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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

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NEW YORK, THURSDAY, FEBRUARY 7, 1878.

Volume 10.—No. 1. No. 111 Fulton St., N. Y.

HUNTER'S REFRAIN.

Selected.

BY GUY H. AVERY.

AWAY, away,
To the woods away,
We'll waken the morn
With the hunter's horn—
Tirra-la-la-la. Tirra-la-la-la-la.
The game is nigh,
And the scent will lie,
Ho! ho! Tally ho! boys oh!

What pleasure to be
A hunter free,
When he hears the sound
Of his faithful hound,
What joy he feels
As the bark it peels
From his jocund heels.
Ha! ha! Tirra-la-la-la,
Ho! ho! Tally ho!

What glee to be
A hunter free;
What glee! what glee!
As he chases the frog
On the slippery log
And falls over his dog
Into the bog,
With his mouth full of blood,
And his boots full of mud.
Ha! ha! Tirra-la-la-la,
Ho! ho! Tally ho!

What comfort to be
A hunter free;
When the day has gone,
And the sunlight fled,
He takes his gun,
And goes to bed,

If he is a sensible man; if he is not, he gropes around in the darkness, upsets the clothes-horse, falls over young Nimrod's cradle, who opens in full cry, leaves his hat and coat in a raspberry patch, blows off the end of his fore-finger, returns the next evening with a consumptive pheasant, and is arrested for killing game out of season.—*Puck.*

For Forest and Stream and Rod and Gun.

Voyaging on the Upper Missouri.

By Ernest Ingersoll.

NO IV.—[Continued from page 468.]

THE PLAGUE OF THE PILGRIM—GROS VENTRES AND OTHER RIVER INDIANS—THE BIG-HORN—ENGINEERING AT DAUPIN'S RAPIDS—ISLANDS—PILOTING BY INSTINCT.

WE were so unlucky as to have with us a Pilgrim. A Pilgrim is an Eastern person who for the first time goes West, and is, of course, ignorant in occidental customs—and ignores it. You may exhaust upon a man the vile vocabulary of a bullwhacker's vituperations, and perhaps he will only smile; but the case is not on record where any true patriot of Montana allowed any one to insinuate that he was no better than a Pilgrim. I suppose the wrath with which an old Pharisee heard himself called a Publican was serene and sunny good nature compared with the amazement and grief and anger and self-sacrificing preparation for instant battle with which a mountaineer comprehends that you have stigmatized him as a Pilgrim! To be thoroughly successful, the Pilgrim ought to be a tolerably well informed man on a narrow range of topics in his native country, and one whose opinions have been wont to command respect. If he comes from Boston, it is well, and he carries Westward with him the full-grown comb which adorned his high head at home. Pilgrims "know it all," and some of them never do survive the shocks to their vanity which their iterated mistakes occasion. Our Pilgrim, like the rest of his genus, was a great bore. As inebriated men often think all the rest of the world drunk, so this man took all the rest of us to be pilgrims and himself only experienced. He discoursed to us on the arts of mining, the science of cattle-raising, the habits of antelope and deer, the customs of Indians; instructed us how to climb mountains with ease (he had never been half way to timber-line), and how to cross deserts (he had never seen a square yard of alkali). He knew all about fighting Indians, hunting buffaloes, navigating northwestern rivers, cheating the Government at Indian agencies, far more thoroughly than the wisest pioneer between the Saskatchwan and Salt Lake. Now, here in the Bad Lands, he had a text for an endless sermon, and he bored half the pleasure of the scene out of all of us. He overheard a geologist say that the singular forms into which the rock had been worn was mainly through the action of trickling water, and that soft and hard strata alternating had worn unequally; therefore— "Oh, yes!" interrupted the Pilgrim, and talked wrong geology "into the ground," if I may use such an expression. Next he must whisper to ye scribe "to write up well" certain features; remarked to the lady sketching that the only proper thing to draw lay "just there," and laid down such rules of work as would disgrace chalk-sketches on a barn door; then climbed on high with a self-satisfied air, and looking critically ahead, informed the pilot that, in his opinion, the channel lay on the right bank, and that to hug the left was a grave mistake of judgment. The pilot only smiled, but the captain made a frank observation as to the Pilgrim's knowledge—the Pilgrim can never quite become accustomed to Western candor—and the unappreciated man was seen no more in the pilot-house all day. If Mr. Josh Billings had been a passenger on the Benton he would have doubly appreciated his own remark: "It iz better to be bored with a two-inch auger than with a gimlett."

At Arrow River the white cliffs are succeeded by lofty banks of mud, less entertaining but equally desolate, which continue for thirty miles, presenting a picture of nature's wild deformities, characterized by a total absence of everything which could give pleasure to the eye or gratification to the mind, except as an exhibition of the weird. At Arrow River Lewis and Clark wintered in 1804-5, and are said to to have left the record carved on a white pillar; but we didn't see it.

Twenty miles below, the Judith—an important tributary—enters from the south, and close by is the mouth of the Dog River. Here are extensive, well-wooded bottoms, which were long ago occupied by fur-traders, and more recently by the Government as an army post, called Camp Cooke. Now there is a branch trading post of T. C. Power & Co., of Fort Benton, here, for the Gros Ventre Indians, consisting of a collection of low log-houses around three sides of a quadrangle and a corral, where the boat stopped in landing supplies long enough to allow the passengers to go ashore and prowl around the lonely station. There wasn't much to see—two or three half tamed squaws in bedraggled calico dresses of civilized cut, who, with their pappooses, were gazed at and quizzed by the ladies of the party, while some of the rest of us examined a lot of moccasins, etc., for sale (at outrageous prices) by the trader, or went to see the three young grizzly bears that were penned up in a log corral near by. I saw only one Indian man about the premises, but he evident ly thought himself a whole host. He was a youth on whose smooth and, for an Indian, handsome face, not one of the ugly wrinkles of age had marked its lines. With his coal-black hair elaborately combed, the parting in the middle strongly indicated by a line of yellow paint, and the ends gathered into a queue behind into which was plaited strips of otter-hide and a tail of large silver disks that hung down to his heels, jingling as he walked; with his swarthy face set off by broad lines and patches of vermilion; with heavy coils of large bright beads about his neck; yellow leggings, whose side fringes trailed the ground, and moccasins of gorgeous beadwork and fringed flaps. Folding his brilliant Navaho blanket with careless grace across his unshirted body so as half to reveal his bronze chest and sinewy arm, he stood erect and motionless as a statue, calm in the admiration he thought he was exciting in our wondering eyes, swelling with the vanity of a full-dressed Indian dandy. My companion was a young lady who had just come from years of residence in Germany and Italy—from wanderings among the orange groves of Naples, and excursions down the historic Rhine. To her all this was full of wild and poetic interest, although by no means her first sight of an Indian. She stopped in half amazement and half admiration to watch this picturesque savage, and observing it, he turned slowly round to fully exhibit all the glories of his finery and personal appearance. She was greatly amused and wanted to talk with him, but I would not permit it. Very likely he knew a little English, but it was pretty sure to be very bad English, and the lady who enters upon conversation with an Indian is pretty sure to find it shockingly unpleasant. We had quite exhausted all the sights of this frontier post by the time the whistle called us to tread the narrow gang-plank again, and the voyage was resumed with little regret.

The Gros Ventres are a band of the Hidatsa, or Minnataree Indians, who belong to the Great Dakotah family. The Crows are said to be another band of Hidatsa, separated long ago. At any rate, the Crows and Gros Ventres are inveterate enemies, yet sometimes unite against the Blackfeet, which are the Ishmaelites of the Northwest, fighting everybody. The Blackfeet occupy the country, properly, north of the Missouri and West of the Marias, extending to the upper waters of the Saskatchewan, yet frequently making long excursions Southward, being admirable horsemen, and some of the worst Indian battles on record or in tradition have been fought in the valley north of Yellowstone Park between the Blackfeet and Flatheads from the West (on their way to hunt buffalo), Crows from the East, Shoshones from the South, or the wandering companies of trappers under Jim Bridger, the Sublettes and other leaders that used to range through this country, and who dreaded the Blackfeet above all other tribes. The Crows included in their country the headwaters of the Yellowstone and Southward—a band of them (the River Crows) living along the southern bank of the Missouri from Fort Benton to the mouth of the Mussel Shell. This left the north bank of the Missouri, east of the Marias, and the triangle between the Yellowstone and the Missouri for the Gros Ventres. East of them were the Assiniboines, and south of them the Crows and Sioux. And they often made long excursions into the districts of their neighbors. The Gros Ventres are said to have once lived "in earthen houses" in the region through which the boundary between Dakotah and Minnesota now passes. It is also known that a portion of them once settled near the head of Green River, where the names of some mountains and streams perpetuate their memory.

The Gros Ventre Indians are fine looking, and I have never anywhere, unless it be among the mountain Utes of Southern Colorado, seen such prepossessing women as those of this tribe. Gov. J. J. Stevens gives some interesting facts about them in his narrative of Explorations for a Northern Railroad Route to the Pacific in 1853. The Gros Ventres were then camped on Milk River, where was fine pasturage for their immense herds of horses, and they treated the officers of the survey with great hospitality, receiving them with great ceremony in a lodge twenty-five feet square, after which they were taken to visit the lodges of the principal men. Among the dishes furnished the guests was a mess made of buffalo marrow, berries and the scrapings of lodge skins, which Stevens asserts he enjoyed. "Polygamy is universal, several of the chiefs having four, five, and even six wives, one of whom is the especial favorite and mistress of the household. The husband will appropriate any of them for purposes of prostitution when he can profit by so doing. They appear to be a simple-minded race, easily influenced, and very kindly disposed toward the whites. They are filthy in the extreme in their habits, many of the women actually eating the vermin out of each other's head and out of the robes in which they sleep. Being improvident, it is always feast or famine, either having abundance or else nothing." Much the same account would do for all the Missouri River tribes.*

But I have been led into too long a digression.

Beyond this stopping-place the barren clay banks crowd upon one another, with occasional cliffs of white chalk, leaving narrow verge for the border of trees until Cow Island is reached during the second afternoon of our voyage.

All this desolate region is the chosen home of the splendid big horns—the mountain sheep. Although no longer, as when Father DeSmet floated down in 1847, are "numerous groups" browsing on the steep declivities, they are still to be got by the hunter, and we saw many of them standing among the monumental rocks as quiet and statuesque as though carved from the sandstone. They are the noblest of game. Much like sheep in some particulars, and more like the chamois or ibex in others; the man who would get them, even though they never saw the human form before, must have the strength and agility to climb to the loftiest ledges, and tact and skill to bring his game down at long range. Even then he may lose it, the body often falling over some precipice on whose very brink the sheep loves to stand. These northern mountains, with their strong dark heights and rugged foot hills are full of them. When climbing the mountains I have had bands in sight for two or three hours at a time, feeding on distant green hill-tops below me, where scattering clumps of dwarf spruces furnished shelter when they cared to rest, and the young grass afforded sweet pasture. It was extremely interesting to watch them. Nothing could better express the wild freedom of the unmapped mountains. An old ram or two, easily distinguished by the immense coiling horns from the ewes, whose horns are small and light, would lead the flock, and there would be from ten to fifty younger rams and ewes following. How they can run! Let the ground be rough or smooth, level or inclined, it seems to make no difference to their sure and agile hoofs; and the kids will race up and down the steepest snow banks just for fun. It will climb to points where wolves even dare not follow, and leap from pinnacle to pinnacle as though held up by invisible wings. This seems incredible when we look at their ovine form and great weight, and the cumbersome Ammonitic horns carried by the males. It is these ornaments that give them the name "big horn," and it used to be believed that the mountain sheep could throw themselves from tremendous heights, alighting on their horns and rebounding without injury. Their hair is coarse and slightly crinkling, and when the bluish winter coat comes out, displacing the brown summer dress, you may find everywhere between the hairs a shorter coat—a sort of undershirt—of the finest silky wool. The flesh of the big-horn is tender and juicy in the autumn when the animal becomes fat, and has a taste between the antelope and mutton, partaking of both.

Just above Cow Island are Dauphin's Rapids, which are the chief obstructions to the ascent of steamboats beyond this point. They are not very formidable as rapids, but in a bend in the river sand-bars have formed in such a way that here, more than elsewhere, the boulders and angular pieces of rock brought down by the ice have been deposited, until an accen-

* Since the above was written there has come to hand the admirable "Ethnography and Philology of the Hidatsa Indians," written by Dr. Washington Matthews, U. S. A., and published by Dr. F. V. Hayden as one of the Miscellaneous Documents of the U. S. Geological Survey. This contains a full account of the manners of this family and their allies, the Mandans, who inhabit a permanent village at Fort Berthol lower down the river.

mulation extremely dangerous to navigation has been formed. This cannot be passed except at high stages of water. After the middle of August, therefore, steamers do not attempt to go above Cow Island, but land their cargoes on the shore there, whence they are hauled to Ft. Benton by teams. Vice versa, freight and passengers are frequently sent down to the late steamers in mackinaws. A mackinaw is a boat of any size from 20 to 60 feet in length, flat-bottomed and flat-sided, with a sharp prow and square stern. The current is sufficiently swift to make rowing unnecessary going down, and so strong that you must drag your boat up by "cordelling."

When we were there some government engineers with an escort of troops were at work dredging the river of rocks and building a wing-dam so as to concentrate the vast force of the river upon one channel, and make it its own perpetual dredge. An unusual height of water was experienced this year, and their operations were delayed until late in the season. The amount of money granted by Congress for this work was small. Perhaps there is no water-improvement in the whole country that would yield such bountiful returns in proportion to the outlay as the removing of the obstructions from the Upper Missouri. I dare say the proper expenditure of $150,000 would add three months in the year to the freighting season of the upper river. It will take very much more than that to put the Yellowstone at all into shape, notwithstanding some reports of its excellence as a steamboat route to Montana.

It was just sunrise as we reached the rapids, and we heard the cook beating the bottom of a tin pail for his gong, before we saw the little colony which had just sat down for breakfast in a bower made of cedar bushes, while the officers' mess was in one of the row of small white tents cuddled down in a hollow. Our whistle, however, put breakfast out of their heads, for had not we the mail from home? And is there anything dearer to the heart of one of these exiles than his letters and newspapers? We gave them a great packet and a goodly quantity of grocery supplies. One would hardly have thought these roughly attired men, without the shadow of uniform about them, were officers of the Army, so accustomed are we to the glitter and military carriage of our West Pointers in the East. But they were very good soldiers, and held as firm discipline—though genially—in buckskin and beads as in broadcloth and buttons. One wonders also at the apparent contentment of these gentlemen, cut off for such long periods from civilization; but their resources of amusement are more varied than we think, their duties keep them busy, and the certainty that they *must* stay enforces a habit of contentment.

At Cow Island the only sign of human use is a dilapidated shanty and a tumble-down sign-board upon an insignificant knoll, whereon is scrawled "Fort Ilges." The island is covered with a sparse cottonwood growth.

Below this the shores become less grotesque, more and more rounded and grassy, and the heights recede from the banks overgrown with pines and cedars that straggle loosely up the sides but gather more densely on the summits. Island after island, low and flat, interrupt the free flow of the river. Each one is known by name to the pilots. From all of these long sand-spits run out into the river, sometimes showing their yellow backs above the surface, often concealed by a thin film of water. But the practical pilot detects them all by the peculiar "ripple" on the water. "Marks" are of little use in steering on this upper river. The pilots, to be sure, do fill their marvelous memories with points to be remembered at every bend, where to go next to the bank, and where to keep away, although to our ignorant eyes each league of the smooth water and every yellow bend looks precisely like its neighbors above and below; but for the most part the pilot must steer by the appearance of the water, and his eye never wanders from its shimmering flood. Forty times a day his bell calls for soundings, sometimes only on one side, sometimes on both. Then a darkey seizes the sounding-pole, which is marked into sections of feet and half-feet, and plunges it down alongside of the lower forward deck. If the water is more than seven feet deep he drawls out, "N—no—o bottom!" But generally he finds one pretty quick, and you hear the thick utterances, repeated by another darkey on the upper deck, "Se-e-ven feet!" with a lunge forward and sinking emphasis on the last word. Then "S—i—i—i—x and a h—a—l—f! S—i—x feet! F—i—ve feet! F—o—ur and a h—a—l—f! Thr—e—e—e feet!" and so on until perhaps there is only "Two—o—o f—e—e—t sc—a—n—t!" and we glide over, grating on the bottom, and our wheel kicking up the gravel behind us. Time and again we got aground, but always got off again without serious difficulty. In this we were very fortunate. Steamers have sometimes stuck for two or three days at a time in the sand, which was tedious, when nothing but Missouri River water was passed over the bar.

A PLACE FOR SUMMER REST.

BAY CITY, Mich., Jan. 7, 1878.

EDITOR FOREST AND STREAM:

Higgins Lake, Roscommon County, Michigan, is nearly six miles from Roscommon Station, on J. L. and S. R. R., distant north of Bay City eighty-five miles. The lake is two and a half by six miles long. An island and little bays and sharp points make all the protection from the wind you need, so that you can fish every day; and one acquainted with the lake can catch more fish than any party can eat. There are no ducks here, but Mud Lake, half a mile below, has some, but not enough for much shooting. The shooting is mostly for partridge, of which there are plenty along the shore, yet the season for rest on the lake is the close season for partridge. July and August are the season for the most perfect rest. Some of your readers have heard of the St. Louis, Mich., Mineral Springs, the great benefit to all who are affected in the least with kidney difficulties from the use of the water. I think the water in Higgins Lake is the feeder for the famous springs mentioned above, for all I have seen who have been at the lake say that the lake water has no equal in purifying the system. We found much pleasure shooting with a Sharps' rifle at the loons on the lake, and I assure you I was surprised at the distance one of their $45 sporting rifles would shoot. In firing at a loon about 400 yards out on the water I found that the balls went clear across the lake, a distance of two and a half miles. I could not believe it until by actual experiment I found it to be true.

In warm, hazy weather, the fishing cannot be surpassed. A sail on the lake and trolling at the same time is the most indolent pleasure in the warm or summer season I ever enjoyed. The best fishing for perch or rock bass is in the early morning. The lake is as smooth as a looking-glass, and as true to mark the shore or clouds, and I have seen a sunrise with equal splendor show in the lake as in the sky; and a sunrise on Higgins is a beauty, once seen never to be forgotten. As for those who do not like to get up to see the sun come up do not enjoy one of the great pleasures of life, for I assure any man that it would be one of the greatest of pleasures to get up and anchor ready for fishing before the sun shows itself on the hill-top.

If you have no other bait take a piece of fat pork, cut the skin off, say half an inch thick and in pieces half an inch square, put on the hook with the flesh side next the hook; let the beard of the hook pass through the skin; this leaves the point of your No. 1 English spear point Limerick hook bare, so that you are not aware of your lazy twelve and fourteen-inch perch, who take this bait in their mouths, unless you see them. Here you are without a rod in the early morning, as lazy as the fish, with the line wound around a large cork or chip, and let the line down among the old moss-back perch. When your pork goes out of sight you pull up, and if—your hook baited as above and sharp pointed—you do not get the fish, then all I can say is that you were too lazy or indolent to make one quick move, which needs to be the first one. I assure you it was the most indolent fishing I ever had, except sailing and trolling. Yet, oh how enjoyable! You are in no hurry if your companion or wife (this is a pleasant place to take one's whole family) says look, or see here—you have plenty of time, for if the fish you have hooked is lost you can very soon get another. You have the entire time for enjoyment. There is no hurry like most every kind of camping out. Of course this does not stir up the blood like grayling or trout fishing; but it is for rest we are here; to get away from dunning letters. In a short time we have perch enough for breakfast; then we pull ashore; then, while the cook is getting breakfast, if you feel steady, you have the loon always to try your Sharps rifle on. After breakfast you take the sailboat and sail and troll. Do not forget to buy a large-brimmed hat, and a lady will need an umbrella. How delightful. The lady can read or knit—they always work. I hold the rudder and line, it is so easy. You can dream or sleep. I have lost myself so that my attention had to be called to the boat often while sailing. You do not have this kind of sailing all the time, for I have seen quite a sea upon the back of old Higgins. However, there are little coves you can run into; there is no danger if you care to be safe. About the fish in the lower end of the lake, your reward is black bass. Have caught them as high as eight pounds. They are the same as everywhere else, when first hooked jump clean out of the water and try to get free from the hook by this and their familiar run after the boat, so that you are sure he is lost. Next comes a little more lively fishing for rock bass. The places you have to find for yourself, for no one ever leaves any mark for others. All fish with anchor; never leave a pole stuck in the lake. Those who are familiar with rock bass can soon find them, for the water is so pure and transparent that you can see the bottom of the lake as easily as if you were on dry land. We let a new tin pail down in the lake, and could see it seventy feet below the surface. I may as well tell you how we get our ice water. We take a twenty or twenty-five fathom line and fasten it to a two-gallon stone jug (you always take one with you when you go from here) and let it down in the lake with a cedar stick large enough to hold the jug. (I have a jug there now with a too small piece of cedar attached to it.) After two hours haul up and you have water so cold that you will not think of ice or ice water again, for you have it at hand. Now, to rock bass—we have found them while I digressed. The great beauty of this lake is, you see all the fish you catch with the hand. I never used my rod once while there. It is only in the way, and I can catch four fish with the line in my hand to any man's one with the rod. The fish do not bite as they do in other waters. Bate your hook the same as for the perch, only make the pieces of pork larger. It is more sport to catch the bass than the perch, for they are more gamey; and I assure you that if you strike a big school you can have a lively time, for we (four of us) caught forty-five in thirty minutes that would weigh from one-half to two pounds apiece. I then pulled up anchor and sailed away, for we had more than we could eat, and there is no way to dispose of them. You are alone in the wilderness. Not a house can be seen from the lake, and I think the nearest settler is a mile and a half away. The only gamy fish I ever caught in the lake was a muskalonge. I caught one up in the upper end of the lake, so that I know they are there, and I assure any one who can take one that will weigh fifteen to eighteen pounds will find it a lively job, and feel when he has him safe that he has done a remarkable thing. They are not very plenty, or, at least, I have not been able to find them. I sailed and rowed more to get my one muskalonge than all my other fishing put together.

H. G.

A ROUGH HUNTING COUNTRY.—A correspondent, W. H., of New Orleans, who has been snipe hunting in the swamps five miles below that city, writes:

"If one wants high, dry and easy hunting let him not seek it in the swamps of Louisiana. Alligator holes, ditches, mud, filth, and other obstacles impede the progress, lacerate the hounds, clothes and dogs. A morning's tramp here is enough to fatigue the strongest man and wear out the staunchest dog."

Five miles below the United States Barracks our correspondent has a favorite ground for snipe. One of his snipe hunts he has taken pains to immortalize, by writing us a letter. He says:

"Our dogs were Nibbs, the celebrated Dacotah chicken dog; and Frank, a New Jersey pointer; both very beautiful and universally admired by every one we met on the day of our hunt. Starting at 6 P. M., we reached the Barracks by 7 o'clock. Our Creole friends who met us were very cordial in their politeness, and our horse and dogs being put up, we were posted as to the most desirable hunting grounds. The barkeeper was an old Frenchman, who told good stories and chuckled at his wit. He was the proud owner of at least eight or ten rat terriers, and at our feet around the stove these sharp little fellows lay. He was delighted with them, and on noticing them cried, 'Bazaine,' and up started a toy dog, valiant with the rat as his namesake with the German. 'McMahon,' 'Eugene,' and others answered in turn, and upon the mention of the word 'rats,' the French dogs arose, and the exiled Bazaine and uneasy President McMahon were all intent upon getting a smell of a rat. If one appeared but poor show he stood.

"Bed-time came and we turned in. At four in the morning we were up, heated a little coffee, ate a breakfast, fed our horse, and resumed our seats. It was bitter cold, and we drove rather rapidly for the Ducros plantation, five miles down. On our right was the Mississippi, and on our left canefields and plantations. Slowly day broke. Then came hard work through a prairie, across ditches, and into holes, losing sight of our dogs in endeavoring to pick our way. Soon a snipe flew, and we prepared for more. On we tramped, killing a few, but not meeting half so many as we expected to in starting. We kept it up until about 9 o'clock, when, tired and wet, we turned to our starting-point to rest. The dogs came in and were themselves lame from the arduous work done.

"We went back to where our wagon was, and as there were a number of negro huts about I sought a place to warm my feet, which were soaking and cold. An old man told me to come in, and calling my companion we entered his cabin, a room about 12x10, with a wood fire in the chimney and a pot of coon boiling. We took seats and found the fire very comfortable. 'Jim,' our host, told us he had caught the coon in a trap the night before, and was cooking him for his breakfast. He had the meat in a little water, and the whole filled up with embers to 'brown de meat,' as he said.

"After warming thoroughly we again started for snipe, and again we got wet and more tired, but shot a rail and rabbit in addition to a few more snipe. By noon we left the fields and started for home."

Fish Culture.

FISH CULTURE UNDER DIFFICULTIES.—The following paragraph from the Kingston (N. Y.) *Courier* shows some of the obstacles which those who attempt to propagate fish have to encounter. We are glad the citizens of Kingston are determined to protect the plants:

"Already, through the creditable efforts of James E. Low and George B. Styles of this place, 100 pounds of yellow perch have been put into the waters of the Esopus Creek. Arrangements have been perfected by the last-named gentleman with Seth Green, of Rochester, to further stock the same waters by adding 200 pounds of mature black bass within a few days. If these fish are let alone for the period of three years and allowed to breed, we can reasonably promise as fine fishing at the expiration of that time as can be had in any waters of this State.

"Certain lawless characters, in defiance of the law of the State as well as in defiance of the special enactment of the Board of Supervisors of this county at its last session, persist in using nets and fykes in the creek. If allowed to continue, the labor and cost of stocking these waters will prove in vain. Nearly $100 will have been expended when the black bass are received from Rochester; and shall all this be wasted to satisfy the greed of a few lawless persons who have contributed nothing?

"Furthermore, any person who shall put a net or fyke in the creek, in defiance of both State and county law, will be prosecuted from this date. Let every good citizen constitute himself a game constable for that purpose. Mr. Clearwater, the District Attorney, has promised to faithfully prosecute all offenders."

GOLD—FISH.—Our special correspondent, B. B. Porter, Esq., late of the Fish Farms, in Bergen County, New Jersey, reached San Francisco on Jan. 23, having rendered us good service *en route*. In the following letter he mixes the gold and fishes of Nevada in a fashion which indicates his interest in both:

"SAN FRANCISCO, *Jan. 23—Mr. Editor:* I found myself the other day in the far-famed Virginia City, Nevada, so noted for its bonanzas, and learned that Mr. J. B. Overton, superintendent of the Virginia City Water Company, was raising trout in the reservoirs with success.

"Through this gentleman's kindness I was conducted through the works of the Virginia Consolidated and California Mining Works. Mr. Mooney, foreman of the melting room of the Bonanza mine, said that in figuring up he found that the mine produced through the month of December, 1877, $1.23 per second. The mine is run night and day; Sundays, too. Piles of silver bricks, 130 lbs. each, 47½ per cent. gold, were awaiting transportation. They use scales that weigh the 1,300th part of a grain. From 80,000 to 85,000 feet of timber per day is sent down one shaft alone to timber up with. The magnitude of these mines is indeed wonderful, and worth going a long way to see.

"From Virginia City I went to Carson City, and met that genial soul, Hub Parker, Fish Commissioner of the State of Nevada, with whom, behind a spanking pair of grays, I visited Lake Tahoe. Though out of season the day was fine. Mr. Parker has 100,000 Michigan white fish, now being hatched, to put into this lake. We took a short sail out on the lake and caught what they call a silver trout, weighing 4½ lbs.; a male and a perfect beauty. It was the first of the kind I ever saw. The waters of the Lake Tahoe are the clearest I ever saw; I could see the pebbles on the bottom very clearly in water fifty feet deep. It is a wonderful lake and well worth a visit.

"Yours, etc., B. B. PORTER."

EELS.—A correspondent takes us to task in regard to a reply of ours to "Septuagenarian" on the subject of eels. We stated "When eels are young and have to be carried any distance an assistant should accompany them." In the paragraph before we printed "Eels are very difficult of transportation, dying in a few hours unless the water is changed." Now, if our correspondent had read the article the least carefully he must have understood that we meant young eels. Everybody knows that the adult eel is very tenacious of life, and can be transported even out of the water a long distance. Our friend also differs with us about eels going to salt water. "That is a mistake," our correspondent writes. He says: "We have eels (in Pennsylvania) in nearly all our rivers, creeks, ponds and lakes that have no outlet, and in the rivers and lakes having falls and dams of from five to twenty feet, so anybody can see that the fresh water is the native home of the eels." This we do not see at all, any more than that the shad or the salmon, because they are caught in the Hudson or Merrimack, have native homes in the fresh water. For one eel caught in fresh water ten are caught in salt water. A fall or dam of twenty feet would not present any difficulties to an eel who could wriggle up or down them at pleasure; but in any serious obstruction no eels are found above it. So far our correspondent may enjoy the benefit of his doubts as to the difficulty of transporting *young eels*, but

as he has evidently never tried it, and our data were derived from absolute experiments made by the Fish Commissioners, we must believe that we are right. When our Pennsylvania correspondent, however, says "that in regard to the breeding (of eels) all our fishermen in my neighborhood have an idea that the Lamprey eel is the mother of all the eels," we beg to remark that the fishermen might as well think that the Lamprey was the mother-in-law or great uncle of eels, as their mother.

Natural History.

THE ROCKY MOUNTAIN BIG HORN.—One of the strangest creations known to naturalists is this member of the animal kingdom om, the Big Horn or Rocky Mountain sheep. Whether descended from some patriarchal family of "shorthorns" who came over in the Ark, or from the common stock that produced the Mexican sheep, is unknown, and probably will forever remain so. It is, however, more than likely that they are a race separate and distinct from all others on this hemisphere, as their forms and habits are entirely different. They may be related to the sheep which inhabit the Urel Mountains of Russia, or the Cashmere or Thibet tribes; but even this is questionable.

These animals are to be found only in the Rocky Mountains in Colorado, Arizona, Utah, Nevada, and portions of Montana. They herd among the higher portions of the range, feeding and living at a great elevation. In form the mountain sheep is much like his prototype of the lowlands, being, perhaps, a little larger and more strongly built. Their wool is short and thick and very warm. This coat they retain throughout the year, its growth being so rapid that even their wild habits and the rough usage which they endure never perceptibly thins it. Their heads are disproportionately large, resting upon short, thick necks; their legs thin, but of wonderful strength, and their feet the surest in the world. A sheep never slips or falls. From the head of the buck grow strong, crooked horns. These issue just above the eyes, curve at first outward and downward, then as their growth continues, inward and upward again, until when mature the leaders of the herd often carry horns fully three feet in length, and in some cases weighing from fifty to sixty pounds.

The hunter's fable of the habit which this animal had of striking upon its horns instead of its hoofs when springing from any great height has long since been exploded; but the wonderful leaps which the Big Horns will sometimes make when frighted are as astounding as any tale which has been told of them. When hunting in Colorado I have seen an entire herd jump from cliff to cliff across chasms twenty feet in width, or down precipices thirty and even forty feet high, and bound away without the slightest apparent injury.

This very fact of their ability to flee where the hunter cannot follow renders the pursuit of them fine sport, and the lover of lamb and green peas will gain an excellent appetite in the chase before the game is his. F. E. H.

[Our correspondent omits to mention that besides the wool of the Big Horn, which, as stated, is short and very thick, the coat consists of hair about an inch in length which wholly conceals the wool. This hair resembles that of the cariboo in many respects, and is very different from that of deer in general. The Big Horn is now believed to be a near relative of the Argali of Siberia, as well as of the Moufion of Corsica, from which latter our domestic varieties are believed to have sprung.—ED.]

A QUESTION ABOUT BEARS.—*Weston, Va., Jan.* 14, 1878—*Editor Forest and Stream:* There is a trait or habit of *Ursus americanus*, that I would like explained or accounted for through your columns. It is the testimony of all hunters and trappers of experience, with whom I am acquainted, that when a she-bear is trapped or killed in the chase during the period of pregnancy, she has been found to have recently aborted. Is the abortion voluntary or involuntary?

CORP. LOT WARFIELD.

[This is a matter to which our attention has never before been drawn, and about which we know nothing. Are any of our readers better informed?—ED.]

LES OISEAUX DU CANADA.—We have recently received from Mr. J. M. Lemoine, the author of *L'Ornothologie du Canada*, an extremely valuable and practically useful ornithological chart, prepared by him for use in the schools of the Province of Quebec. It is entitled *Les Oiseaux du Canada*, and gives, in the clearest and most compact form, a list of Canadian birds, with a reference to the genus, family and order to which each species belongs. The chart is made up of seven columns, and an example taken at random will serve at once to show the admirable method upon which it is constructed. Thus, in the first column, we have the order *Insessores* and a definition of the term; in the second comes the sub-order, *Oscines* (singing birds); in the third we find the family name, *Sylvicolidæ;* in the fourth the name of the sub-family; the fifth contains the name of the genus *Sylvicola;* the sixth that of the sub-genus, *Dendroica*, while the seventh gives the full name of the species, as *D. coronata*, followed by the common names, English and French, and a reference by number to Prof. Baird's check-list. The whole chart, arranged as we have indicated, and containing a list of the 300 birds, including some species about which there is doubt, which are known to Canada, occupies a space of 40x23 inches.

From what has been said, it will be apparent that this chart, after its purpose and the relation of its parts have once been explained, cannot fail to convey to the mind of every child the family relations of the different birds of the region for which it was compiled.

The nomenclature employed is that of the Pacific Railroad Report devoted to birds, Vol. IX, by Prof. S. F. Baird.

EARLY NESTING OF QUAIL.—Our correspondent, Mr. J. B. Newby, writing from St. Louis, gives an account of a quail's nest which he *recently* found there. The occurrence is quite unparalelled, we think. May it not be, however, that the nest was an old one, left over from last year. Mr. Newby says:

While walking (Jan. 20) on my place near St. Charles, one of the men in the party found a nest of the quail with one egg in it, and called me to look at it. There is no doubt about its being a quail's egg. I never before heard of their nesting as early in this section of country.

A TROUBLESOME OWL.

POTTSVILLE, Pa., Jan. 7, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

A singular, and, we believe, previously unheard-of occurrence, took place here recently. A young man, the son of a respectable farmer, residing within a few miles of this place, on his way home across the fields, was violently seized on the back part of the neck by an owl, which had suddenly alighted on his back, and it was with some difficulty that the winged assailant could be kept at bay. A few days afterward, the young man passed over the same route, when he was again attacked by the same or another owl, which flew in his face, and severely bit him. In each case blood was drawn by the beak of the aggressor.

The neighbors becoming alarmed, an investigation was made, and in a large, lonely and well-decayed oak, was discovered a hole, well up near its forks. As the tree was being felled, several owls flew out and escaped; the examination resulted in finding the skeletons of various sizes of birds, mice, bats, frogs, moles, etc., while an immense stock of large and small insects yet remained for a winter (?) supply.

One of our crack sportsmen, while out for game a few days since, caught a live weasel, which was entirely white, with the exception of the tip of its tail, which was black. It was brought into town and sold for $25. DOM PEDRO.

[The "weasel" was probably a Stoat or Ermine (*Putorius ermineа*). He will turn brown in spring. For a full and admirable account of the species, see Dr. Coues' "Fur-Bearing Animals," issued under the direction of Dr. F. V. Hayden's Geological and Geographical Survey of the Territories.—ED.]

THE KNITTING TOGETHER OF THE BONES IN A BIRD.—A correspondent from Cleveland, Ohio, sends us the tibia, or leg bones of a quail. One bone had been broken somehow, but nature in time, by a plastic process of her own, had reunited the fracture. The *fibula* seems to have been joined to the tibia. The mended bone has quite a distinct curve, as if at the commencement of the process of growing together, too much weight had been put on the soft bone by the bird. Such comparisons as we can make in comparative anatomy are of great interest to us, and we have to thank our correspondent for attention.

EMOTIONAL ANTELOPES.—Dr. Caton, in his book on American antelopes and deer, says: "Our antelope has the faculty of weeping when in affliction. I first observed this in a specimen which had been taken wild when adult, and still retained all his natural fear of man. I had placed him in a close cage in the evening, intending to familiarize him with my presence, and divest him of his fears when he saw me, by convincing him that I would not hurt him. When I approached him the next morning he seemed struck with terror, and made frantic efforts to break out, which he soon found was impossible. His great black eye glistened in affright. I spoke softly and kindly, while he stood trembling, as I introduced my hand and placed it on his shoulder. Despair now seemed to possess him, and he dropped on his knees, bowed his head to the ground and burst into a copious flood of tears, which coursed down his cheeks and wet the floor! My sensibilities were touched; my sympathies were awakened, and I liberated him from that cage as quickly as I could tear the slats from one of the sides."

TROUT ON THE TRAPEZE.—The Boston *Post* tells a queer story about a trout, a boarder of Mr. Messenger's, at the Broomfield House, which cuts capers and gives gymnastic exhibitions of a remarkable character. When you place a rattan stick across the aquarium, *Salmo fontinalis* jumps for that stick, catches it with his teeth, and skins the cat, performing numerous acrobatic feats, quite equal to the most accomplished circus man. The *Post* says stories have been told by fishermen (they do it sometimes) that trout in their native streams have been known to indulge in such accomplishments. We doubt very much whether the trout ever does high and lofty tumbling and springs for a twig or an overhanging branch, save to go for some fly or insect.

THE GIANT SQUIDS.—Our correspondent, Monon, sends us from Indiana the following good thing. We laugh, it is true, but our mirth is tempered with solemn thoughts. We feel that, by our too liberal use of scientific language, we are responsible for this joke. We never mean again to give any one a chance to get off another like it. Monon says:

"I was reading your article in a recent number of FOREST AND STREAM, headed 'The Giant Squids,' to our boys and a neighbor named Sam, who is something of a philosopher, much of a pot hunter, a capital shot, and a good neighbor withal. I waded through the long names, and when I was done I saw I had made an impression on Sam, and asked him what he thought of those fellows.

"'I want to ask you, Mr. L———, do you believe they chaw such quids?'

"'Who, Sam?'

"'Why, the giants!'"

—The Westminster Aquarium, London, is said to possess the largest plate-glass tank in the world, one having been lately erected 150 feet long, 20 feet wide, and proportionately high. It will permit the display of fish of the largest size procurable in British waters.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING Feb. 2, 1878.—Received in exchange: One Griffon vulture, *Gyps fulvus*, Hab. Europe; one bald-headed ibis, *Geronticus calvus*, Hab. South Africa; two Swainson's paraquet, *Trichoglossus multicolor*, Hab. Australia; one razor-billed Curasson, *Milua tuberosa*, Hab. Guiana; two herring Gulls, *Larus argentatus*, captured in Central Park.

W. A. CONKLIN, Director.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVINSON, SEC. N. Y. HORTICULTURAL SOCIETY.

BOTANIZING IN MIDWINTER.

UP at what ought to have been daylight, and what, perhaps, would pass for daylight at the pole; in fact, which was a general mixture of the fog of some days, and had become "stale, flat, and unprofitable," and was just then being packed up into sleet, hail, and snow by a roaring northwester, then booming down on us from the Lhawangunk Mountains, full tilt, on a grand frolic for a day, and meaning to race up to sixty miles an hour by noon—cold, clear, and as savage as one of the old Norse Vikings. "Botanizing on such a day—what folly!" cries your gentle rover by warm hill sides and shady glens when the breezy month of May is on us. But, reader, pause! It has been said that one-half the world does not know how the other half lives. Never was this more true than of our two cities in regard to the pleasures which may be had with a little care and a good guide. Reader, pause and perpend!

Whew! how the snow-squall cuts to the epidermis through cloak and muffler till we reach the foot of Liberty street, and then find our companions, Davidson and Bush, florists, artists, and most genial gentlemen. Off, then, by rail, the sun coming out on the northwester clean and clear; but the wild wind howls and whistles across the track. Lo! on the trestle-work across Raritan Bay the train stops for an open draw, and the cars seem fairly to lean over with the wind, and one spooney finds that he has a sudden call back to the last station, and would fain leave us; but the brakesman quietly locks the door of the rear car, and becomes so busy inside that our friend is obliged to take his chances with the rest. In fact, he could not have walked the track in such a wind. Here on the next seat is Luch, and soon we are chaffing on the old theme of Jersey *vs.* the World, and especially New York, the proud and all-claiming metropolis. At South Amboy we leave the station for Rathbun's conservatories, and bear up against the wind and increasing cold with a will. Ah! there, shut the door! Here we are in the tropics, and for an hour, under the spell of William Clements, we wander in dreams of spice islands and Bengal jungles. Strange forms and weird flowers start up around us, and what with orchids, sarracenias and ferns of all climes, and with these men at your side who knew all about them, and love them with a tender devotion to the art of wooing them, which they demand and must have, we soon forgot that we are where winter holds its "ancient, solitary reign." The scene is simply wonderful to a thoughtful eye. Orchids hang round tied to bits of clay or wood, with their fat, puffy apologies of leaves, and long, spider, clean white root spraddling down in every direction, neither root nor branch such as we see about us in this temperate climate. Nature, when she tried her handiwork at an orchid, dispensed with all care of anything but the one end in view—and that was the end where the flower hangs. There the result is about as near perfect beauty as can be imagined. Look here! an orange-and-red butterfly has just alighted and is swinging on the end of this twig. He will slip off as it bends down and fly about. And what a fellow he is! How brilliant the coloring, and the long antennæ. Where did he get them—in this region? Not a bit of it! It is only a flower. We have read of him in Myers' stories of the strange land of Carraccas, and in Orton's (alas that he is gone where the flowers never fade!) accounts of the lovely valleys of Quito. Fancy a thick, "bosky dell" on the Guayaquil, and just on the edge of the leaves across a stream these vegetable wonders, and you comprehend when they tell you that the botanist does not know flower from papilio as he rambles, but must go up and see whether the weird thing flies away before he can tell. Then, look along and note how Nature is given to *mimicry*, how she writes her lessons in duplicate—now on vegetable cell, and now reproducing it in the sensitive flutterer of a day. It is worth a journey to Amboy to see just this much, and, reader, you will find in the place a genial welcome and come back satisfied that there is sense in botanizing in mid-winter.

But we are only on the way. Our Jersey team is at the door, and Jersey is a great place, and Jersey teams are an institution. This one would have suited better a South American pampas than the three miles of sand covered with scrub oak and kalmias, and besides epigaeas—nothing else. It becomes a nice question how long body and soul can hang together against the keen edge of the northwester, now up to fifty miles an hour, and the thermometer falling through some half its distance. But on we go, thankful to a sound bank now and then which takes off the wind till we get out at the hospitable doors of Mr. George Luch, as aforesaid.

We do not intend to describe what followed, but leave you to go and do likewise. What with confabulating with a "'ale and 'arty Englishman" on the mysteries of his art, rushing off to this and that wonder, smiling at the enthusiasm which showed the paternal tenderness over a seedling, and stories anent plants, and all else under the canopy—dinner, a good cigar, and back again, "like a bird that seeketh its mother's nest;"—suffice it that the Jersey team aforetold was back for us all too soon, and, after a most pleasant and profitable day, we went back into the chill air again, not now at our backs, and talking wildly of what we had seen. Such sarracenias and turr-ferns, s hids and camellias, such Vandas and Platyceriums, an acre of space, and opening the

mind's eye to the continents and islands of sunny seas, it is simply wonderful that people do not crowd to see them, and travel while they stay at home. There! don't touch that Platycerium majus! By the way, though not more than six inches high, it is cheap at ten dollars, but you cannot touch it or it is hurt. Look where some Philistine has left his mark, the brute. Come to this corner! We open a private and particular case, and look down into the warm damp air of a Javan dell, where the parrots are screaming in the close branches above, and serpents of strange name glide away from us, and see the delicate clouds of the Trieomanes ferns Well, says Goliath, what of that? Well, my muscular hearty, just this of that: it takes mind and care and thought and industry; it takes oft getting up at midnight to look after furnace and steam-pipe; it takes a conscientiousness in doing what one undertakes to do, and knowledge of all manner of entomological pests and botanical molds and cankers; it takes the skill of a vial herb-doctor to know just when to administer food and drink and medicine (called, vulgarly, manure); it takes a strong hand and back, and a kind heart and a tender touch; it takes, most of all, that "bond of all the virtues"—charity for the weak—to produce those results. You will go and see the Loan Exhibition, for it is the thing to do. Go and revel over laces, aged and brown. Alas! for the dames they have graced. But where are the laces like these in the loom of nature's grounds? No one has dropped a tear to produce them. No weary slave has sighed at bondage to color their tender spray and misty hairs. Look how our friend, James Taplin, watches to catch the style in which you approach them! Sympathize with them; give them a loving glance, and he understands you, and tells you of them with genial tales; but betray your indifference and you are lost. Where is Bush? Well, he is off worshiping a Pitcher Plant, and a dozen times he gets back to it and you hear him expatiating on it. Sure, it was wonderful to look on. What will buy it? To answer that, reader, tell me how much you will take for that dear little girl that is the light of the household? And then think over that old tale of the Prophet Nathan—of an ewe lamb—" and it was unto him as a daughter." That's about the figure.

But we stop; nor relate, as should be done only in melodious verse, of our return—how Bush lost his hat, and a good Samaritan came by that way, who had been hunting robins and found none, and had a duplicate hat; and then how the said robin-hunter takes us to an inn and did well entreat us, pouring in oil and wine;—all this you lose. But as we unrolled our bundle in the warm retreat of home, and put away Gleichenias and Gymnogrammes, fronds fertile and unfertile till late into the night, we found that one may profitably go out botanizing in midwinter. Let him that has time try it, and we commend the wise to our friends, Clements and Taplin, with thanks for a day's pleasure and profit.

DR. C. H. HALL, Brooklyn.

EUCALYPTUS GLOBULUS.—The vitality of popular errors is a feature as marked as it is unpleasant. One of these errors, as we believe, is the statement that the *Eucalyptus* has any special power of averting or destroying malaria, apart from its rapid growth and transpiration, and the improvements in the condition of the soil consequent on planting. As an illustration of our remark, we refer to a statement by a correspondent of *Nature*, that he and many others known to him had suffered from malaria in the very heart of a Eucalyptus forest But if the anti-malarial qualities of Eucalyptus are open for doubt, what shall we say as to the ridiculous statement that the Eucalyptus trees are somehow inimical to mosquitoes? Nowhere, we believe, are these pests more troublesome than in the Eucalyptus forests of Australia. It is a pity that such false and exaggerated statements should be made, as they are sure in the end to excite a prejudice against a tree whose utility is likely to be very great.—*Gardeners' Chronicle, London.*

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7 Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gas of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

St. Louis Bench Show, St. Louis, Mo., Feb. 19, 20, 21 and 22 Entries close Feb. 5.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show. Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb, Secretary.

For Forest and Stream and Rod and Gun.

COURSING RABBITS IN VIRGINIA.

FIELD REMINISCENCES—1st PAPER.

MY first hunting experiences were acquired under the guidance of my cousin Sandy long before I was old enough to straddle a horse, and long before I had attained to the dignity of a long-tailed coat, and, like all Southern boys, I was first "entered at hares," possums, coons, and such "small deer" as the plantation negroes were permitted to hunt, preparatory to the much-longed-for day when, mounted on my own pony, I was to take a part with men in hunting the fox.

My cousin, Alexander Skinner—or Sandy, as he was called by his kinfolk and his intimates—belonged to a distinct class of men peculiar to the Southern States, and which, as it is now extinct, may be worth description. Like the whole of his genus, cousin Sandy was a gay bachelor, of good education, with a certain amount of social talent and information, which made him a welcome guest in every country house in the tidewater counties of Maryland. He was a first-rate judge of a horse and amateur veterinarian, and he was a dangerous man to bet against in the quarter-races, so frequent at the county-court meetings. No man bred such fine game fowls as he, and no one could heel and pit them better. He was a crack shot with gun and pistol and a great stickler for the "code;" his equal at brewing a bowl of punch, an apple toddy, or concocting a julep was not to be found; he could sing a capital song, and, though he was the most amiable and jolliest of men, he once whipped the country bully—one Buckmaster—within an inch of his life for refusing to open a gate for a lady.

Cousin Sandy's many good qualities, and even his weaknesses, made him popular with the gentlemen; as for the ladies, though notoriously a non-marrying man, he was with them a great favorite. He went up to Baltimore four or five times a year, and on his return would entertain them with the town gossip and the latest fashions, and with a perennial flow of that small talk so acceptable to most women. What cousin Sandy's pecuniary resources were no one could precisely find out; but he kept clear of debt, was always well-dressed, drove a stylish, old-fashioned gig, rode a fine horse, and owned a little bandy-legged old negro called (ironically, I fancy) Cyrus, for he could neither draw the bow nor for the life of him tell the truth. This queer little darky accompanied my cousin everywhere as his body servant, and was looked upon by all the boys, both white and black, as the very cutest old darkey in all the lower counties, and what added no little to the importance of Uncle "Sy" was the ownership of the very best coon and 'possum dog in all Calvert County.

It was in December, 1824 or '25, that my father took my brother and myself down to Calvert County to spend a portion of our Christmas holidays with our aunts and cousin Sandy. Early in the morning we embarked at Light street wharf on the Eagle, the pioneer steamer of the Maryland waters, commanded by Captain George Weems, the father of Mason and Theodore Weems, and others of that family, all steamboat men. I remember well the splendid breakfast we sat down to as soon as the boat was under way. We had diamond-backed terrapin and canvas-back, "*a discretion*," as the French would say, but in those good old days a large "hen" terrapin bursting with eggs, or a fat canvas-back duck might be had for a quarter. As the boat neared the mouth of the Patapsco, at North Point, our wonder was excited by the clouds of ducks cutting the air in every direction, and the wedge-like flights of geese on their way to their feeding grounds up the bay. Off Thomas' Point we admired the tall, snow-white swans floating on the flats like a fleet of warships in order of battle; the now famous pleasure resort at Herring Bay was not in existence then. So we passed on, and toward sunset dropped anchor off Plumb Point, landed, and within an hour were seated at my aunts' bountiful table with appetites sharpened to voracity by the bracing salt air of the glorious bay.

Dear old cousin Sandy, who was devoted to young people, had planned a hare hunt for us the next morning. So we were packed off to bed, while he and my father, seated on either side of a yawning fire-place, glowing with half a cord of blazing hickory logs, brewed their apple toddy, smoked cigars, and talked horse.

The following dawn found us up and dressed, and as eager for the hunt as two hung greyhounds straining in the slips. Breakfast was soon ready, and while eating it Uncle Cyrus was sent for and consulted as to future proceedings, but not until he had imbibed near a pint of peach and honey mixed for him by his master. The old fellow sipped it deliberately, as if he enjoyed it, then he replaced the tumbler on the table with a bow worthy of an African Chesterfield. With half-closed eyes and a sigh of contentment he cocked his white woolly bullet head on one side, and then on the other, with an air of the profoundest cogitation—the Lord Burleigh shake of the head was nothing to it—after a pause due to what he considered the gravity of the occasion, he decided that we should first visit the hay-stacks in the meadow, where he knew, he said, that a certain old "har," as he pronounced it, always made his form when the weather was so cold, and the wind from the quarter it was in then. We accordingly set out on horseback, we boys behind my father and cousin Sandy, old "Sy" on foot, leading the way with an ax under his arm, and followed by Lion and Tiger, two young fox-hounds, and his own dog, Bose, the famous coon dog. As old "Sy" predicted, the old "har" had made his form to the leeward of one of the stacks, but he, doubtless remembering former narrow escapes, had bolted before we reached it. The young hounds immediatly took the hot trail, and were off like a flash, making the hills re-echo with the music of their cry. That music from only two mouths gave me a passion for hunting with hounds which has never weakened, and now with more than three score years upon my head I would rather hear a pack in full cry than listen to the sweetest notes of a Betsey Bancker or a Jennie Morton. For twenty minutes or so Lion and Tiger, leaving old Bose far in the rear, stuck close to their quarry, and though soon out of sight were never out of hearing. Suddenly the musical cry changed to a sharp bark, and old "Sy," jumping up and cracking his heels together, exclaimed in great glee: "Got him, Mass Sandy! Done tree, by golly!" and off he ran, his bow-legs making first-rate time. We followed on, and soon found the dogs scratching and gnawing at the root of a medium-sized tree with a small hole at the butt. Old "Sy" eyed the tree with grave deliberation, he then cut a rod or switch about five feet in length, and splitting the small end of it, thrust it up the hollow of the tree, and endeavored to twist the hare out, but only got a little fur for his pains; he then sounded again, and finding the hare had climbed about four feet up, he with great care and neatness cut a single chip out of the tree, and as it fell puss was seen and dragged from her retreat; then, after carefully replacing the chip and securing it with a piece of twisted grape vine, our sable huntsman cast off the hounds again, observing that he meant to have "anudder har out dat tree befo' he went home." The words were scarcely out of his mouth before the hounds opened again, and to our astonishment in a little while another hare took the same tree and was bagged without trouble by simply removing the chip.

Old Cyrus asserted, what I have since ascertained to be the fact, that our little American hare (*Lepus virginianus*) is always acquainted with all the hollow trees within his range, and when hard pressed never trusts to chance to find a place of refuge.

We caught four hares that morning, and returned to dinner highly delighted and thoroughly inoculated with the passion for field sports.

During those ever-to-be-remembered holidays Cousin Sandy and old "Sy" initiated us into all the mysteries of 'possum and coon hunting, and taught me at least that one of the most delicious dishes in the whole range of gastronomy is a fat 'possum baked in a Dutch oven with sweet potatoes, by a Southern darky.

If you can find space for it, I will give you in my next some of my experiences with noted packs of fox-hounds in Virginia and Maryland.

F. G. S.

FIRST ANNUAL BENCH SHOW OF DOGS

TO BE HELD IN BOSTON ON MARCH 26, 27, 28 AND 29 BY THE MASSACHUSETTS KENNEL CLUB—ENTRIES CLOSE MARCH 15.

CLASSIFICATION OF DOGS AND LIST OF PREMIUMS.

DIVISION 1.—Sporting Dogs—Champion Classes.—For either native or imported dogs or bitches that have won first prize at any bench show in this country or abroad.

Class 1—Champion English Setters—For the best dog, $50; for the best bitch, $50. (Winners of first prize in sporting class can have cup instead of coin if they desire it.)

Class 2—Champion Irish setters—For the best dog, $50; for best bitch, $50.

Champion Classes are only open to winners of first prize at Chicago, Baltimore, New York and St. Louis Bench Shows.

Class 3—Champion Gordon Setters—For best dog, $50; for best bitch, $50.

Class 4—Champion Pointers—For best dog, $50; for best bitch, $50.

(Judges in this class will be instructed not to discriminate with regard to weight.)

OPEN CLASSES.

Class 5—Imported English Setters or their Progeny of the First Generation—For best dog, $35; second best, $20. For best bitch, $35; second best, $20. For best dog puppy under 12 months of age, $10; for best bitch puppy under 12 months of age, $10.

Class 6—Native English Setters—For best dog, $35; second best, $20. For the best bitch, $35; second best, $20. For best dog puppy under 12 months of age, $10; for best bitch puppy under 12 months of age, $10.

Class 7—Imported Red, or Red and White Irish Setters, or their Progeny of the First Generation—For best dog, $35; second best, $20. For best bitch, $35; second best, $20. For best dog puppy under 12 months of age, $10; for best bitch puppy under 12 months of age, $10.

Class 8—Native Red, or Red and White Setters, either Irish or Crossbred—For best dog, $35; second best, $20. For best bitch, $35; second best, $20. For the best dog puppy under 12 months of age, $10; for best bitch puppy under 12 months of age, $10.

Class 9—Black and Tan, or Black, White and Tan Gordon Setters, Either Native or Imported—For best dog, $35; second best, $20. For best bitch, $35; second best, $20. For best dog puppy under 12 months of age, $10; for best bitch puppy under 12 months of age, $10.

Class 10—Pointers of Fifty Pounds Weight or Over—For best dog, $35; second best, $20. For best bitch, $35; second best, $20.

Class 11—Pointers Under Fifty Pounds Weight—For best dog, $35; second best, $20. For best bitch, $35; second best, $20.

Class 12—For best dog puppy under 15 months of age, $10; for best bitch puppy under 12 months of age, $10.

Class 13—Chesapeake Bay Dogs—For best dog, $35; second best, $20. For best bitch, $35; second best, $20.

(Judges in this class will be instructed not to discriminate with regard to length of coat.)

Class 14—Irish Water Spaniels—For best dog or bitch, $20; second best, $10.

Class 15—Clumber Spaniels—For the best dog or bitch, $20; second best, $10.

Class 16—Cocker Spaniels—For the best dog or bitch, $20; second best, $10.

Class 17—Field Spaniels of Any Other Breed—For the best dog or bitch, $20; second best, $10.

Class 18—Foxhounds—For the best couple (dogs or bitches), $20; second best, $10.

Class 19—Beagles—For best dog or bitch, $15; second best, $10.

Class 20—Dachshunds—For best dog or bitch, $15; second best, $10.

Class 21—Fox Terriers—For best dog or bitch, $15; second best, $10.

Class 22—Greyhounds—For best dog or bitch, $15; second best, $10.

Class 23—Scotch Deerhounds—For best dog or bitch, $15; second best, $10.

DIVISION 2—NON-SPORTING DOGS.

Class 24—Mastiffs—For best dog or bitch, $20; second best, $10.

Class 25—St. Bernards—For best dog or bitch, $20; second best, $10.

Class 26—Newfoundlands—For best dog or bitch, $10; second best, $5.

Class 27—Siberian or Ulm Dogs—For best dog or bitch, $10; second best, $5.

Class 28—Dalmatian or Coach Dogs—For best dog or bitch, $10; second best, $5.

Class 29—Shepherd Dogs or Collies—For best dog, $15; second best, $10. For best bitch, $15; second best, $10.

Class 30—Bulldogs—For best dog or bitch, $10; second best, $5.

Class 31—Bull Terriers—For best dog or bitch, $10; second best, $5.

Class 32—Pugs—For best dog or bitch, $10; second best, $5

Class 33—Black and Tan Terriers (exceeding eleven pounds in weight)—For best dog or bitch, $10; second best, $5.

Class 34—Black and Tan Terriers (not exceeding eleven pounds in weight)—For best dog or bitch, $10; second best, $5.

Class 35—Skye Terriers—For best dog or bitch, $10; second best, $5.

Class 36—Scotch Terriers—For best dog or bitch, $10; second best, $5.

Class 37—Dandie Dinmont Terriers—For best dog or bitch, $10; second best, $5.

Class 38—Yorkshire Terriers—For the best dog or bitch, $10; second best, $5.

Class 39—Toy Terriers (not exceeding five pounds weight)—For best dog or bitch, $10; second best, $5.

Class 40—Blenheim, King Charles, or Japanese Spaniels—For best dog or bitch, $10; second best, $5.

Class 41—Italian Greyhounds—For best dog or bitch, $10; second best, $5.

Class 42—Poodles—For best dog or bitch, $10; second best, $5.

Class 43—Miscellaneous, Dogs or Bitches—The sum of $15 will be given, to be awarded at the judges' discretion, for breeds of dogs which have not been assigned special classes.

Class 44—Trick Dogs—For best dog or bitch, $20; second best, $10.

This premium will be awarded by a committee appointed for the purpose, and after competitive exhibitions to be given on each afternoon and evening of the show.

For further particulars address E. J. Forster, Secretary, P. O. Box 3008, Boston.

Officers for 1878.—Pres., W. H. Cowing; Vice-Pres., J. Fottler, Jr., E. L. Dorr; Treas., T. T. Sawyer, Jr.; Secy., E. J. Forster. Exhibition Committee—F. B. Greenough, I. Nelson Borland, T. T. Sawyer, Jr., Luther Adams, Samuel W. Rodman, James F. Curtis, John Fotler, Jr.

FIRST ANNUAL BENCH SHOW OF DOGS AT BOSTON.—We shall be glad to forward to any one who may desire them, copies of the rules and regulations, catalogue of prices, classification of dogs, with entry blanks of the bench show of dogs, to be held by the Massachusetts Club, on March 26, 27, 28 and 29.

ST. LOUIS BENCH SHOW—*St. Louis, Feb.* 2, 1878.—*Editor Forest and Stream and Rod and Gun:* The great dog show is about the only topic of conversation in St. Louis at present. Entries are coming in rapidly, and by the 5th I expect to be crowded. All the classes seem to come in for a share. The Rink is fast assuming show form. It will be handsomely decorated and will look grand. All the space for exhibits of sportsmen's goods will be occupied. The Eastern dealers are going to make elegant displays. A taxidermist has requested sixteen feet square for his display of birds and animals. A St. Louis gentleman will show a handsome new hunting wagon, fully equipped, which cost $700. There will be about a dozen boats of different design. Mr. Dabney Carr has been made manager of Division 4 (sportsmen's goods.) F. O. De Luze, agent for Spratt's biscuits, has increased his donation for class 63, native setters, from $25 to $75 value. The prize will be made by Tiffany & Co., of New York, in their best style. Messrs. E. C. Sterling and C. H. Turner are appointed a committee to meet visitors at all trains. Wagons will be provided by the association to convey all dogs from the trains to the Rink at no cost to exhibitors. Rates for visitors have been secured at Barnum's Hotel at $1.50 per day. The proprietor, Col. Pratt, is an ardent sportsman, and the hotel is an excellent one. The St. Louis dealers are preparing places for their exhibits. Some of them, in addition to their own handsome displays, will exhibit cases of goods which were at the Centennial. Yours, truly, CHAS. LINCOLN, Sup't.

A NEW ZEALAND DOG STORY.—The Maori of New Zealand presents, perhaps, the best specimen of aboriginal man. Honest and brave, he seems to have had few, if any, vices; surpassing the American Indian in eloquence, he was never cruel in war. In his interpretation of the phenomena of nature he has given us one of the most poetical and beautiful mythologies in all the world. But, alas! even the Maori has been contaminated by his intercourse with foreigners. From his European conquerors, the simple, truth-loving native has learned the art of—what should we say? Perhaps the following extract from a New Zealand newspaper will show sufficiently how totally changed the whole Maori cast of mind has become:

"There is a dog at Taupo, and also a young pig, and those two afford a curious example of animal sagacity and confidence in the *bona fides* of each other. These two animals live at the native pa on the opposite side of Tapuaharuru, and the dog discovered some happy hunting grounds on the other side, and informed the pig. The pig, being only two months old, informed the dog that he could not swim across the river, which at that spot debouches from the lake, but that in time he hoped to share the adventures of his canine friend. The dog settled the difficulty. He went into the river, standing up to his neck in the water, and crouched down; the pig got on his back, clasping his neck with the forelegs. The dog then swam across, thus carrying his chum over. Regularly every morning the two would in this way go across and forage around Tapuaharuru, returning to the pa at night, and if the dog was ready to go home before the pig, he would wait till his friend came down to be ferried over. The truth of this story is vouched for by several who have watched the movements of the pair for some weeks past."

DACHSHUNDE.—We are glad to know that Mr. F. Leisler's fine Dachshunde Puck and Nellie, which were noticed by us at the Philadelphia show, will be sent to the St. Louis Bench Show. To a correspondent who asked us to give Mr. Leisler's address, we can furnish the same on application directly to us.

DEATH OF DASH.—Mr. J. C. Comfort, of Cumberland, Pa., informs us of the death of his well-known setter Dash. Dash was imported in 1866.

A POSSIBLE CASE WHERE NICOTINE PREVENTED RABIES.—A correspondent, "B. P. B.," of Galveston, Texas, informs us that once he had his Newfoundland dog bitten by another dog, supposed to be mad. As our correspondent was smoking a pipe at the time, he applied to the bitten dog the nicotine in the pipe stem and bowl, anointing the wound with it. The dog never suffered any inconvenience. This question suggests itself to our mind, was the first dog who bit the Newfoundland mad? Nicotine, though somewhat caustic in character, is not considered to be very powerful in its action. We should not be inclined to place any reliance in nicotine, as applied to bites from a rabid dog.

FAIRY'S WHELPS.—Mr. C. H. Raymond's Fairy had eight whelps, Feb. 2, by Mr. Higgins' Lincoln (Dan—Lill.) All are white and orange, good size and well shaped. Six females and two males.

NOTICE TO SPORTSMEN.—Having received so many communications asking us for information in regard to our six-section bamboo trout, black bass, grilse and salmon rods, we have prepared a circular on the subject, which we shall take pleasure in forwarding to any address. We keep on hand all grades, the prices of which range from $15 to $150. We put our stamp only on the best, in order to protect our customers and our reputation, for we are unwilling to sell a poor rod with a false enamel (made by burning and staining to imitate the genuine article) without letting our customers know just what they are getting.

P. O. Box 1,294.—[*Adv.* ABBEY & IMBRIE, 38 Maiden

Yachting and Boating.

HIGH WATER FOR THE WEEK

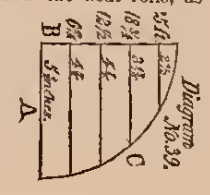
Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
Feb. 8	3	04	M		11	15
Feb. 9	3	43	0	33	11	59
Feb. 10	4	26	1	19	0	24
Feb. 11	5	19	2	13	1	21
Feb. 12	6	19	3	06	2	30
Feb. 13	7	24	4	06	3	40
Feb. 14	8	27	5	10	4	50

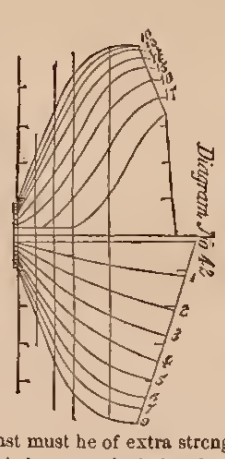
BOAT AND YACHT BUILDING—(12th Paper.)

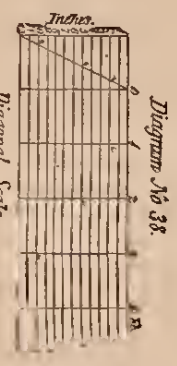
BY NAUTICUS.

A NEWPORT BOAT.

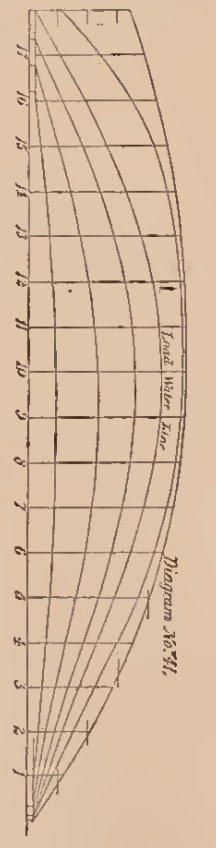
The drawings with this article, diagrams No. 40, 41 and 42 give a model largely in use, and commonly called the Newport boat. The buttock lines are not shown, but their position is indicated on the half breadth and body plans. The distinguishing features of this model are light draft, and the wide shoulders or hips giving great stability. This boat may be sloop-rigged, but is usually cat-rigged. A cat-rig is, undoubtedly, the safest and easiest craft there is when working to windward; running free, the cat-rig is unpleasant. The large mainsail is far forward of the centre of gravity, and consequently a large and strong rudder is necessary to keep the boat on its course. The "rise" of the outward end of the boom must be sufficient to prevent its dipping into the water when the boat rolls, as roll it will when running free. The

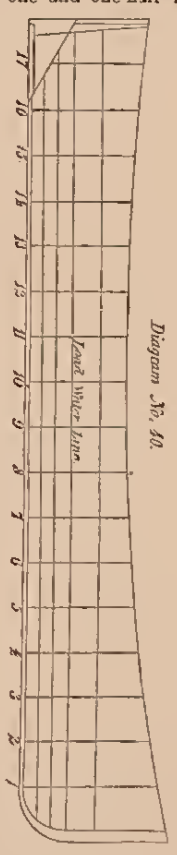






mast must be of extra strength, as no shrouds are practicable. This boat may be built of any size preferred. For a boat 20 feet long the ribs may be three-fourths of an inch at deck line, and three-quarters by one and one-half inches on the keel. The keel is flat, and may be one and one-half inches





thick. Stem and stern deadwood, two and one-half inches thick along the rabbet or grooves. Centre-board, one-third the length of the load water line. Foundation of the trunk, two inches thick, the pieces to run some distance fore and aft of the trunk, materially stiffening the boat. The trunk should be so placed that the centre of gravity, or lateral resistance, of the centre-board when down, will be in the same vertical with the centre of lateral resistance of the hull; the centre of gravity of the centre-board can be found in the same manner as described for finding the centre of gravity of a triangle. Rudder for a twenty-foot boat, about two feet long, made and hung as described for the skip-jack yacht. For the benefit of those who are not used to drawing, some explanation of the mode of making and using scales will be necessary. We will suppose that the builder wants to construct a boat after the Newport model, twenty feet long on the water line. Mark on a piece of paper a line as long as the load water line of sheer plan, and, with a pair of dividers, divide the line into twenty equal spaces, each one of which represents a length of one foot. Draw a series of twelve parallel lines, at equal distances apart, under the first line, and space them like the first line, by lines at right angles drawn across all the lines to intersect the divisions of the first line.

Number the divisions as represented on diagram No. 38; draw the diagonal line as represented on the diagram, and number the end of scale as shown; the large divisions represent feet, and the ending of the parallel lines on the diagonal represent as many inches as are marked on that line. We will now suppose that some certain measure is taken off the boat drawings with the dividers, and we want to know how many feet and inches is represented. Placing one leg of the dividers on the scale on some one of the divisions representing feet, we try different places until we find a position where one leg will rest on some one of the foot divisions, and the other leg touch the diagonal line at its intersection with the parallel on which the measure is taken. The distances indicated on the scale in the diagram are 1 foot 2 inches on the second parallel, 2 feet 5 inches on the fifth parallel, and 3 feet 10 inches on the tenth parallel line. The fractional parts of an inch can be estimated. The enlarged drawings will be more or less inaccurate, but can be easily rectified as explained in the article on drawing. The mast for a cat-rig is best made whole, without a top-mast, and for a boat 20 feet long should be about five inches diameter at the deck line, 2½ inches diameter at the top, and about 25 feet high above deck. Diagram No. 39 shows a method by which a good taper is given to masts or other spars. Suppose a mast is wanted of the dimensions given above—draw two lines, A B, at right angles to one another, as shown on the diagram; set the dividers to five inches and draw the curve C, the intersection of the lines A and B being the centre; draw a line parallel to A, which will intersect the curved line C, at a distance of 2½ inches from B; divide the space between the line last drawn and the line A into four equal spaces, and draw lines from each division to the curved line C. The diagram will now show the line A to represent five inches, or the diameter of the mast at the deck line. The next parallel line gives the diameter at one-fourth of the length of the mast above deck, viz.: 6¼ feet above the deck, and in like manner for the rest as shown on the diagram. The greatest diameter of a boom is at or near its mid-length, and tapered each way toward the ends. The boom for a 20-foot yacht should be 4½ inches diameter. The sail for a 20-foot yacht of this model may be about 350 square feet area, or about seventy square feet area of sail to every foot of immersed mid-ship section.

The following dimensions will give a good-shaped sail for a 20-foot boat: Mast, set 15 inches back of rabbet of stem, 25 feet high above deck, and to "rake" three-fourths of an inch to the foot; "peak" of sail, 7 feet 3 inches aft of top of mast, and 25 feet 4 inches from the foot of mast, measured on the diagonal line; hoist of sail, 16 feet and 9 inches; sail measures along the boom 23 feet and 3 inches; from end of boom to peak of sail, 26 feet; along the gaff, 10 feet and 6 inches; the outward end of boom "rises" 2 feet and 6 inches above the foot of sail at the mast. The mast step should be made extra strong and well fastened. A piece of live oak will make the best "tiller," as it is strong and tough. The ballast should be sufficient to bring the boat down to the load water line, and the bulk of it kept as near the centre of gravity of the vessel as possible. Some shifting ballast may be used, but it is best to have the ballast fastened in place, so that there will be no danger of its shifting. A small boat or "tender" is convenient, and sometimes necessary; but if towed astern acts as a clog. Probably the most convenient boat would be one of Fenner's portable scows, which can be folded up and stowed in the cockpit or under deck when not in use. Directions for building centre-boards and trunks will be found in the article on the skip-jack yacht. A 20-feet boat of this model draws but 14½ inches water, and can be kept on mud flats which are left bare by low tides without removing any ballast. This is quite a convenience. A sharp, deep boat, ballasted and placed in a similar position, will not rise with the tide, but fill with water. This I have learned to my sorrow, and others may profit by my experience. The Newport boat generally has a light spar bowsprit, and a jib is set and boomed out when running free. No jib-stay is used. When working to windward the jib is not used, as it would destroy the balance of the sails and give a "lee helm."

BOAT AND YACHT BUILDING.—In reply to the queries of several correspondents, our regular contributor on marine architecture writes:

"I would say that the *load water line* is shaped according to the judgment or fancy of the designer; the curve of the stem is also a matter of fancy. The paper on drawing (published Nov. 1), contains *all* that is required to learn the art, and I would reiterate the advice there given—'The quickest way to learn boat drawing is to *draw* or copy drawings; continue the practice until every point and line and their meaning is indelibly fixed in the mind.' No one need expect to master the subject by simply reading it over—it requires *study* and *practice*."

CANOE QUESTIONS.—We beg to state that we are fully prepared to give all information in regard to canoes. We are glad to announce that in case any of the queries are beyond our personal powers we can call upon a prominent canoeist and member of a leading club, who will give us his aid.

EASTERN YACHTING NOTES.—The yachting outlook for Boston and vicinity bids fair for a lively season for 1878. The builders and repairers are all busy.

Messrs. Lawley & Son, on Sixth street, South Boston, are just getting out the frame of a 32-feet keel sloop on order, and have just finished two very handsome cat-rigs 22 feet long, one of which has recently been purchased by Frank Drew, Esq.

Messrs. Hutchins & Pryor are building a 37-feet keel sloop, 14 feet beam, 5 feet draught, on order of Mr. O'Gorman, late owner of the Water Witch. The model and molds were furnished by our celebrated architect, D. J. Lawlor, Esq.,

who modeled the pilot boat Centennial, of New York City. Mr. Robert Bibber is building a cat-rig to order, 24 feet long, and she has every appearance of a staunch, sea-worthy boat.

We also find up Bay View that the curiosity shops are not yet closed. There is a curious craft in course of construction on the beach at Ninth street. Some of her peculiarites are in having bilges lower than her garboards, a solid fore-foot extending two feet up the stern, and having an ell added on for a round stern. Although she may not prove so much an object of curiosity as the vessel that was built in the back woods of New Brunswick, she attracts many visitors.

If the large yachts had been in the water Christmas we might have had a fine regatta, the weather was so warm, with a steady breeze.

D. J. Lawlor, Esq., at his shop in East Boston, is building a veritable English cutter, 50 feet long, 15 feet beam, and 7 feet draught. She is being built in the best manner, and is a fine piece of mechanism. No money will be spared by her owner, Frank E. Peabody, Esq., to make her a complete success. We wish him much pleasure in his new departure. All of the new crafts will be furnished with iron keels. Mr. Peabody's keel will weigh 6,800 pounds, and be 18 inches deep and about 35 feet long, tapering to 1½ inches. Mr. Gorman's keel will weigh 1,500 pounds, will measure 12 inches deep, 23 feet long, and taper to 1½ inches. The keel on the boat by Messrs. Lawley & Son will be as heavy as Gorman's, but not quite as long.

Hollow spars are receiving as much attention as last year, and a number of old boats will appear in new rigs.

Nat. Wales, Esq., is going to have the Wyvern refitted for the coming season, and again his generous latch-strings will hang out for his numerous friends.

—The first annual meeting of the Metropolitan Association of Amateur Oarsmen will take plase at the Sturtevant House next Saturday evening.

—Captain Crapo is now playing the *role* of "The Ancient Mariner" at 647 Broadway, where wedding guests may linger to hear the story of the little "New Bedford's" Atlantic voyage.

Boston Yacht Club.—The following officers have been elected for the ensuing year:

Com., Frank H. Peabody; Vice-Com., Nat'l Wales; Rear Com., A. Roheson; Treas., A. Russ; Sec., T. Dean; Measurers, D. J. Lawlor, J. B. Smith; Trustees, Benj. Dean, Wm. B. Merrill, Eben Phillips; Membership Com., A. C. Martin, C. E. Russ, W. H. Whitney; Regatta Com., F. E. Peabody, W. H. Bangs, H. H. Kellet, C. C. Barnard.

The club is in a very prosperous condition financially and five new yachts have been added to the already large list.

King's Sauce Royal.—The great reputation of Worcester sauce arose from the fact that an English nobleman once declared that with it "he could eat his grandmother." We must insist on the possible fact that with a sprinkle of King's Sauce Royal any man could devour the toughest, the most unsavory and complicated mother-in-law. On fin, fur and feather, on fish, flesh or fowl, King's Sauce Royal will be found to give a flattering flavor.

Sea and River Fishing.

FISH IN SEASON IN FEBRUARY.

SOUTHERN WATERS.

Pompano, *Trachynotu carolinus*.
Drum (two species). Family *Sciænidæ*.
Kingfish, *Menticirrus nebulosus*.
Sea Bass, *Sciænops ocellatus*.
Sheepshead, *Archosargus probatocephalus*.
Snapper, *Lutjanus caxus*.
Grouper, *Epinephelpus nigritus*.
Trout (black bass), *Centropristis atrarius*.
Striped Bass, or Rockfish, *Roccus lineatus*.
Tailorfish, *Pomatomus saltatrix*.
Black Bass, *Micropterus salmoides*: *M. nigricans*.

Fish in Market—Retail Prices.—English turbot and sole are in market. Shad of 5½ pounds each are coming in from North Carolina, with very fine red snappers from Mobile. Spanish mackerel, caught at Key West, are also on sale. A very rare and curious fish, the *Lachnotaemus falcatus*, was exhibited to us by Mr. E. G. Blackford, of Fulton Market. This fish resembled in part the red snapper, but is distinguishable by three elongated spines coming from the dorsal, these spine being over six inches in length. The mouth is huge, and capable of any amount of extension, the end of the jaws being covered with long and sharp teeth. Length 28 inches, breadth 9. This makes the second fish of this kind brought to New York. The *Lachnotaemus falcatus* is not often caught, even in Key West. It is said to be an excellent fish to eat. Striped bass, 20 to 25 cents; smelts, 15; bluefish, 15; frozen salmon 35; mackerel, 25; Southern shad, $1.50; white perch, 15; Spanish mackerel, 40; green turtle, 25; terrapin, $18 per doz.; frost fish, 8; halibut, 18; haddock, 8; codfish, 6 to 8; blackfish 15; Newfoundland herring, 6; flounders, 12; sea bass, 15; eels, 18; lobsters, 10; sheepsheads, 25; scallops, $1.50 per gallon; soft clams, 30 to 60 per 100; whitefish, 15; pickerel, 15; sunfish, 10; yellow perch, 10; salmon trout, 16; black bass, 18; hard crabs, $3 per 100.

Connecticut—*New London, Feb.* 1.—Fishing through the ice attended with but poor success. Few pickerel and many in spawn. No black bass. Misal.

The "Wood" Fly.—Brother Reuben Wood, of Syracuse, who conscientiously captures the leading prizes at nearly all the Fly-Casting Tournaments, has kindly sent us a half-dozen of the peculiar pattern of flies which is happy in bearing his name. Now, it need not be supposed that the flies are *wooden*. Nay, they are of most delicate floss and feathers. The bodies are white, head red, hackles brown, and wings and tails of the rayed feathers of the mallard. No other flies are arrayed like these. Mr. Wood tells us that they are to become the "bass fly of the world." While we considerately accept his assurance, we prefer to leave the fact to the bass themselves to determine. This he begs us to do. He says: "Try it any time of day you like; but a dark day, or just at night, is the best. Try it against each and all other flies at the same time, and when you have done let me hear the result." That's fair, certainly! We will test them ephemerally. We should think them also excellent samples for trout, and will try them on those fish also. We have no doubt that brother Wood can duplicate these patterns on order, if an order be sent. Brother Wood was in this city last week, and made his genial presence felt.

The Angling Season Approaches.—In these early months of the year the thoughtful angler will prepare for spring. On the 15th of next month the trout streams of Long Island will be open by law, if not by nature, and it is well to get tackle in readiness for the occasion. Those whose stock of flies need replenishing can apply to John Haily, 320 Henry street, whose advertisement appears in our columns. Or, if they wish to learn the art of dressing artificial flies, Mr. Haily will impart it in a few lessons. Very opportune and fortunate, we think, are the few days of wintry weather which we perceive precede the trouting season. The very contrast of sleet, snow, storm and cold enhances the delights of the more genial spring days which are sure to follow, sooner or later. We could not fish with half the zest if there were no contrasts of temperature and weather; no change of physical features; no temporary repression of the sap in the trees; of the blood in the veins; of the streams in their ice-bound beds. With the reaction of returning circulation comes the glow. This glow it is which makes all nature smile; it reddens the pallid complexion of men; it imbues us all with health. It "stiffens the sinews and summons up the blood." It renovates, rejuvenates and renews. Hail, stormy winter, as long as it pleaseth. After which, hail gentle spring!

We have made a tour of the tackle-shops, Crook's, Conroy's, Abbey & Imbrie's, Marsters', Peck & Snyder's, Fish & Simpson's, Shipley's of Philadelphia, Reed & Sons, and Schaffers of Boston, and others, and find their cases and drawers filled with goodly assortments of tackle, from which they are filling country orders with an activity which would seem to reflect credit upon the voracity of fishes and the propagating efforts of fish breeders.

Sheepshead at the Breakwater.—Perhaps the greates place for sheepshead fishing on our coast, and a place the least resorted to by sportsmen, is the Delaware Breakwater, situated at the mouth of Delaware Bay, on the Delaware shore, just inside of Cape Henlopen. The peculiar formation of this structure, and its close proximity to another "work" of the same description, namely, the "Ice Break," has everything to do with the fact that sheepshead are so numerous around its base. The large stones, sandy and muddy bottom, and precipitous, or rather sudden descent of the walls, forming the breakwater, and its comparatively undisturbed locality, render every encouragement to the tourist seeking the capture of the finny specimen. In order to thoroughly enjoy the sport incident to fishing of this description, one must familiarize himself with the customs of the "game," or his most energetic efforts would only be rewarded by disappointment. "An ounce of experience is worth a pound of theory," and experience is not to be obtained in this matter without the aid of one accustomed to its toils. On the bleak surface of this Breakwater, in a bleak house, exposed to all the howlings of the winter's gale, and alike to the stifling rays of the summer's hottest sun, a middle-aged man and his family proudly hold in hand the responsibility of tending "keeper" to the light-house projecting from the roof of his storm-beaten dwelling. Rather tall, straight as any arrow ever made, with a face covered by a thick, black beard, an honest and open countenance, imposing full confidence at first sight, Captain Al. Jenkins is a person calculated to entice success to those entrusting themselves to his care for the purpose of taking chances with the line in fathoming the mysteries of the deep. "Good morning, gentlemen—Miss!" and the captain springs ashore from his boat. "Haul up her bows, Charlie. Keep her stern off, and lay out the gang-plank! Now, if you will take my hand, ladies, I'll see that you are safely seated; the gentlemen have boarded my craft before, and they can take care of themselves. All aboard! Step aft, please sir! Shove her off! Up mainsail! Trim aft! Give her some board!" We are off, and, oh what fun! Skipping lightly over the top of the little waves, as they splash against the sides of our boat, or driving headlong through a larger swell, which refuses to lift our bows, skipping along, accompanied by the flap of a bonnet-string, the gurgling sound of the rudder, and the merry voices of a merry party, a breeze on our beam, with the sunburnt skipper mindful of his trust, his eye fixed on the beach, and silent as a grave. We leave the shore astern and rapidly approach the spot selected for the battle-ground. Passing a few schooners, and perhaps a stray ship or so lying in the harbor waiting for orders, we glide gently in the quiet waters to leeward of the Breakwater, where, having made all fast by stern anchor and bow-line, we rest upon our oars. A bushel basket of speckled-back crabs is uncovered, and the captain and his son "Charlie," bringing to sight the coveted lines in short order, have all hands baited, "eager sense" waiting for the nibble. "Drop down your lead till it reaches bottom, then haul up about six inches to a foot," are the orders of the captain, speaking for the first time since leaving shore, as he quietly lowers the bait over the bows of his boat. "I think we'll have some work to-day; wind nor'west, and not too much of it. Mind the bite, sir! it feels as if some one had hold of your line pulling steady down," and a little voice speaks up, "Captain, my line feels heavy!" "Pull it quick, Miss, and hold on till I get there! Let me have it. Whew ten pounds or not an ounce!" Watch him as he works his line; now hauling in; now paying out! now holding fast. Fish in sight; now out of sight, rushing madly to and fro endeavoring to free itself from the grasp of death. The captain never smiles. His line always on the same strain; no jerking, no wavering. "Ready now, Charlie," and the boy stands with a net raised in the air. Dash! splash! and the enemy is captured in the meshes, swung from the water and laid in the bottom of the boat, secured safely from further temptation and all wet weather. There is no sport like it when they bite; there is no sport so tedious when they do not bite. But the chances of a turn at the glorious pleasure are well worth the cost; and should the tyro happen to meet with a fortunate trip, I feel assured that he (if he possesses any sense for true sport) will not rue the trouble he undertook nor envy the moments spent in the boat of Jenkins while in search of the hidden treasures by the walls of the Breakwater.

Charles Gibbons, Jr.

THE BASS ROD.

Chicago, Jan. 22, 1878.

Editor Forest and Stream:

In answer to some of your correspondents who inquire about the kind of rod used in black bass fishing, I say that the rod I use is made by J. C. Wells, of Milwaukee, has an ash butt, secure joints, and tip of natural cane or bamboo. I sometimes substitute a tip of lancewood for that of cane, and thus add a little to the stiffness of the rod.

I notice in Hallock's "Gazetteer" a strong recommendation of the Meek reel in casting for bass. While I commend this reel for superiority of workmanship and finish, and its perfection in some kinds of fishing, my experience in casting for bass is, as stated in my former note that this reel is not the best. In reeling in after a cast, the rapid action of the reel is an advantage, for the reason that you can then control it; but in making the cast, this same rapidity is sure to involve you in difficulties, and your line in exasperating confusion. I have abandoned the Meek reel, and used only the double multiplier.

Recurring once more to the Wells rod: In addition to the lightness of its weight, it has sufficient elasticity and strength to capture any fish found in our waters. I took a green bass one day last summer, that weighed (on the scales, and not in the eye) five pounds, thirteen ounces. He made a vigorous fight, and tested the rod thoroughly.

On an afternoon late in the fall, I had come in from duck shooting. Thinking to finish up the day, I shoved out in La Buu Lake in a small duck boat, taking a rod, landing-net and an artificial minnow. On the second cast a fish struck the bait, and in a moment I was fully aware that he was a big one, for he made a rush that carried out, at least a hundred feet of line. When I checked him, he made a bee line for the boat, passing quickly under it, and would have doubled and broken the rod in pieces, had I not quickly slipped the tip of the rod over the stern of the boat, and given him full scope. He tried this same plan three or four times, but finally gave it up for more distant action. After about twenty minutes of hard and exciting work, standing all the time in a crank boat, I brought him alongside, and slipped the landing-net over his head, and the fish in the boat. It proved to be a small muskelonge, three feet two inches in length, and weighing fourteen pounds. The rod worked to perfection during the whole contest. By the way, I notice that some of your correspondents persist in calling the rod a "pole." No fisherman will submit to that, and our friend, Capt. Fitzgibbon, of Indianapolis, will surely kill any man who perpetrates the crime in his presence.

Our brother, Wm. C. Eagan, of Chicago, has taken unto himself a wife, as fair and beautiful as the bride of Morning, and flown to warmer climes for his honeymoon. His sporting days are not over, and you will see him, no doubt, in the coming summer time, on the banks and bosom of the broad St. Lawrence. Geo. A. Shufeldt.

SPLIT BAMBOO RODS.

To our customers and the public:—In reply to the damaging reports which have been circulated respecting the quality of our split bamboo rods, by "dealers" who are unable to compete with us at our reduced prices, we have issued a circular which we shall be pleased to mail to any address, proving the falsity of their assertions.

Conroy, Bissett & Malleson,
Manufacturers, 65 Fulton Street, N. Y.

Dudley's Patent Pocket Cartridge-Loader.—Among the late inventions patented is one by J. H. Dudley, of Poughkeepsie, N. Y. It is a cartridge-loader. The old method of loading cartridges for breech-loading guns necessitated the use of several cumbersome tools. The Dudley Pocket Cartridge Loader is not larger than a good-sized jack-knife. The whole is combined in one instrument, and is very simple. The price is about three-fourths less, also, than the old appliance.—*Brooklyn Eagle.*

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

A. B. H., Tullytown.—Have sent to California to find out.

H. R., Philadelphia.—The papers you require have been sent you.

J. P. S., Philadelphia.—Refer you to reply to T. A. Mc. as to beagles.

N. E. R., Fairfield, Ill.—We sent you last week the pamphlets you required.

W. H. W., Cincinnati.—Mr. Jefferson has not had his picture chromolithographed.

B. M. S., La Grange, Texas.—In next number will have a full description of the breed.

J. R. M., Hillsborough, Ohio.—"Rob Roy on the Baltic" is published by Roberts, of Boston.

W. W., Albany.—The difference of time between London, Eng., and New York is 5 hrs. 1 min.

Picket, Victor, N. Y.—We will do what we can for you. Write us again in about two weeks.

P. R. S., Stewardsville.—The Perry gun out of date; would not know where to get the parts you require.

H. H. S., Ithaca.—Please send me forms of entry for St. Louis Bench Show. Ans. Sent you some last week.

JIM.—The Preston Ponds, three in number, are in the Adirondacks. their outlet is Cold River which enters into the Raquette.

M. D., Stanford, Ky.—One of the best artists in your State for photographing dogs and animals is Wybrant, 141 Market street, Louisville.

H. W. H., Louisville.—Powder used at the Tatham Trial of Improved Chilled Shot was No. 1 Ducking. See reply to "Calla Lily" in this column.

C. E. VAN V., New York.—We refer this inquirer to the answer we have given J. W. S. The case is precisely the same, and wants a similar treatment.

C. V., PINE BLUFF.—Is there a firm of Lon & Garlick, gun dealers, in New York? Yes, in Chambers street; also, there is a firm of Onion & Cornwall.

C. S., West Meriden.—I want to settle as a gun maker; where shall I go to? Ans. Would advise some town in Texas, and to combine lock-repairing and fine iron work with it.

F. L. A., New London, Conn.—What charge shall I put in a Bond double gun, 24-gauge, 29½ in. barrel, ⅛ in. thick at muzzle, 7¼ pounds? Ans. Two drachms powder ¾ oz. shot.

O. G. B., Galveston.—Is there any sense or reason in cutting young pointer or setter puppies' tails a quarter of an inch? Will it prevent worms? Ans. No common sense and no good reason for cutting dogs' tails to attain the object you mention.

E. S. P., Washington, D. C.—Do not think you ought to buy. The name of —— alone, without the Co. to it, is that of a famous maker. Such a second-hand gun, if in good order, would be cheap for $150. Of —— Co. we know nothing. Don't.

L. D. S., Philadelphia.—1. Give me the best method of keeping the inside of my gun barrels clean and bright. 2. What is the opinion of the guns made by ——, of Birmingham? Ans. 1. Use Eaton's rust preventer. 2. Do not know of such a maker.

W. H. H., Pittsburgh.—1. What is a pace? 2. Give me a book on projectiles? Ans. 1. When men shoot measuring as they make a stride, it is called a pace and is considered as something like three feet, though Webster says five feet. 2. Ordnance reports 7 and 8.

J. L. G., Danville, Canada.—Send one "Camp Life in Florida," price $1 50. What is the most comfortable route from Boston to St. Augustine and the fare? Ans. Book sent. Take steamer of Murray & Ferris line direct from New York to St. Augustine; fare $20. Office, 62 South street.

T. M., Chicago.—My spaniel pup had distemper last fall, and since then, on attempting to turn quickly, his hind quarters give way under him, apparently from weakness. Can he be cured? Ans. The dog has partial paralysis. One-tenth grain doses of nux vomica given three times a day would do good.

H. L., Austin, Minn.—1. Give me the names of German papers on sporting topics. 2. Which style of choke-boring is most in use, when the choke is at the muzzle, or where it is from ¾ to 1 inch from the muzzle? Ans. 1. *Deutsche Yagdzeitung*, Ellenberg, Prussia; *Der Waidman*, Leipsig. 2. The gradual, not the sudden, choke.

J. E. C., Cumberland.—Give me some book where I can find picture of H. T. and plunge trap. 2. Do you know such a gun maker as Smith, of London? 3. Could I send it to England to have it altered to a centre fire? Ans. Refer you to a former number of *Rod and Gun*. 2. Do not know such a maker. 3. Much cheaper to have it done at home.

A. R. H., Saint Ansgar, Iowa.—1. Where are the Ballard and the Spencer rifles? 2. Who make Creedmoor rifles? 3. Are there any buffalo in Iowa? Ans. 1. Schoverling & Daly, 84 Chambers St., N. Y., the Ballard, and the Winchester Repeating Arms Co., New Haven, Conn., the Spencer. 2. The Sharps and Remington and Ballard. 3. No.

T. & F., Columbus, Ohio.—Conroy, Bisset & Malleson have the Mitchell bass rods for sale. We bought one of them last summer. We do not understand that the Mitchell rods are made to order by the manufacturer. The Orvis bass rods, both wooden and bamboo, are very fine. We prefer his wooden bass rod to his bamboo rod for our own use.

W. H. H., Grove street, New York.—Have a Richards BB. I want to load it for trap-shooting. It is 10-bore 32-inch. In loading shells must I press hard? Is crimping shells detrimental to good shooting? Ans. Four and one-half drachms powder, 1¼ oz. No. 8 shot. Use Hazard's Electric No. 4 or Dupont's No. 2. Crimping shells is supposed to improve shooting.

J. B. McL., Strasburg, Va.—Have an 18 bore 36 inches long. It shoots small shot well. Want it to shoot No. 1 and 3 B's. Can I do that with choke-boring? Would it then shoot large shot better? Ans. Would not advise its being choke-bored. Not intended for large shot. Think you would spoil the arm. But if you wish to try the experiment send it to Mr. Squires, No. 1 Courtland street.

T. M. Gwen, Woodstock, Ohio.—Please inform me in what counties in Pa. the wild pigeons are feeding. I know they are roosting in Bloomingfield Tip, Trumbull county, Ohio and they fly in all directions. Would like to hear from Jefferson and Clarion counties in Pa., or anywhere else that birds are plenty. Ans. C. Crittenden, Garretsville, Ohio, has plenty of wild pigeons to sell. The "woods are full of them" over there.

G. W. B.—In two of the New York daily papers I see a notice of the progress and advancement of the "Adirondack Club." Will you, through your columns, be kind enough to inform me where I can communicate with said club? Ans. For some particulars of the Adirondack Park, see this week's issue of FOREST AND STREAM. Jas. R. Thompson, of Jersey City, is the President. He will give you the names of the other officers.

JIM RED, Fort McKarett, Texas.—Can I procure a rubber boat to carry two persons? Ans. Have inquired among the manufacturers of rubber goods and they say none are made. There is, however, a "Monitor Raft" sold by the Combination Rubber Company, 62 Church St., N. Y., price $75, which consists of rubber cylinders (to be inflated) connected by a suitable framework, with an elevated seat for the fisherman. See "Sportsman's Gazetteer."

M. C., Jr., Philadelphia.—What is the proper load for pigeon shooting, 21 yds. rise, for a Remington breech-loading gun, No. 10 bore, 30-in. barrels? Also, the best kind of powder, shot and wads to use. 2. If a bird is shot between the trap and shooter, or on a line with the shooter, is it considered his bird or not? Ans. 1. 4½ drs. powder, 1¼ oz. shot, Dupont's or Hazard's, two pink cartridges over powder, one black over shot. 2. The bird is scored if gathered anywhere within the boundary.

E. G. B., Hillsboro Bridge.—1. Is there a shot-gun shell other than the Draper, that uses a common percussion cap? 2. Where can I obtain Kay's shot cartridge, and buy Draper's shells at 18 cts.? 3. Have a Phenix gun, B. L., put 233 shot in a 3-in. target, 40 yds., No. 8 shot. Is that a good pattern? 4. Is —— a good gun, and what is the price? Ans. 1. Not any. 2. Mr. Squires, No. 1 Courtland St., New York. 3. A first-class performance. 4. Admirable arm, and costs something like $75 to $85.

J. W. S.—My dog's hair is falling out, not that he gets bare, for the hair seems to be replaced as fast as it falls out. It is a nuisance, covering one's clothes and furniture. I use Nabler's tablet to wash the dog with. What shall I do? Ans. You fail to mention the breed of your dog, whether long or short haired. The trouble is best remedied by regular brushing, and plenty of open-air exercise. Confinement and lack of exercise causes the hair to fall. The soap you mention has a good reputation.

A. S., Troy.—1. Who is the publisher of "Wilson's Ornithology" and what is the price? 2. Is there a work on animals with colored plates, who published by and the price? Ans. 1. There have been several editions of Wilson issued; the most recent was published by J. W. Bonton, No. 706 Broadway, New York. See advertising columns for price. 2. "Audubon and Bachman's Viviparous Quadrupeds of N. A.," now out of print, hard to get and costly. Randolph & Co., of Broadway, will give you particulars.

SYM POLTRIZER, Memphis.—My pointer is exceedingly addicted to tightness of the bowels. Has suffered so before. He attempts to have an operation every few minutes, and bows his back until his rump almost touches the ground. What is the matter with him, and what shall I do? Ans. The dog has dysentery. Give small doses of castor oil, and inject into the bowels, after each evacuation, 10 drops tincture of opium in a spoonful of starch water. Do not feed meat, and let the diet be simple for a while.

P. D., Eaton Rapids, Mich.—I shot a partridge four weeks ago from my buggy. Since that time my horse has not been able to hear a single sound. He showed no signs of being hurt at the time—merely gave a nervous start, but no more than he did on former occasions. 1. Did the report of the gun make him deaf? 2. Can anything be done for him? Ans. 1. The sudden concussion may possibly have precipitated the deafness, but is not likely to have been the absolute cause. 2. The ears should be carefully examined by a competent person.

T. W. J., Erie, Pa.—Have a new $35 Remington gun, breech-loader, No. 12. Shooting it about one hundred times it leads about three inches from the end of the shell. What shall I do to prevent leading? I won, with this gun, the badge last Friday; score 24 out of 25 balls. Member of the Northwestern Shooting Club. Ans. See that there is no roughness in the barrel caused by an indentation from the outside, or otherwise. If perfectly smooth use Eley's pink edge wads and there will be no leading. Remove the lead with wire scratch brush.

P. B., Washington.—What will cure my dog of sore ear? Health good, but shakes her head and scratches. Ans. The dog has canker of the ear. A cap should be fitted to his head to prevent shaking of the external flaps. The internal ear should be kept clean by syringing it with warm water, and a weak solution of lead water be poured in the ear twice a day. (P. B. has only sent initials of his name and not his whole name. We have made an exception in favor of the dog. We positively do not answer questions when not signed in full. No end of such go into our basket.)

T. A. Mc., Wilmington.—A harrier is generally from twenty to eighteen inches high, with points similar to a foxhound. Legs should be straight; feet round and not too large; shoulders well set back; head like a foxhound's, only lighter; usual colors blended pies, black, tan and white and blue mottles. A beagle is a daintier dog, with a finer head than a harrier, and sharp-nosed; body compact and muscular; height from twelve to fifteen inches; color same as the harriers. Has a flute-like bark; much more ear and finer than a harrier's. For points we refer you to the papers Dec. 22 and 27.

H. B. A., Bellevue, Ohio.—Have a fine Gordon bitch twenty-one months old. She has never been to the dog. Was in heat three months ago. Now her teats are much distended, and she is uneasy at times. When taken out to exercise, is as lively as ever. Fed on cooked meat and vegetables. Appetite variable. Ans. Not an unusual case. Exercise the bitch freely, but, of course, so as not to over fatigue her. Do not feed her on meat for a while. A little camphorated water might help her externally. Let her have a scrupulously clean bed in a properly ventilated place. Write to a week if not better.

H. H. R., Rockford, Ill.—1. What is the color and what are the points of a good "Blue Belton" dog? 2. What kinds of game are they best on? 3. What price ought I to pay for a setter, say 18 months old and who has had first lesson. I mean a fair dog, not one with many fine points. 4. I shall take a trip into Texas next month. What route would you advise me to take and near what towns would I find ducks snipe or turkeys? Ans. 1. Refer you to article on Blue Beltons in next week's paper. 2. Good for everything. 3. $35 to $50. 4 Refer you to Hallock's Gazetteer, as the answer would take a half column.

R. J. S., Jr., New York.—Can you give me information about Halifax, N. S., or St. Johns, N. B? Is living expensive there and can apartments be taken in the English system? Is there any trout fishing in the neighborhood and is it free? Ans. Living is more expensive in Halifax than in St. John. You can board at both places on the English system. There is better trout fishing near Halifax than near St. John, but good at both. Trout fishing free except in streams protected for government hatching purposes. Fullest information can be found of the entire Provinces in Hallock's Fishing Tourist, for sale at this office.

E. R. B., Newark.—1. Have a Frank Wesson rifle, cal. 38; it is not chambered out for the extra long cartridge. If I have it chambered out can I use the extra long with safety? Would I be allowed to use it in a 200 yards match? Its weight is 8 pounds. 2. Is Tatham's new chilled shot, No. 8, the same size as the old soft shot, 399 pellets to the oz.? Ans. 1. The chambering can be done with safety and the rifle would pass according to rules of N. R. A. 2. The improved chilled shot No. 8 should be 409. From No. 1 to 12 standard diametres are made three sizes larger than the English. The Messrs. Tatham will make up to T. T in improved chilled shot.

N. A. L., JR., Albany; G. O. LEWES; D. H. D., New Rochelle; P. & K., Detroit; L. M. A. Brooklyn; S. F. and Party, Concord; DUCK SHOOTER, Norfolk, Va.; J. B. S., Rochester.—We can make about the same reply to all these queries as to the Improved Chilled Shot, manufactured by the Messrs. Tatham. The price will be but slightly in advance of the ordinary soft shot. It is a bright shot, and has no plumbago coloring. It is very even and cylindrical. The Messrs. Tatham are now selling their improved chilled shot to dealers, and you ought to get it from your nearest gun store. Do not know the price. See tables of penetration in last number.

TELEGRAM, Welles Corners.—1. Where can I procure Miller's "Complete American Trapper?" 2. Does Sharps' rifle, cal. .45, use a straight shell, a smooth or a grooved ball? 3. Would you recommend the ——, when all kinds of game are used? 4. Of the twenty-two gallery rifles, which do you recommend? 5. Would you like to hear from me on the "Running Deer" question? 6. Is there a rifle made to shoot ball or shot? Ans. 1. Address James Miller, Publisher, New York. 2. Straight shell, and, for sporting purposes, grooved ball. 3. Would answer your purpose. 4. All are good, the galleries have no preference. 5. Would be pleased to hear from you. 6. There is not.

F. G., Louisville.—Have you ever known of the calla lily blossoming double? I have one that has the cup formed in three distinct petals. Ans. Thos. Meehan, in the Gardiner's Monthly for 1877, page 185, says: "No doubt the peculiar arrestation of bud growth necessary to form the embryonic flower last fall was imperfect. It grew a little after having started to form the flower bud and then was again speedily arrested." Double-headers were unusually plentiful last season, but we have not yet seen one with three developed spathes. It is of little use even if it keeps its character, except as a curiosity. The normal flower is much more beautiful, and we doubt much that this variety would be much thought of even if it proves permanent.

H. G. L., Milton Pa.—1. What improvement is there in the Winchester model 1876 on the 1873? 2. In what work on hunting can I find the most complete directions for deer hunting? 3. In what State or Territory can I find the best deer hunting? 4. Do you consider the —— the best gun for frontier use? 5. Is it advisable for one going West to hunt to carry cartridges with him, or are cartridges of a particular make, Winchester, for instance, easily procured? Ans. 1. Model of 1876 uses cartridges of 45 grains, that of 1873 55 grains. The former has a safety guard. 2. Hallock's Sporting Gazetteer. 3. Michigan, Virginia, Montana and Colorado. 4. An excellent gun for every purpose. 5. If you use model of 1873 you will find cartridges in the large towns, but you had better carry them with you if you use the model of 1876.

D. F. E., Strasburg, Va.—1. What is the best shape to build a flat-bottomed boat for swiftness and to draw least water, so a carpenter could understand it. For lightness what is next best to cedar, which we cannot get here. How far below the oarlocks should the seat be placed? 2. Where are the new lines of Colts and the new Smith & Wesson manufactured? 3. Do the Remington Co. make a rifle that can be used with their shot-guns (double barrel)? I have a $60 Remington that I would like to have made so I could use it as a rifle. I saw something of the sort in your paper some time ago. What would it cost? Ans. 1. See FOREST AND STREAM page 11, No. 1, vol. 9. Basswood next to cedar. Three inches below the rowlocks. Colt's at Hartford, Wesson's at Springfield. 3. The Remingtons have a rifle barrel which slips inside of their shot-guns. Cost $25.

J. R., Washington, D. C.—Can you inform me if the New River, in Southwestern Virginia, can be navigated by skiff or canoe from the R. R. crossing in Montgomery Co., to its junction with the Gauly, where the two form the Kanawha? Also, if it is a good stream to fish in, the kind of fish to be caught, and the varieties of game to be found in the section of country it passes through? If the thing is practicable, three of us propose to make the trip next June. Ans. It can; and much higher toward its source,—all the way through Pulaski and Wythe counties. It is a most romantic and charming river. Good bass fishing may be found in places, but the river is much beset by fish-traps. The game is deer, turkeys, ruffed grouse and gray squirrels, to say nothing of the "mountain boomers" (red squirrels). A canoe trip will be delightful. There are trout in the tributary mountain brooks of the New River.

WM. E. WEBER, Philadelphia, Pa.—Please let me know what works are out on Natural History, such as birds—I mean late editions, which are illustrated, giving the description and habits, where they breed, when they are in pinmage, etc. 2. Is there any which comes out weekly or monthly? 3. Also, send me one of the forms of entry or circulars. Ans. 1. "The Birds of North America," by Messrs. Baird, Brown and Ridgeway, in 3 vols. (land birds, only, issued as yet), is the latest and best work on ornithology. A fourth volume, containing the water birds, is promised. The price of the work is $10 per volume uncolored, $20 colored. The illustrations consist of figures of the heads of different genera. 2. The "Bulletin of the Nuttall Ornithological Club" is a quarterly journal of ornithology, price $2 00 per annum, the only serial publication on this branch of science in the country. 3. We do not understand this question.

CAPTAIN, New York.—1. What is the meaning of the word "Palma" on the Centennial Trophy? 2. What pattern at 40 yds., 30-in. circle, 1½ oz. No. 4 shot (American), would be a fair one to expect from a 10 gauge, $45, Remington shot-gun? 3. Could you use over 4 drs. powder in such a gun comfortably? 4. Would the above gun, with the above charge, knock over a duck at 40 or 50 yds., sure, providing you hold straight? 5. Will you kindly publish at your convenience, some time between now and spring, a draft of a Fair Haven sharpie, of say about 18 ft. long, giving about 3 cross-sections, the place for the C. B. trunk, the mast steps, and dimensions of the sails? Ans. 1. Palma is the Latin for the palm branch, which was accorded to the victor in the games. Hence it is employed as a symbol of victory in the trophy. 2. R. B. 228, L. B, 237, No. 7 chilled shot. 3. Yes, if you wish to. See F. & S. of Jan. 31, 1878. 4. Only requires holding straight. 5. Described in Hallock's "Gazetteer."

G. C. W., Chippewa.—1. Pray give me differences between a King Charles and a Blenheim spaniel? 2. Is their breed extinct? 3. What is a Maltese terrier? 4. What would be your opinion of an Italian greyhound, white, with fawn ears, 5 yrs. old, and weighing 5½ lbs.? Ans. 1. King Charles spaniels have greater length of ear than Blenheims, and ought to be slightly heavier dogs. The cross between the two breeds, as they assimilate closely, has led to a great deal of confusion. A King Charles has wavy hair without curls; color should be a rich black and tan, without white; weight should be 6 and never over 7 lbs.; legs feathered to the toes; head, round and bullet-like; eyes an inclination to weep; nose and palate black. The Blenheim may have white on him and a white blaze between the eyes is admirable. Dog lighter than a King Charles, not much feather on the toes and sometimes without it entirely. 2. Breed not extinct, but rare and costly in England. Some fair Blenheims in New York. 3. The Maltese terrier is really a small edition of the Skye, but rounder slightly in form, and with a silkier coat, and a curved tail. Ought not to weigh over five to six pounds. Dog very scarce, and do not know of any in the country which come up to standard. 4. If in good form, with weight you describe, though she would be classed a trifle higher if of one color, still your bitch must be a beauty, and should be highly prized.

FORTY FIVE, Jacksonville, Ill.—1. Have a $45 Remington 12 gauge gun that the black paint on the barrels has rubbed off enough to spoil the looks. Give a receipt so that I can replace it myself. 2. Is the $45 gun choke or cylinder bore? 3. The shells (brass) that I have been using are 2¾ inches long and the chamber of the gun is 3 inches. Would a 3 inch brass shell shoot any better than the 2¾ inch? 4. Some how or the other I am afraid of the steel barrels and don't like to shoot heavy loads in the gun. Now, will they stand as heavy charges as twist barrels? 5. Have the Remingtons ever made any experiments in that direction; and to prove whether the metal will become rotten after repeated explosions like car-wheels after running a while? 6. Can't you induce them to make experiments in that direction as you did the Winchester Arms Co. with their new rifle? 7. What part of Minnesota would you settle in for farming, cheap, good land and good hunting and fishing being the two chief things wanted? Ans. 1. We might give you receipts for browning, but when it is done at home a botch is made of it. Send it to a gunsmith. 2. Choke. 3. The chamber will not take a 3 in. shell; only advantage would consist in the use of more powder. 4. No reason for the least alarm; all stand heavy charges. 5. All are tested beyond any charge a sportsman would like to put in the guns. Car-wheels are cast, gun-barrels are forged; the comparison does not hold good. 6. Suppose the Remingtons would be quite willing. You can use 5 drs. powder if you want to. 7. The Southwestern part of the State, on the Sioux city road. Choice there of timber and prairie.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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—AT—

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*** Any publisher inserting our prospectus as above one time, with brief editorial notice calling attention thereto, and sending marked copy to us, will receive the FOREST AND STREAM for one year.

NEW YORK, THURSDAY, FEBRUARY 7, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith, and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous contributions will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

TENTH VOLUME.—With the present issue we begin the tenth volume of FOREST AND STREAM, and the second volume of the consolidated paper. In expressing our thanks to the public for their increased confidence and patronage, we feel at liberty to state that we are perfectly satisfied with our present status and success, though we are still ambitious, and hope by continued industry and fair dealing to merit the fullest measure of praise and emolument which it is possible to secure. In a few days we shall publish some substantial testimony of the geographical area over which our FOREST AND STREAM AND ROD AND GUN spreads itself, in the shape of a printed list of *several thousand towns* which the paper reaches by mail.

—That worthy and universally respected President of the United States, the late Abraham Lincoln, sagely, but with childlike simplicity, remarked, in one of his Messages, that it is "easier to pay a small sum than a large one." Adopting this maxim, which is peculiarly apposite to these hard times, we have decided henceforward to render monthly bills for standing advertisements. We trust our advertising patrons will apply Mr. Lincoln's maxim practically, and find from experience that it is mathematically correct.

YELLOWSTONE PARK.—At the meeting of the National Association at Nashville, last fall, a committee was appointed to draw up plans for the protection of the Yellowstone National Park. The members, who are Professor Comstock, Major Powell, Lieutenant Wheeler and Professor Hayden, have been in conference with Professor Henry, of the Smithsonian, and are now endeavoring to secure an appropriation from Congress for the protection of the Park. We hope that this important matter may receive from our Washington legislators the consideration it surely merits. The course of Congress toward this project should be neither hesitating nor doubtful. Prompt and efficient action is called for. A suitable appropriation, judiciously applied, for the protection of this national park from the defacings and ravagings of unprincipled vandalism, will insure for the future a domain of natural beauty, which, once destroyed, no tardy effort can replace.

—Dr. J. R. Romeyn, of Keeseville, N. Y., a gentleman who has visited the Adirondacks regularly for twenty-five successive years without being surfeited with the delights of that region, has very graciously sent us a large photograph, in frame, containing a view of Bartlett's well-known sporting lodge at the outlet of Saranac Lake. Just at this season it is an opportunely pleasant reminder of a very pleasant home. The photograph was taken by Mr. G. E. Baldwin, of Keeseville, whose photographs of scenery can scarcely be excelled. We have many of them in our collection, whose details are as perfect as it is possible to transfer from the face of nature.

SLEIGHING.—New York and Brooklyn enjoyed the unusual luxury of a day's good sleighing on Saturday the 2d inst. The number of turnouts was large, and the display brilliant. On Sunday the sleighing was somewhat impaired.

—"It's all *over* with me now," as the trout said when caught out of season.

Yes; and the joke is all over, by this time.

—It don't look as if the times were very hard when an advertiser like H. C. Squires, No. 1 Courtland street, sells in one week eight out of twelve shot-guns advertised by a single insertion in FOREST AND STREAM (Jan. 31, 1878). Yet we have Mr. Squires' testimony to this effect.

THE DWELLERS AT CURRITUCK.—We are glad to have so good an authority as Mr. J. F. Alcorn, who was an officer attached to the wrecked ship "Metropolis," speak a good word for the so frequently maligned dwellers at Currituck. We believe they are termed "buffaloes" locally. They have had the reputation of being little less than pirates. No doubt they do not despise the valuable waifs which the sea throws up to their doors, but we do not believe that their usual habit is to cut off fingers of the dead to get possession of the rings thereon. Mr. Alcorn, in making his report, says:

"In closing I feel that the isolated dwellers of Currituck Beach cannot be passed over without more than mere thanks. Strewn as that beach is with scores of wrecks, mute evidences of the frequency of the calls upon their hospitality, on the occasion of this last sad calamity at their doors they were most prompt with their aid, generous in their hospitality, and munificent far beyond their means in the distribution of such spare clothing as was at their command.

A CANDID AVOWAL.—A prominent legal official in Minnesota unloads a debt of gratitude to us in the following language:

"I really think any sportsman who lives in this State should appreciate the send-off which your editor has given Minnesota, by at least remitting for your paper and his book, the "Sportsman's Gazetteer."

TO ASSOCIATIONS OF SPORTSMEN.—Associations for the protection of game, game and fishing clubs, rifle clubs, and gun clubs throughout the United States and Canada, would confer a special favor by sending us duplicate copies of their printed constitution, by-laws, with list of members, names of officers, etc., for 1878. Such documents of the above character as we may receive will be exceedingly useful, and will further the end and aim of all legitimate sportsmen.

THE LONDON FIELD—THE FIFTIETH VOLUME.

In the best possible taste, our great English contemporary, the *London Field*, tells its history:

On the first Saturday in January, 1853, was published the initial number of the *Field*, and the last issue of the paper, bringing the year 1877 to a close, completed the fiftieth volume and the twenty-fifth year. The *Field*, in giving a review of the publications in England devoted to cultivating a taste in manly exercises and in the sports of the field, mentions that John Wheble, a bookseller, in 1792, associated with John Wilkes and Horne Tooke, wrote the *Middlesex Journal*, which, purporting to give but a dry analysis of parliamentary debates, under the leadership of the fiery Horne Tooke, occasionally indulged in flaming lampoons. The *Middlesex Journal*, riven by the parliamentary lightning of the day, was killed, but Wheble originated in October, 1792, the *Sporting Magazine*, or, as it was described, "A Monthly Calendar of the Transactions of the Turf and Chase, and every other Diversion Interesting to the Man of Pleasure and Enterprise." For a quarter of a century, though Wheble knew nothing about horse, fox, hound, rod or gun, the *Sporting Magazine*, under his direction, was the leading authority. On our bookshelves there reposes to-day many a volume of this old publication. The paper is blue; the imprint now of a rusty brown. Occasionally, half reverentially we dust off a volume, and have now and then given in this journal extracts from its pages. The *Sporting Magazine* contains a great deal of the P. R., which has the same interest to us now as had the gladiatorial combats of yore. What is not so nice, however, are compilations from *crim. con.* cases of the time. Thank goodness, to-day such purulent matter has been expunged from general literature, and no longer caters to a depraved taste. Wheble, dying in 1820, the Pittmans carried on the magazine. Now arose the most brilliant writer on sporting topics, on horse and hound, that has ever adorned these subjects. Apperley rode as well as he wrote, and under the *nom de plume* of "Nimrod" (Oh! much-abused pseudonym!) produced those three superb essays—"The Chase," "The Turf" and "The Road"—which are as famous to-day as when they appeared many a long year ago in the ponderous *Quarterly*. The *Field* tells us how the ore in this mine has been used, and how some of it is dug out every day and claimed as original. In the United States, filching of this character, we regret to state, is common, and few weeks elapse that we do not discover poor rehashes of these topics, derived from the same identical source. Through Apperley's brilliant talent, readers of the *Sporting Magazine* quadrupled in 1827, when Mr. Pittman died. In 1831 the *New Sporting Magazine* was produced, with Mr. Surtees as editor, Mr. Ackermau for publisher, and with "Nimrod" for chief supporter. In 1843 Apperley died.

In 1820, *Bell's Life in London*, was published. The race for supremacy now commenced between the monthly magazine and the weekly paper, in which the paper won eventually. It was in 1870 that the magazine died after a lingering struggle.

As in New York so in London, we fancy there is somewhat of an over quantity of sporting literature. The supply for journals of this character, at least with us, is in excess of the demand. There is just so much ground to be covered and no more. Readers cannot be forced as in hot-houses. Some few journals must lead; others follow in their wake, dragging out a miserable and anxious existence.

We congratulate our English contemporary on the establishment of what is certainly the greatest of all papers, second only to the *London Times*. The *Field* has accomplished a noble task, and has achieved its success by no chance or accident. It abounds with true English method and soundness. One might gush in a rhapsodic kind of way over its aim and purpose. What it has done which is best, is to have eliminated from a coarse and gross medium the sportsman of only twenty-five years ago, and, by means of scientific study and observation, led him to a higher plane of thought. Our encomiums are, then, hearty and sincere; even we are grateful for the lessons the *London Field* has taught us. May the FOREST AND STREAM AND ROD AND GUN, when it reaches its twenty-fifth year (many of our readers, perhaps all its editors, may have passed away long before that period) only approach the present superlative excellence of the *Field and the Country Gentleman's Newspaper*.

SHEEP RAISING IN TEXAS AND COLORADO.

SOME weeks ago there appeared in this paper some few remarks on the availability of Texas and Colorado as a pasturage ground for sheep. Therein we stated that this vital interest, the production of wool, was destined to become in time one of the great leading businesses of the Southwestern country. Since the publication of this article in the FOREST AND STREAM AND ROD AND GUN, we have received a very large correspondence from various portions of the country, asking for further information on the subject of sheep raising. At the same time the paper has been the recipient of quite a number of applications from persons desirous of purchasing ranches in Texas and Colorado. In the present number will be found the first of a series of letters on this subject, written expressly for THE FOREST AND STREAM, by Mr. S. Nugent Townsend, the well-known special correspondent of the London *Field*. Mr. Townsend has devoted a great deal of time and attention to this matter, having visited all the best portions of Texas and Colorado, mainly for the purpose of obtaining reliable data.

From the letters we have received from many parties now actively engaged in sheep raising, we can state that quite universally our correspondents are highly pleased with their business. Of course, a certain amount of caution and judgment is necessary before entering into any novel pursuit. Now, without casting any false glimmers around this business of sheep raising, which is simply a practical one, requiring thrift and enterprise, we still believe that at the present moment it offers many advantages.

Before investing then in a ranche, it would be wise for persons to visit the country and judge for themselves. Questions of drought, of rain-fall, methods of transportation, proximity of a market, salubrity of climate, particular advantages of certain breeds of sheep, should all be studied. Certain ideas which belong to people who have lived in cities must be discarded. There is no necessity for thinking, however, that life in Texas or Colorado must be necessarily a rough one. People mostly build their own nests, and do make their own surroundings. Life in the Southwest is no more lawless than it is in New York. Exaggerated stories run their course, and are sometimes wonderfully enlarged on, when, in reality, if sifted out, such wonderful narrations are found to have no possible truth about them. If, then, dress coats and lustrous boots, white neckties and the frivolities of a somewhat effete social condition do not exist in Texas and Colorado, to replace these there is no end of honest work, and bluff, hearty hospitality. Drones are out of place any where. If an industrious man should go to Texas or Colorado, he will find in sheep raising a fairly lucrative and healthy occupation. If there be no "millions in it," at least it will afford him an honorable means of support, and may impart to a body impaired by the unwholesome life in the cities a sound constitution and physical happiness, which is worth more than all the money in the world.

As an aid to those wishing to select lands in Texas and Colorado, and to avail themselves of the best and most comfortable means of going thereto, the Missouri, Kansas and Texas Railway Company, with its customary accuracy and enterprise, has prepared a railroad map which shows not only the best grazing lands in the State, but the lumber, sugar, cotton, grain and mineral districts, which they will furnish on application.

Here follows the first of Mr. Townsend's letters:

FORT GRIFFIN, Texas, Sept. 16, 1877.

Mankind, outside of Texas, considers that the Texas and Pacific railway *pro tem* terminus at Fort Worth, in the northern region of this immense State, is the end of all things Texan. "The Texas and Pacific has a paradise to open," say the Dallasites, but at Fort Worth you hear a different story, for every one there has invested more or less in making that most dashing and energetic little city a point which they desire the world to consider a permanent one, and it is said, and that by persons who know what business is over the entire continent, that Fort Worth has grown faster and does more business for its size than does any combination of brick and brains in the United States.

So people in Fort Worth, as a rule, assure you that Horace Greeley's advice to go west holds good only so far West as Fort Worth, and should a morbid craving for pursuing the setting sun irresistibly overcome the tourist or emigrant bound Westward to such an extent as to cause him to enter Mr. Bain's stage coach and, in his ignorance, wander to Weatherford, Palo Pinto, Breckenridge, or, even worse, to Griffin that admirer of Horace Greeley and Western skies will, when common sense resents its sway, have to reverse his preconceived ideas and adopt practically the motto, Go East, young man, go East; but no further east than Fort Worth, the aforesaid *pro tem* terminus of the great Texas Pacific.

Seeing is believing. The cry for the extension of the Texas and Pacific is so earnest, the absolute determination of the Texans to have at least an east and west line through a State larger than either France, Germany or Austria, and a working democratic majority existing in the House of Representatives who are believed as a body to hold that a Southern trunk line is due to the interests of the country, make the probability of this line being quickly pushed on so strong that I doubt not a slight sketch of the proposed extension for some hundreds of miles will be studied with interest by many of your readers.

I cannot say anything particularly complimentary respecting the Fort Worth hotel, so besides noting the fact that a new and handsome one is being built I drop the subject and take a seat beside Hooper, a whip, formerly as well known for his courtesy to passengers in California and Oregon as latterly in Texas. A very gentlemanly gambler who does business in Griffin shared the box seat with us, and behind four good horses we sped westward across Tarrant county, iron ore and clay forming the not very productive soil. The Indian corn was black and not healthily looking, but some crops of cotton were very good and regular, and promised a large pick in about three weeks, and some fair sized villas and larger fenced-in enclosures prove that the settlers about Fort Worth are not only wealthy, but enterprising. When it is remembered that this proposed extension of the Texas and Pacific crosses the drainage of the country, the perpetual hill and valley variations of view that ceaselessly as pleasingly strike the eye at every changing moment, can, in such an ever undulating State as northern Texas, be very easily imagined. Now we skirt the brow of a hill and see white and red Fort Worth, with its St. Paul's-like court-house dome, from every point conspicuous; then down into a deep vale, through a thick belt of evergreen oaks half a mile or so wide. As we top the next rise eight miles behind us again appears the city and the dome, if possible more red and more white than before.

The valley of the Trinity River is now sighted from our road on the side of a hill. This valley is covered with a low forest, except in such few places as long, heavily grassed lawns stretch away to the south and westward. Just on this spot I take my bird's eye view from. An Englishman has, with great taste, built a comfortable villa; behind his house extends for miles a heavily grassed table land prairie plateau. Hooper informed me that this Englishman claimed to be one of the African explorers that, with Stanley, found Livingston. This may have been so, but African explorers have of late grown so numerous that, considering the limited number of Stanley's party when that dashing traveller did find Livingston I can only suppose that the dignity has been created in England an hereditary one, and that as in Germany, every son of a baron is a baron, so now, that every lineal descendant of a Stanleyite is an African explorer, even though he may never have been outside of the State of Texas or of the city of London. If this reads ill natured the flies here must be blamed, for the full complement of those pests inhabit Griffin, and, besides, on a permanent sort of mother-in-law visit to them are the flies that I was so charmed to find absent all the summer from San Antonio.

However, to return to the road. As we go West in Tarrant county the soil gets rather thin and much iron weed, or Jansey covers, the valleys, which as well as the hills, besides being fairly timber sheltered, are on a much larger and broader scale than those in southwest Texas, and very much more so than anything of the sort in Kansas. A few herds of 2,000 cattle are here in good condition, as are the lively, nice, fat-looking, but ill tempered mustang horses. The limestone which everywhere underlies and often crops up through the soil for hundreds of miles west and south of here improves the grass as much as it disimproves the majority of the springs and water courses. Heavy rain had fallen for several preceding days over northern Texas, so, many creeks which, as a rule, are bone dry, appeared to me as quite respectable rivers. The first and prettiest of these—after we had forded the clear fork of the Trinity close to Fort Worth—is Mary's Creek, where we change horses and get a fair lunch at Hunter's. After this we ascend a steep hill and see Weatherford in the centre of the next county—Parker—which we shortly afterward enter. This county is both richer and better watered than Tarrant, which we now get out of. Lignite and fire clay are occasionally found here. Well developed milk weeds, which when eaten largely of by cattle or sheep cause death, thickly stud a long prairie bottom. One stalk of this undesirable weed I found five feet high—a most unusual size. Willow Creek is passed; Weatherford, a pretty little town with a magnificent central, china-tree planted square, puts us up for the night and sweet, cleared voiced mocking birds sing us to sleep.

Old mother Sikes, as she loves to be called, made us all very happy and merry at the Sikes House in Weatherford, and after our thirty mile drive under a hot sun, civility and good fare are always acceptable. But

"There is no union here of hearts
That finileth not an end,"

for next morning we hail to tear ourselves away, leaving our stage coach and old Mother Sikes and our pleasant whip Hooper together, and getting into a little mail wagon with Lieut.-Col. Strang, who was going down to this fort to sit on a court martial, and with the young gentleman who unceasingly courts the fickle goddess by indulging perpetually in games of chance here. Off we drove at eight next morning, to set over as much as possible of the 100 miles that yet lay between us and Fort Griffin. The Villa of the local banker, Mr. J. R. Conts—what a business he might do abroad if he only spelled his name with two t's!—shone resplendent in its new coat of paint through many pretty trees and shrubs as we passed it. We drove through thick past oaks; the hills were gravelly and white lime stone, and the vales reddish sandy loam, and unquestionably of great richness. About half the land was clear, and the rest had not more timber on it than would be necessary for settlers' purposes of fencing, etc., none of the trees being large enough to get fair sized planks out of.

Having thus acquired a fair idea of what this county was, I turned a willing ear to Col. Strang, who has been for many years Quartermaster at Fort Worth, and knows as well as any man alive what Texas produces and wants, for he has purchased supplies all over the State, from time to time since '67, here for government.

"The Texas Pacific has surveys for three routes through here," he said. "It may, for the sake of coal supply, run as far north as Graham, in Youngs County. Any and all of these lines are equally good, generally, for Texas and the country. Of course, there has been a great deal of squabbling about the line of road; no town likes to be passed by, for, except in exceptionally rich districts, any town that the T. P. does not go to, will have to come to the T. P."

"You think then, Colonel, that the road's running is a certainty?"

"Certain as doom," replied the Colonel.

"But about the government guarantee?" I insinuated.

"Oh, it doesn't amount to anything. Sixty millions is all that is asked—not the money, only the interest at five per cent. If the government give this, they have as security the entire road, the entire splendid land grant—twelve hundred miles of road, and many millions of acres of as fine land as any in the world; and then the breaking up of the largest and most oppressive monopoly in this or any other country—the Central Pacific Railroad—why that consideration alone should be enough for Congress."

"Then you don't believe that Col. Tom Scott has already made, as has been said, or will make, a close compact with the Central Pacific?"

"Not a word of it, sir. Such a thing would be a gross breach of faith with the country, and with Texas. Scott would never do such a thing; few know how absolutely he has carried out his contracts, written or implied, to the public. Last year," added the Colonel, "we sent a regiment from St. Louis to San Francisco, one hundred and one dollars head was the railroad charge; the Central Pacific had to take the men just half the way, yet that road got ninety dollars for each man, and the other roads, because there was competition on the Eastern half of the way, had to rest content with eleven dollars per man. Why, troops could be sent to the south of Mexico for the money."

"Mexico, Colonel, what do you think of that business?"

"I lived there for three years," said the Colonel, slowly, "the country is getting poorer and worse every year, and I have long been certain that if we don't annex Northern Mexico, and establish a protectorate over the rest of it, that England or France will some time do so, and seriously affect our trade."

S. NUGENT TOWNSEND.

GAME PROTECTION.

—The Saginaw (Mich.) Protection Club, which has been organized only six months, has already accomplished much in preventing the unlawful slaughter of game in its section of the State. Its members are active in promoting a proper public sentiment on the subject.

MONTREAL FISH AND GAME PROTECTION CLUB.—At the meeting Jan. 29th, the following officers were elected for the ensuing year: Pres., R. W. Kelly; Vice-Pres., F. J. Brady; Sec., A. N. Shewan; Treas., W. H. Rintoul; Committee, McPh. Lemoine, H. W. King, F. E. Normandeau, J. C. Wilson, R. A. Alloway, R. White, F. W. L. Penton, George A. Ahern, D. Sinclair, M. Leach, G. Bourdeau, Louis Depuis. It was then decided that the club shall hold its first annual dinner at the City Club on Wednesday, February 6th. The annual dinner was held last evening, a large number of gentlemen being present.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship

And three team medals, which will be awarded to the teams making the first, second and third best scores. Other prizes will be offered also, to take place at Conlin's shooting gallery. Open to teams from any organized rifle club.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; .22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Off-hand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. Entrance Fee—Five dollars to be paid at the office of the FOREST AND STREAM AND ROD AND GUN, No. 111 Fulton street, N. Y. All teams desiring to compete must be entered ten days before the time the match is announced to take place. The match to be governed by the rules of the N. R. A. relating to teams. Captains of the competing teams shall meet one week before the commencement of the match, make all preliminary arrangements, choose referees, and decide in what order their respective teams shall shoot. The referees shall elect an umpire, whose decision in all cases shall be final.

The match will commence on Monday, March 11.

The New York Rifle Club have entered a team to compete for the Short Range Championship in the FOREST AND STREAM AND ROD AND GUN Tournament.

Boston, Feb. 1.—At the rifle gallery, 655 Washington street, the following scores were made for a Smith & Wesson revolver:

J N Carvalho	4	5	5	5	5	4	3	5—38
F Hollis	4	4	5	5	5	5	4	5—37
H F Small	4	4	4	4	5	5	4	5—35
J Fitzpatrick	5	4	5	5	4	4	4	4—35
N W Arnold	4	4	4	5	5	5	4	4—35
E C Spafford	4	5	5	5	4	4	4	4—35
N W Covell	4	4	5	5	4	5	3	4—34
J E Gore	4	4	5	5	4	5	4	6—34
H G French	4	4	5	5	4	5	4	3—34

ZETTLER RIFLE CLUB.—At the weekly meeting of this club, January 29, in ten shots, Creedmoor target, reduced form, in a possible 59 the following scores were made:

M B Engel	49	R Connor	44
P Fenning	47	B Zettler	43
C G Zettler	46	D Miller	43
G A Shurman	45	M L Riggs	43
Chas Judson	45	F Ochi	42
W M Farrow	46	F Farbsrua	41
R Zimmerman	45	M Dorrler	40
G L Beates	44	W Wieganct	40

YORKVILLE RIFLE CLUB—*New York, Feb.* 2, 1878.—The following are the scores of the Yorkville Rifle Club, at the fifth competition for the champion gold badge, at Washington Park, Jan. 26th, 100 yards:

P McMorrow	Rem. Sport	4	5	5	4	4	4	4	5	4	4	3	3	4	4	—61
J J Reilly	Win. Sport	4	3	5	4	3	4	5	4	5	3	4	4	4	4	—60
F Kassel	Rem. Sport	4	3	4	5	4	4	2	4	4	4	4	4	4	4	—58
J R Grohman	Ball. Sport	4	4	4	5	4	3	4	3	0	0	4	4	5	2	4—50
W W Dodge	Rem. Sport	2	2	3	4	3	3	5	3	3	4	2	2	4	4	—48

Six entries only, probably on account of foggy weather.

Also, third weekly shoot, at 1581 Third ave. (Grohmann's). Rifle, Ballard gallery; 22 cal.

J R Grohman	5	5	5	4	5	3	5	4	4	5—45
P McMorrow	3	4	5	4	5	5	5	3	3	5—43
O Kelz	3	5	3	4	4	5	4	4	5	4—41
G See	3	4	3	5	5	5	2	5	4	5—40

A few others made less than an average of centres (4), whose scores are omitted. On Friday evening, Feb. 1, distance 100 feet, off hand; sub calibre rifles. Targets same as Zettlers use.

NEW YORK RIFLE CLUB.—At a special meeting of the New York Rifle Club, held on Thursday evening, January 31, at the call of the Executive Committee, it was resolved, "that the club enter a team to shoot for the FOREST AND STREAM trophy, and that such team be selected by competitions, to take place on Monday and Thursday evenings each week," until the selection has been made. The first competition under the above resolution, will occur on Monday evening, February 4.

JOHN H. MEEKER, Secretary.

NEWARK, Wayne County, N. Y., Feb. 2.—The regular competition for the champion's badge took place on the 200-yard range of the Amateur Club, Jan. 30. The following are the scores:

D F Wilcox	5	4	5	5	4	5	5	5	4	4—46
E B Elliott	5	4	5	4	4	1	4	4	4	4—42
G M Soverhill	4	4	4	4	3	4	4	4	4	4—39
W H Nicholoy	3	4	4	4	1	4	4	4	3	4—38
H Hamilton	4	2	4	3	4	3	4	4	5	4—37

ELCHO.

OHIO—*Cincinnati, Jan.* 21.—The following scores were made by the rifle team of the Cincinnati Shooting and Fishing Club, on the 26th ult. Our club would like to know how this score stands as compared with others at 200 yards, off-hand. Let us hear from the other "trigger pullers." Three of our best shots absent on a quail shoot in Kentucky:

Baum	5	4	4	5	5	4	4	5	4	5	4	4	5	4	5	—67
Sedam	4	4	5	4	4	5	5	4	4	5	4	4	5	4	4	—65
Eaton	4	4	4	4	5	4	4	5	1	4	5	5	4	3	5	—64
Campbell	3	4	2	4	4	4	4	4	4	4	5	4	4	4	4	—59
Total																255

Average of 63¾ in a possible 75.

G. B. E.

DESERET RIFLE CLUB—*Salt Lake City, Jan.* 24.—The following is the result of the Deseret Rifle Club shooting for the medal, John Sharp, Jr., winning for the fourth time. Should Mr. Ross win five times the medal will become his property. Off-hand at 200 yards:

John Sharp, Jr.	5	5	4	4	4	5	5	5	4	3—44
James Sharp	3	5	4	4	5	5	4	4	4	4—43
John Groesbeck	4	4	5	4	4	4	4	4	4	4—41
E McLoughlin	4	4	5	4	4	3	4	4	4	5—41
W K Conrad	3	4	4	5	5	3	4	4	4	4—39
J Heusser	3	4	5	4	4	4	3	4	4	4—39
B Roberts	4	4	4	2	5	4	4	4	4	4—39
J C Anderson	4	3	4	3	5	4	4	4	3	4—38

PICKARD, JR.

—The Board of Directors of the National Rifle Association held a meeting on Tuesday. The spring meeting will open at Creedmoor Thursday, May 23. A convention of the rifle clubs at that time is proposed.

THE BALLARD RIFLE.—The excellence of the Ballard rifle we have frequently commented upon in our columns as an arm fitted not only for hunting, but for the most accurate target practice. In the contest for the FOREST AND STREAM AND ROD AND GUN medal at Schutzen Park, reported in our last issue, Mr. M. W. Farrow made, in ten shots, 204 with a Ballard, leading "by a large majority" the best muzzle-loaders. This high score has been equalled and sometimes surpassed by Mr. Farrow with a Ballard. In the competition for the Zettler team, in making a choice of men, Mr. Farrow has scored in ten shots 216, 214 and 220. In examining the records of the Ballard at Creedmoor we find most excellent scores for this rifle, as the following analysis will show:

	800 yds.	900 yds.	1,000 yds.	Tot.
Competition for American Team.				
August 1	66	68	66	200
August 8	74	67	68	209
Competition for Canada Team.				
August 22	70	64	64	198
August 23	68	68	67	203
August 29	71	66	62	199
Practice Score.				
September 15	73	69	72	214
Spirit of the Times Match.				
September 28	67	63	71	201
Sharps Match.				
October 6	72	61	63	196
Bronze Medal Match.				
October 27	67	48	68	203
November 17	62	74	67	201
December 16	71	72	61	204
Match to Beat a High Score with a Brand-new Ballard, Never Used Before.				
January 9	74	71	66	211

Among the earliest manufactured of breech-loading rifles, the Ballard soon occupied a prominent position, which place it has ever since retained. The agents for the Ballard rifle—Messrs. Shoverling & Daly—are daily in receipt, as we are ourselves, of communications from sportsmen, in which the excellence of this rifle is particularly stated.

PENETRATION.—With a Ballard, 22, during an evening's use, at Collins' gallery, the balls penetrated through a six-inch thick piece of lead, backed up by a bit of boiler plate ½-inch thick. The charge of the Ballard metallic shell is three grains powder; weight of ball, 28 grains.

DOUBLE-BARREL RIFLES.

THE EXPRESS RIFLE.

EDITOR FOREST AND STREAM:

Mr. T. S. Van Dyke, in your paper of the 17th ult., does not seem to be aware of the great success which has attended the introduction of Express rifles, for dangerous game shooting, into India and Africa. They are now used almost universally, having superseded all large bore and explosive ball rifles for lion and tiger shooting (there must be some thousands of them in use in India alone), being found to be more instantaneously fatal—a great point in tiger shooting. Having killed some thirty grizzlies in the Far West during nine years' hunting, and having used several kinds of large-bore rifles, with explosive shells and without, I have come to the conclusion that the Express rifle is far preferable in many respects. In the first place, it has a practically flat trajectory for 200 yards, doing away with any necessity for judging distances; then, too, it makes only one hole in the skin, generally lodging against the ribs on the opposite side, and lastly its effect is simply awful, the ball spreading to at least twelve times its former size. I have frequently found the inside of deer reduced to a pulp, and small

pieces of the ball sticking in all the neighboring organs. The principle of the Express is a light, hollow, conical bullet, and an immense amount of powder; but this has to be used with particular rifling, and no rifle now used for sporting in America can be made into an Express by hollowing the bullet, the rifling being unsuitable and the charge insufficient. The rifling best adapted for the Express rifle was invented by Mr. Henry, of Edinburgh, the well-known gunmaker, and in a rifle bored on his principle as much as 160 grains of Curtis & Harvey's strongest powder can be used without any unpleasant recoil; in a rifle of only .50-calibre. I have, myself, often fired a .45-calibre double rifle, weighing 9 lbs., over my arm, using it like a pistol when hunting buffalo, and have felt no recoil, using 136 grains of powder. Some friends of mine in India, using similar rifles, killed ten tigers in eleven days, and no tiger required a second shot. I quite agree with Mr. Van Dyke that single-barreled sporting rifles are a mistake, except for antelope stalking, and I do not believe that one out of every thousand sportsman in India ever uses one; nor do I think they will be used here so extensively when the manufacture of double rifles is better understood; for no one who has once used a good double-barrelled rifle would ever go back to a single barrel, particularly for dangerous game. In conclusion, I shall be very much obliged if any of your correspondents who have used the new Winchester rifle, using 75 grains of powder, would kindly say what they think of it for deer-shooting?

VIATOR.

THE OLD CONTEST.

BREECH-LOADERS VS. MUZZLE-LOADERS.

POUGHKEEPSIE, N. Y., Dec. 31, 1877.

EDITOR FOREST AND STREAM:

A communication in your issue of December 27, by "Muzzle-Loader," has attracted considerable attention here.

The question of the superiority of the breech-loader over the muzzle-loader seems to be creating quite a *furore*, especially in England. But it appears to me that all this theoretical talk (for it is really nothing else) is the merest nonsense. The only advantage a muzzle-loader possesses over a breech-loader, is in those in which the ball takes the rifling, and ends its centre while being rammed down. Now, if we examine the Sharps, Remington, and the Rigby (the latter the finest of this type of rifles), we will find that they are practically precisely alike as regards the loading and the ejection of the ball from the gun. This may appear startling to some, but it is a fact well known to every gunmaker, and I think I can demonstrate to the satisfaction of the general reader the truth of this statement.

In none of these three guns does the bullet take the rifling until after the explosion of the powder. The Rigby being no more a true muzzle-loader than the Remington or Sharps, as both of these latter guns can be loaded at the muzzle—a great many riflemen always loading the Remington in this manner.

In the great International matches, it has been the practice of the members of the American team to carefully wipe out their rifles after each shot, while their opponents did not. Does any sensible man think that a dirty muzzle-loader (of the Rigby type) can compete successfully against the clean breech-loader? (Rigby himself now admits it in his letters to the *Volunteer Service Gazette*). A few more (!) defeats will probably convince the foreigners that they must clean their guns if they desire to win the trophy. Both parties using equal care in doing this, and having coaching prohibited, will come to the battle-ground on equal terms, which has not yet been the case. We must try and do away with the stigma that the various American teams have acquired as mere trigger-pullers, and I see no other way except by abolishing coaching, which must appear to every true and honest American as a sacrifice to their manhood. The American teams, when shooting as individuals, have always been beaten. We should cultivate, and cultivate until we can place in the field a team of men who, as individual shots, are capable of holding their own own fairly and without lowering their dignity or self-respect.

As regards the challenge of "Muzzle-Loader," I would like to see it taken up. Perhaps the Sharps Rifle Company, who are generally eager for such fights, will respond if they can have it take place at long range. Whether the Nichols & Lefever muzzle-loading rifle is capable of a victory (being a new gun) over the celebrated Remington or Sharps, I don't know. But I think from the excellent description given by "Muzzle-Loader," and the reputation, as fine workmen, of the Messrs. Nichols & Lefever, that with some further improvements it is destined to be one of the future true muzzle-loaders.

Regarding the bullet for this gun, it strikes me as being too complicated—a uniform density being ignored. Although this style of bullet has been in vogue for years, I am not aware, with one exception, that it has shown any real advantage over pure lead, at forty rods. For a long-range bullet, I think a mixture of tin—one ounce to a pound of lead—is far preferable to the hebdomadal sort of bullet which "Muzzle-Loader" thinks so highly of.

It has been the aim and ambition of every gunmaker, from the earliest period in the history of fire-arms to the present time, to produce a breech-loader that would equal, in shooting, a muzzle-loader. It seems almost comical to the writer that our great gunmakers, after producing what are really fine specimens of breech-loading guns, should, after pitting them against another *de facto* breech-loader (Rigby), and winning, ever after claim it superior to the muzzle-loader.

In conclusion, I would like to ask, as a nut for Creedmoor riflemen to crack, "Have we a breech-loader that has ever, in a competition open to all, beaten twenty (20) inches at forty rods, ten shot string?" This is a very liberal allowance it must be admitted, when it is stated that we have scores of gunmakers capable of making a rifle (ten shot string, forty rods) that shall measure less than ten (10) inches! If any one doubts this, I would refer him to that veteran gunmaker, Billinghurst, of Rochester, N. Y., who is one of the best riflemakers (of forty rod guns) we have, and was at one time the champion string shooter of the United States. For a few specimens of his skill I would refer the reader to the "Crack Shot" by Barber, page 80, where are two diagrams, one measuring 7¼ inches and the other 8¾ inches.

The moral of my letter seems to be: If a breech-loader can be defeated at forty rods, and it is done every time by the Empire State Rifle Club, at Syracuse, at their yearly meetings, can it in truth be the champion it so boastfully claims to be at 180 rods? More anon.

W. J. STEWART.

ALTERING MUZZLE-LOADERS TO BREECH-LOADERS.

MENASHA, WIS., Jan. 23, 1878.

EDITOR FOREST AND STREAM:

I see in your last issue that Ten Broeck takes exceptions to my plan of changing muzzle to breech-loaders, on the grounds that the screw-holes in the barrels are an element of weakness; also, that soft solder is unsafe. In reply to the first objection, I would say that the lump is forged solid in a T-shaped piece fitted accurately to the barrels, and is nearly the width of both barrels; and where the screws (3-16th diameter) pass through the steel plate, is nearly one-eighth inch thick, adding ten times the strength of the material cut away. To the second objection I would say that the form of joint as given above gives from seven to eight square inches of contact, and this, with a good solder joint, alone would make as strong a joint as hard, or silver solder, with the joint as usually made. Besides, in my plan, the barrels are not subjected to the heat necessary to bronze them, which is sufficient to raise a scale and thus weaken them considerably, and with care it can be done so as not to require re-blaining. I would also suggest to your San Diego, Cal., correspondent that, instead of extracting the bullet from his 22-100 cartridge (for his explosive bullets), he take a pair of wire-cutters and cut off the bullet just above the shell. He will then get a much more effective explosion, as the powder is confined much more than in his process.

S. L. HART.

—E. Remington & Sons have a new gun in stock which is worthy of notice. It is a ten-gauge, weighing ten pounds, with twist barrels, extension rib, top snap-action and rebounding locks.

Game Bag and Gun.

GAME IN SEASON IN FEBRUARY.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocets, etc., coming under the group *Limicolæ*, or Shore Birds.

NEW HAMPSHIRE—*Nashua, Jan.* 28.—The weather in this vicinity is unusually mild. Large numbers of ducks have been seen within the week past—feeding, no doubt—in the open water around the falls and the mouth of streams emptying into the Merrimac. A flock of black ducks, numbering some fifty or sixty, were seen flying north. Pickerel fishing continues to be the principal sport, and the boys and weather seem combined to make it a source of pleasure.

WEBB.

BUCK AGUE.—A story comes to us from Dover, N. H., of two gunners who went out for rabbits. They took their positions, and all was still, when suddenly one was heard shouting at the top of his voice, and was seen by his astonished companion running through the woods, hatless and with hair streaming in the wind, his gun firmly grasped by the barrel with both hands. On being brought to a halt, and asked why he did not try and shoot the game, he said, "he never thought of it."

NEW YORK—*Kingston, Jan.* 30.—Rabbit hunting is now in full blast in this section, parties going out every fair morning and bagging quite a number. Rabbits are very plenty in this part of the country this winter, and the light falls of snow we have had have helped to make the sport better. Some of the most successful rabbit hunters are Theodore Hawke and Bennett Spaulding. They have been out a number of times and never returned with less than three rabbits apiece.

OUR HARRY.

VIRGINIA—*Warrington, Feb.* 1.—A club of four turkey hunters have killed sixty during the past season. The Mayor, Mr. Udderback, leads, I believe, in the score. In quail J. K. Maddox takes the lead, with a tally of about 400. No pot-hunting has been allowed in this vicinity. Fox hunts are frequent and lively.

N. B.

—The Presbyterian minister and the two school teachers at the Strasburg Academy in Virginia are "high guns" in turkey shooting, it seems. One of the pupils writes, Feb. 4:

"The Presbyterian minister here paced off eighty yards and placed eight No. 1 shot in the size of the crown of your hat with my Remington; the depot agent placed five in the same size at seventy-five yards, while I killed a wild turkey instantly with it at fully eighty yards, more if anything. The two school teachers here have led in wild turkey shooting, killing twenty-one."

LOUISIANA.—A panther, measuring seven feet from tip of nose to tip of tail, was recently killed in Bayou parish swamp, Avoyellis parish.

OHIO—*Lancaster, Jan.* 28.—The two years' prohibitory law made the past shooting season an unusually fine one. Bags of from six dozen to eight dozen have been common. Pheasants have been quite numerously killed this fall, but quail shooting absorbed all the sportsmen's attention. Wild turkeys are reported unusually plentiful on the hills, below the State Farm. There were but few geese or ducks at the Big Reservoir this fall, and none in the prairie sloughs west of the city. English sparrows have made their appearance in this city, and can be seen in any of our streets at any time.

S. G. V. G.

Jefferson, Jan. 20.—Wild pigeons have been plenty in the vicinity of Bloomfield, and Trumbull, Morgan and Colebrook, and Orwell for some time past. Unlawful netting has been largely practiced, and prosecutions are now in order.

IOWA—*Vail, Jan.* 31.—Yesterday, between 11 and 3 o'clock, four of us succeeded in bagging 31 rabbits from one brush patch.

E. B. B.

THE "STANDARD" GLASS BALL.—As the Spring trade is about opening, and the demand for glass balls has fairly commenced, we would call the attention of dealers to the "Standard" ball, as put on the market by Ira A. Paine.—See advertisement.

—Mr. Ira A. Paine is shooting at the Tivoli Theatre this week, and doing a remarkably fine act in making the feathers fly from his feather-filled balls, both with the shot-gun and pistol. His variety shooting elicited great applause.

TENS OR TWELVES?

WE are often called upon to answer inquiries in relation to the calibres of guns. The question is mostly put to us in this wise: "I want to buy a gun for general use. Shall I buy a ten or a twelve gauge?" When we receive a letter of this character, we examine the address of the communication, and study the locality of the writer, and the matter is at once simplified. If, for instance, it should come from the Adirondacks, where, though small game birds are found, there are deer, we mostly advise the larger calibre, which is a ten. If it be on the sea shore, where there are ducks and geese, we incline toward the larger sized bore. If, on the contrary, the inquiry comes from a section of country where smaller game are the more plentiful, we counsel the use of a twelve. Our own particular fancy, we must declare, is for a twelve, as we have done quite as good shooting in a general way with a twelve as with a ten. All this, however, depends very much upon how a gun is built. We are putting aside for the moment the question of sheer weight. An eleven, a twelve, or even a thirteen-gauge, can be made, and is made, if you want it, with sufficient strength at the breech to stand the charge of a ten-gauge. We may remark that there is a growing tendency in England to run toward small gauges. We cited in a former issue a number of beautiful Scott & Sons' guns of nineteen and twenty. In a certain way the difficulty of hitting a bird may be increased, but with these small calibres, when they are choke-bored, if you do hit, you hit very hard. Of course, if you miss you are a duffer, and there are more duffers, ourselves included, than there are Captain Bogarduses.

Now, as to weight: A ten-gun ought to run not less than 9 pounds, and is made up to 13 pounds; but we think about 10½ pounds is a good average, and of the proper proportion. A twelve is built from 7½ to 9½ pounds. With a twelve, then, of 9½ pounds, with the excess of metal at the breech, a deft sportsman may consider himself as fully equipped, and this arm will do quite as good work as a ten-gauge, weighing 10½ pounds. Captain Bogardus shoots a ten and twelve-gauge on the same stock, both weighing, when put all together, 10 pounds. Now, it is rather more economical for the sportsman to use a twelve-gauge than a ten, as the powder and shot cost less. Gentlemen sportsmen who shoot for pleasure, seem every day more disinclined to lug around arms which are as weighty as culverines. Those old-fashioned days are past when a man loaded himself down like a Bashi-Bazouk. We all know what difference two pounds in a gun makes when a party has to carry it twenty miles in a day's tramp. In the last number of the *London Field* there is a capital communication from Mr. J. J. Whyte, on using small calibred guns. This correspondent says:

"There is the element of pleasure and comfort to be considered, and it is surely more agreeable to walk through a long day with a light weight than a heavy one. For my part, I study lightness in every department of shooting—walk in shoes, and the other garments as light as the nature of the shooting or weather will permit; and I would rather stop at home than carry my own cartridges or my own game. In one matter only I do not like weight stinted, and that is my gun. My twelve-bore weighs 7 pounds 8 ounces, and my twenty-bore 6 pounds 5 ounces. Give me plenty of driving power, and plenty of metal in the breech to make using it safe. If a gun is to be made light, do it by shortening the barrels, not by scrimping the metal at the breech."

As in all matters of a mundane character, we return very often to our first loves. The same correspondent tells of a Jo. Manton, with a twenty-two bore, with which he made a shot at ducks. A bottle at forty yards can be smashed with a twenty-bore, if you hit it.

As to difference of weight in the same calibre, gunmakers are perfectly familiar with the wants of people, and turn out guns which as to weight cover all requirements. In ordering a lot of guns, say a hundred, gunmakers will invariably assort weights, say in twelve's, from 7 to 9½ pounds, and in ten's, from 8½ to 10½. Of course, if heavier guns are wanted there can be no difficulty in procuring them. We say, then, to numerous inquirers, if you want an all-round gun take a ten or a twelve. If you are big and strong, and have brawn and muscle, and glory in your might, take a ten. If, on the contrary, you are not a Hercules, and you want to save yourself, get a twelve. In both cases bear in mind the size of the game to be found in your locality. Always remember that if it be a twenty or a ten, the weight of metal at the breech has to do with the safety or life of the gun. We have purposely left out in this short review of the matter, the choke-bore ideas. This will form at some later day the subject of an article.

THE "UNCLE SAM" AND "MR. BULL" SHOOTING PUZZLE.—"Uncle Sam" and "Mr. Bull" go out together for a day's shooting on the marshes. Before starting they agree that whoever shall make the lowest score shall contribute a sum of money toward defraying the day's expenses, levied on all the game killed by each at the rate of 10 cents per head on every plover, 6 cents on every snipe and 4 cents on every woodcock killed by the winner; and half as much again per head on those killed by the loser. They further agree that each gun shall score 3 for a cock, 2 for a snipe and 1 for a plover. When the day's work was ended Mr. Bull found that his score on cock exceeded Sam's by one-fourteenth, that he had killed one-ninth less snipe than Sam had, and that Sam had killed six times as many plover as he had. After Uncle Sam had examined his bag he found that one-fourth of his score was made by killing snipe; that he had scored half as many more by snipe than he did by plover; that he made two and one-third times as many by cock as he did by snipe, and that he had beaten John Bull by 9 points. How much did Mr. Bull contribute toward expenses?

CONSERVATOR.

A REMARKABLE SHOOTER.—*Rockford, Ill., Jan.* 20.—During the season just closed we have enjoyed some fine sport in this vicinity. The pinnated grouse have been plentier than for years before. I enjoyed a few days as a guest at the celebrated Tolleston Club House near Chicago—most elegant and commodious quarters. The members with whom I became acquainted were genial gentlemen. Whoever is so fortunate as to receive an invitation should not fail to accept the hospitalities of this club.

About the 20th of October a party consisting of ten—not including our cook—made a trip to Gross Lake, McHenry County. A couple of friends—Mr. H. Harper, of Emira, and Mr. John Griffin, of Buffalo, N. Y.—were of the party, and we desired to give them some fine sport. The weather proved unfavorable—as warm and balmy as summer, and the ducks all had *spring fever*; week later would have been just right. Two of our party had on former occasions bagged from sixty to eighty ducks a day at the same place, while our

whole party together did not do half as well. We could see acres of ducks in the large lakes near, but could not approach them. There is a sportsman—a hunter, more properly speaking—here named Ed Lyman, who excels all the hunters in this section of country. In October and November he would go out, when others could scarcely make a bag of half a dozen chickens a day, and get from thirty to sixty. It riled some of our amateur hunters to get cleaned out so badly. On one occasion four concluded they would put in a good big day, go quite a distance, stay over night, get to work early in the morning, and return at night with a pile of game. Lyman started early on the morning of the same day. The four returned with three chickins, chagrined and crestfallen; Lyman came up to the scratch late in the eve with fifty-six. I saw them and counted them. The boys said he had a *corn crib* full of them somewhere away down in the country, and just went and shot a wagon load. I have been beaten so often by this same man that I have made up my mind that a hunter, like a poet, is born, not made.

Now, a good many will say while reading this, "I'll bet I could warm him up!" To such I would say, "Come next fall and try it." Others will ask, "How in the world does he beat you so badly?" That's just what we would like to know ourselves. I have gone out often with him. For instance, on the last trip the roads were fearful, and we did not expect to do anything, for it was only a week or two ago and chickens were wild as near the city as we had to hunt. We got one each in the first cornfields. Then I hoped we should find no more, for I wanted to be able to say, once at least, that I was up to Lyman. We separated. I went through just as good cornfields, had equally as good chances, and when we came together Ed had seven and I had—none.

One eve in November he rode out, and while a certain person held the horse, he went through our cornfield, and returned to the wagon with twenty chickens—a big load and a big story for November. The most of us give up hunting chickens after the flocks begin to pack in the fall.

Now, you will be more astonished when I tell you that Lyman shoots a 6¾ lbs. muzzle-loading gun, and uses No. 9 shot, even for fall chicken-shooting. This is just as true as preaching, and if some of our Western chicken hunters feel a little beaten at such a report, we have been beaten worse many a time at this man's wonderful success. I will add that Lyman is the best taxidermist I know of, and makes his living a mounting game birds and shooting game. NIMROD.

CHILLED SHOT.

EDITOR FOREST AND STREAM: NEW YORK, Feb. 2, 1878.

In the interest of practical sporting, I desire to make a few comments on your article relative to the trial of hard chilled shot in yours of 31st Jan. It is unfortunate that different brands of No. 7 old fashioned shot were mixed, as varying in the number of pellets to the ounce, and consequently in weight, the result or difference is not as accurately shown as it would have been if only one brand had been used. It would perhaps be well, in order that the merits of the different kinds, chilled, etc., may be better appreciated, to state that the specific gravity of lead of which old-fashioned shot is made is 11.4 times as great as the same bulk of distilled water, which is the basis of all comparisons; while that of antimony, which is mixed with lead in the manufacture of hard (chilled) shot, is only 6.7 times as great. If you decrease the weight of your shot you shorten the range, and if you use hard metals you increase the number of imperfect shot. An accurate count of Tatham's soft shot, No. 7, gives 274 pellets to the ounce, which weigh 440 grains. A similar number of their "7" hard chilled shot weigh 422 grains, a decrease of 18 grains, a very marked difference. The English chilled run about the same as the American. You say: "In the 1⅛ oz. of soft shot the pellets average some 394, in chilled shot the number of pellets by *measure* were the same." (The italics are mine.) As the pellets of soft and hard shot will gauge the same if of the same number and diameter, the hard (chilled) though "by measure the same" are in weight much less, 394 soft shot, No. 7, weighing 616 grains, and 394 hard (chilled) weighing only 593 grains, a difference of 23 grains; yet, in the trial, the charge of powder (4 drachms) was the same. Now is it reasonable to suppose that 4 drachms of powder, in a range of 40 yards, could make 616 grains of shot penetrate as far as 593 grains? If it could, the old saying of "sending a boy on a man's errand" must be revised. Similar weights should have been used to insure correct results. Lastly, you say: "Soft shot being jammed out of shape before leaving the muzzle of the gun, many fall short of the target or fly off out of range, chilled shot retaining their spherical form, etc." This would be difficult to prove, as no one ever saw the condition of shot "before leaving the muzzle of the gun" after the powder was ignited. Plenty of your readers, however, have seen and felt good, round, old-fashioned shot in game when cooked. Would it not be more reasonable to ascribe the "falling short of the target or flying off out of range" to the fact that not enough powder, in proportion to the weight, was used with the soft shot?

Of what use would penetration prove if your range is so shortened as not to reach the bird; and yet this is the result if hard (chilled) shot be used at long range. Either a sportsman must have two guns, one for long and the other for short range, or else the birds must be induced to fly nearer than they have been in the habit of doing.

Of what practical use to sportsmen, in the light of these facts, is hard (chilled) shot? Why do such eminent shots as Capt. Bogardus refuse to use it? In his matches, including the breaking of 5,000 glass balls, he used No. 8, old style shot. Do away with black lead polish, which so fouls the gun and taints the game, and old-fashioned shot will be good enough. Yours truly, H. W. KNOWLTON.

THE "OLD GANG."

WILLISTON, S. C., Jan. 15, 1878.

EDITOR FOREST AND STREAM:

By way of introduction let me state that I am one of a hunting club, known as the "Old Gang," of twenty-five years' standing.

At the commencement of the war, we were in our prime, and had all the fun and good hunting we wanted, but the cruel war knocked everything into a cocked hat, and scattered the Old Gang. Most of them went into the war, and did their best; some of them now sleep in the grave, and their old shot-guns are laid away, and kept sacred as family relics. Their mellow old horns, that have so often sounded to call the Gang around the death scenes of the old bucks, now hang on the gun-rack, and have long since been made mute by dirt-daubers and spiders. But the war is done with, we are now at peace, and let us have peace! Our motto is now, "To give the right hand of fellowship to every real good fellow that we meet, regardless of his clime, and both hands and a little of our 'Irish eye-water,' if he is a Simon Pure, jolly good hunter." Since the war our Gang has revived, and we have plenty of sport at times, notwithstanding that we are a very poor set of devils.

We hunt deer, foxes, turkeys and partridges; but have no deer or turkeys in our immediate vicinity. We find deer, turkeys and woodcock somewhat abundant in the lower section of our State, on the Saneo and Savannah Rivers. Sisters' Ferry, on the Savannah, is the more desirable place, as deer, turkeys and woodcock are plentiful, and the place is easy of access by steamboat. The ground is well adapted to shooting. Sisters' Ferry is somewhat notable as the place where Sherman and Kilpatrick crossed the Savannah River from Georgia into South Carolina, about the latter part of the war, with a desperate set of fellows under their lead, and created right smart consternation as they passed through the State.

We keep a rousing fine pack of hounds—when all together, about twenty-five—and what we consider some good pointers, and some crack shots; no Bogardus, however, among us, and no Irish reds or Gordon setters. And, sir, if you should ever blunder down into the Palmetto State, with an Irish red and your breech-loader, and should have occasion to stop at the health-giving town of Aiken, on the South Carolina Railroad, sixteen miles from the city of Augusta, in the great State of Georgia, just inquire for the Old Gang. You will have no trouble finding us, and we promise to carry you to Sisters' Ferry, where you can try your hand at any game you wish, all through the roll, from an eight-snag buck down to a cat squirrel; and if you are not right lively, it will bother you smartly to turn down some of the Gang.

ONE OF THE GANG.

SPRING AND SUMMER SHOOTING.

AMBRICUS, Ga., Jan. 30, 1878.

EDITOR FOREST AND STREAM:

Allow me space to express gratification at seeing the article of M. J. Eagan on "Spring and Summer Shooting." This is a subject we have long desired agitated, but dare not do it ourselves, as those who enjoy the sport should bring about the reform to make it successful. In the last few years the diminution of both snipe and ducks has been great, and every winter the number that comes to us grows alarmingly less. We trust others, both North and Northwest, will zealously second the motion and save these precious game birds from total destruction.

Permit me to add my item of observation on deer in this latitude. The running season here commences about Dec. 1, varying according to the severity of the weather. The bucks shed their horns in Feb. I saw a large buck last year—Feb. 27—with one antler gone and the other hanging down by the size of his head. SHOT.

"BOONE" TO THE EDITOR.

MY DEAR MR. HALLOCK:

Pardon the presumption of a subordinate addressing the Chief, in person, but when the Editor himself brings the *afflatus* on his correspondents, he must bear with their acknowledgment of it.

First, on the part of the large shooting and fishing fraternity—who, you know, like Brutus, are all "honorable men"—I want to thank you for your "Vacation Rambles." He must needs be hard to please, as gunner or angler, or both, who cannot now, after you, find a satisfactory resort for his chosen diversion. And yet, I am not sure but that some poor fellow, pressed and kept at home by the *res angusta domi*—the straitened pocket, that no Silver Bill will relieve, for no man would like to pay even ninety cents on the dollar—I say, some such poor fellow will scarcely feel disinterested as he lays down the "Fishing Tourist," the "Camp Life in Florida," the "Vacation Rambles," and sighs for himself while glad for another. But no! we will take on the generous spirit of our craft, nor grudge a brother what is denied to us; and remember the high ordination of *non cui omnia*, not all things to any one, which permits us, the year round, to look forth on green woods and fields and grassy plains, while, the same year round, the Editor is immured in walls of brick, and walks over heated or frozen stone.

But, when you do break forth, my dear sir, a man has need to draw on his seven-league boots to follow you! Now, in Michigan, then in Wisconsin; then, while we are tracking you on the map, over the Father of Waters in Minnesota; then in Dakota, or threatening it—truly, when snug in your sanctum again, you must yourself feel as if all had been a dream. Except the upset! We all sympathized with you in that, at the time, and our sympathy is renewed on your own record of it. I could well feel for you, remembering a like catastrophe at midnight in the rapids of the Raquette, when I was too busy saving a comrade from drowning to be able to take much thought for myself; another in the Sandusky marshes, my boat sinking, inch by inch, under me into the treacherous moss-grass, with twenty feet of mud below; no help in hearing, no form of man in sight; alone, alone; sinking, sinking, and knowing it to be as fatal to plunge out into that waving grass, clinging to legs, to arms, to neck, as it would to throw yourself into the hideous arms of the octopus—the longest ten minutes of my life. Yes, my dear sir, there was one reader that could feel for you, for he had "been there!" The gun, the tackle, the equipage—how striking, at such a time, the old Roman word for baggage, *impedimenta*—that was a shrewd loss! But a person of doubtful veracity told the truth once, "Skin for skin, all that a man hath will he give for his life." You came off with that, and more than yourself are thankful for it. I once raised an umbrella in a bark canoe to save paddling. My old Gjibwa guide grunted, "Too much hush for canoe, heap turn over!" I furled sail, and resumed the paddle.

Bye the bye, Mr. Hallock, speaking of the Father of Waters, I once heard an apostrophe to him by poor Tom Marshall, which is not in print, and I want to record it in your columns. In his very last days, just before the outbreak of the rebellion, notice was given that he would speak in St. James' Hall, in Buffalo. He came in, intoxicated as usual, and supported by two friends. They gave him a table and a chair to prop on, and then began the wondrous talk: "They talk of secession, of division—how can these be in a country which Nature herself has made eternally one! The Father of Waters, his head pillowed on the snows of the North, his feet bathed in the tepid waters of the Gulf—the conditions of health!—stretching out one hand to the riches of the Alleghanies, and with the other, reaping to himself the gold and silver of the Mountains! The Father of Waters, who can divide him?" The Intellect of man rose above the grandest work of Nature, and, for the moment, the shattered mind was more sublime than the mighty stream.

In short, thanks for your pleasant account of your varied trip. It will show many what is open to honest fishers and gunners in this beauteous world, when leisure and means open the way.

A few words on other recent points of agreement. You notice the 20 gauge Scott guns in your late visit to Schuyler, Hartley & Graham. Was it "Royal,"—honor and peace to his memory—or was it "Recapper,"—thanks that he is yet with us—who said that the gun for his use would be a 16 gauge, built to six pounds? That preference and your own, as expressed for small gauges, are precisely mine. As you say of the rifle—that, for hunters and war, the magazine rifle will be the rifle of the future—so, for use over a dog, and while birds will lie to a point, the small gauge shot-gun will be the gun of the future. While sweltering through our stubble-fields and prairies last summer for grouse, I would often look at my 8-pound, 12 gauge, and ask myself, "For shooting like this, what need of so much iron as this? of so much wood to balance the iron and bear the discharge? Where birds rise as set by your dog, at ten feet from your muzzle, and give you your choice up to 120 feet, what need of 4 drs. and 1 oz., with the weight to meet it, when 3 drs., at the outside, and ⅞ oz. No. 10 is absolutely all needed? So of grouse till they flock, and so, always, of woodcock, snipe and quail." And my thoughts went back to a beautiful little 20 gauge in one of those wondrous English cases at the great Exposition, and, under the August sun, I sighed for the little gun, with less iron and less wood, less powder and less shot, yet sufficient for all game shot over a dog. Could I obtain such a gun as I saw, and as you describe, I would use no other till the grouse flocked in the fall, and the ducks and geese came on from the North. Then, of course, heavier metal, with a proportionate charge, but then, too, the bracing air and the braced nerve and invigorated muscle in their proportion. I do not wonder at your pleasure, nor at your description, if that was the first time you had seen a Scott 20 gauge. The beauty, the material, the workmanship, the handiness—but, alas! the price. That is what cuts us down in the midst of our admiration, and leaves the gun to be to us only a pleasant dream. The justly celebrated makers come near to subornation of breach of the tenth commandment in putting them before our eyes in times like these, and with the average gunner's purse.

You speak of the Messrs. Scott. I can but think them fortunate in their choice of agents in this country. You mention one firm. Messrs. Read & Sons, of Boston, are another. Having had occasion to get a ponderous Scott muzzle-loader of them for geese, I can testify that whoever buys a gun of these gentlemen, will have two pleasures, one in the gun he buys, the other in the correspondence attending the purchase. Truly yours, BOONE.

PIGEON MATCHES.

NEW JERSEY—*Flemington, Jan.* 28.—The following is the score of a match shot at Stockton, N. J., January 26, for a D. B. breech-loader, twelve chances, $3 each, five birds each, Rhode Island rules.

Wm Jack	1 1 1 1 1—5	Gano	1 0 —1
L Case	1 1 1 1 1—5	Updyke	1 1 1 1 1w—4
J W Delts	1 1 1 1 1—5	Bailey	1 1 0w —2
A Burroughs	1 1 0w —2	Sheppard	0w —0
Dalrymple	0w —0	Emmons	0w —0
Kline	1 1 1 1 1—5	Updyke	1 1 1 0w —3

Ties on five.

Wm Jack	0w —0	Kline	1 1 1 0w—3
L Case	1 0w—1	Delts	1 1 1 1 1—5

Delts won, killing ten straight birds.

Followed by sweepstakes—$11 to man shooting most straight birds; first miss out.

W Jack	0	Apgar	0
Gano	1 0	Lane	1 1
Updyke	0	W Jack	0
Scarborough	0	Emmons	1 1 1 1 0
Dalrymple	0	Kline	1 1 1 1 1 1
Bailey	0		

Long Branch, Jan. 24.—Match between E. Hart Haight, of Allendale, and Henry White, of Red Bank, at Wheeler's Driving Park, Eatonville, N. J; 40 birds, 21 yards rise, 80 yards boundary. Score:

E Hart Haight....1 1 1 1 0 0 0 1 1 0 1 1 1 1 0 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 0 1—31.
Henry White....1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 0 ; 0 0 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 0 1 0 0—30.

E. S. G.

KENTUCKY—*Louisville, Jan.* 28.—Below I give you the shoot of the Louisville Gun Club, at the Jockey Club Grounds, Saturday, 26th. First match, $50; ten single birds, 25 yards rise, H and T traps:

J Van Cowling, Jr....1 1 1 1 1 0 0 1 1 1—8
H S Gilmore....1 0 1 0 1 1 0 1 1 1—7

Second Match—$5 sweepstakes, 21 yards rise.

W W Thompson	1 1 1 1 1—5	J W Thompson	1 1 1 0 0—3
J V Cowling, Jr.	1 1 0 1—4	Jno S Noyes	0 1 0 1 1—3
Jos Griffith	0 1 1 1 0—3		

Third Match—$5 sweepstake, 21 yards rise, miss and out.

H S Gilmore	0	J V Cowling, Jr.	1 1 0—3
Jos Griffith	0	S Hitching	1 1 0—3
Dr J W Bedford	0		

Fourth Match—Same as last.

H S Gilmore....1 1 1 1 1 1 0—6 Jos Griffith....1 1 1 1 1 1 1—7

Fifth Match—Five double birds, $5 entrance, 18 yards rise.

Dr J W Bedford	10	11	10	11	11—8
J W Thompson	11	00	11	11	11—8
W W Thompson	11	01	10	11	11—8
S Hutchings	10	11	11	00	11—7
J V Cowling, Jr.	11	11	11	10	10—8
Jno M Barton	11	00	11	11	11—8

Ties shot off at one pair.

Dr J W Bedford	11	11	11	11	11	11	11—14
T W Thompson	10w						
W W Thompson	10w						
J V Cowling, Jr.	11	11	11	11	11	11	11—13
J M Barbour	00w						

This match created a great deal of excitement, and the enthusiasm at times was immense. The birds were all hard ones, and stronger than any the club has hitherto shot at. The score shows excellent work by all.

J. V. COWLING, JR., President.

WACO (TEXAS) GUN CLUB, *Jan.* 18.—Side match, fifteen balls each. Score:

Captain McCall's Team.

McCall....1 0 0 0 0 1 0 0 1 0 1 1 1 1 0—7
J Thompson....1 1 1 1 0 0 1 1 1 1 1 0 1 1 1—12
Almond....1 0 0 0 1 1 0 1 1 0 1 1 0 1 1—9
Early....0 1 1 1 0 1 0 1 1 0 1 1 1 1 1—11
J Garland....1 1 0 1 1 1 0 0 1 1 0 0 1 0 0—8
Cresap....1 1 1 0 0 1 0 0 1 0 1 0 1 0 0—7—54

Captain Thompson's Team.

Thompson....1 1 1 0 1 1 1 1 1 0 1 1 0 1 1—12
Lane....1 1 0 1 0 1 1 1 0 1 1 1 0 0—11
McCulloch....0 1 0 1 1 1 1 0 0 1 0 1 0 0—7
S Garland....0 1 1 1 0 1 0 1 1 1 0 1 1 0—10
Downs....0 1 1 0 1 1 1 1 1 1 0 1 1 0 0—10
Gerald....1 1 1 0 0 0 0 1 1 1 0 1 1 1 0—9—59

Second Match—Five balls.

McCall	1 1 1 0 0—3	Thompson	1 1 1 1 1—5
Thompson	1 0 1 0 1—3	Lane	0 1 1 1 0—3
Almond	1 1 1 1 1—5	McCulloch	0 1 0 1 1—3
Early	1 1 1 1 1—5	Downs	1 1 1 1 1—5
Cresap	1 1 1 0 1—4—20	Gerald	1 0 1 0 1—3—19

WACO.

NORTHWESTERN SHOOTING CLUB—*Erie, Pa., Jan.* 21.—First regular shoot for the champion gold badge. Score;

Johnnie Graham	1	1	1	1	1	1	1	1	1—10
Theo. Jarecki	1	1	1	1	1	1	1	1	1—10
S S Burton	1	1	0	1	1	1	1	1	1—9
H Vanvelsor	1	1	1	0	1	1	1	1	1—9
W W Derby	1	1	1	1	1	1	0	0	1—8
Charles Firch	1	1	0	1	1	0	1	1	1—8
W Tracy	1	1	1	1	1	1	0	1	0—8
Jake Graham	1	1	0	0	1	1	1	1	0—7
Tim Lynch	1	0	1	1	1	1	0	0	1—7
Z Smith	0	1	0	0	0	1	1	1	1—6
C Lynch	1	1	1	1	1	1	0	w	—6
J Ross Thompson	0	1	0	0	0	0	0	1	1—4
G W Hayward	0	0	0	0	0	1	0	1	1—3

Ties on ten.

Graham	1 1 1 0 1—4	Jarecki	1 1 1 1 0—4
Graham	1 1 1 1 1—5	Jarecki	1 1 1 1 1—5
Graham	1 1 0 1 1—4	Jarecki	1 1 1 1 1—5

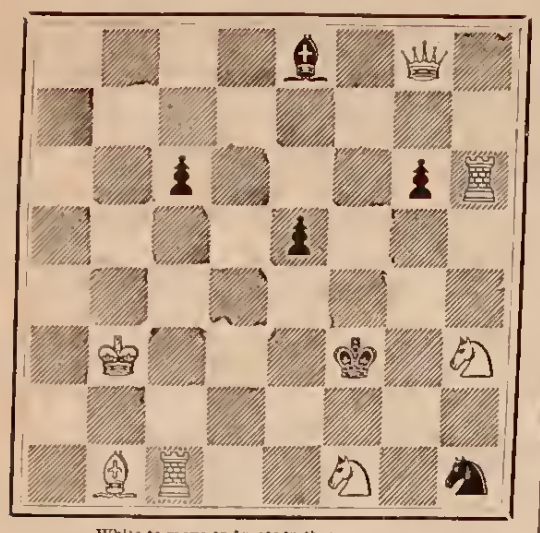
SNIPE.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should addressed "Chess Editor FOREST AND STREAM, P. O, box 54, Wolcottville, Conn."

Problem No. 4.

Tourney set—No. 2. Motto—Talk enough—Gossip



White to move and mate in three moves.

SOLUTIONS—NO. 2.

1—K R-R6	1—K B4	1—K B4	1—K B5
2—R-Q R5	2—K B5	2—R-B5	2—K-Kt4
3—R-B6 mates.		3—B mates.	
1—K R-R6	1—Kt-Kt6	1—K R-R6	1—Kt-Q6
2—B tks Kt	2— moves	2—B tks Kt	2— moves
3—R mates		3—mates	

Game No. 6.—KING BISHOP'S OPENING.

Played by correspondence in 1840.

White. Norfolk.	Black. New York.	White. Norfolk.	Black. New York.
1—P-K4	1—P-K4	14—Kt-Q2	14—Kt-K B3
2—B-B4	2—B B4	15—Q-Q B2	15—R tks Kt (g)
3—P Q B3 (a)	3—Q-Kt t (b)	16—Q tks R (h)	16—Kt tks P
4—Q-K B3 (c)	4—Q-K Kt3 (d)	17—Q-Q B	17—B-K B6
5—Kt-K2	5—P-Q3 (e)	18—P-Kt3	18—P-K R 4
6—P-Q4	6—B-Kt3	19—B-Q5	19—P-K R5
7—Castles (f)	7—Kt-K B3	20—B tks Kt	20—Q tks B
8—P tks P	8—P tks P	21—B tks B	21—Q-K Kt5 !
9—Kt-Kt3	9—B-K Kt5	22—Q-K3	22—K P tks B
10—Q-Q3	10—Q Kt-Q2	23—K R-Q Kt	23—P-K5
11—P-Q Kt4	11—Kt-R4	24—Q-K	24—P-K B4
12—B-K3	12—Castles Q R	25—R-Kt2	25—P-K B5
13—Kt tks Kt	13—B tks Kt	26—R-Q Kt and black mates in four moves.	

NOTES.

(a) The best move here is 3—Kt-K B3.

(b) This move is the invention of the Italian school. Subsequent authors considered it inferior until Jaenisch demonstrated its superiority.

(c) The best move.

(d) Also the best move.

(e) 5—Kt-Q B3 is equally good.

(f) P tks P is usually played here and results in an even game. We prefer the text move.

(g) This move is sound.

(h) Better than taking with B.

The subjoined game is one of Cochran's brilliant skirmishes:

Game No. 7.—SCOTCH GAMBIT.

White. Cochrane.	Black. Papert.	White. Cochrane.	Black. Papert.
1—P-K4	1—P-K4	11—Q Kt-Q2	11—B-K B4
2—Kt-K B3	2—Kt-Q B3	12—Kt tks P	12—Kt tks Kt
3—P-Q4	3—P tks P	13—Q-Kt5 ch	13—Kt-B3
4—B-Q B4	4—B-Kt5 ch	14—K R-K ch	14—B-K3
5—P-Q B3	5—P tks P	15—B tks B	15—P tks B
6—P tks P?	6—B-R4!	16—Q tks P	16—R-Q
7—P-K5	7—P-Q3?	17—Q tks Kt ch	17—K-B2
8—Q-Kt3	8—Q-K2	18—Kt-K4	18—Kt-K2
9—Castles	9—P tks P	19—Kt-Kt5 ch	19—Q tks Kt
10—B-R3!	10—Q-K B3	20—Q tks P ch and wins.	

The following is the first game scored in the International Tourney between Great Britain and the United States. Play commenced July 18, 1877:

Game No. 8.—SCOTCH GAMBIT.

White. Wm. Olcott.	Black. H. Williams.	White. Wm. Olcott.	Black. H. Williams.
1—P-K4	1—P-K4	8—B-Q3	8—P-Q R3
2—Kt-K B3	2—Kt-Q B3	9—Castles	9—B-Kt3
3—P-Q4	3—P tks P	10—P tks P	10—Kt tks P
4—Kt tks P	4—B-Q B3	11—R-K	11—Castles
5—B-K3	5—Q-K B3	12—Q K R5	12—P-K Kt3
6—P-Q B3	6—K Kt-K2	13—Q tks Kt	13—R-Q
7—B-K2	7—P-Q4	14—Q-K Kt5 and black resigns.	

CURSORY JOTTINGS.

—Mr. MacKenzie and associates won the grand consultation match at the Cafe International. Does this contest decide who is to represent America at Paris?

—Consultation games are played at the Wednesday and Saturday evenings' sessions of the Brooklyn Chess Club. The season of 1877-78 has surpassed all previous ones for some years past, in the life and spirit manifested at the club meetings, and the interest taken by members in the club contests. We will gladly give space to games played by the members of this famous club.

—Max Judd, on his recent Southern trip, contested seven games with Mr. Galbraith, and won by a score of 5 to 2. It is evident that Mr. Galbraith is a fine player.

—A handicap chess tournament is now in progress at the Manhattan Chess Club at Cafe Logeling, No. 49 Bowery. This Club now numbers over forty members, including such players as Delmar, Perrin, Von Frankenberg, Limbeck, Mohle, Rice, Ettlinger, Frere, Fowler, Ray, etc. The tourney is divided into four classes, and the prizes are: First, a gold medal, and the second, third and fourth to be divided into equal parts.

—Ajub, the automatic chess player, is quite a curiosity, and all chess players should visit the New York Aquarium, where it is now located.

—Chas. A. Gilberg, Esq., has carried off both prizes for the best two and three move problems in the recent problem tourney of the *Danbury News*.

ANSWERS TO CORRESPONDENTS.

F.W. Skinner Cincinnati, O.—Instead of Castling on the 12th move, black should play 12—B-Q3 or Q-Q3. Mr. Lowe's move, Q-Q, might also be played—the only, and perhaps, serious objection thereto, being that Q Kt cannot afterward retire to his square—after 13—P-B3 followed by 14—Q-R4. The attack on the K R side may be effective then, although, after a hasty examination, we fail to discover any line of play yielding black a superior position. If black make either of the above suggested moves, he obtains the superior game. We do not consider the sacrifice severe, viz.; 13— ——, 13—Q-Q; 14—P-Q Kt4, 14—Kt-Q1; 15—P tks B, 15—Q-R5 ch; 16—R-B2, 16—Q tks R P; 17—Q-R4, 17—P-K B4; 18—Kt-Kt5, 18—R-B3; 19—Q tks Kt, and wins. However, our line of defence may be weak, and should you so discover, we will give this variation a more careful examination.

W. A. Briggs, Montpelier, Vt.—Solutions and problems at hand. Send other problems as soon as possible.

Geo. Noble, Fisherville, Can.—Solution noted. Glad you are pleased to see the valuable addition of chess to the FOREST AND STREAM.

G. R., Philadelphia, Pa.—Right glad to hear from you. One or two games from Philadelphia experts would find a place in our columns.

Wm. Parker, New Britain, Conn.—Can you not elaborate a set for our tourney? Problem No. 1 might be called a double-hinged one.

W. D. Mills, Savannah, Tenn.—Your solution is written in as intelligible manner as the English chess notation admits of.

Rich. Fairey, Chatham, New Brunswick.—Have credited you with solutions. Gossip's "Manual," $5 00; Staunton's "Handbook" and "Praxis," $3.00 each; last edition of the German *Handbuch*, about $9.50; Agnell's "Book of Chess," $2 00; Pocket chess board (best made), with set of men, $1.00; and rubber chess type for printing, $1.00: we will furnish you, or any of our readers, any of the above chess books, etc., at the prices mentioned.

Prof. David S. Jordan, Irvington, Ind.—Solutions duly received, and we sincerely hope that "you will find time to continue them."

Rev. H. C. Bog, Rocky Hill, N. J.—You are very prompt and accurate in solutions, and we are greatly surprised to hear that you have not, for six years past, played a game of chess.

THE FOREST AND STREAM PROBLEM TOURNEY.

Recognizing the increasing favor with which this branch of the royal game is regarded we have decided to offer a number of liberal prizes for competition.

THE PRIZES.

1. For the best set	$25 00
2. For the second best set	20 00
3. For the third best set	10 00
4. For the best three move problems	5 00
5. For the best two move problems	5 00
6. For the second best three move problems	2 00
7. For the second best two move problems	2 00
8. For the best problem entered in the tourney	5 00

Each composer is invited to send in a two move problem accompanied by his photograph, the author of the winning position to receive as a prize all the photographs.

Problems will be judged according to the following standard.

BULL'S PROBLEM CODE.

1. Beauty and originality of design	1 to 10 points.
2. Difficulty of solution	1 to 10 "
3. Accuracy and elegance of construction	1 to 10 "

RULES.

Competition is open to the world. All problems to be direct mates—that is to say, white to play and mate in two or three moves, as the case may be. All problems must be original and not hitherto published. Competitors may enter as many sets, or single problems as they please. Each competitor will affix a motto to every single set or problem sent in and also inclose his name and address. Competing problems will be submitted to the umpire, Charles A. Gilberg, Esq., who will report all unsound positions. American composers will be allowed four weeks in which to correct such positions; foreign composers being allowed eight weeks for the same purpose. Should the requisite corrections not be received within the time specified the positions will then be ruled out of the tourney. The tourney will be open to competition until the first day of July 1878, after which date the list will be closed. The prizes will be awarded within two weeks after the publication of the last problem. Address E. A. Kunkel, Wolcottville, Conn.

THE FOREST AND STREAM SOLVERS' TOURNEY.

This tourney commences with problem No. 1 and will continue until all the problems entered in the above problem tourney are published.

THE PRIZES.

1. Cash prize of	$10 00
2. " " "	
3. The FOREST AND STREAM for one year.	5 00
4. Cash prize of	
5. " " "	3 00
6. " " "	2 00
	2 00

New Publications.

AMERICAN ORNITHOLOGY: NATURAL HISTORY OF THE BIRDS OF THE UNITED STATES. By Alexander Wilson and Prince Charles Lucien Bonaparte. The Illustrative Notes and Life of Wilson, by Sir James W. Jardine. Three volumes, illustrated in colors. New York: J. W. Bouton, 706 Broadway, 1877.

Apart from their value to the scientific man, the life and labors of Alexander Wilson must possess a strong attraction for every enlightened reader. In this country, especially, which was the scene of his struggles, and where, worn out by his exertions in the cause of science, he died, leaving his work still uncompleted, should Wilson be appreciated and admired. In these days of steam and electricity, it is a difficult matter to realize the hardships which our pioneers of science in the early years of this century were forced to undergo in their search for knowledge. Different sections of the country could only be reached by means of boat or horse, and the distance that we now traverse in an hour required then a day. To go from New York to Boston, or from Philadelphia to Pittsburgh, was then a serious undertaking, and when we consider the time occupied by this means of conveyance, we may well wonder how it was that Wilson and Audubon accomplished all that they did. Only one who has mounted his horse and fared wearily along for a thousand miles or so can at all appreciate the difference between the travel of those days and the present. The average railway tourist can have no conception of the time and labor involved by a journey fifty years ago.

Alexander Wilson was the first man to devote any serious attention to the birds of this country, and it is chiefly through his exertions and those of Bonaparte and Audubon, who immediately followed him, that the birds of North America are better known to-day than those of any territory of equal size upon the globe. The publication of the grand works of these authors gave an impetus to the study of ornithology which it yet feels, and, happily for science, the mantle, dropped by the great men of the past, has in our day fallen upon worthy shoulders.

To say that Wilson never erred would be to claim that he was more than man. He did make mistakes, but they were honest ones, and such as the best of us are liable to. He was, however, truly a scientific man in the best sense of the term; careful and conscientious in his observations, and just and scrupulous in recording them, and it is on this account that his works are so valuable to the ornithologist. But he was also a true poet and an ardent enthusiast in his chosen study, and hence his writings should be as popular with the general reader as with the specialist. What can be finer than his description of the robbery of the fish-hawk by the white-headed eagle?

"Elevated on the high, dead limb of some gigantic tree that commands a wide view of the neighboring shore and ocean, he seems calmly to contemplate the motions of the various feathered tribes that pursue their avocations below; the snow-white gulls slowly winnowing the air; the busy Tringæ coursing along the sands; trains of ducks streaming over the surface, silent and watchful cranes; intent and wading; clamorous crows, and all the winged multitudes that subsist by the bounty of this vast liquid magazine of Nature. High over all these hovers one, whose action instantly arrests all his attention. By his wide curvature of wing and sudden suspension in air, he knows him to be the fish-hawk settling over some devoted victim of the deep. His eye kindles at the sight, and, balancing himself with half-opened wings on the branch, he watches the result. Down, rapid as an arrow from heaven, descends the distant object of his attention, the roar of its wings reaching the ear as it disappears in the deep, making the surges foam around. At this moment the eager looks of the Eagle are all ardor; and, leveling his neck for flight, he sees the fish-hawk once more emerge, struggling with his prey, and mounting in the air with screams of exultation. These are the signals for our hero, who, launching into the air, instantly gives chase, soon gains on the fish-hawk. Each exerts his utmost to mount above the other, displaying in these rencontres the most elegant and sublime aerial evolutions. The unencumbered eagle rapidly advances, and is just on the point of reaching his opponent, when, with a sudden scream, probably of despair and honest execration, the latter drops his fish; the eagle, poising himself for a moment, as if to take a more certain aim, descends like a whirlwind, snatches it in his grasp ere it reaches the water, and bears his ill-gotten booty silently away to the woods."

No reproduction of the works of Wilson and Bonaparte, which we have ever seen, will at all compare with that now before us. The writings of these two authors, brought together and edited by Jardine, comprise the greater part of what had been done in American ornithology up to the time of Audubon, and are thus of the highest interest to all. A full set of colored lithographic plates, excellent copies of those in the original quartos, but reduced so as to come within the size of these volumes, accompanies the text. They are remarkable for excellence and beauty of finish. The type of the volumes is large and clear, and the pages clear and attractive in appearance.

We heartily congratulate the publishers on the success of their edition, and bespeak for it the attention of all of our readers who have any liking for natural history.

NUTTALL BULLETIN.—It is with feelings of no little satisfaction that we tender to the Nuttall Ornithological Club our congratulations. These are called forth by the appearance on our table of the January number of the *Nuttall Bulletin*, which since its last issue has been increased in size to forty-eight pages. We have so often in the past called attention to this admirable periodical, that it is unnecessary here to speak further in its praise. To any one who desires to keep up with the progress of ornithology in this country it is simply indispensable. Take for example the present issue: In the General Notes are to be found three additions to the Avifauna of North America, the occurrence of *Cotumiculus henslowi* in New Hampshire, of *Poliioptil cærulea* in Massachusetts, of *Corvus ossifragus* near West Point, New York, of *Calamospiza bicolor* in Massachusetts; and a dozen other notes of the utmost interest, which, but for the *Bulletin*, might have remained for years buried in a note-book, and which now will not come to the knowledge of those collectors who do not read this periodical until the publication of the next general work on ornithology.

We wish that we had space to review at length the contents of this number. As we have not, we can only enumerate the titles of the articles, most of which are of great interest. Dr. Coues gives a brief note on *Passerculus bairdi* and *P. princeps*, which is accompanied by a beautifully colored plate of the former species, the first correct figure published since Audubon's original specimen was introduced to science. Species of the Genus *Passerella* are treated at some length by Mr. H. W. Henshaw, so well known for his admirable report on the birds collected by Wheeler's Survey, and for other ornithological writings. Mr. Wm. A. Cooper tells us of the breeding habits of *Carpodacus purpurens*, var. *Californicus*, and Mr. Ridgway describes a new wren from the Trea Marias Islands, under the name *Thryothurus felix* var. *Lawrencie*. In a second article Mr. Henshaw defends himself against the charge by Mr. Elliott that he has erred in giving the name *Selasphorus allini* to the green-backed hummer of California, and gives what seems to be good reasons for thinking that Gruelius' bird was the common rufous-backed species. By some omission both the preceding articles are omitted from the title-page of the issue.

Mr. Wm. Brewster contributes a paper, full of interest, on the "First Plumages of Various Species of North American Birds," these first plumages, he it understood, having never before been described. Mr. J. A. Allen, the editor-in-chief of the *Bulletin*, demolishes, in his article on "An Inadequate Theory of Birds' Nests," a theory advanced by Mr. A. R. Wallace to account for the different kinds and positions of the nests of various groups of birds. Col. N. S. Goss, of Kansas, contributes a short paper on the "Duck-Hawk Nesting in Trees."

The "General Notes" are, as might be inferred from what we have already said of them, a mine of wealth to the writer in this department. We have not space to tell of all the interesting facts brought to light in this number. Those who desire to be informed as to their character, and who would keep up with the times in this science, should subscribe to the *Bulletin* forthwith. We wish it all success.

THE AMERICAN NATURALIST.—In our issue of January 17th we referred to the change of ownership of this Journal, its purchase by Prof. Cope, and consequent transfer to Philadelphia, and to the dissatisfaction with which this change was regarded by leading scientific men. We also stated that this feeling of dissatisfaction "is so strong that it is resulting in the gradual withdrawal of those who have hitherto been its (the *Naturalist's*) most influential supporters. At that time we were not at liberty to speak more definitely, although the documents which justified our remarks had even then been submitted to us. We are now, however, able to state that the dissatisfaction to which we referred had even then taken definite shape in the form of a protest as follows:

The undersigned, who have in past years contributed articles and by other means helped to support the *American Naturalist*, protest against the continued use of their names in the same connection under the new conditions advertised in the December number of 1877.

December 10, 1877.

This document is signed by the following eminent naturalists: Alexander Agassiz, Asa Gray, J. D. Whitney, H. A. Hagen, N. S. Shaler, J. A. Allen, W. G. Farlow, James D. Dana, G. C. Marsh, A. E. Verrill, J. S. Newberry, A. R. Grote, Saml. Lockwood.

BOOKS RECEIVED.—"Dog Paths to Success:" a Practical Guide for Sportsmen and Trainers, by Kit Kilbird, 1878. "Out of the World:" Fables by G. Washington Æsop; The *World*, New York, 1878. "Bits and Bearing Reins, and Horses and Harness," by Edward Fordham Flower; Cassell, Petter & Galpin, London, Paris and New York. "New Method of Horsemanship, including the Breaking and Training of Horses," (illustrated), by F. Baucher; New York, Robert Cogswell Publisher.

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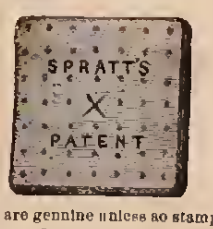

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SETTERS FOR SALE.—"Fan," black and tan, pure Gordon, imp. stock, out of "Maud," by Marbles' "Grouse," two years old; taught first lessons; bred to "Lelapa" Jan. 5, 1878; price $75. One dog, two years, white and chesnut, sire Tucker's dog, Providence, R. I., Copelandt's "Old Pete" grand sire, dam English imported, very handsome, 23½ inches high; taught first lesson, and game shot over; price $75. "Bell," half imported red Irish and half English, color orange, two years old, taught first and second lessons (see circular), extra in field, fast, staunch and handsome, 23½ inches high, never bred, price $125; will breed her to "Lelap," same price. Dogs trained and boarded. For terms and particulars, send for circular. FRANKLIN SUMNER, Milton, Blue Hill, Mass. jl7 4t

THE DOG BREAKER'S GUIDE.—Train your own dogs in the most artistic manner. "The Dog Breaker's Guide" sent for three cent stamp. M. VON CULIN, Delaware City, Del. jl7 tf

FOR SALE.—One imported red Irish setter dog, Dash, from J. C. Cooper, Limerick, Ireland, of good stock, bred by Grouse out of Flirt. Dash is about two years old and unbroken; of a deep blood red color, with slight marking of white on face. Price moderate. One Chesapeake Bay duck dog, Friday (long hair) well broken to retrieve (about one year old). Price, $25. Snapshot, celebrated champion pointer, and Frank, imported English setter, winner of first at Philadelphia, in the *stud*. LINCOLN & HELLYAR, Warren, Mass. Jan17 4t

COCKER SPANIEL BREEDING KENNEL OF M. P. McKOON, Franklin, Del. Co., N. Y.—I keep only cockers of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruffed grouse and woodcock shooting and retrieving. j10 tf

FULL-BLOODED—Two Irish setter bitches, four months. Sire of pups, Don, imported from J. C. Cooper, of Limerick, Ireland, by C. H. Turner, Sec. Nat. Kennel Club, St. Louis, Mo.; dam, Countess, by Rodman's Dash. One Gordon bitch, eighteen months old; hunted this fall, staunch on quail and very fast, with good nose; will make a good one. One Gordon bitch eight months old. Full pedigree given with pups. H. B. VONDERSMITH, Lancaster, Pa. Nov22 tf

FOR SALE, when eight weeks old, six puppies out of my blue belton setter Mell, by Bob Boy. They are black and white. Two of them are black, white and tan, and are almost perfect images of their sire. For particulars, address L. F. WHITMAN, 5 City Hall, Detroit, Mich. je28 tf

FOR SALE, at a great bargain, my entire kennel with the exception of one brace for my own shooting. I have on hand, for sale: One pointer dog pup, Dilley's Ranger stock; one pointer bitch pup, Don-Lina; one red Irish setter pup, Plunket-Nell; one lemon-and-white setter dog pup, Tam-Queen Blanche; one black-and-white setter bitch in whelp. Will sell the above at prices very much lower than ever before offered, and warrant them to be finely bred, and am confident no better blood exists. I am going to be absent from home much of the time henceforth, and must sell. Address W. H. HOLABIRD, Valparaiso, Ind. Jan31 tf

FOR SALE—Irish setter slut Sally; color red, white chest and feet; thoroughly broken; 18 months old; warranted to point, back and retrieve; good nose and fast; full pedigree; sold for want of use. Price $50. Address C. H. CONE, 156 East 126th street, Harlem, N. Y. feb7 2t

SPIKE COLLARS.—Spike Collars, by means of which dogs of ANY AGE OR BREED, no matter how long hunted, or what the disposition, can be taught to fetch and carry, and to retrieve game in a most perfect manner, with no play about it. Dogs broken of gun shyness and whip-shyness, made steady before and behind, and "to heel" steadily; prevents lugging on the chain, besides a much more extended sphere of usefulness. Price, with directions for using, $3. Kennel collars, which no dog can get over his head, price $1. Address M. VON CULIN, Delaware City, Del. feb7 tf

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FOR SALE, A BARGAIN—A well-broken setter dog, two years old, color blue belton; is fast, staunch, and good retriever. Price $30. Address T. DENMEAD, P. O. box 458 Baltimore, Md. Jan31 tf

WANTED TO USE A BITCH.—I have an imported English setter dog, Don-Judy, and wish to breed from him under usual conditions. Address, stating pedigree, C. H. C., P. O. Box 2155, New York. feb7 1t

STUD DOG.—I shall want this month the use of a Belton stud dog for my bitch. The dog must be of the best breed, with an undoubted record. Address M. Q. O., care of R., FOREST AND STREAM Office, giving cost and full particulars. feb7 1t

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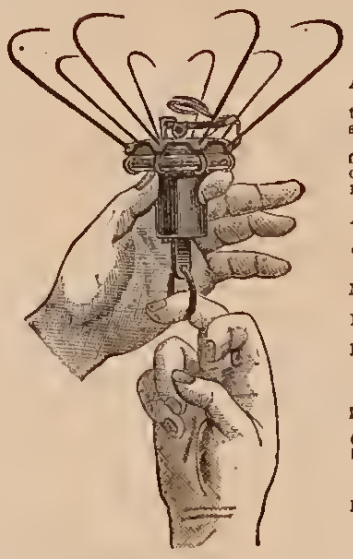

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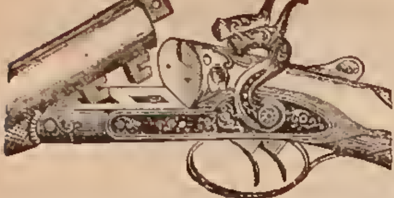
THE

CHOKE-BORE MATCH.



W. W. GREENER begs to inform his numerous patrons in America that his gun has again come off victorious at the great match of Choke-Bores vs. Cylinder Bores, at the London Gun Club, on May 23, beating seventeen of the best shots in Great Britain who used guns by the best London makers, viz.: Four made by Grant, three by Purdy, three by Dougal, one by Lancaster, Boss and others.

[*See London Field, May 26, Editorial Remarks.*]

"Mr. Cholmondeley Pennell, the winner of Mr. Purdey's massive fifty guinea cup, weighing over 91 ozs., for the highest score, shot wonderfully well, killing all his birds at 30 yards with the first barrel. The gun he used was a full choke, by Greener, of Birmingham. The result of the trial served to show the superiority of the choke at the long range. Mr. C. Pennell cutting down his birds in a marvellous way with his heavy Greener."

W. W. GREENER,

St. Mary's Works, Birmingham, and 68 Haymarket, London.

Read "Choke-Bore Guns and How to Load," by Cassell, Petter & Galpin, New York.

Second-Hand Guns

AND

SPORTING GOODS,

WHICH CAN BE BOUGHT CHEAP AT

J. F. MARSTERS,

125 NASSAU ST., N. Y.

One Scott Premier 10-gauge choke-bore, weight 9 lbs., in first-class order, with case, price $225
One Remington Sporting Rifle, made to order, pistol grip, rubber heel to prevent recoil, .44-calibre 50
One Hollis' 10-bore, 9 lb., pistol-grip, rebounding locks.................................... 70
One Remington Military Rifle, 1,000-yard range. 15
One French Double Gun, pin-fire, 16 gauge..... 25
One More & Harris Muzzle-Loader, 10-gauge, 8¾ lbs., double gun.................................... 35
One Hollis' Ducking double gun, 8 gauge, 14 lb. 25
One Scott Muzzle-Loader, 12 lb., 9-gauge, 34-in.. 25
One Ballard Rifle, .44-cal. 10 lbs.................. 20
One Colt's Revolving Rifle, 6 shot................ 18
One Maynard Rifle, little the worse for wear.... 8
One Single Muzzle-Loader, 10-gauge, cost $45.. 15
One Single Breech-Loader, Stephen's make..... 10
One Skeleton Stock Stephen's Rifle, .22-calibre, in case.................................... 12
One General Fishing Rod, will make up five different rods, German silver-mounted, cost $40.. 20
One large German silver trolling reel, holds 600 feet line.................................... 10

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Sportsmen's Emporium.

SHOOTING, FISHING AND CAMPING GOODS OF EVERY DESCRIPTION.

Send 10 cents for 50-page illustrated catalogue, with rules for glass ball shooting, hints on camping, hooting and fishing, etc.

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Sportsmen's Diary and Notebook, with blank scores and useful receipts, etc., mailed on receipt of 50 cents.

PURDY'S GLASS BALL TRAPS, $3.50.

The best for wing practice.

Paine and Bogardus' glass balls; Kay's composition Balls.

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Guns, Etc,

GUNS Cheap!

DOUGALL—Highest quality; 12-bore, 7 lbs.; in highest quality case, and implements; cost $175; price.................................... $250
SCOTT—Premier quality; 10-bore, 9¼ lbs., pistol grip, and all improvements; made to an order given to W. M. Scott in person, and is warranted finest in every respect; in best English case, with implements complete; never used; cost $310 gold; price........... 275
RIGBY—Highest quality; 12-bore, 7 lbs.; elegant Damascus barrels, in solid leather case; cost $525; price.................................... 275
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J. HOLLIS & SONS—12-bore, side lever, pistol grip, 9 lbs. weight; good as new; in case with shells; cost $85; price.................. 55
WEBLEY—12-bore, 7 lbs.; laminated barrels; scroll-fence breech; good as new, and a bargain.................................... 48
REMINGTON—10-bore, 8 lbs. weight, $45 grade; last one for.................................... 30
SINGLE BREECH-LOADER—Damascus barrels, 10-bore, 8¾ lbs. weight, pistol grip; made by Nichols & Lefever, and cost $85; present price.................................... 50
Also a very fine Hollis muzzle-loader; 30-inch, 8¾ lbs., nearly new; cost $85; price.......... 25
Also a Wm. Moore breech-loader, back-action locks, twist barrels, for.......................... 28

The above guns are nearly all the property of gentlemen who have no further use for them, and are sold at a great sacrifice. Each gun is exactly as represented, and will be sent for examination on satisfactory reference, or receipt of sufficient money to pay express charges. List of second-hand rifles next week.

HENRY C. SQUIRES,

No. 1 Cortlandt St., New York.

HIGHEST HONORS

AT THE

Centennial World's Fair, 1876!

THE

SHONINGER ORGANS

PRONOUNCED UNANIMOUSLY AS THE

Best Instruments.

Their comparative excellence is recognized by the **Judges** in their **Report**, from which the following is an extract:

"The **B. SHONINGER ORGAN CO.'S** exhibit **as the best Instruments** at a price rendering them possible to a large class of purchasers, having a combination of Reeds and Bells, producing novel and pleasing effects, containing many desirable improvements, will stand longer in dry or damp climate, less liable to get out of order, all the boards being made three-ply, put together so it is impossible for them to either shrink, swell or split." **THE ONLY ORGANS AWARDED THIS RANK.**

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ESTABLISHED 1850.

We are prepared to appoint a few new Agents.

A liberal discount to the Clergy, Sunday Schools, Teachers, Churches and Lodges.

Illustrated Catalogues, with prices, sent by mail upon application to

B. SHONINGER ORGAN CO.,

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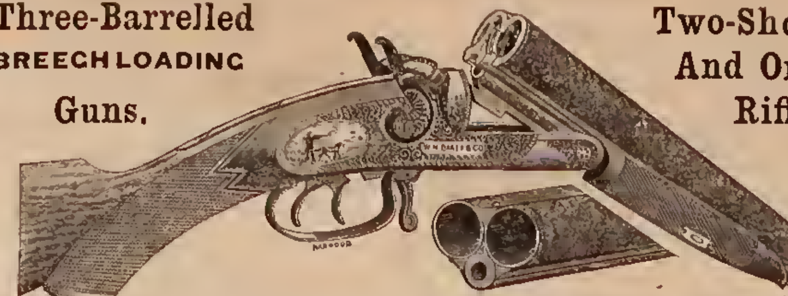
NEW HAVEN, CONN.

Three-Barrelled BREECHLOADING Guns. Two-Shot And One Rifle.



A new feature in the Sporting Line. Forms a light and compact gun from eight to ten pounds, giving to sportsmen the very thing so often wanted in all kinds of shooting. We are also manufacturing a Double-Shot Gun, containing more good points than any other gun in the market.

PRICES—Three barrel, $75 to $250. Double barrel shot guns. Damascus barrel, $50 to $200. Twist barrel, $35.

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FEATHER FILLED GLASS BALL.

PATENTED OCTOBER 23, 1877.

The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade.

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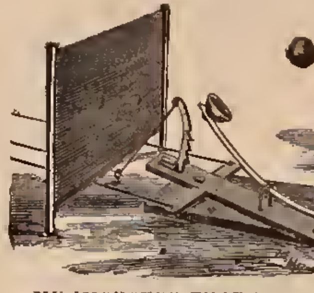

Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. **Price $8.**

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FOR TRAPS, **GEO. E. HART & CO., Newark, N. J.**

Second and enlarged edition of "Field, Cover and Trap Shooting," containing instructions for Glass Ball Shooting, will be ready Feb. 1. Price $2, by mail, postage paid. Address,

Dec6 tf **Capt. A. H. BOGARDUS, International Hotel, N. Y.**

THE UNITED STATES CARTRIDGE COMPANY,

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CENTRAL FIRE, SOLID HEAD,

BRASS SHELL, RE-LOADING CARTRIDGE,

Used by the Army and Navy of the United States and several Foreign Governments.

All kinds of RIM FIRE AMMUNITION.

Special attention paid to orders for TARGET PRACTICE CARTRIDGES.

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Sportsmen, Attention

Keep Your Feet Dry.

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Goods sent to all parts of the U. S., C. O. D.

Catalogues containing full instructions for self-measurement sent free on application.

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NEW YORK SHOOTING COAT.

MADE OF WATERPROOF VELVETEEN, CORDUROY, FUSTIAN OR CANVAS

Having the above Coat thoroughly tested the past season by sportsmen in different parts of the country. I can confidently recommend it by numerous testimonials as to Comfort, Style and Convenience. The Coat in any material is cut in the English style, and made in the most thorough manner.

Coat, Vest, Trousers and Cap complete if desired.

I have also completed a Canvas Fishing Jacket, with all necessary pockets, etc.

Rules for Measurements and Samples and Price List sent upon application.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, FEBRUARY 14, 1878.

Volume 10.—No. 2. No. 111 Fulton St., N.Y.

THE CONDUCT OF LIFE.

Selected.

BE it good that we do, let us do it,
Giving soul and our strength to the deed;
Let us pierce the hard rock and pass through it,
And compass the thing that we need.

Does Fate, as a dark cloud, hang over,
And cover our heads from the light?
Does hate mock the heart of the lover?
Must wrong be the victor of right?

Yet in Fate there is freedom for each one
To make or to mar, as he will;
And the bolts of ill fortune that reach one
May maim, but they never shall kill.

Ever onward and upward pursuing
The aim that is thine for the day,
Adding strength to thy strength by thy doing,
Thou shalt gain it, nor faint by the way.

And though thou art busied with small things,
Though menial thy labor may be,
Do thy utmost in that and in all things,
Thou still shalt be noble and free.

Dost thou love? let it be with full measure;
Nor mingle with coldness or hate
Of others the joy of thy pleasure,
The passion that crowns thy estate.

Be to every man just; and to woman
Be gentle, and tender, and true;
For thine own do thy best; but for no man
Do less than a brother should do.

So living thy days fall to number,
In peace thou shalt pass to the grave;
Thou shalt lie down and rest thee, and slumber,
Beloved by the good and the brave.

—*Tinsley's Magazine.*

For Forest and Stream and Rod and Gun.

Duck Shooting in Various Places

SHOOTING ON CHESAPEAKE BAY.

The Chesapeake Bay and its tributaries afford, beyond question, the best opportunity for wild fowl shooting in this country. The vast multitudes of wild fowl of almost every known variety indigenous to our country that frequent these waters annually, computed, would stagger credulity. The principal attraction, undoubtedly, is the abundance of wild celery (*Valisineria americana*), which grows along the shores on the shoals and flats in greatest profusion. The juicy and succulent roots (not blades) of this aquatic plant furnish a food not only highly prized by the birds, but which gives to them, when properly cooked and served, a delicacy of flavor unequalled. Especially is this the case with the famed canvas-back and red-head, which fact accounts for the ardor with which these varieties are sought by both sportsmen and market hunters. The Susquehanna Flats at the head of the bay are the choicest feeding grounds of the birds, and here is where the devotee to the sport can gratify his passion to the fullest extent. The State of Maryland has very wisely enacted stringent laws to protect the fowl from constant harassing, hence shooting is only allowed on three days of each week from November 1 to January 1, after which time an extra day per week is permitted to the end of the season. About twenty vessels carrying sink boxes, and more than double that number of bushwhackers are granted license in regular form.

Your correspondent was recently the recipient of a grand day's sport upon the flats. In the choice company of our genial friends and gifted sportsmen, J. E. S. and E. C. P., we took the four o'clock P. M. train on the P. W. and B. RR., and after a pleasant ride of less than two hours were landed safely at Havre de Grace, and a few moments later were snugly ensconced in the commodious and elegantly fitted up cabin of the gunning sloop, Lilly, where a single glance revealed most excellent taste and judgment in the arrangement of bunks, lockers and furniture, and where our sensitive olfactory nerves utterly failed to discern the slightest odor of bilge-water. That this reflected credit upon her commander, Captain Bill Myers, we frankly admit, and we were convinced, in addition, long before our departure, that the captain was an able seaman, a good ducker, and entitled to much praise for the gentlemanly qualities and abstemious habits of himself and crew.

Havre de Grace is situated at the mouth of the Susquehanna River. It is the headquarters of the Chesapeake gunners, and is distant about five miles from the best shooting grounds. As the law prohibits any gunning craft crossing light-house line before three o'clock A. M. on open days, we did not rise until dawn of day, when we awakened to find ourselves upon the shooting ground, but, greatly to our chagrin, enveloped in a heavy fog. A thin, drizzling rain soon added to our discomfiture, and everything looked dark and discouraging. In the midst of our despondency, however, the report of a gun came feebly to our ears. This sound was welcomed gladly by our captain, who informed us that the wind was rising. Shortly after, in proof of his assertion, a puff shook the mainsail, then a rippling of waters was heard, and as the wind increased steadily the vessel soon gathered headway. The fog was lifted up and dispelled, and the rays of the morning sun were disclosed to our delighted vision. On our starboard bow, distant a few hundred yards, lay an immense bed of canvas and red-heads feeding. The discovery of ourselves to the birds was simultaneous, and the deafening roar occasioned by their rise fairly shook the vessel upon which we stood.

A few moments now sufficed to place our craft upon the feeding-ground, then all on board were engaged in a noiseless bustle. Silently the anchor was unshipped, and noiselessly it reached the bottom. How, I don't know. Then the lashings of the box were cast off, and it was lifted gently over the side, and an instant later was gliding quietly away, propelled by a pushing pole in the hands of Captain Bill, and the boat that took its place was being rapidly filled with decoys, taken from the vessel's hold by eager and willing hands. These were evenly arranged in triangular form around the box. The scene was enlivened by the occasional heavy muffled thunder of flushed beds of fowl by other vessels getting into position, and the air was soon literally alive with the thoroughly startled host, flitting hither and thither in pairs, flocks or singly, evidently looking for places of safety to gorge themselves upon their favorite food. None, however, heedless enough to venture within the range of our choke-bores.

Far away over the intervening waters lay the northern shore, with its irregular white outline stretching miles away eastward, to terminate in the well-known Turkey Point. Upon the shore, and in bold relief against the northern sky, looms up Bull's Mountain, whose broad base is constantly washed by the ever-changing tides. Upon its wooded summit leafless trees rear their tough and wiry branches heavenward, as if in very defiance of the cold blasts of the coming winter. Many miles of varied landscape grace the southern shore, the scenery of which is wild and fascinating. The eye here rests a moment upon the Battery light-house, which stands like a grim white sentinel in the haze of early morn; and then upon Spesutia Island, with its dense brown autumnal foliage and famed "Narrows," distinctly seen away to the south and east, while vessels, differing in size and color, dot the broad surface of the water here and there, giving familiar and life-like expression to the charming scene.

While we were gazing upon this magnificent panorama, the "set-out" was being completed, and we were warned to prepare to take the box first. Our dress consisted of three heavy flannel shirts, topped by a woolen gurnsey of proper neutral color. Suspenders were dispensed with in order to give free play to our arms and body; two pairs of woolen stockings and rubber boots protected our feet, and a pair of dog-skin mittens, having a transverse and longitudinal slit cut in the palmer surface of the one belonging to the right hand, so that the fingers could be thrust instantaneously through the opening to grasp the wrist and triggers of gun. Thus equipped we took our "lay down" position in the box, without any misgivings concerning its frail or questionable appearance, and enjoyed, as we always do, the novelty of the thing amazingly. All around us, on the mirror-like surface of the water, sat the decoys, nodding and bobbing as they rode the swells and tugged at their anchors with life-like vigor. The Lilly "tripped" her anchor, and in a mysterious and noiseless manner made sail and tacked away to mooring quarters half a mile to windward. Distances on the water are very deceptive. Especially is this the case at early dawn. It is no wonder then that we spoiled our first "fly," by raising a little too soon, the ducks that appeared to us when lying down within easy range, were discovered—alas! too late—to be eighty or ninety yards away, and ran the gauntlet of our fire with the loss of only one of their number. We determined to wait until the next "fly" were in the act of extending their legs preparatory to alighting, or directly over the stools. The wisdom of this resolution was soon apparent, for a moment later we stopped right and left a pair of canvas-backs, and hurriedly slipping in a shell cut down a single black-head that had the temerity to cross directly overhead. A pair of red-heads next rewarded our skill, and then a clean miss on the right vexed us not a little. Shots on this side are the most difficult, and tax to the utmost the skill of the most expert. The shooter is here obliged to "throw out," that is, suddenly and without preparation, fix his knees upon his abdomen, so that his feet will clear the side of the box, while at the same time his body is raised and he spins around upon his seat facing the birds. The celerity with which this movement is accomplished by a practiced hand is astonishing, while the attempt upon the part of a novice is ludicrous in the extreme.

A gun making a good penetration and a close target with large shot is essential to success, for the birds, with an appalling perversity, will persist, in the majority of instances, in "throwing off" when about fifty yards away from the sportsmen. Our choice gun, a Nichols and Lefever—right barrel, modified, left full choke—we found a *ne plus ultra* for this sport. We could use either barrel, according to distance, and then the easy and quick manipulation of the action with one hand, while drawing and inserting shells with the other, made it very effective in shooting cripples before they got out of range.

A single drake canvas-back next made a dart at our decoys. We concluded to let him settle, which he did within ten feet of the box, giving us a splendid opportunity to witness his beauty of form, graceful movements and exquisite penciled plumage. A slight movement, however, alarmed him, and he rose with marvelous speed to fall dead an instant after, as the sharp report of our "Lefever" rang out upon the reverberating atmosphere. A bunch of black-heads gave us a long shot on the right, and we made a good *kill* with our left barrel. Scarcely had we shoved in fresh shells, when we espied a large flock of canvas-backs heading directly for our "set out." With eyes riveted upon the incoming birds, we breathlessly waited until they were over the tail decoys; then raising quickly, we took careful aim at a "climbing" bird, and pressed the trigger. Hurriedly we covered another and touched the second trigger, and as the report ended, looked to see the result.

"Thunder and Mars!" we ejaculated, "not a feather." Astonished! of course we were.

"But," says some inexperienced brother, "why didn't you shoot into the body of the flock?" Because the birds invariably separate when the shooter rises and seldom give a bunch shot. A grand good shot, indeed, is the man who can make three out of four doubles. Many sportsmen are misled by the idea that sink-box shooting is not difficult. A little experience with these swift-flying birds in this cramped position will soon disabuse one's mind of such an erroneous impression. Bunch shots are the exception—single shots the rule.

After a number of splendid "darts," we were relieved by our companion, E. C. P., and accompanied Captain Bill in the boat to pick up our slain, which had drifted slowly away with the tide. The shooter usually keeps count of the number of ducks down, and reports to the boatman, who rarely fails to gather all of the dead, cripples often escaping. Our friend, E. C. P., made a grand score in the succeeding hour with his new "Lefever," never missing a bird. His pick up made a showing of twenty-one canvas, seven red-heads, four black-heads and one bald-pate. J. E. S. next manned the fort with his "Scott." With the aid of the telescope we viewed his every movement, as he dealt out destruction with lavish hand.

This proved to be a good hour and added largely to our bag. J. E. S. resigned to us, and we in turn to E. C. P., and thus the sport went on until time for the evening "take up." The expertness of the men here evidenced remarkable skill, for the three hundred decoys and box were "decked" in just forty-seven minutes. The wind proved favorable, and the Lilly showed a clean pair of heels, while we wiped out our guns and returned them to their cases. By the time we had arrived at Havre de Grace, the steward had placed a most excellent repast upon the table, of which we partook liberally, enjoying all the while the keen satire of J. E. S., and the retaliating home thrusts of E. C. P., as the incidents of the day were recounted. Our bag numbered one hundred and fifty-six ducks for the day. Consequently we were honored by the distinguished title of "Duckers." Had our bag been light we should have been dubbed "City Sports" by our jolly captain. This was, indeed, a red-letter day, brother sportsmen, and rest assured that we were all extremely sorry when we stepped aboard the evening express train that the end was at hand.

Doc.

For Forest and Stream and Rod and Gun.

SCENES IN THE SIERRAS.

THE scenery of the Sierra Nevada Mountains is the most picturesque of any of the Rocky Mountain chains. Approaching from the plains, the dark outlines of the hog-backs and foot-hills are seen, and behind those the Alpine snow-capped peaks of the first snow-range rise high toward the sky. On the crests of the hills as you enter them, a few scraggling, stunted cedars appear, and the bottoms are dotted with straggling sage and grease bushes, with an occasional "Spanish bayonet." The hills are rigged with ragged granite rocks, and loose boulders are seen on every side. On these ridges and among the boulders are the winter feeding-grounds of the antelope and big horn sheep. Further into the mountains are groves of spruce and pine trees, and the bottoms are covered with dwarf willows and quaking aspens, better known in the mountains as "quakin' ash." The spruce and a few fir trees grow up the mountain sides to an altitude of twelve thousand feet, and above timber line there is a rich growth of short grass and flowers, forming thousands of acres of beautiful pastures, where countless bands of antelope, mountain sheep, elk and mule deer graze.

These verdant slopes are nourished by numerous rivulets, fed by the slowly melting of the perpetual snow banks on the sharp rock summits. Going still further into the larger ranges, deep, rocky gullies and dark canyons are traversed, miles in length. Their vertical sides are dressed with spruce trees and vines, which grow from the crevices of the rocks, hanging pendant or meeting from opposite sides, thick arches of foliage are thus formed which the sun's rays never penetrate. In these shady passes the long-crested jays and nut-crackers resort, and their harsh notes reverberate in noisy chorus.

After traveling for several hours through a dark canyon, it is a pleasant change to turn a sharp angle in the trail and come out into the bright sunlight of the bottoms. When exploring the Rocky Mountains, one never knows how soon he will have to take the back trail. Oftentimes several days are spent in useless travel when trying to reach a mountain peak which appears to be but a few miles away. Rivers can usually be forded successfully, but heavy fallen timber, and the vertical sides of high rocks are barriers often met with which defy progression.

When viewing the many ranges from a high peak, the aspect is strange and wild. When looking back over a month's trail, which can only be located by mountain peaks, the many beautiful valleys which have been crossed are lost from view, and on every side the numerous ranges appear to be packed closely together, resembling in the distance huge waves out at sea. The general surface is occasionally broken by the larger mountains, whose peaks tower far above the ranges, their snowy caps making conspicuous landmarks, which are discernible at great distances. One of the most noticeable of these peaks is the Mountain of the Holy Cross. Near its summit are two large fissures in the rock which cross at nearly right angles. They are filled with snow nearly the whole year, and some seasons the snow cross is plainly seen during the entire summer. When visiting it in the latter part of August, '73, the cross was somewhat wasted and shortened at its lower end.

The Eagle River is the first one met after crossing the "divide," and its waters reach the Pacific Ocean. It is one of those clear, turbulent, refreshing streams peculiar to the Rocky Mountains. Its waters were teeming with salmon trout, and a friendly trapper and the writer packed two ponies with them in three hours' fishing. In exploring these vast mountain chains one may wander for months without seeing a human being. Straggling prospectors and an occasional Indian hunter are the only people who have the hardihood to venture far into the mountains. J. H. BATTY.

Fish Culture.

BENEFICIAL RESULTS OF SALMON HATCHING ON THE SACRAMENTO RIVER.—The Sacramento River furnishes one of the best illustrations in this country of the beneficial results of fish culture. Not only have the Sacramento salmon been captured by every possible device, in season and out of season, but nine-tenths of the spawning-grounds—in fact nearly all but those of the McCloud River—have been wholly destroyed by the hydraulic operations of the miners, and yet in spite of all these calamities the salmon of the Sacramento have actually largely increased in number through the instrumentality of the Salmon Hatching Station of the United States Fish Commissioner on the McCloud River. This fact becomes the more impressive when it is remembered that the young salmon which have been returned to the river have been only the surplus that Professor Baird could spare after furnishing all the States of the Union and several foreign countries with as many California salmon eggs as they wanted. This appears to furnish pretty good evidence of the possible efficiency of fish cultural operations. The last year, it is true, the applications were for over ten million eggs (10,000,000), while the supply was only seven million (7,000,000), so that some applicants were disappointed; but this was owing to a combination of adverse circumstances, among which was the secret fishing conducted out of season by the salmon canning establishments before they could be reached by the law. As this is not likely to occur again, it is confidently hoped that in the future the McCloud Station will be able to furnish all the California salmon eggs that are wanted in the United States, and in all parts of the world, besides being able to put enough salmon back into the Sacramento to keep up and to materially increase the stock of that river.

TRANSACTIONS OF THE AMERICAN FISH CULTURISTS' ASSOCIATION.—We are in receipt of a copy of the transactions of the association for 1876 and 1877. In this publication may be found all the topics discussed by the association, with copies of the papers read before them. This pamphlet is certainly the most interesting of all reports issued by the association, as it contains information of the most valuable character. We must compliment the association on the excellent style in which their transactions have been printed. We call particular attention to the seventh annual meeting of the association, which will take place on the 27th and 28th of February. A general invitation is extended to all who may take an interest in the subject of fish and fisheries.

AMERICAN FISH CULTURISTS' ASSOCIATION.—The annual meeting of the American Fish Culturists' Association will take place on Wednesday and Thursday, Feb. 27th and 28th, 1878, at eleven o'clock, in the rooms of the Directors of the Fulton Market Fishmongers' Association, foot of Beekman street, New York. The place where the meeting will be held is particularly suited to the requirements of the association, as it is in the midst of the wholesale fish business of the metropolis. It fulfills exactly the aim of the association in popularizing the study of fish. Papers of interest will be presented by the various sections appointed at the last meeting. There will be an exhibition during the meeting—a particularly fine display of fish, which collection will be furnished by the principal wholesale fish dealers of New York.

LUDLOW TROUT PONDS.—This well-known fish nursery in McKean county, Pa., will have plenty of brook trout eggs to dispose of this season. Brook trout eggs will be ready for shipment from Nov. 10th to Dec. 20th; salmon trout from Dec. 20th to Jan. 20th. Brook trout fry can be sent by Jan. 20th and salmon trout fry by Feb. 20th. The prices are as follows: Brook trout eggs, $3.50 per thousand; salmon trout eggs, $3; brook trout fry, $4.50 per thousand, and salmon trout fry $5 per thousand. For large quantities of eggs or fry a reduction of prices is allowed.

NEW YORK.—The first shipment from Caledonia, for 1878, was of 45,000 brook trout eggs and 54,000 young salmon trout, which were last week sent to be distributed in the lakes and brooks in Essex county, owned by the Addison Duck Club.

—Twenty-five thousand California salmon were recently deposited in Cayuga Lake.

PENNSYLVANIA.—Twenty thousand California salmon fry have been planted at Sinnemahoning. A lot of 37,500 salmon eggs from the Seboodic salmon breeding establishment, at Lake Stream, Me., were received at Marietta, and an invoice of 100,000 brook trout, from Corry, Pa., are to be placed in the streams about Marietta.

OHIO—*Lancaster, Feb.* 11.—The State Fish Commissioners recently deposited in the waters of the Big Reservoir twenty-five thousand Columbia River salmon minnows. The attempt at restocking these waters, however, can only prove an unavailing expense, until the unlawful, wholesale netting which is practiced there the year round, is prohibited. If the Legislature has any idea of pisiculture their attention should be immediately turned to this matter. S. G. V. G.

MICHIGAN.—Twenty-five thousand salmon ova from the Government Hatcheries were received at the Michigan State Hatchery, at Niles, January 25.

CALIFORNIA.—Mr. Stephens, of Sebastopol, is engaged in carp culture. He has extensive hatcheries in Caulder Creek.

Natural History.

ICHTHYOLOGICAL NEWS.—We have received from Prof. D. S. Jordan, the well known ichthyologist, three papers relating to the fish fauna of several of the Western and Southern States, which constitute a very valuable addition to our knowledge of the ichthyology of this country. In his Contributions to North American Ichthyology, published as one of the Bulletins of the U. S. Nat'l Museum, Prof. Jordan gives us a Review of Rafinesque's Memoirs on North American Fishes. The author has endeavored, by means of careful comparison of specimens of all the species known to exist in the region worked over by Rafinesque, with the latter's descriptions, to identify beyond a doubt all the names given by this early author. By this means many of the vexed questions relative to the nomenclature of the Ichthyologia Sbiensis and Rafinesque's other papers on fish, are finally set at rest. A complete catalogue of the Rafinesquian genera, with their equivalents in the nomenclature of to-day, is added to this paper, and will prove of vast service to the student.

The second paper on the Fishes of Northern Indiana was printed in the proceedings of the Philadelphia Academy, and is based on material "collected, in the summer of 1875, in the streams and clear, deep lakes of the Northern part of Indiana." About sixty species are represented, most of them small. A list of the localities, with the species from each, is given, and the whole paper (55 pages) is extremely interesting.

In a communication to the N. Y. Lyceum of Natural History, Dr. Jordan gives a Synopsis of the Fishes of Upper Georgia, with several supplementary papers on fishes of Tennessee, Kentucky and Indiana. These papers are of no little interest as treating of a fish fauna, to which little attention has of late been paid.

TRAINED BRONCHOS.—New attractions at the Aquarium are the trained broncho horses, which go through a variety of very remarkable feats. The accomplishments of these equine performers consist of leaping through hoops of flames, see-sawing on a single plank (balanced on a saw-horse, of course), jumping over each other, and over gates ten feet high, rolling barrels up an inclined plain, a military drill, etc.

A SINGULAR COMBAT.

SPRUCE PARTRIDGE VS. SPANISH ROOSTER.

DONNALD, CAP RANGE ROAD, ST. FOYE, Near Quebec, Jan. 2, 1878.

EDITOR FOREST AND STREAM:

As a sportsman and an ardent admirer of the feathered tribe generally, I should deem myself remiss were I to omit to record so singular a combat as the one here referred to. The incident alluded to occurred some years ago in presence of myself and several members of my family, and would, perhaps, have been forgotten, had I not, while looking over old memoranda anent birds, found the following description of this battle, the like of which probably few, if any, have had the good fortune to witness. I copy the description as I find it, written shortly after being an eye-witness to the occurrence, trusting that, in justice to our plucky little Canada grouse, you will record his valor in the pages of FOREST AND STREAM:

"On this balmy, cloudless May morning, the cry of 'Your gun, quick,' roused me from an unusually prolonged nap. After a very hasty toilet I found myself, gun in hand, on the kitchen stoop. From the alarmed cry of the person who called, I concluded that I was about to confront some very unusual denizen of the forest—a bear, a loup-cervier, or perhaps, the dreaded cat-a-wampus (*Felis concolor*), which, it is said, has for some time haunted the outskirt of the settlement at Valcartier. Great was my surprise, indeed, when, instead of any of the above formidable gentry, I beheld a male spruce partridge (*Tetrao canadensis*) engaged in mortal duello with the Spanish knight-errant of our poultry yard. The combatants fought in the manner common to the *Gallinacea*—eyeing each other with outstretched necks and drooping wings. At each attempt to strike on the part of the rooster, Tetrao, with the rapidity of a flash, would hop, or rather fly, over the head of his unlucky opponent, and passing, would use, as weapons of offence, both wing and claw with astonishing effect. At each onset, this passing was repeated several times without intermission; when, as before, the posture of attack would be resumed. In this manner the duello was carried on, round after round, but it soon became evident that, owing to his activity and strange and superior mode of attack, the smaller of the two opponents must eventually become the victor. Feeling his advantage, the little hero's fury knew no bounds. Striking from all sides, he punished the unlucky *Chevalier des poules* till his crest and wattles were torn to shreds, and, half blind, bleeding and stunned, he became utterly demoralized, and took to his heels. Little, however, did his flight avail him. Tetrao, bent on carrying hostilities to the bitter end, followed the *fuitard*, knocking him down repeatedly by the violence of the blows, till, vanquished beyond hope, lying flat on the sod, hiding his bruised and bleeding head under a tuft of grass, Gallus surrendered at discretion.

"Victory complete, our forest hero, after briefly eyeing the prostrate chanticleer, giving way to the tender emotions of love, flew towards the hens; and in his flight, by a tremulous motion of his wings, produced that singular sound known as drumming. Alighting in the midst of poulets and matronly Brahmas, the commotion was general; yet they manifested none of that *sauve qui peut*, as when the dreaded hawk attempts a foray. A nervous hop aside, a mistrusting side glance, and cackle expressive of surprise, was all the fear evinced. On reaching the ground, our little grouse paid court with outspread tail and trailing wings, by strutting about, displaying his graceful form and delicately pencilled livery; anon slightly oscillating his body from side to side; then, with a few rapid forward steps, curving his neck, would emit a short, sharp sound, like spiff, spiff. Thus parading and drumming (produced by this species while flying downward from a tree), o gallant sought for several days to win favor. All to no purpose, however. Disgusted at the marked want of appreciation on the par *Mesdames les poules*, our brave inhabitant of the sombre swamps to flight toward his native wilderness, there to seek, find and win a fore bride worthy of his chivalry."

The Canada grouse, or swamp partridge, as this pretti species is called, is, except when driven from its haunts by some accidental cause, rarely met with in the woods and groves which, like dark green islands, dot the gradual declivity, from the base of the Laurentides, to the ancient Stadacona and the banks of the St. Lawrence. A few, I am informed, still linger about the swampy strip which, with more or less interruption, stretches westward from the Chaudiere Falls to the famous Cariboo hunting grounds in the rear of Chantilly. From this locality, owing to large fires which at the time raged about Chaudiere, the individual above alluded to came.

In the district of Quebec, the favorite home of the spruce partridge is amid the vast extent of gently undulating hills that diversify the divide, or watershed, between the Saguenay country, St. Maurice, and St. Lawrence. Here, by placid lakes and limpid streams, it finds ample food, and in the dense undergrowth of stunted spruce and balsam, security from its natural enemies, various *Raptores* and small *Carnivora*. Seldom disturbed—except at distant intervals by a wandering family of Montagnais Indians, a Canadian hunter, or passing explorer—and having for companions several species of sylvan warbler, vireos, thrushes, and other migratory song birds, the Canada grouse propagate, live, and die in the enjoyment of that blessing, which many seek and find not—Peace and plenty. J. N.

RECENT ARRIVALS AT THE CINCINNATI ZOOLOGICAL GARDENS.—One horned owl, *Bubo virginianus*, presented; three Axis deer, *Cervus axis*, presented by the King of Wurtemberg; one European blackbird, *Turdus merula*, presented by Mr. Anton Deneke, City; one red fox, *Canis fulous*, presented; six undulated grass parrakeets, *Melopsittacus undulatus*, hatched in garden; seven pug dogs, *Canis domesticus*, born in garden; one leopard, *Felis pardus*, deposited by Sells Bros.; one Virginia deer, *Cervus virginianus*, presented by Mr. H. Caldwell; two grizzly bears, *Ursus horribilis*, born in garden; one hooded finch, *Spermestes cucullata*, hatched in garden; two undulated grass parrakeets, *Melopsittacus undulatus*, hatched in garden; one wild cat, *Felis rufa*, purchased.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING FEB. 9, 1878.—Four flying squirrels, *Pteromys volucella*, presented by Mr. W. A. Lyon, Irondiquoit, N. Y. One Virginia deer, *Cariacus virginianus*, presented by Mrs. Sage, N. Y. Two ring doves, *Turtur risorius*, presented by Mrs. Webber, N. Y. Two green monkeys, *Cercopithecus callitrichus; Hab.* West Africa. One moustache monkey, *Cercopithecus cephus; Hab.* West Africa. Four sooty mangabeys, *Cercocebus fuliginosus; Hab.* West Africa. Thirty-seven small Rhesus monkeys, *Macacus rhesus; Hab.* India. One markhoor, *Capra megaceros; Hab.* Punjab. W. A. CONKLIN, Director.

NOTICE TO SPORTSMEN.—Having received so many communications asking us for information in regard to our six-section bamboo trout, black bass, grilse and salmon rods, we have prepared a circular on the subject, which we shall take pleasure in forwarding to any address. We keep on hand all grades, the prices of which range from $15 to $150. We put our stamp only on the best, in order to protect our customers and our reputation, for we are unwilling to sell a poor rod with a false enamel (made by burning and staining to imitate the genuine article) without letting our customers know just what they are getting.

P. O. Box 1,294.—[Adv. ABBEY & IMBRIE, 38 Maiden-Lane.

ROBBING THE DEAD FATHERS.—As a precaution against ghouls, the Regents of the Mount Vernon Association have connected Washington's tomb with the Mansion by an electric burglar alarm.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE NEW YORK HORTICULTURAL SOCIETY.

AT the last meeting of this society, in addition to the splendid head of the Double Poinsettia and the noble dishes of mushrooms shown by Messrs. Bennett & Henshaw, a very instructive and entertaining lecture on "Small Fruits for the Family Garden," was delivered by Dr. Hexamer, Newcastle, N. Y., giving among other thoroughly practical information those varieties of small fruits, which from their freeness of growth in almost all soils, and under different conditions, hardiness, fair flavor, good size, and general good qualities, are essentially the "fruit for the people." Commencing with the strawberry, he said that the variety known as Charles Downing for a main crop, with Duchesse for an early and Kentucky for a late sort, seemed to give all the requirements necessary for a bountiful supply during the season. And for the amateur who wished to try other sorts of higher flavor, he recommended Black Defiance, Lenning's White, Seth Boyden, Burr's Pine, and, for heavy soils, *Triomphe de Gand.*

In raspberries the Black Cap, Doolittle, Miami or Mammoth Cluster and Davison's Thornless were highly spoken of, and the suggestion offered that as they are propagated from tips only, they must not be planted so deep as the other kinds which are propagated by suckers and layers. Of these, the Philadelphia, Highland hardy, Clark, and Cuthbert (a late variety, but large and fine) were pronounced the best hardy sorts; while of the tender sorts, requiring shelter and protection in winter, the Hudson River Antwerp and Brinkle's Orange were the favorites. Of blackberries, the Kittatinny, hardy and prolific, and the Dorchester. In currants the cherry and Versailles, which were pronounced much alike, the old red Dutch and white grape were recommended; and among gooseberries, though all subject to mildew more or less, the Houghton and Downing. The favorite Concord among grapes was awarded the palm of superiority as being everybody's grape, and succeeding well in almost any location, while in sheltered places the higher flavored sorts, such as Delaware, Iona and some of Rodgers' seedlings, could be grown.

The address was received with great favor, and a hearty vote of thanks awarded to Dr. Hexamer. We have much pleasure in stating that at the future monthly meetings of the society, addresses may be expected on "The General Culture of Greenhouse and Bedding Plants and Kindred Subjects," and at the next meeting a letter will be read from J. A. Warder, Esq., Indianapolis, on "Forestry." Premiums for cut flowers, hyacinths, primulas, etc., in pots, will also be competed for, and as these exhibitions are free to the public, we hope many will avail themselves of the opportunity afforded them of a few hours' instruction and recreation.

OUR NEW JERSEY GARDENS.

NEW Jersey is proverbial for its greenhouses and market gardens, and in the rarer and finer classes of plants South Amboy undoubtedly takes the lead. On a recent visit we found at Mr. R. H. Rathbun's a splendid collection of Agaves and other succulents, many of them very rare; a fine collection of Azalias just starting into bloom, besides many plants of peculiar interest to the lover of the curious and beautiful in nature. A finely-grown plant of the extremely curious New Holland Pitcher plant, *Cephalotus follicularis.* is very interesting, showing the finest colored pitchers we have ever seen. His collection of ferns, palms, marantas, and other exotic plants is very fine, and, with the extensive, healthy, and well-grown collection of orchids, show the care and attention bestowed on them by his energetic and able gardener, Mr. W. Clements. A plant of the rather weak-growing Dendrobium Pierardii is worthy of particular mention, the stems being over five feet in length, and bearing over 550 flowers. We never go to South Amboy without making Mr. G. Such's extensive green-houses our objective point, where the presiding genius, Mr. Taplin, dispenses lore on orchids and pitcher plants, with a zest that made enthusiasts of us all. Here we found, in addition to the many palms, Dracenas, Pandanads, Crotons, *et sic genus omne*, a fine lot of orchids, either in or showing bloom; notably, Cattely, Trianæ, Lælia anceps, a very fine variety of Oncedium bicallosum, the lovely light pink East Indian Butterfly orchid, Phalænopsis Schilleriana, and its lovely white Congener P. Amabilis. Sophronites grandiflora, Odontoglossum Rossii, in many varieties, undoubtedly native hybrids; O. Pescatorei Vanda tricolor, and many others. In the cool houses, Lincolia gratissima, with its large Hydrangea, like heads of fragrant pink blossoms, was still in good shape, though in bloom for over two months; Lapageria rosea and Thunbergia Harrisii with its wealth of light blue trumpet-shaped flowers, were also very fine; while immense plants of the most lovely of all the New Zealand ferns (Gluchenias in many varieties) showed the master hand of the cultivator. But after all, to the intelligent observer, the palm of superiority must be awarded to the seedling pitcher plants raised by Mr. Taplin, crosses between Nepenthes Rafflesiana, as the female parent with N. Hookeri, distillatoria and Hookeri. We have here a most wonderful variety, surpassing anything we have yet seen of British or Continental origin in brightness of color, shape and size of pitchers, as well as vigor and gracefulness of growth and habit. Altogether a visit to South Amboy at no matter what season of the year, is a treat to even the veriest tyro in horticulture.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7 Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

St. Louis Bench Show, St. Louis, Mo., Feb. 19, 20, 21 and 22. Entries close Feb. 5.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show. Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb, Secretary.

BLUE BELTONS.

IN reply to several correspondents who ask particulars as to blue Beltons, taking the late Mr. Edward Laverack's work on the setter as authority, we condense from his book as follows: The origin of the Belton is not well known. The Marquis of Breadalbane had only Beltons in his kennel. There are black and tan Beltons, but blue were preferred. Many years ago, through Cumberland and Northumberland, England, the breed was known. Mr. Laverack's acquaintance with the breed dated back in 1872 to some forty-seven years before. A dog called Fred II. was supposed by Mr. Laverack to present all the best physical traits of the Beltons. On page 22 of "The Setter," by Edward Laverack, we find the following description: "Head long and light, not snake-headed or deep-flewed, but a sufficiency of tip, remarkable for being very strong in the fore-quarters; chest deep, wide, and ribs well sprung behind the shoulders, carrying the breadth of back to where the tail is set on; immensely strong across the loins, shoulders very slanting and oblique, particularly short from the shoulders to where the hind-quarters meet; color, black, or blue and white ticked; coat, long, soft and silky in texture; eyes soft, mild and intelligent, of a dark hazel color; ears low set in and close to the head, giving a round development to the skull." There are lemon and white Beltons, although Mr. Laverack declares these to have been very fine animals, he still gave preference to the blue Belton.

No dogs who do not get the color from Laverack blood can fairly be called blue Beltons. Mr. Laverack wrote: "If I had not kept my breed of blue Beltons pure, this rare old strain would have degenerated in a similar manner" (to other degenerate strains). The best specimens in America find examples in Mr. Smith's "Paris" and "Pearl," Mr. Beecher's "Blue Belle," by "Pride of the Border," and Mr. Olcott's "Guy Mannering" and "Roderick Dhu." There are others equally true in color, but not so well known. Laverack's old "Blue Dash" had little entire black, except her ears, and the nearer a "blue and white ticked" setter of pure or part Laverack strain resembles him in color, the nearer he approaches to the true blue Belton type. Some critics may hold that no dog, however black and white ticked, is a true blue Belton, unless he is a pure Laverack; but generally the term is admitted as applying to any setter bred wholly or in part from "Laverack blood that approaches the hue of old 'Blue Dash.' His owner says that "when this dog was first exhibited as a specimen of the blue Belton, most of the public and judges had never seen the breed;" which is another way of stating that they were purely his own. As other specimens of it, he mentions Garth's (Q. C.) "Daisy," Lewellin's "Countess" (a beautiful and perfect specimen), and Dickens' "Belle."

THE BEST BIRDS TO BREAK DOGS ON.

WRITING to the Chicago *Field* under this caption, Arnold Burges gives as his decided opinion "formed from experience" that the ruffed grouse is "the best bird of all to break dogs upon." The arguments that he advances in support of this assertion are more plausible than practical, and but one side of the question is discussed. This is the first occasion we have known any one to advocate breaking dogs first in cover, and upon the wildest of our game birds when found in thickly settled districts. Differing in opinion from Mr. Burges so widely as to consider the ruffed grouse the least suitable for this purpose of all the game-birds usually shot over dogs in this country, I venture to present some facts that serve to support my opinion and that furnish ground for objections that to my mind far outweigh the arguments used in favor of the subject. The tenor of Mr. B.'s argument is, that owing to the wariness of these birds, a young dog should first be broken on them to develop caution, a keen nose and slowness on a trail. Does Mr. B. desire that a dog's first lesson shall teach him to trail? A dog takes naturally to this mode of hunting, and after acquiring the habit in cover adheres to it when taken to the field, unless extraordinary care is taken to break him of what may be to some very desirable in cover, yet is detestable when it becomes the habitual mode of hunting in the open. First impressions are oftentimes the most durable ones, and therefore care should be taken that these impressions should be such as to leave a desirable effect on the pupil's mind. This would hardly be the case if the first lessons were such as to teach him to hunt with nose to the ground, seeking the foot-scent that he might find game by trailing. All dogs have a natural propensity to hunt in this manner, and the repeated hunting of ruffed grouse alone would inevitably confirm a dog in the habit unless he were constantly corrected. Although shooting many varieties of game over my dogs and devoting much time and attention to make them equally good in cover and open, I know full well that few, very few, sportsmen do the same. Mr. Burges will probably allow that it is not over easy to teach a dog to hunt fast and in fine style in the open after it has become habituated to hunting close and slowly in cover, seeking the foot-scent by preference and finding game like a hound by the trail, which it follows cautiously until the bird rises; or else, if the bird at last lies and suffers the dog to approach near enough to take the body scent, he catches it while on the trail with head down and stern depressed, and "freezes" in that position. There are some qualifications quite desirable in a dog for cover-shooting that are quite the reverse for open shooting, and to possess both in perfection a dog must be so thoroughly broken as to leave the slow, pottering gait and habit of trailing the moment that he emerges from cover to hunt in the field, and ranging fast and wide carry his head and stern well up, not seeking to find game by the scent on the ground, except when after a crippled bird. This is a matter of training, and higher training, too, than is ordinarily attained. It is no difficult matter to teach a dog to hunt close in cover if he is under good control and hunts for his master and not for himself; for except when excited by the near presence of game, the scent of which has already been detected, the dog no sooner misses his master than he returns and hunts within sight or hearing. Mr. Burges' arguments are good if the dogs are to be broken especially or solely for cover shooting. But if to be used principally for open shooting I would not allow a young dog to be taken into cover for his first field lessons, nor indeed until after he had been worked sufficiently on game in the open to become quite controllable, and familiar with the work expected of him. I do not doubt that Mr. B. can break dogs first in cover and make them equally good in the open. But if he habitually does it, he obtains results quite at variance with the vast majority of dogs so hunted. Too often has my eye been pained by the appearance in the field of dogs of really fine qualities, marred by bad habits contracted in the cover. Ruffed grouse, like other birds, vary their habits according to locality, etc. When much shot at they are very wild, but in localities little frequented by man they are quite the reverse, and may not only be easily approached, but may be shot from the trees one by one until several are killed ere the remainder will seek safety in flight. "None but pot-hunters would kill them thus," has often been remarked of shooting game birds sitting, yet this bird is generally considered as an exception to the rule. They are very desirable additions to the larder, and when found in the dense forest where, owing to their surroundings and their habits, they cannot be shot on the wing, afford no sport, and are killed solely for the pot.

To illustrate the difficulty of obtaining a wing shot at ruffed grouse in such localities I will relate an incident that occurred to the famous sportsman "Cale" Loring, who was the most wonderful field shot of whom I have ever seen record. It was near the close of a day in early autumn, while traveling by canoe with an Indian hunter toward Northern Maine to hunt moose, and the falling shadows warned him to select a camping ground. Suddenly a pair of wood-ducks flew around a bend of the stream and directly toward the canoe. Too near to turn back, they separated to pass the canoe, one on each side. But Cale's gun was lying at hand, in readiness for any unexpected shot whereby he might obtain a good supper, and both ducks fell to a right and left shot from either shoulder, for he had the remarkable faculty of shooting from either shoulder, and could not turn quick enough in the canoe to kill them otherwise.

Great was the astonishment of the Indian at this feat, it being the first time that he had ever seen a bird shot while flying. Poor "Lo" thought that the devil's power was used. "Ugh! kill um so every time!" "Most every time." "Kill um all kinds so?" "Yes, all kinds." "Kill Injun partridge?" "Yes; Injun find one." While this conversation was going on, the Indian making long pauses after each query, the ducks were picked up and the canoe beached, unloaded and turned bottom up on the shore. A pair of small ducks were just enough for one man's supper after an all day's paddle, so they immediately set out in search of partridges, as grouse are commonly called in Maine. Soon a dozen were found feeding on the ground. "Ready now?" asked the Indian as the birds began to run. "Ready all the time," was the reply. The Indian clapped his hands, but the birds only ran the faster. He then threw a bit of the dead branch of a tree at them and one or two went to the lower branches of the nearest tree, flying but a few feet and giving no time for a wing shot. After repeated clubbing the others were gradually flushed, but with like result, it being impossible to make them fly far enough at a time to afford a wing shot. Yet so shy are the same birds when frequently shot at that it is often difficult to get near enough to them for any sort of a shot, not lying to either dog or man. Especially is this the case in open woods free from underbrush, where they will run rapidly and take flight out of range. Even when not thus shy they will almost invariably first use their legs ere resorting to their wings as a means of escape. And owing to their habit of running are they especially undesirable birds upon which to break dogs. When a dog has been hunted upon no other game, and has become proficient upon ruffed grouse, he hunts in a slow, pottering manner, necessarily so, to be successful in any great measure, for the birds run so that the foot-scent is most often the first taken, and the game is found by trailing, which should be done in a slow, cautious manner, lest the wary birds be unintentionally flushed. Now, when the dog is first taken to the open he hunts in like manner, and continues to do so until he is taught that another style must be adopted. By the time that this other style (a fast gait, with head and stern well up, wide ranging and no trailing), is thoroughly learned, the dog must have another course of training in the covers, to teach him to resume there his work as first taught, and to know that he must do *this* in cover and *so* in the open, and never confound the two duties. All this has been, and can be, done; but, not only must a dog be highly trained for such work, but his training must

be kept up, and he must be used alternately in cover and open if possible.

For my own part, I would prefer a dog to hunt always in a fine, dashing style, even though occasionally flushing in his eagerness, than to hunt by trailing or in a slow, pottering style. Mr. B.'s premises in regard to breaking young dogs upon sby birds, to teach cautiousness, are all well enough; but ruffed grouse are ill adapted even for that purpose, since their habit of running is likely to lead the dog into worse faults than could be compensated for by all the cautiousness acquired. Moreover, thick cover is an entirely unfit place to give a young dog his initiatory field lessons, for at that time especially should he be constantly under the eye of his breaker. It is much easier to teach a new virtue than to correct an acquired fault.

I heartily agree with Mr. Burges that too much attention cannot be given to thoroughly breaking the dog in the yard ere allowing him to go into the field. This is of great importance, but too often neglected by sportsmen who break their own dogs, and also by professional breakers, who obtain quicker, but not better results, by taking puppies into the field with old dogs to learn to find game ere they have been brought under control. However well yard-broken a young dog may be, it is impossible to keep him constantly in sight in thick cover, provided he does any hunting; and there would be great danger of his acquiring a fondness for hunting hares and other fur almost before his breaker would suspect it. Mr. B's idea of choosing the cover for the initiatory field lessons is certainly a novel one, and I hardly think that many sportsmen will indorse his preference, unless they wish their dogs broken especially for cover shooting.

The snipe, as found in the North and East in autumn, is far preferable for developing the same qualities, "keen nose and cautiousness," than is the ruffed grouse, and the *habitat* of the snipe is far better suited for breaking a dog. I am well aware that in the West and South the principal snipe shooting is in the spring, at which time the habits of the birds are different from those during the autumn migration. But go to Canada, New Brunswick, Nova Scotia, or the Northern Atlantic States in September or early October, and you can find game that will bring out the good qualities of your dogs. If you desire wild birds and a strong scent, select a cold, damp, windy day. Take your young dog and hunt up wind. If the birds are plenty he'll soon take the scent; but not from the ground. If he flushes, as is very likely at first, you can see how and why he does it, and govern yourself accordingly. Here there being nothing to hide him from view, every opportunity to teach a virtue or encourage him is a praiseworthy action can be taken advantage of, and faults can be corrected ere they become confirmed. On the day described the birds will be wild enough, but the scent is good and can often be taken at eight or ten rods distance by a keen-nosed dog.

As the dog catches the first scent he slackens the pace, and with head raised sniffs the air, soon learning to hunt thus for game, and not with nose to the ground. There is no trailing in this shooting, although snipe will often run where the ground is smooth with sparse cover, for the body scent of this bird is, under ordinary circumstances, stronger than the foot-scent.

Again, if your dog is sufficiently cautious, and you wish to practice him on close lying birds, select a calm, warm day, and the best feeding-grounds. Now, the birds will suffer both the dog and yourself to approach very near, and here is the opportunity to teach your dog staunchness, if he needs any lesson in that line.

If in a locality where ruffed grouse abounded, and no other game upon which dogs could be broken, then would I give them their initiatory lessons on game in the cover and upon grouse; but it would be "Hobson's choice," and not my own. Although not here expressing an opinion as to which of our many game birds may be best adapted for the field education of dogs, I certainly do not consider the ruffed grouse to be so, but quite the contrary, both from its habits and its *habitat*.

Of course I am writing, as I judge did Mr. Burges in the article referred to, exclusively of pointers and setters. I trust that he does not advocate trailing as an accomplishment that should be taught these dogs. But little encouragement is needed for the acquirement of that which is so congenial to them, and if once confired trailers it is often very difficult to entirely break them of a habit that is so detestable when adhered to in the open. It is presumable that one so well known in connection with canine matters in this country as is Mr. Burges, has had much experience with dogs in the field. Therefore is it the more remarkable that he should advocate breaking first in cover and upon ruffed grouse, dogs that are to be used for mixed or open shooting. Mr. Burges says: "We see then the advantage of giving the dog his first lessons upon grouse (ruffed grouse) since, when proficient upon them, he is fitted for all others." I would add to my remarks on the subject that I trust my readers can see the disadvantage of giving the dog his first lessons upon ruffed grouse.

EVERETT SMITH.

For Forest and Stream and Rod and Gun.

AFTER THE HOUNDS.

REMINISCENCES—NO. II.

AFTER being entered at hares, as described in my last, I was in due time promoted to fox hunting. As soon as my legs were long enough to grip a pony I was mounted on a pad saddle, without stirrups, and permitted to follow the hounds. I took to fox hunting as naturally as a duck to water. At first I did not pretend to ride straight across country as my seniors did, but a pretty good knowledge of the topography of our county enabled me, by cutting across and dodging around, to hear, if not see, much more of the chase than one would suppose, and not unfrequently I contrived to be in at the death. In my youth I hunted with two subscription packs of fox hounds of considerable note, some account of which I propose to give in future numbers of your paper. One of these packs was in Baltimore and the other at Washington City, and both were at their best about the time of General Jackson's second term. As for private packs they were innumerable, for the planter in the slave States who did not keep from one to ten couples of hounds was an exception to his class; and from the day when the crops were secured in the fall, so that no injury could result from leaving down the fences, to seed time in the spring, hunting was the chief recreation of the landed gentry of the South, and took precedence of shooting, deer driving and all other field sports.

Among the private packs which I best remember were those of Mr. Ramsay Waters, at Annapolis; the Ogles, at Bel Air; Mr. Charles Hanson's, near Baltimore, and Major Harry Carroll's, at Perry Hall, near the same city.

In Virginia, the Taylors, of Mount Airy; the Corbins, of Moss Neck; the Chichesters and the Broadnaxes were all famous for their hounds and the matches they made upon them. Indeed, the venatic passion in the Old Dominion is still so strong as to have survived all the disasters of the late civil war, and as a proof of it, we may read in a recent issue of a local paper—*The Roanoke Valley*—a challenge from Mr. Wimbish, near Lynchburg, and Mr. Stokes, of Lunenburg, to run their combined packs against those of Mr. Broadnax, of Brunswick, and Mr. Tucker, of Gaston, for a very heavy wager.

Of all the private packs I ever followed, except my own gray-fox pack in Mississippi, that owned and hunted by Mr. Ramsay Waters, at Annapolis, Maryland, afforded me, I think, the best sport; not that the hounds were better, or even as good as some others, but because they hunted a better country, where foxes were numerous, as they always are in a tide-water section, abounding in ducks, fish and crabs, all of which are favorite tid-bits on Reynard's bill of fare; and then the level lands were cut up there into innumerable small peninsulas, or "necks," as they are called, in which the fox can be hemmed in as it were, and prevented from making straight runs of ten and twenty miles, as he will frequently do in the upper country. For some reason, probably because I had the luck to be a prominent actor on the occasion, a run which I had, when not quite twelve years of age, with the Annapolis pack, made so strong an impression on me that I can recall all its incidents as vividly at this moment, after a lapse of fifty years, as I could the day of its occurrence.

My father and myself went to breakfast with Mr. Waters, who lived in one of those old-fashioned colonial houses, near St. Anne's Church, full an hour before day—and a bountiful breakfast it was, such as can be had only in the tidewater counties of the Southern States. "Peach and honey" to begin with, half a dozen varieties of hot bread, two-year old home-cured ham, smoked sausage, oysters in every form, broiled ducks and partridges, and that most delicate relish peculiar, I believe, to the Southern States, corned shad. While enjoying our meal we could hear the impatient baying of the hounds, some eleven couples, which, under charge of an old negro, were awaiting us at the door, in the most frequented street of the old metropolis. At the very first peep of dawn we were in the saddle, the hounds were uncoupled, and we started for one of the neighboring "necks," in which we hoped to find an old red dog-fox, famous for having repeatedly beaten the best packs in Anne Arundel and Prince George counties. As we slowly trotted along, the dormant echoes of the sleeping town were suddenly aroused by a deep, prolonged, but musical, howl from one of the dogs. Our host, who was leading the way some ten yards in front, pulled up and observed the challenge came from old "Trueman," the most reliable hound in his kennel, who was never known to "open" on anything but the trail of a fox, and that, as extraordinary as it might appear, he was now giving tongue within the limits of the city on a fox trail and nothing else; and while he was yet speaking, half a dozen dogs joined in. The cry proceeded from a small market-house which stood at that time at the right of the main street leading from the city and near the suburbs.

As the sequel will show, it was the trail of the identical fox we were looking for; he had ventured, as doubtless he had frequently done before, into the market-house to pick up some of the offal usually to be found in such places. The trail was yet warm enough to afford us a good cry, and it was followed without difficulty down the road, across a couple of fields and into quite a large cover of second growth pines near South River ferry. When here, the cry of the hounds, which had been swelling as we advanced, suddenly burst into a thunderous tempest of sound, which we were afterward told was distinctly heard across South River two miles away. Old Reynard was up, and, flourishing his white-tipped flag in defiance of a foe he had beaten so often, he broke cover gallantly, but meeting the horsemen in the road he darted back again, and here, as if to supple his lithe limbs for the coming contest, he ran in circles within the cover for twenty minutes or more, and then dashed away in full view of the field, evidently aiming for the up country in the neighborhood of Elkridge, twenty miles away, as he had often done before to the discomfiture of his pursuers; fortunately, he encountered a string of market wagons and was coursed by some our dogs, this caused him to double back, and he headed for Primrose Hill, a country seat belonging to the late Lewis Neth, situated on a peninsula opposite to and in full view of Annapolis. At this double, a check, the only one during the whole chase, occurred, and this gave Mr. Waters time to tell us that he now felt confident of either killing the fox or of running him to earth. To avoid the latter, it was determined that I, the only boy present, should be detailed to watch the earth and prevent the entrance of the fox.

As the run was now confined within the limits of the "neck," and the hounds on such good terms with their fox as to make it next to an impossibility to lose him, Mr. Waters pulled out of the chase and took me to the earths about a half a mile away. This fox burrow, one of the most ancient and extensive in the State of Maryland, dug probably by the first red foxes that crossed the Chesapeake more than a century ago, runs so far under ground and has so many galleries as to make it a difficult task to dig a fox out. It is just under the brow of an almost perpendicular cliff eighteen or twenty feet high, and overlooks the whole peninsula clear away to the bay shore. Here, after hitching my pony some fifty yards away in a thicket, I was left by my guide with the strictest injunctions to remain seated in the mouth of the den so as to fill it up completely, and on no account to leave my position even for a second. Somewhat consoled for being thus thrown out of the active pursuit by the responsibility of my functions, I willingly obeyed orders, nor had I any cause to repent, for from my commanding position I had a better view of the chase then those who followed the hounds; indeed, except when at rare intervals fox and dogs were concealed by the tall grass or thickets, I witnessed the whole of it with an excitement more intense than I had ever yet experienced in my young life.

The distance blended the fierce cry of the pursuing hounds into the sweetest music, and as the chase drew near or receded the harmony was like that of an Æolian harp played upon by the summer winds. I could every now and then see the gallant fox, yet fresh and strong, skimming along far in advance, with the ease of a swallow cutting through the air; then, half a mile in the rear would come the gaunt, long-striding hounds, four or five abreast, with sterns down and heads up, running on a burning breast-high scent, and gradually gaining on their quarry. Since that day I have witnessed some of the most stirring scenes in the whole range of field sports, both home and abroad; I have treed and shot the black bear and the catamount in the Stygian swamps of Louisiana; some of the biggest bucks of the Alleghanies have dropped in their tracks at the crack of my rifle; I have fired into clouds of wild-fowl at Carroll's Island until my gun was too hot to hold; but for delirious excitement nothing will compare with what I experienced on that day when I sat almost breathless in the mouth of the fox den at Primrose, and were I to live a thousand years I never would forget it.

At the end of I know not what time, for I was too much excited to note it, it became evident that the fox was failing fast and running his last foil. He had probably found too heavy a meal in the market-house, and from some cause could not throw it up as foxes and dogs readily do when hard pressed. Be that as it may, when he last crossed my view he was making shorter turns; he labored in his lope, and his brush was trailing on the ground, and as he disappeared from view under the creek bank the clamorous pack was but two hundred yards behind him. After disappearing from sight under the bank, the chase led up the creek to my left, and I could hear the roaring cry gradually receding in my rear, until it became almost inaudible, and I began to fear that Reynard was making a bold push to escape from the "neck," but the failing condition in which I had seen him last reassured me, and presently the music became more and more distinct, nearer and nearer came the cry rapidly swelling into a perfect hurricane of sound. Just then, when I was ready to jump out of my very skin with suppressed emotion, a few clods of earth fell upon my head, and the fox, now dead beat, jumped down almost in my lap. It would be hard to say which was most startled, he or I. I leaped to my feet and he made a great bound in the air and fell rolling heels over head down the face of the cliff, and before he could recover his legs the whole pack came after like a roaring avalanche, covering me with dirt as they passed, and nearly carrying me with them in their descent. In an instant the poor fox disappeared beneath a living mound of yelling, snarling, writhing hounds, and before I could reach him he was crunched beneath the savage fangs of his enemies into a limp, disjointed mass. As soon as I could I out with my barlow, whipped off the brush and stuck it in my cap. When my father and the other gentlemen joined me they were greeted by the proudest twelve-year-old boy in the proud old State of Maryland. F. G. S.

THE REAL BRITISH BREED OF DOGS.—Incredible, but often truthful, stories are told of the endurance of dogs in running deer and foxes. Sometimes hundreds of miles of ground are run over. The biggest and, proportionately, the most truthful, story we have ever yet heard, is told by the Lynchburg *Virginian* of Jan. 30, ultimo. It purports to come from an old negro beater named Lake, and is included among the reminiscences of the writer, from which we quote. The writer is referring to the prodigious performances of a hound named "King." He says:

"As far as we could see, King had been chasing the deer for twenty-four hours, which, of course, was so improbable that the bare possibility excited much discussion. Uncle Sam and Lake, however, stood to it that the dog had been running the deer since the day before, as it appeared.

"I chanced to ride with Lake some two or three miles immediately after this incident, and expressed strong disbelief the likelihood of King's performance. Lake insisted upon that such a race was nothing to be wondered at. 'Y sir,' he said, 'Mas' Sam's stock of dogs is the rale British breed, and dat race of King's is nothin' to what I known 'em do. Dar was an ole red fox dar in de mounta jes 'bove Mas' Sam's, and many was de race I had after hi but I never could ketch him, cos for want of time. I was always 'bliged to blow off de dogs and give him up. Well, I swore, come Christmas, I would ketch dat fox if it took me all de holidays. I know'd 'zactly where he lay, and by day Christmas morning I had him up. I run dat fox all Christmas day and all Christmas night. Next mornin' Mas' Sam he sends one of de nigger boys to see what had come of me and de dogs. I took dat nigger's fresh horse, and I runs dat fox all dat day; you never heard such a chase. About night Mas' Sam sends annudder nigger. I takes his horse and runs dat fox all dat night. Next mornin', 'bout daybreak, dat horse was broke down, and I gits down off him and takes after dat fox on foot. I was so tired I could jes barely walk; but, Lor' bless you! it was all de same, for de dogs were jes' ahead, yellin' like mad, and de fox in sight—all walkin'. Me an' de dogs walked after de fox till ten o'clock dat day before we cotched him, an' when Mas' Sam sent for us dey had to git a wagon to haul me and de dogs home.' 'Why, Lake!' 'Fac, sir; you jes' ask Mas' Sam. I tell you dem dogs is de rale ole British breed. Dey 'lows no varmint dat runs on top of de ground to git away from 'em, once de scent gits hot.'"

RUSSIAN SETTERS.—"E. A. B." asks upon what page in "Stonehenge" I find the quotations made in my article upon this subject. In reply I would say that by "Stonehenge," I referred to the well-known English writer upon canine matters, Mr. J. H. Walsh. If, as "E. A. B." says, "Stonehenge" gives four pages mainly in their favor as superior to the English setter, he has very much changed his mind since writing the following in his "British Rural Sports:" "Many good sportsmen use these dogs constantly, and I have seen some of them do their work well; but they are so unsightly to my eye that I should never be willing to exchange the noble-looking English or Irish setter or pointer for such a poodle-looking brute as the Russian;" and, furthermore, expresses my own views in these words: "But as to my taste, all the beauty of shooting consists in pleasing the eye by the fine working of handsome dogs, I could never get over the unsightliness of these uncouth creatures." AMICUS CANIUM.

—Mr. N. P. Leach, of the Quebec Game Protective Club, Montreal, has just lost a very valuable Norfolk spaniel, winner of the first prize in Montreal in 1876, and one of the best ruffed grouse dogs known. His death was caused, it is believed, by a kitchen girl in a hotel throwing him a piece of hot meat just off from the coals. A *post mortem* examination showed his stomach, lungs, and intestines near his stomach to be badly inflamed, while the intestines further downward were white and hard as a whip cord.

A DRUGGIST'S MISTAKE.—Mr. Tremaine, of Allegheny City, Pa., reports the death of his Irish setter puppy Bob, winner of first and special prices at Pittsburgh last month. He was poisoned by a mistake of an apothecary in filling a prescription. Suit has been entered for recovery of his value. Bob was by Rufus II., out of Moll II.

MICHIGAN—*Detroit, Feb.* 9.—J. N. Dodge has had the misfortune to lose the stud beagle dog Rally, property of General Rowett, of Carlingville. Rally made his escape by climbing over a couple of high fences. RED RUFUS.

RILL—*Columbia, Tenn., Feb.* 11.—Mr. Dew's hitch pup Rill, winner of the puppy stakes at Nashville field trial last year, died with distemper a few days ago. He had refused $300 for her. VAL.

SALE.—Mr. L. F. Whitman, of Detroit, has sold to A. G. Smith, of New Philadelphia, O., the Rob Roy, Mell, white black and tan dog Dike R.; also to George Carpenter, of Gwasso, Mich., the blue belton bitch Louie R. This disposes of the entire litter.

NAMES CLAIMED.—BELLE AND JIM.—Dr. S. Reilly Beecher, of Lebanon, Pa., claims the name of Belle, orange and white setter bitch, born Dec. 29, 1876, out of Dr. H. A. Rosenthal's Sport and Flora. Also the name of Jim, black and white, born 1877, sire, Jos. Montgomery's Gordon Ned, dam Metzger's orange and white Fan.

WHELPS.—*Strathroy, Can., Jan.* 31.—L. H. Smith's field trial setter bitch, "Chip," nine puppies, to Byron's "Gladstone."

Brooklyn, Feb. 10.—H. A. Rosenthal's setter bitch Flora whelped on the 6th ult. ten pups by Sport. All strong and hearty.

GLEN—*New York, Feb.* 13.—The setter bitch Glen, owned by C. De Ronge and H. Iuman, whelped yesterday four puppies, three black and white, and one pure white—three bitches and one dog. Sire, Mr. D. Gleott's Guy Mannering. C. DE R.

VISITS—*Feb.* 4.—D. C. Sanborn's "Nellie," Hampton champion, to L. H. Smith's "Leicester." L. H. Smith's "Victress" to "Leicester," and "Pearl" to "Paris."

Claremont, N. H., Feb. 3.—Wm. Jarvis' "Rose," by famous champion "Palmerstone," to champion "Elcho."

SPLIT BAMBOO RODS.

To our customers and the public:—In reply to the damaging reports which have been circulated respecting the quality of our split bamboo rods, by "dealers" who are unable to compete with us at our reduced prices, we have issued a circular which we shall be pleased to mail to any address, proving the falsity of their assertions.

CONROY, BISSETT & MALLESON,
Manufacturers, 65 Fulton Street, N. Y.

Game Bag and Gun.

GAME IN SEASON IN FEBRUARY.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocet etc.; coming under the group *Limicolæ*, or Shore Birds.

FIRE-ARM PATENTS, WEEK ENDING JAN. 25.—Gun-lock, Nichols & Livingston, 198,669; guns, breech-loading, Nichols & Livingston, 198,670.

WEEK ENDING FEB. 1.—Fire arms, extrator, Jones & Marsion, 198,745.

ROD AND GUN CLUB OF SPRINGFIELD.—We beg to acknowledge from the Rod and Gun Club, of Springfield, copies of their constitution and by-laws for 1878, with an extensive list of members, and with its most efficient officers the club enjoys high reputation in Massachusetts for its sportsmanlike character.

BEAR HUNTING IN ULSTER CO.—*Poughkeepsie, Feb.* 10.—Wednesday, Jan. 23, a party from the vicinity of Bull Run, town of Denning, while out hunting roused a black bear from his winter resting place under the roots of a maple tree. The bear was driven out by the shots of the party and escaped, but soon returned and showed fight. He was finally brought down by a rifle shot from Jack Atwell. He weighed about 200 lbs. Wednesday last King Sheeley and brothers, of South Hill, while hunting on Moose Mountain in Denning, discovered a black bear. After tracking him some distance and wounding him, the dogs brought him to bay. He showed fight and closed on King, striking him on the left shoulder and knocking him down, causing a severe bruise. The dogs then seized the bear, and were engaged in a desperate struggle when King finished Bruin with an ax. The bear weighed nearly 500 lbs, being a monster both in size and flesh. While engaged in dragging the body to a wood road at the foot of the mountains, the dogs began to bark furiously at an overturned tree, and, on examination, a den containing two young bear cubs, one black and the other white, excepting a dark stripe along its back, was discovered. The party took the cubs out of the nest and took them home.

OUR HARRY.

GREENVILLE SPORTSMAN'S CLUB.—The following officers have been elected: Pres., G. Carlin; Vice-Pres., J. H. Phillips; Treas., C. R. Beatty; Sec., Dr. F. Herrick—all active sportsmen. The club will be represented at the State Sportsmen's Association, at Wilkesbarre, in June. B.

TENNESSEE—*Columbia, Feb.* 11—Notwithstanding the large bags taken, there will be a great many quails left over for breeding, and the shooting bids fair to be uncommonly good next season. Rabbits in abundance; no good bags have been made so far. Duck, geese and snipe shooting has almost been a total failure, owing to the mildness of the winter North. Mr. C——— and myself bagged sixteen mallards and summer ducks, in two or three hours shooting on the river, which is the best bag made so far. Close season begins 14th inst. VAL.

SOUTH CAROLINA—*Charleston, Feb.* 2.—Weather has been bad for hunting during the past week, and only a few small bags of birds have been brought in. Ducks have made their appearance in large numbers in the neighboring rivers and rice fields within the last three days. A few members of our club, after two days of capital sport, brought home three deer.

FLORIDA—*Crystal River, Jan.* 22.—Three days in the last two weeks a drove of wild turkeys have come to the yard surrounding the dwelling house, and quail come about the house, or within fifty yards of it, nearly every day. A. B. D.

MICH.—*Detroit*, Feb. 9.—G. Stenton, J. Eldridge and E. H. Gillman, returned this week from a week's sport at St. Clair flats. They had a very rough time and deserved better success. Working over twenty-five miles of territory at the flats their bag was 275 canvas backs and 130 red neck and blue bills. RED RUFUS.

LETTER FROM "PRIVATE" DOHERTY.—Mr. Doherty is the energetic but disgusted secretary of the recently defunct game club of St. Charles, Ill. He is a sport of the first water from the "ould dart," but a Yank by adoption. He says this himself, and we believe him. He is not at all flattered by the disbanding of his game club, nor of the material of which its members were made. He writes:

"There are a few true sportsmen here, but the rest are—well, I don't know what to call them. For a specimen of them I will tell you of a hunt we had. We started about seven in the morning and were gone all day, and had found plenty of game. There was one of our party who has a single breech-loading shot gun (he has had it for ten years), and about the same number of shells (he has got them yet), and he never shot his gun off but once all day, and then he cried for half an hour, for he missed a partridge on the set. *Them* is what constitutes our gun club, with a few exceptions."

SPIRIT LAKE, IOWA.—A correspondent refers to Spirit Lake as one of the choice places for mallard, ducks and prairie chickens:

"This beautiful sheet of water," he writes, "is situated in the northwestern part of Iowa, and holds out advantages to the sportsman with which few of its companions can compete. The numerous thickets that dot its margin afford fine woodcock shooting, and the prairie which surrounds it on all sides teems with grouse. On its northern shore is the little village of Spirit Lake, which contains a very fair hotel kept by a Mr. Randolph, who is always ready to accommodate sportsmen as far as it lies in his power to do so, but if the stay is to be a long one I should prefer to camp on the western shore of the lake."

The favorite shooting stand is at the pass which nearly divides the lake, and where thick brush effectually conceals the sportsman. Standing here one morning in September, at daylight, the writer and his friends shot teal and mallards until they and their retrievers were well nigh tired out. At 8 o'clock they went to breakfast, and after breakfast took a turn on the prairie after grouse. He concludes:

"I shall long remember that morning's sport, and the beautiful working of Mr. B.'s splendid Irish setter, Doctor. His rapid ranging and the steadiness with which he held his point when he found birds. At times there were three and four birds up at once, and the air resounded with their whirring wings and the sharp cluck of the old hen, to which we added the crack of our shot guns and our words of command to the dogs."

Another correspondent expatiates on the big bags of ducks they make out in Colorado. Here is what he says:

DUCK SHOOTING IN COLORADO.—Our best autumn shooting is done here on a stormy, disagreeable day, either when a cold drizzle of rain falls, or when snow fills the air. At such times the ducks come down in great numbers from the ponds and lakes in the mountains to the streams at their foot. And there the dwellers on the plains have grand sport.

Monday, October 21st, was a day long to be remembered by sportsmen of Colorado who lived anywhere between the Platte and the Arkansas. For two days the sky had been overcast with clouds. Monday came very cold; the snow fell steadily, and soon its effects were seen in the great flocks of ducks that came from the mountains. It had doubtless snowed there the previous day. My friend, Charlie S., a young fellow not yet out of his teens, took down the fowling-piece, a plain old muzzle-loader that was not dignified with name of any maker. Off he went to the neighboring ponds. To use his own language "they were covered." Lying down flat he made a raking shot into a flock, and as they rose he discharged his second barrel. The result of the two shots were 18 ducks; his first fire killed 12, and his second killed 6. He loaded again, quietly as possible, and soon another flock settled in the same place, and this time six more fell a prey to his destructive fire, making a total of twenty-four killed at three shots. Better work than this, done at inland shooting with a common-place old gun, I have never seen done.

After a time two of his cousins joined him, and as the ducks whirled and circled about them they loaded and fired as opportunity presented, and when they came to count up their birds they lacked but a few of two hundred. Enough were kept by the boys to make a good dinner for the two families, and 180 were sent to the nearest town for sale in the market, where they commanded the enormous price of ten cents each. C. B.

CALIFORNIA.—An unusually large number of swans have been killed in the western part of the State this season

CANADA—*Montreal, Feb.* 9.—Cariboo are becoming quite plentiful in some sections of the townships. STANSTEAD.

WILD PIGEONS.—Correspondents will oblige us by keeping us informed of the whereabouts of wild pigeons. The birds were in Southwestern Missouri at latest advices.

CAPTAIN BOGARDUS AND HIS SON.—Captain Bogardus has brought forward a rival in the high art of shooting. According to the laws of heredity, capabilities for shooting should run in the whole Bogardus family—men, women and children. As it is, Master Bogardus, a fine looking young lad of 13, handles a breech-loader with consummate skill, and breaks the hardest shooting balls, right and left in the neatest style. For a quiet and easy method, with *sang-froid* and adroitness, Master Bogardus' performance is quite wonderful. At his *debut* at the Tivoli, Master Bogardus never missed a ball. The Captain, now entirely recovered from the strain on his system by the 5,000 ball match, excels, if any thing at present, his former feats. The captain's fancy shots consist in pulling the trap with his back to the stage, wheeling and hitting the ball. The whole performance may be summed up in four words, "there are no misses."

RECOIL.—A correspondent writes us:

"Have any of your readers noticed that recoil is greater in damp weather and less in dry? Such has been my experience. I think it greater during a damp, driving snow storm than at any other time."

[It might be possible that the heavier the medium the gun is fired into, as the most laden atmosphere being—the greater the recoil. But this is purely theoretical. Query—Has it ever been tried scientifically?]

PENETRATION—USING A PINE BOARD.—For the benefit of a great many of your readers, who cannot get the pads for trial, which are spoken of in your paper, I would tell them that, after having made a great many trials and witnessed the shooting of a good many guns, that if any one can drive a No. 8 shot, 1¼ oz., with 4 or 6 drs. of any kind of powder, through one-half inch of pine board, at 30 yards, he is doing remarkably well. He may be satisfied that he has an excellent gun. I have seen it tried so many times, I am convinced that if a gun will do it, it is a good gun, and shoots hard enough to kill up to forty yards or more. G. F. G.

A GUN WITH A HISTORY.

THROUGH the courtesy of Dr. Emil Bessels, who accompanied Capt. Hall in his last Arctic expedition in the Polaris, I have had the opportunity to-day of handling and inspecting a firearm with a history. The weapon is owned by the Doctor, and was carried by him up to 81 deg., 50 min., north, to which point on Hall's Land, ice, with others of the Polaris party, penetrated Robeson Channel in an open boat. During the summer of 1872 ice formed in their rear and cut off retreat, so the party was compelled to leave Polaris Camp with as light loads as possible, and tramp back many miles through the snow to Polaris Bay. They left behind them in the boat this gun, a chronometer, sextants, and other instruments and books, and there they remained until in 1876 a sledge party from one of Sir George Nares' ships, while exploring, struck the camp and gathered up the articles. The gun was but slightly injured by its long exposure to the polar climate, and a good thorough cleaning has so far restored it that the Doctor has been able to realize an advantage from the courtesy of Captain Malcom, R. N., through whom it was restored to him, by using it this fall on quails and ducks successfully. The gun is a fine twist barrel, Lefaucheux, of .14 calibre, and for service is uninjured, and but slightly injured in appearance. The Doctor showed me, also, some of his books and papers which had been subjected to the same exposure with but trifling injury. The chronometer, one of Negus' make, was carried on board the ship, wound up, and ran with a uniform and small rate until it reached England. It is probable that the preservation of these iron and steel implements, through so long an exposure, was due to the absorption by the snow of a larger portion of the oxygen of the atmosphere

I also saw a pretty little chest, filled, to my certain knowledge, with most excellent smoking tobacco, upon whose lid there was a silver shield, on which was engraved:

EMIL BESSELS.

This Box is Constructed from a Portion of a Gun
Belonging to E. B.,
Picked up at Life-Boat Cove on July 28, 1875.—B.

A. H. M.

The initials being those of Capt. Malcom who returned them. PISKOO.

PIGEON PIE.—Take six young pigeons, have them neatly drawn, trussed and singed, stuff them with the chopped livers mixed with parsley, salt, pepper, and a small piece of butter. Cover the bottom of the dish with rather small pieces of beef. On the beef put a thin layer of chopped parsley and mushrooms. Season with pepper and salt. Over this place the pigeons. Between each put the yolk of a hard-boiled egg. Add some brown sauce or gravy. Cover with puff paste, and bake the pie for an hour and a half.

BIRDS TOWERING WHEN SHOT.—*Editor Forest and Stream:* I notice in a recent number of the FOREST AND STREAM, a statement taken from an English paper, that birds which tower after being shot, are not, as has been supposed, shot in the head, but through the lungs. This is contrary to my experience. I have seen many ruffed grouse tower and some quail, and have always found that they were shot in the head. One exception was very singular. I once fired at a partridge which flew directly across me, about forty yards distant—first one barrel and then the other. She took no notice of either, but flew straight on for about twenty rods, then suddenly turned back and came towards me. When she reached where I was standing, she suddenly began towering, and after three circles in the air, going higher and higher, and in smaller and smaller circles, she suddenly fell dead within six feet of where I stood. On examining her, I found that she was shot in the neck, about one inch below the head, T. S. S.

THE BOGARDUS BALL.—This popular ball, which bears the name of the champion, is rapidly taking a prominent position among sportsmen. So constructed as to break readily when touched by a shot, the Bogardus glass ball fills exactly the place of the pigeon. The making of glass balls is now quite an important branch of manufacture, and what with turning out traps and balls Captain Bogardus has his hands full.

THE HUBER TRAP.—This trap has certain peculiarities of make which call the attention of gentlemen who desire an excellent apparatus for throwing glass balls. The springs are of double-coiled steel-wire, and are not only light, but wonderfully powerful and enduring. The manufacturers guarantee any of their traps for six months. The range of the balls thrown from the Huber trap can be so managed as to throw them at varying speeds and distances. A ball may be sent 140 feet, at an elevation of twenty-five or thirty feet, or a driving bird can be imitated with the ball, the rise not being over seven feet. The trap is well and solidly built on an oak frame, and thoroughly secured and bolted. It can be easily turned in any direction, and may be packed for shipment in a small compass. The growing popularity of this trap is the best criterion of its merits.

OUT! OUT!—A man is oiling his gun, and just then his dog comes in and jostles his arm, and down trickles the lubricator over his trousers. Now, for this kind of thing, nothing is better than Parret's Lightning Eradicator. It is not only for men's unmentionables that the Professor'

Lightning Eradicator is good. A man has a wife, and that man's wife has a shawl, and somehow the man's wife's baby butters that shawl. Then the lightning eradicator comes in. Professor Parret, having at many industrial fairs *cleaned* out all the concerns, is the recipient of numberless medals. As editor's coats are always old, seedy and greasy, a good many of them attest to the excellence of the Lightning Eradicator in the region of their collars.

MIXING DITTMAR WITH BLACK POWDER.

NORWOTON, CONN., Jan. 25, 1878.

EDITOR FOREST AND STREAM:

Perhaps my experience with Dittmar powder may be of interest to your readers. I used a quantity of Dittmar powder, wounding more birds while I used it than I ever had before. Then this thought occurred to me, "does the Dittmar give as good penetration as the black powder?" So I set up a target with a *Harper's Monthly* for a penetration pad, and fired ten shots of Dittmar and ten of black powder (Hazard's "Sea Shooting"). The result was that the black powder penetrated 96 sheets, while the Dittmar only 63. The shells were all loaded with 4 drs. and 1⅛ oz. of No. 4 chilled shot. As to the pattern, the black was a little behind the Dittmar, but not enough to make it of any account. I next took a quarter of a pound of Hazard's Sea Shooting and mixed with it 12 drs. of Dittmar, loading the shells the same as before. I got a penetration of 102 sheets with a good pattern, and I also found the mixed powder to be *very* clean. By the time this reaches you I will be after ducks with my mixed powder. Will not some of our brother sportsmen who have time to spare make some trials with the Dittmar powder and let us know the result. Let us say "Amen" to the "recoil" talk and have some more powder discussions.

BACK ACTION.

TRAP SHOOTING.

MASSACHUSETTS—*Salem, Feb.* 7.—Match between A. D. Gardner and E. Reeves. Score:

Reeves	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0—10
Gardner	1	1	1	1	1	1	0	1	0	1	1	0	1	1	1—12

FOUNTAIN GUN CLUB.—*Brooklyn Driving Park, Parkville, L. I., Feb.* 9.—Regular monthly contest at pigeon shooting for the championship medal, shot for at seven birds each from H and T traps, handicapped distance, 80 yards boundary; Fountain Gun Club rules:

Henderson	25 yds	1	1	1	0	1	1	1	—6
J T Slane	21	1	1	1	1	1	1	0	—6
Durfee	28	1	1	1	1	0	1	1	—6
McMahon	26	1	1	1	0	0	1	1	—5
Miller	25	1	1	0	1	1	0	1	—5
De Franc	25	1	0	0	1	1	1	1	—5
Cleaver	21	1	1*	0	1	1*	0	1	—5
Madison	25	0	1	1*	0	0	1	1	—4
Helmstedt	25	1	1	0	1	1*	0	0	—4
Tucker	25	0*	0	1	1	1	0	1	—4
O'Connors	21	0*	1	1	0	0	1	1	—4
Hanley	18	;	0	1	0	1	0	0	—3
James	21	1	0	0	1*	0	0	1	—3
Byrne	21	1*	0	0	0	0	0	1	—2
"Charles"	18	1	1	0*	0	0*	0	0	—2
Lennon	18	0*	0	1	1	0*	0	0	—2
M Williams	18	1	0*	0	0*	0	0	1	—1

Tie on six—3 birds each.

Henderson	1	1	1—3	Durfee	0	1	1—2		
Slane	1	1	1—3						

Second tie.

Henderson	1	1	1—3	Slane	1	1	1—3

Third tie.

Henderson	1	1	1—3	Slane	0	0	1—1

--A match of sixty birds each will be shot by Christ. Wisner and Henry M. Woods, on the L. I. Shooting Club grounds to-morrow.

NEW JERSEY—*Bloomsburg, Feb.* 1.—Glass ball side shoot; score:

W G Jones	1	0	0	1	1	0	1	0	1	0—5
M Crevelling	0	1	0	1	1	1	1	1	1	1—8
G Bruner	0	0	0	0	1	0	0	0	1	0—2
J O Hoff, M D	0	1	0	1	1	1	1	0	1	1—7—22
W Dalrymple	1	1	1	1	1	0	1	0	0	1—7
G Scott	0	0	1	1	1	0	1	0	1	0—5
R Dalrymple	0	0	0	0	0	1	1	1	0	1—4
G Benward	0	0	1	1	1	0	1	1	5	0—5—21

Feb. 2; score:

			Dalrymple, W	1	0	0	0	0—1
Jones	0 1 0 0 0—1		Crevelling	1	1	1	1	1—5
Scott	1 1 0 1 1—4		Benward	0	0	0	0	0—0
Hoff	1 1 1 1 1—5		Dalrymple, R	1	0	0	0	1—2
Neulsizer, P	0 1 1 1 1—4		Neulsizer, J	0	0	0	0	0—0
Boss	1 1 1 1 1—5		Rapelyea	0	0	0	1	1—2—10
Fine	0 1 0 1 1—3—22							

Second match:

Jones	0 0 1 1 1—3		Dalrymple, W	1	1	1	1	1—5
Scott	1 1 1 1 1—5		Benward	0	0	0	0	0—0
Hoff	1 0 1 0 0—2		Dalrymple, R	1	1	1	1	0—4
Neulsizer, P	0 1 0 0 0—1		Neulsizer, J	0	0	0	0	0—0
Fine	0 1 1[illegible] 0—2—13		Rappleyea	1	1	1	0	0—3—12

NEWARK GLASS BALL CLUB, *Jan.* 28.—First cup shoot; 15 balls; Bogardus' rules. Score:

W Richards	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1—14
Quimby	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1—13
Schriber	0	1	1	1	1	1	1	1	0	1	1	0	1	1	1—12
T Richards	0	1	1	0	1	1	1	1	1	1	1	0	1	1	1—12
Burr	1	0	1	1	0	1	1	1	1	0	0	1	1	1	1—11
Fulliger	0	0	1	1	0	1	1	1	1	1	0	1	1	1	1—11
Dougherty	0	0	0	0	1	1	1	1	0	1	0	1	1	1	1—0

Nick.

HACKENSACK GUN CLUB.—Monthly badge shoot Feb. 12. Score:

J Blauvelt	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
C Ackerman	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1—13
J Anderson	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1—12

Weekly badge shoot:

Anderson	1	1	1	1	1	1	1	1	1	1—10
Blauvelt	1	1	1	1	1	1	1	1	1	1—10
Ackerman	1	1	1	1	0	1	1	1	1	0—8

Tie shot off.

Anderson	1 1 1 1 1 1—6		Blauvelt	1	1	1	1 0—5

PENNSYLVANIA—*Westchester, Feb.* 2.—Match at 25 balls, Purdy trap, 12 yards rise; shot by the Amateur Cope Club. Score:

T S Cope	0	1	1	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	—19
F Hoops	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	0	0	0	0	1	—15	
A Cope	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—25	
R French	0	1	1	1	1	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	1	—11		
J G Cope	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—26	

Also on the 4th, 21 single balls, Bogardus' trap, 20 yards rise.

R French	0	1	1	0	0	1	1	1	1	0	1	0	1	1	0	1	1	1	1	0	—14					
H Ingraham	0	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	0	0	1	1	0	—13				
F Hoops	0	0	0	1	1	1	1	0	1	0	1	1	1	0	1	1	1	1	1	0	1	—14				
J Cope	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	1	0	1	0	1	1	—10				
Ben Fen	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	—3					
A Cope	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	—20					
J G Cope	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	—19					
T S Cope	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	—18					

Three double balls:

R French	1 1	01	10—1	Ben Fen	01	01	01—3
H Ingraham	00	10	11—3	A Cope	11	01	11—5
F Hoops	00	10	10—2	J G Cope	00	11	10—3
J Cope	01	00	00—1	T S Cope	11	01	11—5

R. F.

GERMANTOWN, *Feb.* 6.—Shoot for medal; tame birds, extra strong on the wing. Conditions—Ground traps, H and T; 15 single at 21 yards rise, and three pairs at 18 yards; usual boundary:

D Karsner	*	1	1	1	1	1	1	1	1	1	1	1	1	0	—13
J Emory	0	0	1	*	1	1	1	1	1	1	1	1	1	1	—12
J Rupee	1	1	1	1	0	1	1	1	0	1	1	1	1	1	—13

Double birds at 18 yards rise.

D Karsner	11	11	11—6	J Rupee	11	11	10—5
J Emory	01	11	01—4				

D. K.

MICHIGAN—*Detroit*, Feb. 7.—Side shoot of the Pacific Gun Club. Score:

W Bordwelt, Capt	1	1	1	1	1	0	0	1—6
Chas Brown	1	1	1	1	1	1	1	0—7
G R Booth	1	0	1	0	0	0	1	1—4
Jno D Walker	0	0	1	1	1	1	1	1—6
D A Thayer	0	0	1	1	0	1	1	1—5—28
T N Bermingham, Capt	1	0	0	0	1	0	0	1—3
Wm H Gilliman	1	1	1	1	1	1	1	1—8
J R Minehan	1	1	1	0	0	1	0	1—5
Dell Sheldon	0	1	0	1	1	0	1	1—5
Jas Brown	0	1	1	1	0	0	0	1—4—26

Same Day—C. A. Mack vs. C. Brown. Score:

Chas A Mack	0	1	1	1	1—4	Chas Brown	1	1	1	1 0—4

Tie shoot-off at twenty-six yards rise.

Chas A Mack	1	0	1—2	Chas Brown	1	1	1—3	

Match at five birds, twenty-one yards rise:

Dell Sheldon	1	0	1	0	0—2	J D Minehan	1	0	1	0 1—3

IOWA—*Keosauqua, Feb.* 2.—The first glass ball shooting ever done here came off to-day. The following are the best scores:

Beaman	1	1	1	0	1	1	1	0	1	0—7	Johnston	0	0	0	0	1	1	0	0	0—2
Lea	1	0	1	0	1	0	0	0	1	0—4	McDonald	0	1	0	0	0	0	1	0	0—2
Bleakmore	0	0	1	1	1	1	1	1	0	1—7	Long	0	1	0	0	0	0	0	0	1—2

Beaman and Bleakmore divided first money, McDonald took third.

A second match at five balls gave the following:

Beaman	0	0	1	1	0—2	Johnston	0	1	1	0 0—2
Lea	1	1	0	0	1—3	Bleakmore	1	1	1	1 1—5
Wilkin	0	0	0	0	0—0	Robertson	0	1	0	0 1—2

Ties on two.

Beaman	0	1	1—2	Robertson	0	0	w
Johnston	1	1	0—2				

Second tie.

Beaman	1	1—2	Johnston	1	1—2		

Divided third money.

D. C. B.

—THOSE WONDERFUL MASON'S CHARTS advertised in this issue have created an unprecedented sensation in the musical world. They have gained for the inventor an imperishable name, and their sale is simply enormous.—[*Adv.*

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—[*Adv.*

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
Feb. 15	9	24	6	09	5	53
Feb. 16	10	18	7	03	6	45
Feb. 17	11	07	7	56	7	34
Feb. 18	11	58	8	49	8	23
Feb. 19	0	26	9	42	9	02
Feb. 20	1	17	10	34	9	47
Feb. 21	2	10	11	27	10	33

For Forest and Stream and Rod and Gun.

CANOEING.

ELECTION DAY EXCURSION OF THE "RAMBLER" AND "QUI VIVE."

IT was high noon on the sixth day of November, 1877, when two voyagers drew their canoes from the monotonous stretch of canal they had traversed to gain the headwaters of a stream they desired to run, and, sliding them down a steep decline thickly overgrown with tangled briers and saplings, broke forth at length into an open, grassy spot upon the river bank.

Second River, a stream with some fifteen feet of channel width, runs over a rocky bed through some of the most picturesque scenery to be found in eastern New Jersey. For the most part the banks are high and steep, well wooded with evergreens, and rocky. Its course is one nearly continuous rapid, and it is navigable only when swollen by heavy rains, when the mimic fury of its rift delights the canoeist. The running of such a stream is exhilarating, but not dangerous.

"Well, Qui Vive, as you are more experienced in these matters, you may lead the way," cried the navigator of the Rambler as we pushed off. With a laughing reply I shot my light craft to mid-stream, and cautiously took the first rift. A jump, a shock, a splash, two strokes of the paddle and a stop; the Qui Vive was fast, half-way down the pitch. Quickly making use of my paddle as a setting pole, I lifted her from the rock and continued on my course. With like trouble the Rambler passed, and then we ran rift after rift, with only an occasional bump on a rock or scratch across the face to bother us. Presently, warned by our ears that we were approaching something unusual, we effected a landing. A few rods down the stream we discovered a fall of about four feet, so completely choked up with rocks as to be impassable even for canoes. Over and among these rocks the impetuous stream foamed and roared, flinging its white spray some feet in the air as though indignant at the barrier. A single glance showed us that we must carry around this obstruction. A few yards farther down a large tree had fallen across, so we carried our boats, one at a time, past both, and, lowering them tenderly down the steep bank, were soon afloat again. For nearly a mile I had a glorious run, striking heavily several times, but not fastening to the rock once. At length I reached another rocky fall, just below which a stream joined with ours. Here I landed, and, after a look at the fall, started in search of the Rambler, which had not put in an appearance. Some 300 yards up river I discovered the canoe, diagonally across a rift, hard and fast among the rocks.

"Hello, there!" I cried, as I worked my way down the hill; "why don't you push ahead?"

"Can't do it; I'm fast," came the answer.

There he sat in the canoe, hatless, his face scratched and dirty from encounters with numerous tree limbs and trailing, wet, climbing vines. How I laughed!

"You don't intend to stay on that rift all night, do you?" I inquired.

A brief but determined effort, and he was free; then a race, and I beat him to the Qui Vive by a few yards. After an unsuccessful search for the missing hat, we launched upon the now broad and pleasant river. The scenery had changed. We no longer ran through a wooded and rocky defile, but on the right towered a hemlock and pine-covered hill, with here and there an outcropping of redshale or sandstone, while to the left lay a wagon road, with white houses at intervals, beyond which the upland farms sloped gradually away to wooded heights. Anon we would float out upon a pretty millpond, when we would carry around the dam and put into the rapid stream below. At one place we passed the picturesque ruins of an old mill or manufactory, with its crumbling brick walls, red-tiled roof and old-fashioned water-wheel fast going to decay. Strange it seemed to find here, within twenty miles of the great metropolis of enterprising America, the landmark of ancient activity. I should like to know the history of that old mill.

At another place we carried past a fall. The river, converging to a narrow rock-bound channel, rushed down a sharp decline, then plunged, one mass of angry white water, into a circular basin of rock some fifteen feet below. The leap was bold, and the basin that received it boiled and steamed like a caldron. The fall was wildly beautiful. The stream had eaten its way through the soft red sandstone under the very base of the hill, and the tall old hemlocks above leaned over as though to shelter it. Long we looked in admiration, but at last turned away and resumed our journey.

With plenty of water on the rifts, we got along well till we had passed our third dam and made some distance on the stream below. Here we encountered a rapid situated in a sharp elbow of the river, with two more immediately below. The white channel waves first kept the left bank, but presently, in an irregular and broken manner, crossed to the right shore, which they followed closely around to the quiet water below. Now, in rapids, the wildest and whitest water is the safest; and the rule is, keep her straight and smash your paddle before you smash your boat. Entering to the left I essayed to cross where the channel waves did, but miscalculating the strength of the current, was swept down bodily and fastened half out of water upon the rocks. As she struck my light craft heeled over and the water began to pour into the well. Fixing my paddle blade on bottom I lifted with all my strength. Once, twice, thrice I tried, and was victorious. Like an arrow I shot out from that rift and entered the next, which I passed in safety. Then came a real fall of nearly four feet, with a veritable foamer. Water enough there was, and with a wild yell I took it under full speed of current and paddle. The keen air cut against my flushed face with grateful coolness, the white spray flew high over my head, every muscle was strung, every nerve tingled with excitement, and my canoe seemed like a thing of life as I took that glorious plunge and fairly flew down the little rift below.

No sooner had I reached still water than I saw before me high stone dam, through which the water disappeared by huge sluiceway armed with flood-gates. Stemming the current I slowly made my way back to the foot of the rift. On either hand mud-flats extended. There was nothing else to be done, so, paddle in one hand and dragging the Qui Vive with the other, I made my muddy way to *terra firma*.

Up the stream I discovered the Rambler fast upon the crooked rift. I was making my way toward him, when, barefooted, he stepped overboard. Turning the canoe to the channel he jumped into the well, while I stood there and watched him run the rapids and take the fall. He meandered ashore through the mud, as gracefully as myself I presume, but I could not help laughing at his black stockings, scratched face and wind-tossed hair. Without incident, save turning around on a shallow rift, the canoes reached the Passaic. Hoisting our close-reefed mainsails to the stiff northwest breeze, we reached Newark in good time, and housed the canoes, feeling well satisfied with our day of life in the open air. MAGUA.

NEW BEDFORD YACHT CLUB.—The officers for the ensuing year are: Commodore, J. A. Hawes; Vice-Commodore, E. B Hammond; Fleet Captain, T. G. Wing; Secretary, G. W Parker; Treasurer, E. Dews; Measurer, W. Nye, Jr.; Directors, H. F. Hammond, J. A. Bullard, G. D. Kingman, R S. Lawton, G. W. Parker, J. H. Garnett, W. R. Myrick, F C. Bancroft, W. Fisher, A. G. Alley, R. S. Morgan.

NEW YORK YACHT CLUB.—At the annual meeting Monday evening, there were eighteen yachts represented, and a large attendence of non-yacht-owning members. The annual regatta was fixed for the 13th of June. The special committee appointed at the last meeting to confer with Mr. George L. Schuyler, with regard to the American Cup, reported progress The club adopted a resolution to continue in their present rooms for another year. A resolution was adopted to increase the dues for life membership from $100 to $200. Vice-Commodore Stillman, of the schooner-yacht Wanderer, presented the club with a painting of that vessel by A. Cary Smith. The officers elected for the ensuing year were: Com., S. Nicholson Kane, of the schooner-yacht Restless; Vice-Com., William H Thomas, of the schooner-yacht Rambler; Rear Com., J. J Alexandre, of the sloop-yacht Vision; Sec., Chas. A. Mintou Treas., Sheppard Homans; Measurer, A. Cary Smith; Fleet Surgeon, G. S. Winston; Regatta Com., Charles H. Stebbins, Alex. Taylor, Jr., William Krehbs; House Com., Fletcher Westray, N. D. White, J. O. Proudfit, H. N. Alden, T. B. Asten.

--Higgins, the English rower, has challenged Hanlon to a £1,000 race.

ICE YACHTING.—*Kingston, Feb.* 10.—Ice boating has been quite lively in this section for a few days back, but is now ruined by the rain. If it should now freeze up again the ice will be in a still better condition. OUR HARRY.

THE SAPPHO.—A Smyrna, Asia Minor, correspondent of the New York *Herald*, tells us that the famous American yacht Sappho, now the property of Prince Maffeo Sciarra Colonna, is at present lying in that harbor. She has just returned from a cruise in the Black Sea and Grecian Archipelago. She will be in New York in the winter of 1878-9. Her crew are all Italians, commanded by the same thorough yachtsman, seaman and gentleman who was her captain with Mr. Douglas, Captain Van Wyke.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

F. C. O., Danbury.—We send you a form for a club.

F. S. will find about opening of trout season in this issue.

M. H. B., Packerville.—Address Arnold Burges, Hillsdale, Mich.

R. T., Philadelphia.—Send us the result in as condensed a form as possible.

A. B., Manchester, N. H.—Dr. Lyncicum's writings are not published in book form.

M., Dauphin, Pa.—Write to Messrs. Peters, Calhoun & Co., Newark, for a McLellan tree.

H. G. C., Indianapolis.—Have sent your card to Messrs. Tatham, who will give you full information.

H. D. B., Cottonwood, Ill.—Pray give me P. Webley & Son's address? Ans. No. 84 Weaman st., Birmingham, England.

SANCHO PANZA.—For swan's eggs write to J. H. Batty, New Utrecht, New York; C. J. Maynard, New Ipswich, Mass.

J. W. B.—The officers of the Adirondack Club are: Pres., J. R. Thompson; Sec., Thos. J. Hall; Treas., W. E. Pearson.

W. H. E. Bryant, Kan.—Does Kay manufacture wire cartridges for buck shot? Ans. He does not. We do not know of any but Eley.

S. H. A., Troutman, Pa.—The quarter of 1857 has no value. The quarters of 1823 and 1827 are worth from $1 to $10, but must be in good order.

H. B., Philadelphia.—If your puppy, 9 week's old, will not eat oatmeal and milk, or mush, try him with bread panada and milk, or with fine grits well boiled.

W. O. W., Charlottesville, Va.—The regular U. S. Ordnance Reports might be difficult to procure, as we understand. Get Col. J. G. Benton's "Ordnance and Gunnery," published by Van Nostrand, N. Y.

PHILADELPHIA.—I have a 10 bore breech-loading gun, twist barrels, 32 inches, half pistol grip stock, rebounding locks, made by ——, London. What is the reputation of the above? Ans. Very good reputation.

J. A., Escanaba, Mich.—1. Can I get pin-fire shells 14 and 16? 2. Are there metallic pin-fire shells in the market? 3. Where can I get them nearer than New York? Ans. 1. Yes. 2. No. 3. Chicago or Detroit.

J. H. W., Rosedale, Kan.—Please tell me the nearest point to get Paine's feather-filled balls; also price. Ans. Cannot be had anywhere but at Bohemian Glass Works, 214 Pearl St., New York: price $18 per thousand.

H. C. M., Philadelphia.—My bitch was put to dog, and failed to drop pups. Was in her second heat. I hunted her for three days after she came from dog. Was that the cause of her failing to pup? Ans. Some other reason.

ENQUIRER.—Feed your red bird on hulled rice, uncooked. You can only tame him by gradually accustoming him to your presence. The $1.50 binding of E. & S. is red cloth with black leather back. Send your numbers by express.

S. B., Geneva, N. Y.—Give me the address of some first-rate gunsmith who can alter a muzzle-loader to a breech-loader, and do it cheap and well; and what would be a moderate price? Ans. Genez, Chambers st. Cost you from $45 to $50.

M. E. B., Windom, Minn.—Will you please inform me how far the shooter should stand from the trap in glass ball shooting, and how far and high the balls should be thrown? Ans. Distance from traps 18 yds., balls should be thrown from 12 to 15 ft. high.

PLANKERS, Hudson.—1. What is good for a dog to purify his blood? 2. What shall I use to get vermin off of my puppy? Ans. 1. If you are sure that your dog's blood is impure, which you may not be correct about, give him castor oil. 2. Use kerosene, best and safest method.

A. D., Plymouth, Mich.—Would you advise crossing beagles and harriers? Would they run foxes equally well? or would you advise full blood? Ans. Do not cross the breeds, unless compelled to do so. Such a cross might produce good dogs, but it is advisable to keep the strains distinct.

H. D. J.—What is the market value of Wilson's American Ornithology, with notes by Jardine, with editions including the birds described by Audubon, Bonaparte, Nuttall and Richardson, New York, T. L. Magagnoa & Co., 16 Beekman st., quarto, 1854? Ans. The market value is not more than $1 50.

H.—1. Where can I get a catalogue giving the common and scientific names of birds? 2. What is the value of ostrich eggs? Ans. 1. "Key to North American Birds," by Elliott Coues, is the best work for identification. Published by Dodd & Mead, 751 Broadway, N. Y. Price $7. 2. Ostrich eggs cost $5.

ENGINEER, Wellesville, N. Y.—I have $— to buy a No. 1, a No. 2 or a No. 3; which would you prefer? Ans. All excellent and a toss up between them. Had we the money to spend it would be between No. 1 and No. 2. No. 3 excellent every way, but perhaps not quite as high finish for the same money.

G., Boston.—Have a setter pup sold me, is a Gordon with good pedigree. He is a handsome red. It is said his mother, Meg (imported), was red also. Is he likely to be a good dog, being of that color? Ans. A good dog may be of any color. Red is certainly a favorite, but not the typical color of the Gordon strain.

F. W. P., Walla Walla, W. T.—For instructions in taxidermy consult Brown's "Taxidermist's Manual," price $7, Orange Judd & Co., N. Y.; "Taxidermist's Manual," Haney & Co., 119 Nassau st., N. Y.; "Practical Naturalist's Guide (English)," J. D. Sabin & Son, Nassau st., N. Y.; Coues' "Manual of Ornithology," and J. C. Maynard's "Naturalist's Guide."

BERG, Red Bank, N. J.—Will you please inform me where I can purchase some "Blue Rock Pigeons" for breeding? I have sent to Reicho & Bro., and to Herman Cahill. Neither of them deal in any but fancy pigeons. Ans. You will probably have to send to England unless some one seeing this line has them to offer. They do not seem to breed well in this country.

W. D. C., Washington, D. C.—1. How can I determine the exact calibre of my gun? 2. By what rule do makers measure guns? Ans. Take calipers and measure inside, and any gunsmith will, from his standard gauge, tell you calibre. 2. The gauges of guns were started originally in this way: A 10 bore would carry ten balls to a pound, a 20, twenty balls to a pound. Approximatively, a 10 bore is about ¼ of an inch, a 12 about 1-16 less, and a 16 in the neighborhood of 5-8's of an inch. A great deal of trouble is caused by differences in gauges of guns, for which cartridge manufacturers are blamed. It is the gunmaker always, who is at fault.

G. M. S., Gananoque.—1. What height of ceiling is necessary for a room to throw up glass balls in from a Bogardus' trap? 2. Are there any rules to be obtained for the management of a shooting gallery such as Coulin's? 3. Is not the range in his gallery (Conlin's) an iron tube? Ans. 1. Twenty-five to thirty feet. 2. Not that we know of. Address Coulin personally. 3. No.

C. A. D., Melrose.—I see in the N. Y. *Clipper* Almanac, 1878, that Jan. 25, 1877, Dr. A. Carver beat Captain A. H. Bogardus 50 balls—48 to 37—Palace Opera House, San Francisco, Cal. It is said that Dr. Robinson, of San Francisco, beat Capt. Bogardus the first time and Bogardus beat Dr. Robinson the second time. Is N. Y. *Clipper* Almanac right or wrong? Ans. The *Clipper* is correct.

VALLEJO, Solano Co.—Estes & Lauriat, Publishers, Boston, will send you a catalogue with names of all works relating to Yachting. None are now in print. If you could get a copy of the "Kedge Anchor," printed for the author in 1848, it would be very serviceable. Apply also to J. W. Boulon, Publishers, 760 Broadway; also "Alston's Seamanship," Wiley & Son, New York, 1871.

CONSTANT READER, North East, Pa.—Does shooting across a ravine have any tendency to lower the shot from the same distance on level ground? Does shooting downward from a hill or bluff carry over? Ans. These ideas are purely speculative and are abstractly theoretical. No. Up hill or down dale over water is all the same. We take the faults of our sense of sight as having to do with such matters.

S. C. S., Chittenango.—Have a spaniel pup, 9 mos. old. His eyes run, and he has had two fits. Fits last five minutes. You would think he was dead, but he revives, and seems to be as well as ever. What shall I do for him? Ans. It may be that the puppy is about to have distemper, in which case he should be put under the treatment proper for that disease. In many cases, however, the symptoms you describe indicate worms, for which give areca nut and castor oil.

S. P., Delaware.—Loaned a 12 bore breech-loader, 36-in. barrel, to a friend. He stuck the muzzle in the snow, got it choked with the snow, fired it, and it bursted some inches from the muzzle. Will shortening the barrel 4 or 5 inches hurt the shooting powers of the gun? Ans. If not a choke-bore, and you do not say it is, you might be pleasantly surprised did we inform you that by cutting off some 4 inches, your gun would be as good as before, and, just as likely, better.

INQUIRER, Brooklyn.—1. In shooting glass balls from Bogardus traps is it an infringement of the Bogardus rules for glass ball shooting to put any substance in the cup in order to change the natural flight of a ball thrown from a trap at level on the ground? 2. Does Bogardus, when shooting at double glass balls, place either ball neck downward in the cup? Ans. 1. You are at liberty to cause the balls to go in any direction desired. 2. No, it would break nine out of ten balls.

C. O. D., South Gardiner, Mass.—In the target used by the Schutzen Corps, the circles are extended. The printed target stops at the 11 circle, but in shooting at 200 yds., it is carried out to the 1 circle. This accounts for some of the lower scores. Some day, this method of target, we think, will be adopted for all rifle shooting. It shades off the exact skill of the rifleman, and no ties are possible. Your drawing is correct. All you would have to do would be to make ten more circles.

W. F. S., Concord.—Can you send me the name and address of some reliable person in Sandpoint, Province of Ontario, Can., from whom I can obtain all the particulars relative to the "Conlongo District," such as procuring guides, provisions, camping outfit, etc.? Also, the best hunting localities, and, in fact, everything connected with it? Ans. See five columns of FOREST AND STREAM, Vol. I., No. 24, for fullest particulars. See also, Hallock's "Sportsman's Gazetteer and Guide."

MOWITCH, New Westminster, British Columbia.—Please give method of preserving castoreum, *i. e.* beaver castor for druggists' use. Ans. Castorem is found in the two glands beneath the root of the tail of the beaver. When fresh it is of a yellowish red color, changing to a light brown when dried. To prepare it for market mix with ground nutmeg, powdered cloves, ground cinnamon and a drop of essence of peppermint. Stir in as much whisky as will make a paste, after which bottle and keep carefully corked.

B. D., Mt. Morris, N. J.—1. What is your opinion of Dittmar powder for field use in breach-loading shot-guns—is it safe? 2. Will it ignite by concussion? 3. Is it more liable to corrode, or injure the barrels than other powder? 4. Is its penetration as good as the black? 5. If so why not in more general use? Ans. 1. Under certain precautions Dittmar's powder is excellent. 2. It will not ignite by concussion. 3. It does not corrode. 4. Its penetration is excellent. 5. No fellow knows; see prior F. and S. for fullest description of Dittmar powder.

NEWFOUNDLAND, New York.—Have a Newfoundland dog about 14 months old, whose eyes are weak and suffer a continual watery discharge. From his 6th month to about the 10th the left eye was discharging considerable matter, and as I did not get possession of the dog until he was 7 mos. old, do not know the reason. He has a soft, long and healthy coat, a good appetite, and buoyant spirits. What shall I do to effect a cure? Ans. Feed no meat for a time, wash the eyes with warm water, and then with a lotion containing 2 grs. of alum to 1 oz. water.

FAIR SHOT, Chicago.—1. Is four drachms Dittmar powder the right charge for a 10 gauge gun weighing nine pounds? 2. Does it (Dittmar) require special care in manipulating? 3. Is it more dangerous carrying brass shells loaded with that than with black powder? 4. In shooting buckshot ought they to chamber in the shell, or the muzzle of the gun? 5. How does the —— gun rank? Ans. 1. Four drachms. 2. No special care. The Dittmar should be treated like gunpowder as to ramming; the mistake is to overcompress it. 3. No. 4. Chamber in the muzzle by all means. 5. Very good.

F. H. L., Lynn.—Give me full description of the target used by the German shooting association. Ans. A series of concentric rings starting from a bull's eye 1½ diameter, with 7 rings ¾ of an inch wide all in the black. Then come 8 other rings ¾ inch all on the white; sixteen rings in all. The centre bull's eye counts 25. Shots in each ring within ¾ of an inch from the 25 bull's eye being counted one less. Outside of the tenth ring other rings are made ¾ of an inch apart, so that 1 is the lowest count. The printed target in use has only the counts from 25 to 16. We will give a cut of it shortly.

F. B. B., Brooklyn.—1. Do you consider a —— gun, laminated steel barrels, double locks, side or snap action, a good arm, safe and serviceable? 2. Is it a fully established fact that a choke-bore will kill game from ten to fifteen yards further than a gun of the ordinary bore of the same make and calibre, the charges and other conditions being the same? Ans. Do not know the maker. Would be doubtful about it, as the name used recalls, or imitates, that of a real good maker. 2. Assumed rather than fully established. The best proof, however, that the choke-bore is the gun of the future is that without an exception all the great gun builders are making them.

G. F. G., Amesbury, Mass.—1. Which is the better powder for an M. or B. L. gun, coarse or fine, pattern and penetration considered? 2. Is the Oriental FFG a quick powder? 3. What would be its effects as to pattern? 4. What grade of Hazard's is best for glass balls with muzzle-loader? 5. Do all choke-bores lead? Use FFG. 6. Do you publish glass ball shooting? Ans. 1. We prefer coarse to fine powder. Think that the best patterns are made with coarse—slow—powder, and better penetration with finer—quicker—powder. 2. Rather quick. Use FG. 3. Good pattern, not much penetration. 4. Hazard's Electric. 5. Ought not to lead so as to be annoying. 6. We do.

BOXING GLOVES.—Can you tell me why pugilists spit into their hands as a necessary part of the programme? Ans. This is one of those insignificant customs, which are oftentimes the survival of very curious, as well as very ancient, beliefs. Lecky, in his "History of European Morals," says that among the Romans the human saliva was believed to possess many mysterious properties; and he quotes Pliny: "If a pugilist, having struck his adversary, spits into his own hand, the pain he caused instantly ceases. If he spits into his hand before striking, the blow is more severe." You will find this subject very fully discussed in Mr. E. B. Tylor's "Primitive Culture."

J. V. C., President Louisville Gun Club, Louisville, Ky.—The question of handicapping 10 bore guns against 12 is now up before our club. Of course, there is a great diversity of opinion on the subject. It is contended that 10 bore guns should be put back 5 yds. on single, 3 yds. on double birds. This I think excessive. I have both sizes, and am disinterested. Will you give me your ideas? Ans. No American rules govern this case. But we should adopt the English ones. In England one yard only is given for each difference in calibre. For instance, a 10 and a 16 bore shoot; the 16 has 6 yds. given him. The 10, then, in your case, is handicapped 2 yds. Five yards we would deem excessive.

SUBSCRIBER, Amanda, Ohio.—1. In loading paper shells how much is left above shot wad to be turned over? 2. What number of Orange Lightning is nearest in size to Curtis & Harvey's Diamond Grain No 6? 3. Is the action of the —— gun considered strong and reliable, and is the gun a good shooter? 4. Do —— make only two sizes and weights, and are their guns bored to shoot open, or close, as ordered. Is it a good gun, price considered? Ans. 1. About ⅛ of an inch. 2. Very closely resemble one another. 3. Is considered excellent, especially the last model. 4. Yes. The last model made is choked; think they have both kinds—cylinder and choked—very good arm.

ENQUIRER, Morrisania.—The substance of your inquiries has been so lucidly presented in the *Journal of Commerce*, that we copy from that paper as follows: "Congress never did in express terms declare the bonds payable in gold. The greenbacks are payable in coin. Silver was a legal tender for all debts up to April 1, 1853; then the fractional silver coin was reduced 7 per cent., and was made legal tender for only five dollars. Every one for twenty years has understood 'payable in coin,' when either the interest or principal of the public debt were referred to, as payable in gold for all principal sums, and in silver only as to the fractional parts of the dollar. Silver is still a legal tender in many countries."

JAPHET, Malvern, Mass.—Excuse my ignorance, but please inform me what a "cooley" is, mentioned in one of your editorial rambles in Minnesota? I judge it to be a small valley or hollow between hills. Ans. Properly *coulee*, a ravine, distinguished from other hollows by their being caused by running water, chiefly from melting snows or heavy spring rains. They are filled with greener vegetation, shrubbery and ranker grass than the adjacent prairies. Deer and other animals resort to them for food, rest, moisture and shade. The word *coulee* will be found in the vernacular from Michigan to the Pacific; but it is not known, or used, south of Missouri, to any extent. In the southwest it is replaced by the synonym "green," or drain.

L., Lilesville, N. C.—1. My setter slut, eight years old, in good health and condition, has twice recently, though not in succession, miscarried when from five to seven weeks "gone." Can you suggest a remedy? She is too fine for her name and blood to pass away. 2. Who lives or shoots at "The Cedar's"—Frank Forester's old home—now? 3. Is the blue wing teal strictly a migratory duck? 4. What is the technical name for our Carolina "summer duck" which stays here all the time? Ans. 1. Keep the bitch in good order, not too fat; give her gentle exercise. Sometimes, however, miscarriage becomes a constitutional vice and no remedy can be suggested. 2. Place was burned and never rebuilt. 3. The blue wing teal is decidedly a migrant and this instinct is exceptionally strong. 4. *Aix sponsa.*

A. W. S., Harrisburg.—Some two months ago, during hunting, my dog slipped, and fell on his head. In two weeks his head commenced swelling. A physician examined the dog, and decided that the blow was serious. The dog having been lanced under the right eye, there was a large discharge of matter. After six week's the left eye showed swelling, and seems to be afflicted like the right eye. This has been cut, and is discharging. Was the treatment proper? What ought I to do? Ans. We suppose the doctor diagnosed injury of the periosteum, and if correct, there is likely to follow disease of the bone. The treatment would seem to be correct enough, provided the incisions were sufficiently free to allow complete escape of the matter, which should not be allowed to accumulate at any point. The dog's strength should be kept up by giving quinine, if necessary, and he should be kept at rest where he can have pure air and sunlight.

W. C. S.—In the remarkably good chapter on fly making in Hallock's "Gazetteer," there are one or two terms which, when taken in reference to color, I do not understand. May I then ask you what are the meanings, in this connection, of hyaline and subhyaline; luteous, I presume, being some kind of clay color? Again, would you kindly describe the best knot for joining gut in casting lines, and, also, for making a loop? I find, for the latter, that a bowline knot, although the firmest possible, breaks the gut. Ans. 1. Hyaline and subhyaline are used to designate two different shades of that indefinite color which belongs to the wings of the common house fly. Nature imitates them in the slaty-colored feathers of various birds. 2. Luteous is dark orange-yellow. 3. The water-knot is the best for joining gut lengths, where snoods are to be inserted. This knot and the loop can hardly be described without a diagram. To prevent the bowline from breaking, take a second turn with the end. The difference in strength is as 8 to 3.

A CORRECTION.—In our last issue, in answering E. G. B., by the omission of an 0, a 30-in. target was described as a 3-in. one. Trusting that the world will still roll on as usual, we cry "*Mea culpa.*"

ALLIGATOR BOOTS AND SHOES.—The Messrs. H. & A. Mahrenholz have made a specialty of manufacturing boots and shoes of alligator skin. People who even put their trust in leather are skeptical sometimes as to the advantages of alligator. It is thought that that portion of the skin which lies between the scales is deficient in strength and tenacity. There never was a greater mistake than this. Subjected to a rending strain at the centennial exhibition, alligator skins, when properly tanned, were found to stand an enormous amount of tension. Not only is an alligator skin boot and shoe tough, but it is actually water-proof. As prepared by the Messrs. Mahrenholz, this particular leather is as soft and elastic as calf skin. When sportsmen have to tramp on wet and boggy ground, there is no shooting boot or shoe equal to those manufactured by the Messrs. Mahrenholz out of alligator skins. The peculiar trade mark of the house has, no doubt, attracted the attention of our readers. It is a 'gator enjoying a diminutive colored brother. The motto should be, "come out of the wet," as applied by the 'gator to the little nigger. Allegorically it means that, with a pair of alligator boots or shoes, the wearer always can "come out of the wet."

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, FEBRUARY 14, 1878.

To Correspondents.

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We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

VOYAGING ON THE UPPER MISSOURI.—We must not delay the correction of an ambiguity which appeared in our issue of Feb. 7 under this title. Mr. Ingersoll, speaking of the Gros Ventre Indians seen at Camp Cooke, or, as it is more generally called, Fort Claggett, at the mouth of the Judith River, says: "The Gros Ventres are a band of the Hidatsa or Minnataree Indians, etc." This is, of course, quite correct, but it is misleading, for this reason. There are two bands or tribes of Indians in the Missouri region called Gros Ventres—the Gros Ventres of the Prairie, who live high up on the river, and some of whom are always loitering about Claggett's, and the Gros Ventres of the Village, who live with the Mandans and Rees at Fort Berthold. The latter are a branch of the Hidatsas, while the former are really a band of Arrapahoes, who have strayed far to the North and have made peace with their hereditary enemies, the Crows. Of late years these Gros Ventres have wanted to move South and join their tribe again, but the mountain Crows will not allow them to go. The Gros Ventres of the Village have never been up the river nearly so far as the mouth of the Judith.

SOLITUDE HATH CHARMS.—We spoke incidentally the other day of the seclusion so often indispensable to the scientist and student of natural history. There is at least one man in America who appreciates such retirement, and it is certainly not his fault if he fails to have it. According to the New York *World*, Dr. Coues, the naturalist of the Hayden Survey, does not seem to care for company:

On the door of his office at Washington is the inscription, "Notice to Visitors: Blessings brighten as they take their flight," and the walls are hung with such mottoes as these: "Exeunt Omnes." "He who robs me of my time confers the charm of his personal presence at the expense of science." "Freedom from interruption confers a peace of mind that religion cannot give." "Brevity is the soul of wit in visiting." "The simple fact of a door has a certain suggestiveness." Indeed the collection is so unique that people will often stay over a train to visit this lover of solitude.

—The "*Dolor*" is what the merchants call it now.

—We were honored last Friday by a call from George Dawson, Esq., the veteran editor of the Albany *Journal*, who dropped in to talk for a moment of the "Pleasures of Angling."

KIT CARSON.—In a recent issue we had occasion to inform a correspondent that Kit Carson did not serve in the war of the Rebellion—that is, he was not in the Confederate service. An old comrade at Washington, D. C., has very kindly recalled to mind the following facts of his war history. He says:

"Old Kit, together with St. Vrain (an old frontiersman), raised a Union cavalry regiment (First New Mexico), in 1861, to which he succeeded St. Vrain as colonel in that year, and for gallant and meritorious services at Valverde and other points, he was brevetted Brigadier-General by President Lincoln, in March, 1865. Brave, modest old Kit Carson, whose only pride was in being an American, and, in his own language, 'one of the meanest of the lot,' served his country too faithfully and well to have his services ignored or forgotten by the people he so loved to represent."

Alas! it is too true that the deeds of our heroes are soon forgotten. The survivors of the past generation, however, who were contemporary with Carson and St. Vrain, will long cherish their memory, not only for their services in the trying period of the war, but in the *ante bellum* days of those hardy mountaineers and prairie travelers who were the pioneers of States which have since become magnificent.

[FROM OUR SPECIAL TEXAS CORRESPONDENT.]

RANCHE LANDS IN TEXAS.

SECOND LETTER.

FORT GRIFFIN, Texas, Sept. 26, 1877.

Civilization, as a rule, comes as certainly from the East and advances Westward, as does conquest come from the North and progress Southward. The gradually abandoned posts of the United States troops in western Texas mark line behind line of lovely territory where the stars and stripes had, in the interests of civilization, to be heralded by the bayonet and sword; but the sword has now been transformed into the plowshare for at least 150 miles west of Fort Worth, and even the most advanced west Texan outpost—Fort Griffin, from which I write—is at least 100 miles too far east of where the furthest outpost ought to be. In expressing this opinion, however, I rather anticipate my personal experience of the outer frontier and its Comanche Indian troubles. I shall in time come to them, but for the present pursue my sketch of the proposed extension of the Texas and Pacific line, with which subject the Senatorial halls of Washington will, doubtless, ere long be ringing, and on which matter mighty and vigorous blows of logic will be dealt out, received and returned.

In Texas, and especially in Northern Texas of course, to speak of the possible failure of the Texas-Pacific bill is to write or confess yourself an ass; and indeed, though I do not carry the lone star on my banner, I sincerely wish the Texas-Pacific God-speed—first, in the interests of the nation and the world; secondly, for the sake of Texas and the great and useful cause of emigration; for it is perfectly wonderful how little makes the settler comfortable and happy in Texas. Meat is cheap and abundant; of game there is decidedly more in the Lone Star State than in the rest of the Union put together. Once away from the Rio Grande frontier—that source of so much disquiet and discomfort—you find the counties well organized, the laws well administered, and life and property safe and protected. The wonderful collection of ruffians, robbers and scum of the earth, that the Eastern Hemisphere and, in a whisper be it said, not a few of the Eastern States contributed to Texas and then accused her of harboring, never have found things pleasant here, and find them more disagreeable every day. The courts from Fort Worth—north, south and east—have filled the State penitentiary pretty quickly, and turned the balance of kleptomaniacs and oppressors of the feeble and weak, of which they had judicially taken cognizance, over to Col. T. W. Pierce, to perfect his already almost perfect road—the Galveston, Harrisburg and San Antonio.

Then out West, vigilance committees give short shrift to the evil doer; in fact, the same spirit that has made Kansas one of the very best governed States in the Union is at work in Texas. Capital, therefore, and honest labor need not be afraid to travel westward with the Texas-Pacific, nor, indeed, to travel well ahead of it.

Well, but about the land? Jump with me into a little two-mule coach at Weatherford: the gentleman who professionally indulges in games of chance is on the box with the driver, and Col. Strang, with me, in *propria persona*, and the dealer in fancy, behind. We drive through some rough ground, and down a steep arroya, over, oh! such a bad road; then, if you are fond of conjuring up tricks, watch us——

The Colonel and I sit dignifiedly bolt upright—crack, bang, over a rock. Tableau—the Colonel's nose is buried deep in the rear pocket of the gentleman who indulges in games of chance. Crack, bang, over another rock! The Colonel is shot back into position No. 1, while I advance upon him, chin foremost, with lightning-like rapidity, squashing him, and more especially his hat, into a corner. Then with one masterly crash forward, we both lose our seats, and temporarily repose on the flooring of the coach; as in Pope's Homer,

"Thus fell two heroes; one the pride of Thrace
And one the leader of an Epeian race."

This is Homer's way of putting it, but probably my rendering would be more descriptive. It runs—

Thus fell two tourists; one was a hard case,
He gave a yell, for he had bruised his face.

But even rocky ravines come to an end, and this one eventually brought us up on a splendid plateau, on the edges of which, next the water, cultivation, both of corn and cotton, was highly successful. Want of water is certainly the chief drawback to the majority of land out here, and, except along the banks of the few streams that constantly flow, agriculture is a rather sickly experiment. In this county—Parker—and its next adjoining one—Palo Pinto—the valley of the splendid Brazos River (nearly all of which is taken up, of course, however, only in alternate sections by the Texas-Pacific land grant) affords any number of miles of magnificent farming lands, and those who have gone still farther west than the Brazos valley, prospecting for agricultural sites, have returned thither. The few who have tried raising crops near Griffin, have achieved only most lamentable failures. Sheep, cattle and goats are the members of the dumb creation that, as the Texas and Pacific goes west, are destined to supplant the wide, splendid ranges now the all but last home of the hardy buffalo.

Near the borders of Parker County we drive up and down rather steep stony hills, very fairly timbered with oak and pecan. The contour of the country is here handsome in the extreme; and the valley soil is sandy red loam. Sleek, quiet, happy-looking cows grazed over long, open glades, which ran everywhere between belts of timber, until at length, they all run into an immense, rolling, well-grassed prairie, with only an occasional clump of timber on it. One or two more valley vistas present themselves to our view as we top sundry unnamed hills, and then we reach Big Sandy Creek, on which is the ranche of Mr. Newberry. This Big Sandy, I presume, is a constantly running stream, though it is an insignificant looking one; but here corn and cotton were both excellent, and Mr. Newberry's dear little children looked as healthy and as bright as though they had lived all their lives in the Garden of Eden, or in some happy valley in bracing, invigorating Colorado: a healthy peach orchard proved the district to be suitable for fruit growing.

Two other Newberrys—all brothers—had ranches farther on; and then, after a long forest drive, Mr. Welles' ranche is reached, and a camp meeting shed, primitive and rustically rough in the extreme, trees felled and squared on the upper side for seats. The pillars of this humble temple were rough poles, and the roof leafy boughs arranged crosswise. Another long forest drive, and then we strike the Mesquite tree for the first time. The pod of this tree is simply invaluable for cattle, sheep, or horses, in the winter, and where it exists in quantity, animals cannot, at any rate, starve. The Mesquite grass, however, we have, up to this, very sparingly struck, and, until the Brazos is crossed, it does not appear in any quantity; but, fortunately, across the Brazos is just where this valuable grass is most needed, for it gets on so well and vigorously with a minimum of moisture, and constitutes thus rich cattle pastures, which without its presence would be barren wastes.

About Rock Creek a great deal of land is fenced in, and fairly well cultivated. Over Rock Creek rises quite a mountain, densely timbered. The creek, the hill and the appearance of the timber, would here strongly remind any one who has traveled in England of the ground above Taplow on the Thames.

We had come fifteen miles in four hours, which is the average pace put on by stage coaches out here, and at a very nice little house we stopped for dinner. The soil here is as red as red can be, and as it approaches the Brazos, gets immensely rich. First up a steep, timbered hill, and then down its opposite side, brings us in this very fine river, which *was up*. The turbid vermilion water-level, with high banks, swept with mighty force onward. It was about 500 yards wide, and the strain on the ferryboat rope was intensely severe, as that unroofed Noah's ark bore the coach, together with a very heavy wagon, across to the westward shore. Had that well-worn rope given way, there would have been to a certainty a vacant Brevet-Colonelcy in the army, a vacant special correspondentship in the FOREST AND STREAM staff, and an idle monte table in Fort Griffin; but the rope did not break, so the army has still its full complement of Brevet-Colonels, the FOREST AND STREAM'S most blundering correspondent still runs his head against Mexican and other all but unsolvable problems out here, and the monte table at Griffin runs full swing at a profit. S. NUGENT TOWNSEND.

We append the following letter from a correspondent in Montana, bearing upon the subject of stock grazing in that Territory, which will prove most interesting to our readers:

Montana is well named, for at every point as far as the eye can reach, are mountains, wood and water in abundance everywhere, and for grazing and pasturage it ranks far ahead of any country in the world (so learned men say). Cattle, sheep and horses are the stock raised, and the rankest scrub in Montana ranks A No. 1 in a Chicago market. Buffalo and bunch-grass grow on the mountains, and what is called "blue joint" in the valleys and basins below. There is very little, if any, hay cut, and what is cut is fed to the horses they ride, or stock horses, as they are called; but even those, if they are not used much are sometimes put in pasture, or even picketed out all winter. Horses, as a general thing, can't be made to eat grain as long as there is a spear of grass or hay in sight. There is a man on the next ranche that has a valuable young stallion. He has been trying for the last week to make him eat oats, but so far has not succeeded in making him touch them; and it is not the fault of the grain, for Montana, as a grain growing country, can't be beaten. This will prove it: I can make bread that will stand inspection with any bread I ever saw, not excepting my mother's, and that, too, with nothing but sour dough and soda.

There is little or no rain from the last of June till the following spring, and the grass has no chance of losing its nutriment. It comes on the ground, and as there is very little snow, stock keep rolling fat all winter. Cattle have been known to come out in the spring actually too fat for the market. A rancheman drove a lot of cattle last December to a corral, a distance of over 500 miles, and had no chance to feed only at night, and he averaged twenty miles a day. When he arrived they ranked as "not beef" cattle, and he received the very highest price paid.

If I had time and space, I could relate a thousand similar instances. As I said before, there is very little snow, and what little we have will come one day and go the next. Do not judge from this that we are troubled with sloppy weather, far from it. The snow disappears from before what is called a Chenook wind. It is a sea-breeze and very warm. It always follows a storm, and if we were blessed with a few orange trees, it would make one think they were in Florida spending the winter. CHARLES KIMBALL.

GAME PROTECTION.

CONNECTICUT.—A Hartford correspondent writes of the working of the new game law in that State:

The number of woodcock found in October and November was greater than before for ten years. Co-operation of adjacent States will restore the abundance of game found in former years. Quail were scarce in the seaboard, but abundant as usual in the interior; probably because the farmers in the latter localities took pains to feed them. The law allows landholders to trap quail on their own property, and where snarers took advantage of this privilege the diminution of birds was very noticeable. The Hartford Game Club accomplished much by promptly securing the conviction of lawbreakers in the early part of the season. T. S. S.

GAME PROTECTION WANTED IN DANBURY, CONN.—A correspondent informs us that Danbury is badly in want of an association for the protection of game. Quail have been recently shot and sold in the vicinity of Danbury. The best method then, as our correspondent proposes, is to found a sportman's club. In this way, not only all the pleasure of the field would be more thoroughly enjoyed, but by means of a regular constituted organization, those trespassing on the game laws can be prosecuted and punished.

THE ADIRONDACK CLUB.—The Adirondack Fishing and Hunting Club have the control of over 95,000 acres of land and water in the Adirondack tract, in Essex county. A fine fish-breeding house has been built, and Mr. Seth Green, Superintendent of the State Fisheries, has stocked it with 50,000 eggs of the lake and brook trout. Mr. C. G. Atkins, Superintendent of Fisheries of Maine, has sent 25,000 eggs of the Maine land-locked salmon, and from Samuel Wilmot, Commissioner of Fisheries of New Castle, Ontario, 50,000 eggs of the famous Lake Ontario land-locked salmon have been received. These fine fish are not generally known in this State, and a most desirable addition to the native Adirondack game fish, and will be placed in Lake Henderson, one of the main

sources of the Hudson. Arrangements have been made with Mr. Green to furnish the club with one of his best men to take charge of and superintend their fish-breeding establishment, so as to insure its success. The club have purchased, in Canada, and forwarded to their preserve, a bull and cow moose, and have contracted for more. Within the next five years the club entertains the hope that they will be enabled to restock this favorite resort with fish and game. The Adirondack Club is incorporated under the Game laws of the State. Its officers are: J. R. Thompson, Pres.; Thos. J. Hall, Sec.; W. E. Pearson, Treas.

NEW YORK ASSOCIATION FOR THE PROTECTION OF GAME.—The monthly meeting was held on Monday, the 11th. The chair was occupied by Mr. D. H. Lawrence. Mr. Thomas N. Cuthbert, Secretary, informed the meeting of the interest taken in other States in the topics treated by the association. Recalling the history of game protection, the Secretary states that the first game laws were only passed in 1848. Mr. Charles E. Whitehead, counsel to the association, stated that the recent action of the association in not enforcing the law in relation to the sale of venison after January 1, had resulted in the wholesale vending of the forbidden game by small dealers, who said they had sold it on the assurance of the wholesale dealers that the association would not deal harshly with them. The action of the association had demoralized the dealers, and he hoped no such leniency would be shown them next season. He had commenced some fifteen suits for selling venison out of season, and had brought three to trial, gaining two. Dr. A. R. Strachan was duly elected a member, and the name of Dr. G. Winston, President of the Mutual Life Insurance Company, was proposed and laid over until the next meeting, under the rule. Ex-Congressman Clinton L. Merriam, of Lewis county, N. Y., gave information in relation to the wholesale destruction of deer in the Adirondacks. He mentioned one case in which three young men had gone up there, hired five guides, secured as many hounds, and mercilessly slaughtered the deer. They were, of course, arrested, but compromised the matter by paying a slight fine. Such acts worked incalculable mischief, and he hoped the association would take some action with the view of securing legislative aid. Senator Alfred Wagstaff assured the gentlemen that Senator Turner was about to introduce a bill authorizing the Governor to appoint State Game Constables, who would see that the game laws were properly enforced all through the State. It was determined to combine with the West for the purpose of stopping the shipment of game to New York out of season.

NEW JERSEY STATE CONVENTION.—A convention of delegates from Cape May, Cumberland, Atlantic, Burlington, Ocean, Monmouth, Hudson, Bergen and Middlesex counties, one hundred members in all, met at Trenton, Feb. 5, to discuss the present system of net-fishing. A committee having been appointed, framed a bill prohibiting all seine fishing from June 1 to Sept. 15.

—The Sportsman's Club of Cecil County (Md.) have sent the Legislature the draft of a law for the protection of fish in the Elk River.

LOUISIANA—*Opelousas, Feb.* 10.—The season for deer closed last week. This game is reported plentiful in the eastern part of the parish. A change in the law, making the season open Nov. 1, instead of Aug. 1, as now, would prove beneficial.

—Remonstrances to the proposed five years' prohibition law in regard to quail shooting are pouring into the Ohio Legislature from all over the State, and its passage is considered pretty effectually defeated.

OHIO.—The Jefferson Game Protective Association was organized at Jefferson, Feb. 4, with the following officers: Pres., Geo. W. Beckwith; Vice-Pres., J. L. Brown; Treas., L. H. Means; Sec., W. D. Honells, Jr.

MICHIGAN—*Howell, Feb.*—A club has just been organized here to be known as the Howell Game Protection and Shooting Club. The following officers were elected: President, H. B. Blackman; Vice-president, L. S. Montague; Secretary, C. G. Jewett; Treasurer, E. H. Rubert.

MICHIGAN STATE SPORTSMAN'S ASSOCIATION.—The State Sportsman's Association of Michigan convened at Battle Creek Feb. 5, with Pres. E. S. Holmes in the chair. Representatives were present from the St. Clair, Detroit, Bay County, Kent County, Howell, Saginaw, Hastings and Battle Creek Associations. Among the papers read was one by E. R. Miller, Esq., of the Fish Commission, on the prohibition of lake trout and whitefish seining during the spawning season, and for a brief time thereafter. The entire cessation of all netting of whitefish when running in large schools into shoal water to deposit spawn, and of trout while seeking the reefs for spawning, was urged as the only means of restoring the fishing industry of Michigan to its position among the other commercial interests of the State. The paper prepared by Mr. John Davidson, of Monroe, advocated the strict protection of all ducks that breed in the State, viz.: Mallard, wood-duck, and teal, between the 1st day of February and the 1st of September. Following the discussion of this topic came an able presentation by Senator J. L. Burleigh, of Ann Arbor, of the need of more stringent game protective enactments. Prof. H. B. Roney, of East Saginaw, read an able essay on "The Importance of More Effective Legislation for the Protection of Game and Fish." The difficulty of securing proper enactments, the writer thought, was the lack of a healthy public sentiment and laxity of public opinion on the subject. Statistics show that of the enormous amount of venison shipped from fifty-four stations in the northern part of the peninsula, during two months of the present winter, about four-fifths went to markets in other States. The subject elicited a lively discussion among the members, one subject of warm dispute being the prohibition of still hunting deer, and legalizing only hounding. Other papers were on the handling of a gun, by Mr. T. S. White of Grand Haven; and one on Michigan grayling, by Mr. E Harbeck, of Battle Creek.

The next meeting will be held at Lansing the third Tuesday of January, 1879. The officers for the ensuing year are: Pres., Dr. E. C. Holmes, Grand Rapids, re-elected; Sec., Dr. J. C. Parker, Grand Rapids; Treas., N. A. Osgood, Battle Creek.

FISH AND GAME PROTECTION CLUB OF THE PROVINCE OF QUEBEC.—Our thanks are due to the club for their polite invitation to dine with them on the 7th of February. If only time and space were annihilable we might undoubtedly have dined in Quebec with our many Canadian friends. We look, then, with intense longing at the savory bill of fare, which, starting with bare soup, runs all through the culinary gamut of game. Some of the toasts were kindly thought of and most appropriate. We, though absent, feel sure that the toast, "Our Sister Societies in the United States," was well received and heartily responded to. Our well-known contributor, R. H. Kilby, Esq., is the President, and A. Shewan, Esq., Secretary of the Fish and Game Club.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship

And three team medals, which will be awarded to the teams making the first, second and third best scores. Other prizes will be offered also, to take place at Conlin's shooting gallery. Open to teams from any organized rifle club.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Off-hand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. Entrance Fee—Five dollars to be paid at the office of the FOREST AND STREAM AND ROD AND GUN, No. 111 Fulton street, N. Y. All teams desiring to compete must be entered ten days before the time the match is announced to take place. The match to be governed by the rules of the N. R. A. relating to teams. Captains of the competing teams shall meet one week before the commencement of the match, make all preliminary arrangements, choose referees, and decide in what order their respective teams shall shoot. The referees shall elect an umpire, whose decision in all cases shall be final.

The match will commence on Monday, March 11.

We beg to acknowledge from Messrs. Remington & Sons the receipt of a nickel-plated, pearl-handled revolver, as one of the prizes for the FOREST AND STREAM AND ROD AND GUN tournament.

"NICK" ON THE TROPHY CONDITIONS.

FROM an association numbering among its managing members so large a proportion of practicing lawyers, the National Rifle Association has its laws and regulations in a most remarkably inchoate state. Among the smaller clubs throughout the country it is no uncommon thing to adopt as their standard the rules of this prominent organization, and it becomes the more important, therefore, that these rules for the conduct of rifle shooting should be drawn with all the fullness and perspicuity possible. The association could well afford to drop all the wrangles into which its opponents and ill-advised friends would draw it on the question of representative nationality, and make itself a model of its kind, to which growing clubs could look up to with the assurance that a sound, progressive example was set before them. But, instead, the records of the association show a system of tinkering, patching, altering and amending, practiced on the unfortunate by-laws and regulations, until they teach and direct almost everything in their assertions, and practically amount almost to nothing in their many contradictions. Of course it has often occurred that the legal rifle managers enjoy interesting matches of interpretation, and the board meetings were often the scenes of amusing mimic battles of gab between the hair splitters. The climax came when one of the members of the board discovered, or thought he had, that the association had been living for five years or more a lawless life, in that the by-laws had never been legally adopted. Of course an issue was raised, the lawyers wrangled, and once again the directors performed each his part in a grand legal circus. A compromise was reached, and now the association rests on the belief that it has a set of by-laws, at least until another legal light chases away the notion.

In legislation affecting the association there has been the same halting mode of procedure. Several acts have been passed, each tacking on some feature which a little more care and circumspection in the drawing of the original bill would have included. There was, of course, much that was fresh and untried in the work of drawing up laws touching rifle associations. No models existed on which to frame their requirements, and to a certain extent it was necessary to feel the way; but allowing for all this, there has been a great amount of blundering, and a liberal stumbling upon good luck rather than its intelligent pursuit.

No small share of the apparent success thus far of the N. R. A. has been due to the support of the general public and the earnest endeavors which the secular and non-professional press has given to the topic of well-directed rifle practice. There have been hickerings which have at times found their way into the columns of the sporting papers, but the great world without, who have no axes to grind, and are therefore not wroth when the grindstone fails to turn, are not dissatisfied with the progress thus far made; but the fact remains that the path has been a devious one, according to methods more blindly lucky than discreetly shrewd and business-like, and to-day it would be an economical use of time and effort if some one should take upon himself the codification of the mass of by-laws, rules, regulations, precepts and directions already passed by the directors of the N. R. A.

The latest case where this want of intelligent drawing up of rules and conditions has come to the surface, is in the specifications governing the contests for the Centennial trophy. The loose wording, fixing the qualifications of entrants as respects nationality, has already been so thoroughly ventilated in the British team, that I will spare anything but their mention. But now arises the question of the control of the matches, and at the meeting of the team a few days since the topic was mooted, and sufficient opinion expressed to show that very diverse opinions are entertained on radical points. The conditions say, positively, that the winning team, or a majority of it, shall prescribe time and place for the next annual contest; beyond this the conditions refer solely to the match proper. There is no mention made as to the manner of selecting the representative teams. No line or method of securing the best shots fixed, and the whole matter, in fact, left open for a vast amount of future discussion. In the two contests thus far had, the National Rifle Association has assumed the control without any special protest or objection. The results certainly could not have been more brilliant under any management, and though in equity the National Rifle Association should have extra privileges of supervision in any further contests or selections as a matter of absolute right and law, the conditions give them no more control than the veriest backwoods target company. In fact there is no particular mode of selection fixed. The match was to be carried on pretty much as the practice of the N. G. S. N. Y., with a constant hope for the best. The riflemen of the land are supposed to draw themselves together into a sort of "a fortuitous concourse of atoms," and some how or other create a representative team—a theory of evolution without the presiding intelligence. The present team think it should be left each year with the holders, but there are objections to this opportunity for self-advancement. In England the difficulty was easily managed in a dictatorial manner "by the direction of the Council," Scotland picked and sorted so carefully as to leave her best men at home, while Ireland, having little room for selection, was soon satisfied. Canada, we need hardly recall, sent a club team, which might or might not have been representative.

But now the practical question arises: If Gen. Dakin's team fix Chicago as the place, will the National Rifle Association enter upon the work of fixing conditions? And, if not, who will? Will the Dearborn Rifle Club assume the charge or the Northwestern Rifle Association? Perhaps we may have no match this year, or it may be that Creedmoor will be the battle-ground again, and then the control would naturally go to the N. R. A. Altogether there is room in the loosely drawn conditions of the Centennial trophy for a host of perplexing complications, and it may be that the trophy will ultimately fall a victim to these *lapsa pennæ*. NICK.

MATCH FOR THE TROPHY.

The following notice has been sent by the Secretary of the N. R. A. of America to the various rifle associations of the world:

NEW YORK, Feb. 8, 1878.

Sir—I have the honor to invite your attention to the following resolution unanimously approved by the Board of Directors of the National Rifle Association of America, held Tuesday, Feb. 5, 1878, viz.:

"*Resolved*, That the secretary be directed to notify the riflemen of England, Ireland, Scotland, France, Germany, Australia, the Dominion of Canada, the South American States, and all other countries having rifle associations or clubs, that the next match for the Centennial trophy will take place in this country in September next, open to the riflemen of all countries on the same terms as the former competitions, provided that notice be received by this association on or before June 1, 1878, from the riflemen of any country or any foreign rifle association that a team will be sent to represent them in such match. That in case no such notice be received by that date or match take place, that such match will be postponed to the year 1879, the trophy to remain in the meantime in the possession of the last American team, as at present, and to be inscribed as having been won by America in 1878."

A printed copy of the conditions of the match above referred to is furnished herewith, and I have great pleasure in expressing the earnest desire of this association that your country may be represented in the third competition for the American Centennial Trophy.

I am, sir, with great respect, your very obedient servant,

GEO. S. SCHERMERHORN, Jr., Sec. N. R. A.

Copies of the foregoing sent to N. R. A., Great Britain; National Association of the Riflemen of Germany; Société Générale de Fir de Suisse, Switzerland; Ulster Rifle Association, Ireland; West of Scotland Rifle Club; National Rifle Club of Scotland; Victoria Rifle Association, Montreal; Dominion of Canada Rifle Association, Ottawa, Canada; Province of Quebec Rifle Association, Canada; Société Havraise de Fir, Havre, France; La Societe de Fir des Communes de France; Calcutta Rifle Association, India; Southern India Rifle Association, India; Cobourg Rifle Association, Canada; Prince Edward's Island Rifle Association; Ain, Rifle Club, Lima, Peru; Port Elizabeth Rifle Association, South Africa; Demerara Rifle Association, West Indies; New South Wales Rifle Association, Australia; Victorian Rifle Association, Australia; Irish Rifle Association, Ireland; Guelph Rifle Association, Canada; Victoria Rifle Club, Canada; Ontario Rifle Association, Victoria, Canada.

NATIONAL RIFLE ASSOCIATION.—At a meeting of the Board of Directors, held on Tuesday, Feb. 6, mention of which was made in our last issue, the president, Judge N. P. Stanton, announced the result of the annual meeting of the association, and reappointed the members of standing committees for the ensuing year. He recommended the equalization of the salaries of the assistant secretary and the superintendent of the range at Creedmoor, and that the Range Committee should assist in the work of making the headquarters a centre of information, etc. Secretary Schermerhorn announced that the report of the association was nearly ready for printing, and 1,000 copies would be distributed at an early date. The report of Treasurer Wylie showed a balance on hand of $50.87. Gen. John B. Woodward reported that the committee had drafted a skeleton form of a proposed programme, which was submitted to the Executive Committee for revision and action. The plan embraced was similar to the one which governs the matches of the National Rifle Association of Great Britian. The number of shots per man in all matches was placed at seven, and the number of men in each squad at four. In the majority of matches subscription prizes would be allowed. The spring meeting will open on Thursday, May 23, with the "Leech Cup," which will be contested on the old range, while the targets on the new range will be allotted to matches for "volley firing" and "skirmishers." On the second day ten matches will be contested at 300 yards, five at 800 yards, three at 900, and three at 1,000 yards. On the third day thirteen matches will be contested at 200 yards, seven at 500 yards, and 6 at 600 yards. In conclusion, Gen. Woodward stated that the profits of the spring meeting last year were only $85, while under the proposed plan he thought some money might be realized by which many needed improve-

ments could be made. It was decided to have copies of the new regulations printed and placed in the hands of directors for their examination, upon which action will be taken at a special meeting. The editor of the *National Guardsman* has offered a long-range rifle, valued at $125. Mr. J. W. Frazier would give a cash prize of $250 in gold, to be shot for upon conditions to be arranged by the executive officer at the spring prize meeting at Creedmoor. Gen. Shaler offered resolutions calling for a convention of the officers and members of the various rifle clubs throughout the country to meet in this city or at Creedmoor during the spring prize meeting. The secretary was directed to notify the riflemen of all countries that the next competition for the "Centennial trophy" will take place in the month of September next, and in case no reply is received from any team by June 1 next, the contest will go over until 1879, "scoring a walk-over" for the American team. Thomas G. Alvord was elected an honorary director of the association. On motion, the treasurer was instructed to secure a loan of $2,000 for the payment of the floating debt. On motion of Major Fulton it was decided that hereafter no match should be shot at Creedmoor unless 10 entries had been secured. William Richardson and Orlando L. Stewart were elected life members.

POSSIBLE INTERNATIONAL MATCH IN PARIS.—On the 9th of this month a dispatch was received in New York, purporting to come from the Directors of the Paris Exhibition, announcing that a rifle match was to be held during the Exposition for the championship of the world, shooting to be at 800, 900 and 1,000 yards, open to all teams.

In a letter from Paris from the correspondent of the New York *Times*, dated Jan. 24, mention is made that certain difficulties in the way of foreign riflemen coming with their arms into France had been temporarily removed through the efforts of M. Waddington, the Minister of Foreign Affairs. A society of riflemen in France, called *La Societe National du Tir des Communes de France*, has been created in order to develop and encourage a taste for rifle practice. The *Times* correspondent brought forward some facts not very well known. In 1876 only 1,511 communes had organized clubs; in 1877 there were 2,492, and no less than 112,866 persons belonged to them. Vincennes, quite near Paris, would furnish every facility for a rifle range, or the plain of Sartory, at Versailles, only a few miles distant from Paris, would be equally available. We should very much favor some kind of a rifle match in Paris, and we are pretty sure our American riflemen would show well to the front. Will our friends of the *Chasse Illustree* show their accustomed energy and bring the matter into prominence.

NEW HAVEN (CONN.) RIFLE ASSOCIATION.—At Quinnipiac range, Feb. 7; no prize matches, the time being principally taken up in practice. But part of the members entered for the two gold badges, the result of which was as follows:

For All-Comers' Badge.

Dr A Reickholdt	4	4	5	4	4	4	5	4	4	4	—42
C Z Gordon	4	4	5	5	4	3	5	4	4	4	—42
J E Stetson	4	4	4	4	4	3	4	5	4	4	—40
E A Folsom	5	4	4	4	4	4	4	3	5	4	—40
W E Story	3	4	4	3	5	5	4	3	4	4	—39
F Doerschuck	2	4	4	0	3	4	3	4	5	4	—33
S R Smith	0	5	3	3	3	4	2	4	3	4	—31
A Allen	3	4	4	4	4	4	2	4	0	0	—29
F C Bronson	3	3	3	4	4	3	3	w			

For Military Badge.

	200 yards.							500 yards.							T'l
J E Stetson	4	4	4	5	3	4	5—29	3	4	3	4	5	5	5—29	—58
S R Smith	5	2	4	4	4	3	4—25	5	5	5	3	2	3	4—27	—53
F C Bronson	3	3	5	4	4	5	4—28	3	3	4	3	3	4	4—24	—52
C E Fowler	4	5	3	3	4	4	4—27	4	3	2	3	2	3	4—21	—48
E A Folsom	4	5	5	3	2	3	3—25	4	3	2	2	4	5	2—22	—47
A Allen	4	4	3	4	4	4	2—26	0	2	5	3	0	5	5—20	—46
F Doerschuck	4	4	4	3	3	3	3—24	3	3	3	5	2	3	0—19	—43

The best score out of a possible 50 was made by W. E. Story, as follows: 5 5 5 4 4 4 5 5 5 5—47.

At the same range, seven shots to a score, the following were among the best shots:

J E Stetson	5	5	4	5	4	4	4—31
C Z Gordon	5	4	5	4	5	4	3—30
R M Walker	3	4	5	4	4	4	3—27

F. M. L.

CALICO HOP.—On Feb. 26 the New York Schutzen Corps will indulge in a dance and the usual festivities at the Germania Assembly Rooms, 291 and 293 Bowery.

SPRING MEETING AT CREEDMOOR.—The regular meeting of the N. R. A. of America was held on Tuesday. In our next issue we will publish the programme in full.

CREEDMOOR, JR., *Feb.* 2.—Match for $100 in gold at 260 Broadway:

C E Blydenburgh	5	4	5	5	5	5	4	5	4	5—47
W M Farrow	5	5	5	5	5	5	4	4	5	4—47
Fred Alder	5	4	5	4	4	5	5	5	5	3—45
H W Gourley	5	4	5	4	5	5	5	5	5	2—45
D F Davids	4	5	5	5	4	4	4	4	4	5—44
Blydenburgh	5	5	5	4	4	5	4	4	4	4—44
F H Holton	5	5	5	3	4	4	5	4	5	4—44
J W Todd	5	5	4	4	4	4	4	4	4	5—43
L Bird	5	4	4	5	4	5	4	4	4	4—43
W M Farrow	5	5	4	4	4	4	5	4	5	5—43
F Jones	4	5	5	5	4	4	4	4	5	3—43
C Johnson	5	3	5	5	3	4	5	4	4	5—43
Gen F F Millen	3	4	4	4	4	5	5	5	4	4—42
G Lee	5	5	4	4	3	5	3	4	5	4—42
E H Sanford	5	4	4	4	4	4	4	4	3	5—41
D Banks	5	4	4	3	4	4	5	3	4	5—41
F Johns	5	4	5	4	5	3	5	5	4	3—41
A Steele	3	4	4	5	4	5	4	3	3	3—38

GROHMAN'S GALLERY.—Fourth weekly practice; the following scores were made (100 feet, .22-cal. rifle, off-hand, 10 shots) on Friday, Feb. 8, at Grohman's, 1,581 Third avenue:

G See	4	5	4	4	3	4	5	5	5	4—43
M Ratley	4	3	4	4	4	4	5	5	4	5—42
J R Grohman	4	3	3	4	5	5	4	5	5	5—41
P McMorrow	5	4	4	3	3	5	4	4	4	4—40

A few others made less than 40; scores omitted.

At the fifth competition, Paulding match, the following scores were made (100 yards, any rifle, off-hand, 15 shots) on Saturday, Feb. 9, at Washington Park.

J R Grohman	4	4	5	5	4	4	5	4	4	4	4	5	4	4	3—63
W W Dodge	3	4	4	4	4	4	4	4	4	3	4	4	4	3	4—58
P McMorrow	5	4	4	3	3	4	5	3	5	3	4	3	4	4	—58
O Kelz	4	4	4	4	4	3	3	4	3	4	3	4	4	4	—56
J J Reilly	0	5	5	4	5	4	3	0	5	4	4	4	4	4	—55
J L Paulding	w														

—The New Jersey State Rifle Association held their meeting last week, Col. E. H. Wright, the president, in the chair. Mr. Man, Chairman on Legislation, reported that the bill incorporating the association had passed the Assembly. The proposed range at Elizabethport was 1,500 feet wide at the south end, and 300 feet wide at the north end. Its extreme length was 3,500 feet. Another range "on the other side" of Bergen Hill, Major Fulton said, was as large as would be required, and could be obtained for the sum of $1 a year. It is accessible by seven different lines of railroads.

UTAH RIFLE ASSOCIATION.—At a meeting, held Jan. 31, at Salt Lake City, a territorial rifle association was organized. Communications from the Corinne, Springville and Beaver rifle clubs were received, all expressing their fullest sympathy with the association. G. A. Mears was elected president, J. A. Groesbeck, vice-president; J. H. Latey, treasurer, and F. J. Evans, secretary.

SHOOTING RUNNING DEER.

REPLY TO "DEER-HUNTER."

MINER'S RANCHE, San Diego County, Cal., Jan. 4, 1878.

EDITOR FOREST AND STREAM:

In your issue of Dec. 20 I notice a slight exception taken by "Deer-Hunter" to my views of the distance necessary to shoot ahead of a running deer with a rifle. For this I am obliged to him, as it gives me an opportunity to explain more fully what, for the sake of brevity, I left in my former articles too much to implication. I stated then that the distances given could not be relied upon, from the impossibility of making a measurement, and that they were giving only as hints to aid others in learning it for themselves. What at fifty yards appears to me like four feet, might appear to another as only two feet, and be in reality three feet. Furthermore, I neglected to state that all my remarks applied only to hitting in the best place—the shoulder or just behind, instead of the paunch or haunch, which latter may, of course, be done with much less margin, and where the deer is close or running slow, without any.

"Deer-Hunter" says: "Few hunters will agree with me as to this distance, etc." In this he is correct, and that is the main reason why there are so few good running shots with the rifle. The majority of running shots in timber will be on deer, either driven toward one or sprung from their beds by very cautious still-hunting, and will be inside of fifty yards. The great majority of runs of the latter kind will also be quartering or straight away, and may unquestionably be generally struck without holding off the deer. I do not claim that it's always necessary inside of fifty yards to allow margin, but that it is generally necessary if you wish to hit the shoulder, absolutely so if the speed is great, and always expedient. At sixty or seventy yards and over, this expediency becomes a necessity, unless the deer is running very slow.

There is a difference in the speed of balls, a round or light conical ball, with plenty of powder, traveling up to 100 yards much quicker than the ponderous bolt now so much in vogue. But this difference is not enough to allow one to neglect holding ahead at any considerable distance—say sixty or seventy yards or over—if the deer is under ordinary speed.

I have never yet missed a deer by holding too far ahead, although I have held as far as 10 feet on some that were killed. But I have missed dozens and dozens by holding on the body, although at short distances I have also hit them while so holding on. And I repeat it, old hunters to the contrary notwithstanding (for many of whom, as practical men, I have the greatest respect, and as companions and friends the most pleasant recollections and kindest regard), that the distance ahead, necessary for good, successful shooting—not occasional hitting—is much greater than one would naturally suppose, or is supposed even by those who do occasionally hit. I base this statement not only upon a large number of shots, both successful and unsuccessful, at deer in every possible form of running, but also at rolling wheels, running hares on dry ground, where every ball can be plainly seen to strike, birds skimming along water, etc.

Three times this very year it has happened in trailing up a wounded deer that had had time allowed it to lie down, that it lay out of sight and sprung within fifteen or twenty yards of me, and started off at a lively pace. So close were they, that, notwithstanding the number of times I have been deceived, it seemed so absurdly unnecessary to hold ahead that I did not do so. One running quartering got scratched on the off-ham, though I held on the near shoulder; another, on which I had to make a snap-shot or none, though running broadside, had a hind-leg broken; and the other, nearly broadside, was missed, and I saw the dirt fly from the ground in line with his tail, but a few inches behind. Twice at deer, only walking, at seventy or eighty yards, I have held a few inches ahead, and struck just in the shoulder. In the former article I spoke of a deer coming in the direction of an 11 o'clock wind toward me, and firing at 75 yards so as to see a strip of daylight ahead of his breast, and striking in the middle. That was a mistake of either my pen or the compositor. The distance was only 35 yards, and the deer was not running extra fast either. That calculation was based upon a similar shot upon the previous day—a fawn running away slanting, instead of toward me, which I hit in the rump while holding on the shoulder. It would only weary the reader to give more instances, of which I remember many striking (not always on the deer) ones. But the sum of my experience has been that, though a good standing shot with rifle and good wing shot with shot-gun, I never could hit a deer at any distance until I commenced holding far ahead, and since then have had little trouble except on high jumps or irregular ground, which will bother any one. After missing scores of good chances, my eyes were fully opened only by shooting at a running wheel, to which I kindly recommend "Deer-Hunter" or any one else who wishes to solve the "lateral motion" question.

The reasons why some "old hunters" will not agree with me (though I believe the majority will) are these: Old hunters, especially the real old Leather-stocking type, though the best fellows in the world, generally capital shots and good hunters, are often amazingly ignorant in the abstract of principles, which they implicitly, but unconsciously, follow in practice. Though I have rarely been so happy as when smoking or talking with them round a backwood's log-fire after a day's hunt, enjoying their large-hearted hospitality, I know no class of men from whom so little can be learned.

Many are full of theories, and are implicit believers in nonsense, which their every-day's practice or a few moments' thought would show to be wrong. I scarcely know one who owns a modern breech-loader of the long or mid-range pattern who is not ready to swear on a stack of Bibles that it "holds up" (shoots level) forty rods, when in fact at 100 yards the ball drops six or eight inches below the round ball of the old muzzle-loader that he has discarded. The majority—I do not refer to the hunters of the plains—have about as much idea of distance as a woman has. "That old buck"—it's most always an "old buck"—"I killed yesterday" is always at least "forty rod off." I know some men whom I've heard detail the killing of dozens of deer, and it was almost invariably "forty rod off" or "sixty rod off." The fact is, that in timber, twenty rods is a long shot, and more deer are killed inside of fifteen rods than over it. Some of the best hunters I ever knew had filed out the half-cock notch, "because it was dangerous" to carry it so, and I'll bet "Deer-Hunter" that to-day, in the Wisconsin backwoods, he will find the majority of the old muzzle-loading rifles so fixed. The nearest I ever came to getting a thrashing was in a quarrel with a first-class hunter, of the real old style, for carrying my rifle at half-cock, when a mule could hardly pull it off. He argued that if it caught in brush and was pulled back, that the notch of the "tumbler" would pass the "dog" (isn't it?) in its descent, and let the hammer fall on the cap. And afterward, in discussing the point before several others at a turkey shoot, he was backed up by the rest, and they only "caved" when I offered to give my rifle to any one who could fire it in that way, and they actually tried it. These are only a few samples.

Now, most of the shooting these men have done is at standing game. But few of them are good running shots, but some are splendid ones. But nearly all their experience has been in timber, at very short distances, on deer at a moderate gait, and with round balls. Of course many such shots can be hit by holding "on the shoulder, low," as "Deer-Hunter" says; but they make no account of the number they don't hit, nor of those that are struck in the paunch or haunch instead of shoulder.

Moreover, I am satisfied that they often hold a little ahead without knowing it. Some do know it, and avow, as I do, that it's the only true way to success. But I know that others say they do not. It may seem absurd to say that a man can shoot ahead without knowing it. But it is not strange when we recollect how a preconceived theory will often influence our observation of the simplest facts. A man knows that his Sharpe or Maynard or Remington holds up higher at 300 yards and over than his old muzzle-loader and round ball. Therefore, it holds up higher all the way. This is the whole basis of this belief, to which many cling with an utter blindness to facts, or the plain principle of low initial velocity from weight of the long-range ball. Just so with some running shots. They have the "lateral-motion" theory in their heads, and unconsciously argue thus: "The motion of the gun carries the bullet ahead, therefore it's unnecessary to shoot ahead. Therefore I don't."

Now, this may seem too ridiculous, but I have heard it not only from riflemen, but from several first-class duck shots. One of the best shots I ever knew, and one of the best friends I ever had, used to swear positively that he never held ahead, because the motion of the gun was sufficient; while I, shooting by his side, had to hold from one to three feet ahead in crossing shots, and never could touch a crossing duck at over 30 yards by holding directly on.

In this "lateral-motion" idea, which I see "Deer-Hunter" has, a very natural mistake is made. The motion of the barrel, as a *radius vector* (like a wheel-spoke), is mistaken for a lateral, equal motion of the whole cylinder, which forms the bore. In the latter case the ball partakes of both motions, and its actual motion in space is that of the diagonal of a long narrow parallelogram, built upon the line of fire and the line of lateral motion. Thus, if a ball were fired from one railroad car to another, both at same speed, it would strike a target on the other the same as if both were at rest (allowing of course for wind), just as an apple tossed up in the car returns to the hand again. Here the path of both ball and apple, though apparently straight, is not so in fact.

But where the gun is simply moved on a pivot at its breech, the ball pursues a straight line. If it were not so, a ball thrown from a light tube, by a whirling motion by hand, would be plainly seen to take a crooked path in the air. And, if this were true, the great host of authorities, who tell us we must shoot ahead with a shot-gun on crossing birds, would be in error. An old hunter once undertook to explain this away to me by saying a rifle ball was so much swifter than shot. But for forty or fifty yards, a gun, properly loaded for ducks, heavy with powder and light with shot, gives about as high velocity to heavy shot as that of a round rifle ball, and higher than that of a long slug.

If holding on were sufficient, how could such a riflemen as Col. Gildersleeve have missed, as he did on his first trial last spring, twelve shots out of thirteen at the Creedmoor running-deer target, at only 100 yards—a target that moved with a smooth, even glide, on tramways, and where the conditions of every shot were all alike, and the speed very slow? The Colonel could certainly hold his sights on its shoulder through that kind of motion, and if "lateral motion" were sufficient he surely would not have missed the whole body.

"Deer-hunter" says, "Others affirm that the best way is to carry the aim ahead of the deer, and when he jumps into the sights pull." I have heard this often, and it cost me over a dozen as fine deer as ever waved, with flaunting handkerchiefs, farewell to a mortified hunter, to satisfy me that it is worthless. When he jumps into the sight is just too late, unless very close, as any one can find out by making a swinging target, and resting the rifle, with a board so fixed that he cannot possibly see the target until it swings into the sights. The fact is that those who shoot successfully this way—and there are many who do—pull just before he jumps into the sights, although some say and, I believe, really think that they do not. But the strongest proof lies in the statement itself. Why carry the sight ahead of the deer at all, unless for the purpose of shooting ahead? Why resort to this bungling process when it's so much easier and more certain to draw directly on him? Where is the difference in effect between letting the deer jump into the sights and making the sights come on to the deer. If he could be hit by either method, the latter would be by far the most accurate. The very fact that the latter way won't work proves that the other must be different from it.

He says, "When the deer reaches ground he is practically in a

state of rest." While it is impossible for him to be absolutely at rest, his forward motion is then so slackened, by changing into up and down motion, that, if close by, a ball fired directly at him will hit him somewhere. But this is only when he is jumping high. And if he is seventy or eighty yards away you cannot get the ball into that place until he is out of it, unless you fire before he reaches it.

If "Deer-Hunter" will read this carefully, he will, I think, find that there is no difference between us (except the lateral motion, which I hope he will abandon), my position being only that a deer may be hit close by or going slow, without holding ahead of him, but that even then you will be more sure of him by holding ahead; and that at any considerable distance or speed you must hold ahead to hit him forward of the flank, although I may be a foot or more out of the way in my estimate of the amount of margin necessary. Of course, in the instances given, allowance must be made for poor shooting, as I don't claim to be a crack shot, and no one can put a ball just where he wants to under such circumstances. But I have fired far more than enough shots to eliminate all results of chance from the problem, and to satisfy me beyond all doubt of what I stated, that the distance necessary to hold ahead for good success is much greater than is generally supposed, and that ignorance of this fact is the main reason why so many good hunters make such wretched work on running deer with the rifle. And however good work one may do by holding on, it only proves to my mind that he could do splendid work by holding ahead.

If I have dwelt upon this point to a tedious extent, it is because of its importance; because the reason why they do so is so little known or suspected by those who are mortified by missing, and because all books that I have seen are silent upon this kind of shooting, the best, most scientific and important in the whole range of rifle hunting, and the grandest and most satisfactory in the whole line of sporting.

If any "old hunter" should feel sore at anything I have said, I have only to say—I didn't mean you; I've left a class of exceptions and you belong to them; but you know it's true of the next man. What some old hunters *don't* know would make a good sporting encyclopædia; what many *do* know, but can't or won't tell, would make a still better one; and what many *do* know and *can* tell is better yet, and I hope some of them will comply with "Deer-Hunter's" polite request to "give us their views, practice and experience through these columns." T. S. VAN DYKE.

PROJECTILES.

DOES A BULLET COMMENCE TO FALL AS SOON AS IT LEAVES THE MUZZLE?

We publish the following interesting correspondence in full, and have to thank Col. Ship, of the Virginia Military Institute, for the lucid explanation he gives of some not very well understood laws in projectiles:

RICHMOND, Va., Jan. 29, 1878.

RIFLE EDITOR FOREST AND STREAM AND ROD AND GUN:

Some weeks since I purchased your book on "Long-Range Rifle Shooting," having seen it advertised in the F. AND S. AND R. AND G., a paper which is read regularly by a majority of the members of our club (rifle). At one of our meetings I stated that you had asserted, on page 84, "If a gun is fired in a perfectly horizontal position the bullet commences to fall as soon as it leaves the muzzle." This produced a lengthy discussion, some contending that where a large charge of powder was used it would not be the case. We finally agreed to leave it to Col. S. Ship, of the Virginia Military Institute. I inclose you his reply, which I think will interest a good many of your readers; certainly all in this locality.

Yours truly, C. P. STOKES.

LEXINGTON, Va., Jan. 26, 1878.

C. P. STOKES, Esq., Richmond, Va.:

Dear Stokes—You ask, "Will a bullet, shot from a rifle, the axis of the bore being parallel to a perfectly level plane, be the same distance from this plane, when ten feet from the rifle, as when it left the rifle?" You say: "I have contended that it commences to fall the instant it leaves the muzzle, unless the gun has some elevation." You are right in your view, but wrong in your qualification. It begins to fall whether the gun has elevation or not. It is true, if the axis of the bore is perpendicular to your horizontal plane—that is, if the angle of fire is 90 deg.—the bullet will go straight up, but gravity is directly, in this instance, opposed to motion, and the bullet will go up with a velocity equal to the difference between that impressed by the impulsive force of the charge and the retarding force of gravity; it is pushed up by the charge, it is held back by gravity; it moves in the direction of the resultant. So gravity prevents the bullet attaining the height it would attain but for gravity, and the influence of gravity is manifested in its retarding effects, not in this instance by an actual downward motion. But if the axis of the bore makes with the horizontal any angle less than 90 deg., then the bullet will begin to fall the instant it leaves the muzzle, and the spaces fallen through will be proportional to the squares of the time during which it is falling. Suppose a gun fired over a horizontal plane, with the axis of its bore parallel to the plane, it will strike this plane at a certain determinate distance, depending upon charge, piece, bullet, etc., and this distance is called the "point-blank range." If gravity did not pull the bullet down, the range would be the same when the axis was horizontal as when it is inclined upward; that is, when the angle of fire is zero, and when it is some quantity greater than zero, which is counter to the fundamental principles upon which the science of ballistics is based. Returning to your supposed case, let us assume that the initial velocity of projection is 1,600 feet; that is, that the bullet will traverse 1,600 feet of space in the first second after leaving the piece, then it will require the 160th part of a second to go ten feet. But we know that under the influence of gravity a heavy body will fall 16.0833 feet in the first second of fall, or 192.9996 inches. Then, in the first ten feet, it will fall 1,206th of an inch. This of course is merely for illustration, and does not represent the facts, for if a bullet traverses 1,600 feet in one second it will accomplish the first ten feet with a velocity vastly greater. In my calculation I assume that equal spaces would be described in equal times, which is not true, and hence really, although the bullet must fall, it would not fall as much as 1,206th of an inch in going ten feet. The equation of the trajectory in *vacuo* is $y = x \tan. \phi - \frac{1}{2} gt^2$. Your supposed case makes $\phi = 0$; hence, $\tan. \phi = 0$, and the equation remains $y = -\frac{1}{2} gt^2$. You see the gravity is still in the equation when $\phi = 0$, or when axis is parallel to the horizontal plane. If the axis of the bore is horizontal, the resistances to be overcome before the bullet can be moved, are inertia, friction, and the resistance of the air. If the axis is inclined upward, making an angle with the horizontal, the resistances to be overcome before the bullet moves are inertia, friction, resistance of air, and the *components of weight in the direction of motion*. This last element does not enter where the axis of the bore is horizontal, and this may be what your opponents are driving at. Gravity opposes no resistance to motion in a horizontal direction, but it acts in the direction of the vertical, and will pull the bullet down in the first ten feet; even in the first one-tenth part of an inch. This point is material to a full consideration of the subject.

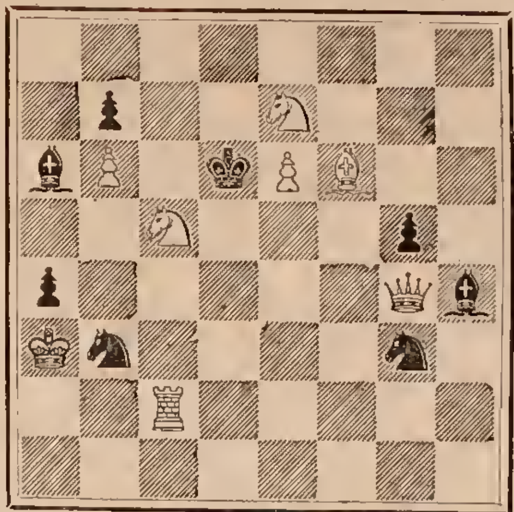
Yours truly, SCOTT SHIP.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 5.

Tourney set, No. 3. Motto—Wants a Little—Gossip.



White to play and give mate in two moves.

SOLUTIONS—NO. 3.

1—R-Kt7	1—K-Kt2	1—	1—P-Q3
2—Q tks B mate		2—R tks B P mate	
1—	1—K-Q3	1—	1—P-Q4 or B-Kt3
2—Q R-K R3 mate		2—Q ch mates	

Several of our solvers consider this an ingenious and difficult problem. Brief and to the point reviews will be given space hereafter.

OPINIONS OF THE PRESS.

Mr. Kunkel's well known ability guarantees an excellent chess column to the readers of the FOREST AND STREAM.—*Chess Record.*

Mr. E. A. Kunkel, a devoted chess student and an enthusiastic lover of the game, having severed his connection with the *Globe* is now conducting a chess column in the well known and popular sporting journal—FOREST AND STREAM. Since *Wilke's Spirit* has discontinued chess it leaves a vacuum which a live chess department in a widely circulated and influential paper like the FOREST AND STREAM will acceptably fill and is sure to profit by. This undertaking gives Mr. K. a broader field in which to display his talent, and we wish him success.—*Hartford Times.*

We congratulate the FOREST AND STREAM upon the acquisition of Mr. E. A. Kunkel, formerly chess editor of the *Globe*. His name is a guarantee that this chess column will be the liveliest in the metropolis.—*Holyoke Transcript.*

The following is the first of the Philadelphia consultation games, Messrs. Elson and Neill playing against Messrs. Davidson and Reichelm. This game with notes is taken from the *Chess Record* which Mr. Reichelm so ably and entertainingly edits:

Game No. 9.—RUY LOPEZ.

White. Davidson and Reichelm.	Black. Elson and Neill.	White. Davidson and Reichelm.	Black. Elson and Neill.
1—P-K4	1—P-K4	13—Kt-Q B3!	13—B tks B ch
2—Kt-K B3	2—Kt-Q B3	14—Kt tks B	14—Q-K2
3—B Kt5	3—P-Q R3	15—Q-R5! (f)	15—P-K B3! (g)
4—B-R4	4—Kt-K B3	16—Q R-K! (h)	16—P tks P
5—P-Q4 (a)	5—P tks P	17—Q tks K P	17—R-B2
6—Castles (b)	6—B-K2!	18—P-B5 (i)	18—Q-B4! (j)
7—P-K5	7—Kt-K5	19—Q-Kt3 (k)	19—Kt-Q5!
8—Kt tks P	8—Kt-B4	20—Q-B2! (l)	20—B tks P
9—B tks Kt	9—Q P tks B	21—Kt-K4	21—Q-B (m)
10—B-K3	10—Kt-K3 (c)	22—Kt tks B (n)	*22—Kt tks Kt
11—Kt-B5 (d)	11—Castles	23—Kt-Kt5	23—R-B3
12—P-K B4 (e)	12—B-B4	24—Kt-K4 drawn game	

NOTES.

(*a*) The method of the Morphy period, and to our mind about as effective as any other; although Steinitz and the German school incline towards 5—P-Q3, holding that this opening cannot bear the strain of a more open assault.

(*b*) This is perhaps slightly preferable to advancing the P-K5 at once.

(*c*) The black allies consider this line of defence a mistake.

(*d*) An interesting deviation suggested by Mr. Davidson, giving rise to many complex and beautiful variations.

(*e*) Best. Black cannot play P-B3 in reply, because of 13—Kt tks B ch, 14—P-B5 and P-K6.

(*f*) The only good way of proceeding with the attack.

(*g*) Played with rare good judgment. This appears to be the best promise of relief.

(*h*) Both attack and defence are most delicately poised. Very exact manœuvring is necessary.

(*i*) 18—R-Q is a powerful move and was carefully considered; but the charms of the more aggressive 18—P-B5 prevailed.

(*j*) Some remarkable variations arise here. Suppose:

18—	18—Kt-B4	23—Kt-Q6	23—R-K2
19—Q-Q4	19—Q-Q3	24—Kt tks Q P	24—R tks R
20—Q tks Q	20—P tks Q	25—R tks R	25—P tks Kt
21—P-Q Kt4	21—Kt-Q2	26—K-K8 ch	26—Kt in'p's
22—Kt-K4	22—P-Q4	27—Kt tks B and wins	
18— again if	18—Kt-B	23—R-Q	23—Q tks R P
19—Q-Kt3	19—Q-B4	24—R-R	24—Q-Q4
20—Kt-K4	20—Q-Q5	25—K R-Q	25—Q-B5
21—K-R	21—Q tks Kt or *	26—P-Kt3 winning	
22—Kt-Kt4	22—Q-Q4		

* Another beautiful possibility.

21—	[illegible]	24—Kt-B3 ch	24—K-Kt
22—Kt-Kt5	22—R-B3	25—Kt mates	
23—Kt-Kt4	23—R tks P		

(*k*) Kt-K6 is answered by Q-Q5.

(*l*) Again the only forcible way of continuing the assault.

(*m*) Some striking play results from Q-Kt3, e. g.

21—	21—Q-Kt3	28—Kt-B6 ch	28—P tks Kt
22—K-R	22—R-Kt3	29—Q tks B P	29—B-R4
23—Q-R4	23—R tks R ch	30—Kt-B7	30—Kt-Kt2
24—R tks R	24—R-K	31—Kt tks P ch	31—K-R2
25—Kt-B4	25—Q-R2	32—Kt-B5	32—Kt tks Kt
26—Q-B4	26—P-R3	33—Q tks Kt ch	33—B-Kt3
27—Kt-K5	27—Kt-K3	34—Q-K3 ch and white, we believe,	

must rest content with a drawn battle. We cannot, therefore, help thinking that 21—Q-B is a slight blot in the masterly defence of Messrs. Elson and Neill.

Here white, in turn, are guilty of a sin of omission; they ought to have played as suggested by Messrs. Elson and Neill after the termination of the game, the following somewhat obvious moves.

22—Kt-Kt5	22—P-B3	27—R-K7	27—Q-B
23—Q-Kt4	23—P-R3!	28—R tks B P	28—R-Q
24—Q tks Kt	24—P tks Kt	29—R tks kt P ch	29—Q tks R
25—Kt tks B	25—R tks Kt	30—Q tks R ch with a pawn plus and the chances in their favor.	
26—R tks R	26—Q tks R		

Off-hand game played at the Hartford Sabbath School, Nov. 18, 1877, between Max H. Peller, Chess Editor of the Hartford *Globe*, and A. Oldack champion of Middletown, Conn.

Game No. 10.—SCOTCH GAMBIT.

White. Peller.	Black. Oldack.	White. Peller.	Black. Oldack.
1—P K4	1—P-K4	11—B-kt3	11—Kt tks P
2—Kt-K B3	2—Kt-Q B3	12—Castles	12—Kt-Q B3
3—P-Q4	3—P tks P	13—P-B4	13—Q-Q3
4—P-B3 (a)	4—P-Q4 (b)	14—B tks kt	14—R tks B
5—P tks Q P	5—Q tks P	15—Q-B3	15—Q-kt3
6—P tks P	6—B checks	16—K R-K	16—Kt-Q4? (d)
7—B-Q2	7—B-Kt5	17—Q-kt 4 ch	17—K-Kt
8—Kt-B3	8—B tks K kt	18—Q tks P	18—R-K
9—B tks B (c)	9—B tks kt	19—Q tks B P	19—R tks P? (e)
10—P tks B	10—Castles	20—Q tks Kt!!!	20—Resigns

NOTES.

(*a*) This move we consider inferior to B-B4. An analysis of this line of attack appeared, we believe, in a recent number of the *Schact Zeitung.*

(*b*) P tks P may be here played with perfect safety. The text move brings the Q into play too early.

(*c*) P tks B is the better move.

(*d*) This move is quite weak, and the attack on the B P useless. Black now has a safe game, and the Gambit Pawn can be maintained. R-K was the proper move.

(*e*) Kt tks P, and Black could still make a gallant fight. White's next move is very pretty, although obvious.

CURSORY JOTTINGS.

—Mr. M. D. L. Buell, Lebanon, Ill., desires to play by correspondence with second-class players; and W. Russell and J. Hayward, of Hannibal, Mo., wish to play, by postal card, two players consulting against them.

—It has been calculated that out of every 100 problems in two, three and four moves, which have been published, in 7 of them the King moves first, in 9 the Pawn, in 13 the Knight, in 16 the Bishop, in 22 the Rook, and in 33 the Queen. Now is the chance for composers to move the unobtrusive Pawn on the first move, and construct a difficult problem.

—We call the attention of our readers to our two-move photographic tourney. Thus far we have received only one two-move problem accompanied by a photograph—all the way from Europe. Shall we not receive a few more?

—A new chess column has made its appearance in the Holyoke (Mass.) *Transcript*. It is edited by R. H. Seymour, and the problems in charge of George E. Carpenter, of Tarrytown, N. Y.

—Mr. Peller has added a third and large diagram to his column in the Hartford *Globe*. One of this week's games is kindly contributed by our friend and former editorial associate.

—Of the *American Chess Journal* the *Herald* of Hannibal, Mo., says: "Work is actively progressing on the first number under the new management, and when it does appear, we predict it will be a 'thing of beauty,' and, of course, a 'joy forever.' * * * * * After the first number the *Journal* will come as regularly as your grocer's bill."

—"A Chess Century" is the title of a problem book published by Dr. R. L. C. White, containing a hundred and odd elegant problems entered in one of his tourneys. The price is only $1 00.

—The St. Louis Down-town Chess Club will give a handicap tourney open to all the players of St. Louis. The entrance fee will be $1 00 to members of the club and strangers. There will be three classes, and competitors will be classified according to their strength. Eleven names have already been enrolled.

Sea and River Fishing.

FISH IN SEASON IN FEBRUARY.

SOUTHERN WATERS.

Pompano, *Trachynota carolinus.*	Grouper, *Epinephelus nigritus.*
Drum (two species). Family *Sciænidæ.*	Trout (black bass), *Centropristis atrarius.*
Kingfish, *Menticirrus nebulosus.*	Striped Bass, or Rockfish, *Roccus lineatus.*
Sea Bass, *Sciænops ocellatus.*	Tailorfish, *Pomatomus saltatrix.*
Sheepshead, *Archosargus probatocephalus.*	Black Bass, *Micropterus salmoides; M. nigricans.*
Snapper, *Lutjanus caxus.*	

THE TROUT LAW IN NEW YORK STATE.—Sec. 20. No person shall kill, or expose for sale, or have in his or her possession, after the same has been killed, any speckled trout, save only from the first day of April to the first day of September, under a penalty not exceeding twenty-five dollars for each fish. (Amended Ch. 411, Laws of 1877.)

Inasmuch as it was inadvertently stated in our last issue that the open season for trout fishing would begin on Long Island on the 15th of March, we take occasion to publish the full text of the amendment to the law as it was passed by the Legislature of 1877—an amendment which it would appear the writer of the erroneous paragraph had forgotten. For many years an exception to the general law of this State was allowed to Long Island. We are glad that greater uniformity has now been secured.

FISH IN MARKET—RETAIL PRICES.—Striped bass, 20 to 25 cents; smelts, 10; green do., 15; bluefish, 15; frozen salmon 30; mackerel, 25; Southern shad, 50 cents to $1.50; white perch, 15; Spanish mackerel, 35; green turtle, 20; terrapin, $18 per doz.; halibut, 12½; haddock, 8; codfish, 0 to 8; blackfish, 15; flounders, 12½; sea bass, 18; eels, 18; lobsters, 10; sheepsheads, 25; scallops, $1.25 per gallon; soft clams, 40 to 60 per 100; whitefish, 18; pickerel, 18; salmon trout, 18; black bass, 18; hard crabs, $2.50 per 100; smoked haddock, 12½; smoked salmon, 16; dry cod, 7.

VERMONT—*Ferrisburgh, Feb.* 8.—Fishing through the ice has been followed for some time, smelt and perch biting freely. VERD MONTE.

MOVEMENTS OF THE FISHING FLEET.—The fishing arrivals for the past week included three more vessels from Fortune Bay, N. F., which corroborate the previous reports of interference with the Newfoundland herring fishery and the failure of the business for the Gloucester fleet. The receipts of frozen herrin[illegible] from Newfounland will be the lightest known sinc[illegible] business was engaged in, comprising one fare in por[illegible] another at New York. Herring are plenty in

the Bay of Fundy. The number of Bank and La Have arrivals for the week has been 23, and the receipts 600,000 lbs. halibut and 370,000 lbs. round codfish. There are some sixty vessels engaged in the Georges fishery, but the arrivals are not yet numerous. Five arrivals have been reported since our last issue, bringing about 100,000 lbs. round codfish.—*Cape Ann Advertiser, Feb, 9.*

NEW HAMPSHIRE—*Dover, Feb.* 10.—A string of over fifty pickerel were taken from Bow Lake by two fishermen. Fine fish taken this winter. ROBERT.

TENNESSEE—*Columbia, Feb.* 11.—Although trout (bass) fishing is in season, the river is too high to make it pleasant or successful. Anglers are making preparations to catch large creels when the water falls. Some bass and perch in market from Swan and Reelfoot Lakes. VAL.

MISSOURI—*St. Joseph, Feb.* 6.—The fishermen of St. Joseph are setting their nets and raking in the whitefish daily and with great success.

MURDOCK LAKE FISHING CLUB.—We are pleased to note the re-election of that genial gentleman and piscator, Mr. D. L. Dickinson, to the Presidency of the Murdock Club of St. Louis.

TROUT MINING AT LAKE BIGLER, CALIFORNIA.—In the general freeze Emerald Bay has been frozen solid. It is one vast ledge of ice from the surface of its transparent waters to the bottom. From some cause the fish, especially the trout, have fairly swarmed there. When the great and sudden freezing came it imprisoned them by hundreds of tons all over the Bay. There they are fixed, like a bee in a drop of amber. Of course the fishermen of the Rubicon and its neighborhood are reaping a rich and novel harvest. The present abundance of fish in the Carson market is due to this remarkable occurrence Monk says that the Bay presents a wonderful appearance. He says in all truthfulness that Sailor Jack and some associates have actually sunk a winze in the ice between the boat landing and Captain Dick's Island, and that by dint of tunneling and stoping in the solid ice they are actually mining out the imprisoned trout by the cart load. Hank says he has an interest in one of these extraordinary "claims," and that he has every reason to expect prompt and numerous dividends. The present state of the weather seems to guarantee a continuance of this strange species of mining for some days yet to come, if not, indeed, for the remainder of the winter. This class of phenomena occurs only at very rare intervals. In 1845, Back Cove, an arm of Casco Bay, was a scene of such a freezing as this. All sorts of salt-water fish, such as frequent the more shallow bays and estuaries—smelt, tom-cod, eels and flounders—were frozen in and captured by the million. The tom-cod, when thus frozen, may be thawed out in cold water and restored to life. For this reason this small member of the finny tribe is known as the "frost fish."—*The Carson (Cal.) Appeal.*

CANADA—*Montreal, Feb.* 9.—Large quantities of *salmo fontinalis* are now being taken through the ice on the lakes throughout the eastern townships. February 3d, while some workmen were cutting ice in the Coaticook River, near that village, several large trout appeared in the water that filled the holes, and one of them, a 2½ pounder, was thrown out on the ice with a shovel and captured. Fishermen here say that this season it is a common occurrence for trout to appear in the holes that they have cut to fish through. It cannot be hunger that caused this, for the fish are in good condition, and I can only account for it in this way—that the soft weather has kept the water up against the ice, and the trout come into these holes after a fresh supply of oxygen. STANSTEAD.

ERRATIC FISH HOOKS.—*Milwaukee, Wis., Feb.* 5.—Your readers, many of them no doubt, read the description of a curious fish-hook, in a late number of *Harper's Weekly*, which was of a French pattern in use by the fishers along the Newfoundland coast. This hook had been found in a cod fish caught along the New England shores, a distance of 2,000 miles. The West, not to be outdone, "goes" a thousand miles better. Mr. J. Tyrrell, a messenger in the United States Court, recently purchased a codfish in this city, in which was found one of the hooks referred to. The hook has been examined by the dealers of this city, but nothing could be found that resembled it. Dr. Foster, of the United States Court, was unable to find a similar one in a collection of several thousands. It is quite evident the hook has made a journey of upward of 3,000 miles.

Those cute foreigners have a fashion of introducing their fish-hooks into foreign countries, which we Yankees don't know anything about. Seriously, the hooks were undoubtedly used by the French fishermen, at Caraquette, Quirpon (Str. of Belle Isle), or some other French fishing station on the American coast. If we knew in what locality the codfish were caught, the whole thing might be easily made plain. It is not at all likely that the codfish have run over to Europe to smuggle French fish-hooks into America. We don't believe they are interested in thematter in the slightest degree.—ED F. and S.]

THE WISCONSIN EDITOR ABROAD.—We have frequently been indebted to the Ashland *Press* for Wisconsin fishing items, and we have never failed, in so far as our own modest attainments in the manufacture of fish stories would allow, in heartily seconding the efforts of its energetic editor, Mr. Sam. Fifield, in his efforts to herald abroad the piscatorial attractions of Wisconsin waters. It is with something akin to dismay, therefore, as we open the last number of the *Press*, and seek the usual account of a bigger haul than the last big haul, that we learn of the abscuce of that wielder of the pen, which is mightier than the fishing rod, and read this weak-kneed salutatory from the temporary captain of the editorial craft:

"We cannot conceive of a more trying ordeal than to be suddenly called from the paths of virtue and honesty to the editorship of a paper which has achieved a national celebrity for the magnificence of its fish stories, and the impressiveness with which they are told. If, as we undoubtedly shall, we fall behind what is expected of us in the way of sustaining the reputation which this leading authority on matters piscatorial has achieved, we will say to our readers that our life habit has been to confine ourself strictly to the truth in all statements, and that with no more foundation to go on than the fact that a few thousand tons, more or less, of herrings have been caught through the ice on our bay within the last three weeks, and perhaps as many white fish, lawyers and trout (lake trout—our law-abiding citizens would catch no other), it is an up-hill business to attempt. We do not claim to be as utterly incompetent as George Washington; but to edit a great family journal like the *Press* requires a breadth and capacity for—for this kind of thing, to which we make no pretensions."

THE BLACK BASS OF VIRGINIA.

BALTIMORE, Jan. 22, 1878.

EDITOR FOREST AND STREAM:

Having been an interested and enthusiastic reader of the articles in former numbers referring to the modes of taking bass, I have at last concluded to ask you or some of your readers and correspondents for an explanation of a phenomenon that has appeared strange to me and for which I have, in vain, sought a satisfactory solution from others older and more experienced than myself.

I have fished exclusively for bass for several years, principally in the Great Cacapon, the Potomac, and in that portion of the south branch of the Potomac which runs through Hampshire County, West Virginia, but have only noticed the peculiarity to which I allude in the last-mentioned stream. In fishing at the same spots I have frequently taken two bass, about equal in size and weight, but so different in color as to almost seem different species. One would have the regular deep color that is associated with the name black bass, while the other would be very, very light; a pale green, in fact. Now, is it the difference in sex that produces this dissimilarity, or an irregularity in the time of spawning, or can the paler fish be diseased. The fish were taken from the same pools, sometimes two at a time, rising to exactly similar flies or taking exactly the same kind of bait I have always found the darker fish much more game than the other and affording superior sport, while the pale fish after a few dashes comes as naturally to the landing net as a common chub. Another difference: In stringing bass to keep them alive while fishing I use a leather string with a sharp piece of telegraph wire at one end and a steel piece of wood at the other instead of passing the string through the gills of the fish I pierce a hole through the membrane below the lower tip and out at the mouth. This does not interfere with respiration, and the dark colored fish will be as lively at the expiration of several hours as when caught, but the light hued ones do not seem to stand it much over one hour. In examining a string of fifty bass, two hours caught, I found every black fellow as strong and hearty as ever, while every pale one was stiff and dead. Now can you or any of your friends explain these facts to me? I may mention that I have generally noticed this phenomena in July and August.

According to a request in a former issue I would like to give what my experience has taught me to be the best weather for fishing in the waters I have mentioned. For fishing with bait of any kind, minnows, helgramites, crayfish, etc., a bright, sunshiny day, cloudless and with little breeze is the best, for bass do not seem to feed as greedily in dark, lowering weather as they do when the sun shines. Last summer I fished for two hours one July day on the South Branch, during a steady rain, and did not get a nibble, though using minnows, which I regard as the very best bass bait. I may here state that the water was slightly milky. At the end of two hours the sun came out very bright and warm, so I retraced my steps to the place I had started from and fished the ground over again. Now, however, I took bass as fast as I could land them, all along the places where a short time previous I had failed even to get a single bite. But with the fly there is a difference, for though I regard bright weather as best, yet I have had very good success with bright flies even during a heavy shower. The best flies for general use I have found to be large sized, dark colored ones made of pheasant's feather or mallard. The smaller bass will bite equally well at them, while a good sized individual will hardly notice a small fly except occasionally. There should be a slight breeze, just to ripple the surface of the water and ruffle its glassy transparency. I prefer a common click reel, with about thirty-five yards of fine waterproof silk line tapered. The click of the reel is sufficient in itself to hook the fish without necessitating that turn of the wrist which the tyro generally makes too soon or too late, in either case losing the fish he has induced to rise to his cast.

I hope you will give me a solution of my problem.

Yours, etc., GREYSTEEL.

Commenting upon "Greysteels" atements, our obliging correspondent at Leesburg, Virginia, remarks:

LEESBURG, Jan. 24, 1878.

I have noticed the two different looking bass he describes; one a dusky black with broad finger marks ranging in intensity of coloring almost mottled in bands; the other pale-green tending to a whitish-yellow, each kind whiter on belly than on back; the dusky one thick and chunky, the pale-green slender and rather slim. The dusky is more vigorous, longer lived, and more gamey, I believe they are male and female. I have never to my recollection seen but one dusky mottled bass smaller than a pound fish, though anglers here say they have noticed the two kinds of all sizes. I think at first they are all alike of an almost uniform color, pale-green; as they grow older the males show the mottled bands and dusky look; the females get darker but not mottled. This is only conjecture, but I shall examine next season so as to determine, if possible, the true state of the case.

I have always been most successful in pleasant weather whether I used the fly or minnow. Brightness no drawback in minnow fishing if the water be clear; and, when the water is not clear, the brighter the better. In fly-fishing, the water being clear and the sun bright, I cast where shadows fall; if the water is clear and the sun not bright I cast anywhere. I hardly ever take a fish in a sunny part of the stream when the water is clear and sun very bright. I believe they see me under such circumstances. I believe in moderate sized flies, of a size rather large for trout, but much smaller than the bass flies of the stores. I like the fly to look large but the hook to be rather small for a bass hook. Nos. 4 and 6 Sproat bend are large enough. T. W.

SALMON FISHING ON THE ST. MARGUERITE.

31 LIBERTY STREET, NEW YORK, Feb. 4, 1878.

EDITOR FOREST AND STREAM:

Having made an engagement with my friend, E. A. Green, Esq., of Newark, N. J., who by the way is the original inventor and maker of our present split bamboo trout and salmon rod, we met at the St. Louis Hotel, Quebec, on the 11th of last July, I having preceded him a couple of days, and selected our provisions for the "trip," and had all placed on board the steamer leaving that day for the Saguenay River, of which the St. Marguerite is a branch. I here learned that we had lost at least three weeks of the very best time, salmon having been abundant in the river on the 20th of June, and all old anglers know fresh run fish always take the fly much the best.

We also learned that the lessees, Willis Russell, Esq., of St. Louis Hotel, Quebec, and Robert Hare Powell, Esq., of Philadelphia, had made arrangements with the lessees of the net fisheries near Tadousac, where all salmon have to pass in reaching this river, to have those nets all raised two days each week, which gave us almost a guarantee of still having good sport.

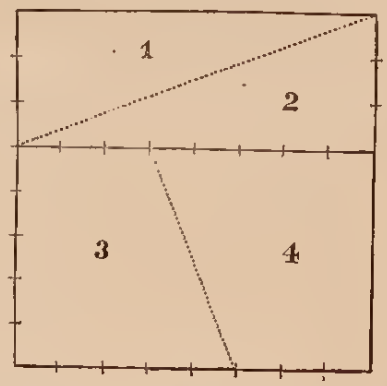
Our steamer left Quebec at 7 A. M., and at daylight next morning we landed at the mouth of the St. Marguerite (having taken a small sailboat in tow from Tadousac, a distance of 12 miles, on which we stepped to go ashore). On landing we fired a double gun, the usual signal to call out the trusty guardian, Johnny Jourdan, and we were soon taken to his house, and eating an early breakfast of fresh laid eggs and fried salmon prepared by his good wife, he, meanwhile, not being idle, as the little pony and cart at the door ready to carry our "traps" gave ample proof. After a drive of six miles we arrived at the Home Pool and "Our Little Cottage Home," a neat and tasty frame dwelling of six rooms, and furnished with whatever is necessary to make one comfortable, not excepting bed curtains to keep out black flies and mosquitoes. Here on the piazza one can sit and watch the salmon leaping in the pool in front of the door. From this pool the travelling is by canoe, and the stations are from three to six miles apart up to the Upper Forks' and at each station you find the same style of cottage, there being six in all on the river.

Our two first days' fishing gave us eleven salmon weighing 136½ pounds, and more lively or gamy fish we never saw. The weather now soon changed and became excessively hot, the mercury showing 90 deg., and even 92 deg. in the shade, and the water stood at 70 and 71 degrees, a heat never before known in this region, causing both salmon and trout to desert the pools and gather around the springs and the mouth of spring brooks in large numbers. In several places we saw as many as 100 and 200 salmon, and in one place we estimated the number at between 500 and 600 salmon and quite as large a number of large trout. These fish lay like sticks of cord wood, their heads to the cool spring water, and the majority motionless.

We also proved the old adage, that "Salmon will never rise to a fly unless in swift water," erroneous. In casting one day for a very large trout, apparently a six-pounder (myself and others having taken several exceeding that weight in this river), the smaller trout would chase the fly and we were compelled to raise it to prevent their getting it, we noticed a noble salmon start suddenly in that direction. I immediately returned the fly in front of the large body of salmon, when three started for it and one captured it, which, after a half hour we landed and it proved a 20-pound fish. These brooks are generally near a level part of the river and distant from any pool, which made it much more difficult to capture our fish after hooking them. We both used over 150 yards line on our reels, and each lost salmon by their getting out all our line and breaking loose, and we ran them with a canoe when necessary. On our last day's fishing we left camp taking but one rod between us, and fished alternately at the same pool, and at 9 A. M. we had secured four salmon besides losing three more with flies, one of which took out my whole line before he broke loose. Our whole trip, which included not over 11 days' actual fishing, gave us 36 salmon, weighing 489 pounds, an average of 13 7-12 pounds each. The removing of the nets proved to us that the river is the home of large salmon, and as the lessees are putting 100,000 young salmon yearly in the river it must continue to be so. Had the weather continued cool and comfortable as when we first arrived or as on our last day's fishing, we are satisfied our catch could only have been told by the amount of our endurance, for on the last morning's fishing at no time was it necessary to cast five minutes to hook a salmon.

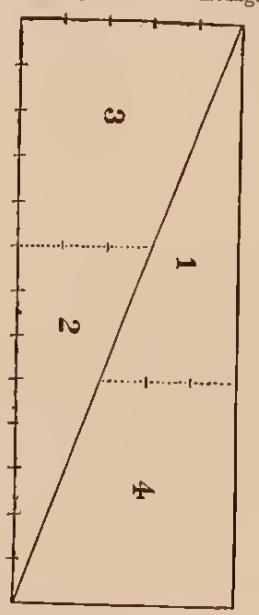
I hope that on your next trip for salmon you may have as good sport and enjoy it as well as did your friend, SAMUEL STREIT.

A STRANGE PUZZLE.



BOSTON, Jan. 1.

Your mathematical puzzle seemed to interest your readers. I enclose another which is simple, but puzzling. The point of it is that a square of eight inches, say, can be cut up into four pieces which can be put together so as to make a parallelogram of 5x13, that is to say larger by one square inch than the original square was, as a square of eight inches contains sixty-four inches, whereas a parallelogram of 5x13 contains sixty-five. This seems an absurdity, but the accompanying outline will show that it can be done. It will be seen that the square—it is on the scale of ¼ inch—is divided into the figures 1, 2, 3 and 4, which figures can be arranged as in the second



outline, making a parallelogram 5x13. Wherein lies the fallacy? The second outline is only to show how to place the figures after they have been cut, but the way to do the problem is to make a square of eight inches, one-half, or one-fourth, cut it up as shown and see than it does fit into the parallelogram. F.

NICHOLS & LEFEVER,

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MANUFACTURERS OF

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Double-Barrel Breech-Loading Rifles, and Shot and Rifle combined. Muzzle-Loading Creedmoor guaranteed to be the best, and not to give "UNACCOUNTABLE MISSES"

Our Catalogue for 1878 *will be ready January* 15, *giving full description of gun, recent improvements in same, matters of general interest to Sportsmen, etc., etc.*

Tiffany & Co., Silversmiths, Jewellers, and Importers, have always a large stock of silver articles for prizes for shooting, yachting, racing and other sports, and on request they prepare special designs for similar purposes. Their TIMING WATCHES are guaranteed for accuracy, and are now very generally used for sporting and scientific requirements. TIFFANY & CO. are also the agents in America for Messrs. PATEK, PHILIPPE & CO., of Geneva, of whose celebrated watches they have a full line. Their stock of Diamonds and other Precious Stones, General Jewelry, Artistic Bronzes and Pottery, Electro-Plate and Sterling Silverware for Household use, fine Stationery and Bric-a-brac, is the largest in the world, and the public are invited to visit their establishment without feeling the slightest obligation to purchase.

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This Powder is guaranteed to kill fleas on dogs or any other animals, or money returned. It is put up in patent boxes with sliding pepper box top, which greatly facilitates its use. Simple and efficacious.

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Put up in boxes containing a dozen powders, with full directions for use.

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Both the above are recommended by ROD AND GUN and FOREST AND STREAM.

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oct 12 102 NASSAU STREET.

FOR SALE, when eight weeks old, six puppies out of my blue belton setter Mell, by Bob Boy. They are black and white. Two of them are black, white and tan, and are almost perfect images of their sire. For particulars, address L. F. WHITMAN, 5 City Hall, Detroit, Mich. je28 tf

FOR SALE—Irish setter slut Sally; color red, white chest and feet; thoroughly broken; 18 months old; warranted to point, back and retrieve; good nose and fast; full pedigree; sold for want of use. Price $50. Address C. H. CONE, 156 East 126th street, Harlem, N. Y. feb7 2t

SPIKE COLLARS.—Spike Collars, by means of which dogs of ANY AGE OR BREED, no matter how long hunted, or what the disposition, can be taught to fetch and carry, and to retrieve game in a most perfect manner, with no play about it. Dogs broken of gun-shyness and whip-shyness, made steady before and behind, and "to heel" steadily; prevents lugging on the chain, besides a much more extended sphere of usefulness. Price, with directions for using, $3. Kennel collars, which no dog can get over his head, price $1. Address M. VON CULIN, Delaware City, Del. feb7 tf

The Kennel.

NATIONAL
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SETTERS FOR SALE.—"Fan," black and tan, pure Gordon, imp. stock, out of "Maud," by Markles' "Grouse," two years old; taught first lessons; bred to "Lelaps" Jan. 5, 1878; price $75. One dog, two years, white and chesnut, sire Tucker's dog, Providence, R. I., Copeland's "Old Pete" grand sire, dam English imported, very handsome, 23½ inches high; taught first lesson, and game shot over; price $75. "Bell," half imported red Irish and half English, color orange, two years old, taught first and second lessons (see circular), extra in field, fast, staunch and handsome, 23½ inches high, never bred, price $125; will breed her to "Lelap," same price. Dogs trained and boarded. For terms and particulars, send for circular. FRANKLIN SUMNER, Milton, Blue Hill, Mass. j17 4t

THE DOG BREAKER'S GUIDE.—Train your own dogs in the most artistic manner. "The Dog Breaker's Guide" sent for three cent stamp. M. VON CULIN, Delaware City, Del. j17 tf

COCKER SPANIEL BREEDING KENNEL OF C. M. P. McKOON, Franklin, Del. Co., N. Y.—I keep only cockers of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruffed grouse and woodcock shooting and retrieving. j10 tf

FULL-BLOODED—Two Irish setter bitches, four months. Sire of pups, Dan, imported from J. G. Cooper, of Limerick, Ireland, by C. H. Turner, Sec. Nat. Kennel Club, St. Louis, Mo.; dam, Countess, by Rodman's Dash. One Gordon bitch, eighteen months old; hunted this fall, staunch on quail and very fast, with good nose; will make a good one. One Gordon bitch eight months old. Full pedigree given with pups. H. B. VONDERSMITH, Lancaster, Pa. Nov22 tf

FOR SALE, at a great bargain, my entire kennel with the exception of one brace for my own shooting. I have on hand, for sale: One pointer dog pup, Dilley's-Ranger stock; one pointer bitch pup, Don-Lina; one red Irish setter pup, Plunket-Nell; one lemon-and-white setter dog pup, Tam-Queen Blanche; one black-and-white setter bitch in whelp. Will sell the above at prices very much lower than ever before offered, and warrant them to be finely bred, and am confident no better blood exists. I am going to be absent from home much of the time henceforth, and must sell. Address W. H. HOLABIRD, Valparaiso, Ind. jan31 tf

FOR Irish and native setters, dogs and bitches of all ages, broken and unbroken. address E. J ROBBINS. Wethersfield, Conn. Oct 2

FOR SALE.—A fine setter pup eight months old, half Gordon and half native; black, with white star on breast. Address, JACOB SMITH, No. 205 Broad street, Harrisburg, Pa. feb14 1 t

The Kennel.

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FOR SALE.

Thoroughbred Gordon Setter puppies, out of our Gordon setter bitch "Border Lily," by L. H. Leonard's Gordon dog, "Pride of the Frontier," whelped January 25, 1878.

The above stock comprises the celebrated Major S. Stocklon, Dr. J. H. Gaulier, Jobling (of Morpeth), Langstaff, Sir Arthur Ohichester, and George, Duke of Gordon strains.

See article on "The Gordon Setter," in the *Chicago Field* of January 19, 1878.

Special inducements to sportsmen in the South and West. Address, FISHER & BICKERTON, 179 Flatbush ave., Brooklyn, N. Y. feb14 4t

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FOR SALE CHEAP—One-fourth interest in a well-located brook trout hatchery of most unlimited capacity, within 2½ miles of a depot; also a good farm of 200 acres in connection with fishery. Enquire at this office for further particulars. jan31 tf

LIVE QUAIL.—I have a choice lot of live quail which I offer at one dollar per pair. Address, CHARLES FREDRICKS, 73 Maujer street, Brooklyn, E. D. feb14 1t

FOR SALE.—Five pictures after landseer—"The Stag at Bay," 30x43; "The Monarch of the Glen," 31x41; "The Challenge," "The Combat," "The Defeat," each 22x33. These pictures have been highly praised by the press, and are so nicely worked in ink that it *requires very close examination to distinguish them from the finest steel engravings.* Price $175, or will exchange for a 12-gauge breech-loader of equal value. Address, JAMES F. CARR, Portsmouth, Va. feb14 2t

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American Standard Diameters.

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Gives **greater penetration** and **better pattern** than ordinary shot, by reason of retaining its shape under concussion and impact, soft shot being jammed out of shape while leaving the gun. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found **free from shrinkage**, more **spherical**, more **uniform in size heavier** and of **brighter** and **cleaner** finish than any other. SEND FOR CIRCULAR.

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Also manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

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Superior Mining and Blasting Powder.

GOVERNMENT CANNON & MUSKET POWDER; ALSO, SPECIAL GRADES FOR *EXPORT*, OF ANY REQUIRED GRAIN OR PROOF, MANUFACTURED TO ORDER.

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(Oriental Rifle.)

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Nos. 2, 3, 4, 5, 6, 7 and 8. Superior Rifle, Enfield Rifle, and Col. Hawker's Ducking. W. STITT, 91 Cedar street, N. Y. Agent for the United States.

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THE BEST IN USE.

ONLY ONE QUALITY MADE AND THAT IS THE VERY BEST.

Each article—coat, trowsers, vest and hat—have the name and manufacturer's address stamped upon it, and no suit is genuine without it bears this imprint.

The suit can be sent, securely packed, by mail to any part of the United States or Canada on receipt of $1.25 above the price of the suit.

We make no discount except to the trade. We make but one quality, and that is the VERY BEST. The price of the suit complete is $13.

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The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are riveted, and nothing is neglected to make the whole suit complete in every way.

OUR PATENT DECOYS

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THE HUNTER'S TENT

is made of tan-colored duck; light, easily transported. Size, 7 ft. by 8 ft. Price, $10 complete, made on the umbrella principle, folding into a neat roll 3 feet long.

In the Judges' report at Philadelphia they were commended for excellence in every part. Very novel and practicable; adapted to all out-of-door purposes where lawn, beach, hunters and camp tents are used; quick folding; all sides strongly fortified; enables them to stand against wind and rain. Rev. F. B. Savage, of Albany, N. Y., who camps out in Florida in winter, and the Adirondacks in summer, writes this about the tents:

ALBANY, July 31, 1877.

SIRS—I have just returned from a three-weeks' camping expedition in the Adirondacks, and have had the three tents bought of you put to the severest tests of exposure both as to wind and storm, and I do most unhesitatingly say they are the most complete thing of the kind I ever used.

1st. They are easily put up or taken down.

2d. They are perfectly waterproof.

3d. They are a good height and all the room is available.

Our party asked for no better. They were admired by all who saw them, and one party insisted on buying one of ours that was to spare. Rev. Dr. Duryea, of Brooklyn, and the Rev. Dr. Irwin, of Troy, both indorse what I say about your tent. With kind regards, yours truly, F. B. SAVAGE.

Tan-Colored Leather Pliable Waterproof Suits.

Shooting Coats, Jackets, Breeches, Vests and Hats at following prices: Coats, $22; Breeches $15; Jackets, $18; Vests, $12. These form the most elegant shooting equipment known. They are indestructible.

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Whenever a sportsman, or even one who does not claim the distinction, finds a really good and useful article, it is no more than fair that he should let others have the benefit of his knowledge. For this reason we would call attention to the Tan-colored Leather Shooting or Fishing Suits, made by G. W SIMMONS & SON, of Boston, Mass., the manufacturers of the famous "Boston Shooting Suit."

I saw these goods advertised in your paper, and wrote to the parties for samples. I found the material as soft and pliable as a piece of kid. I tested it by soaking in water twelve hours, and found it as nearly waterproof as one could desire, and after drying was happily surprised to find it had not stiffened in the least. I have since then received a full suit—coat, vest and breeches—ordered by letter from measure taken by myself.

The goods are splendidly made, well lined with flannel; in fact I do not see how they can be improved.

My friends are unanimous in their verdict that G. W. Simmons & Son's leather goods cannot be excelled in quality or beaten in price.

For every kind of sportsmen's goods address

G. W. SIMMONS & SON,
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PRICE, BOXED, WITH DARTS, SLUGS, TARGETS, &c., $10.
FULL NICKEL PLATE $12.

THE NEW IMPROVED AIR RIFLE.

Especially Adapted for Target Practice, SPLENDID FOR SHOOTING SMALL GAME and touching up

CATS OR DOGS.

Just the thing for Taxidermists to collect specimens. There is no report or danger attending its use, or any auxiliaries required to operate it. It can be loaded with ease and rapidity. It is extremely simple, and has no delicate parts to get out of order or wear out. For sale by the Trade generally. Sent upon receipt of price or C. O. D.

SEND FOR CIRCULAR. H. M. QUACKENBUSH, Patentee and M'f'r, Herkimer, N. Y.

Hart's Sportsman's Favorite Metallic Shells.

FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside. Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2⅜ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *GEO. E. HART & CO., Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

ESTABLISHED IN 1837.

Consult your interest by sending for our revised and reduced prices.

Excelsior Scroll Saw

LATEST IMPROVEMENT.

Double Treadle, including one dozen Saws, thirty insultable Fret Sawing Patterns and prepared Wood, to the value of $4. A new device for tightening Saw, Power Drilling attachment, Wrench, Oil Cup and Screw Driver. Speed, 600 strokes per minute. Saws, 1-16 inch thick. Price, complete, cased and delivered on board cars or at Express office, $12.

Saw only, without attachments, $9.

SMALL STEAM ENGINES,

With Copper Boiler, to drive light Lathes, Scroll Saws, etc. Are all sizes from 1-8 up to a horse power; either plain castings, partly finished, or complete, ready for use.

The "Scientific American" of June 30, 1875, says of the above, in an extended Editorial, introducing our manufactures to the public: "It can turn wringers, churns, washing machines, or ice cream freezers, run coffee mills, pump water through a house, actuate foot lathes, scroll saws or light boring machinery, run knitting or sewing machines, turn a grindstone or emery wheel, work ventilating or hand threshing machine cutters, meat or feed choppers, or sausage machines, drive small blowers for pneumatic dispatch tubes in a building, or for a blacksmith's forge, or compress air or work an air pump on a small scale in a laboratory. These are a few only of the purposes to which it can be applied."

Buffalo Pony Planer.

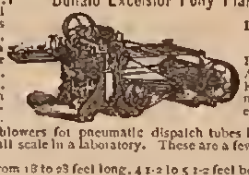
NEARLY ONE THOUSAND IN USE.

Buffalo Pony Planer. Will earn itself and pay expense of running in 8 days. Price from $50 and upwards, each.

LIGHT MACHINES FOR PONY OR HORSE POWER.

The great success of these machines is unprecedented, and it may be confidently affirmed that no article has ever more clearly proved its superiority for the quantity and quality of its work than this. It is made in several sizes, and can be fitted up suitable for bullock, mule, steam or wind power, in addition to those above mentioned.

Buffalo Excelsior Pony Planer and Matcher.



Patented March 30, 1875.

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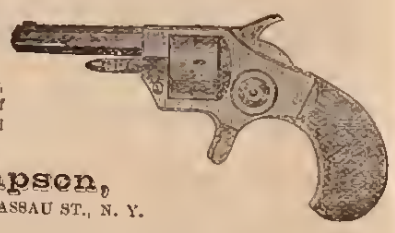

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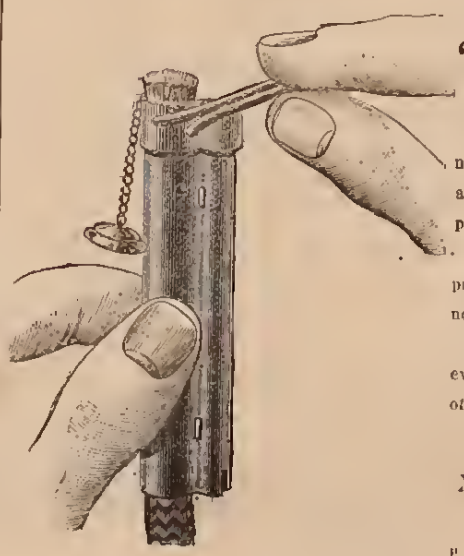

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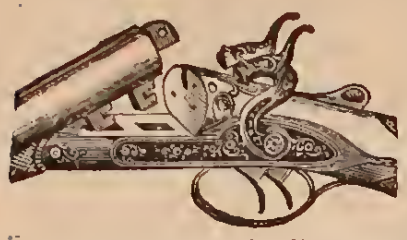

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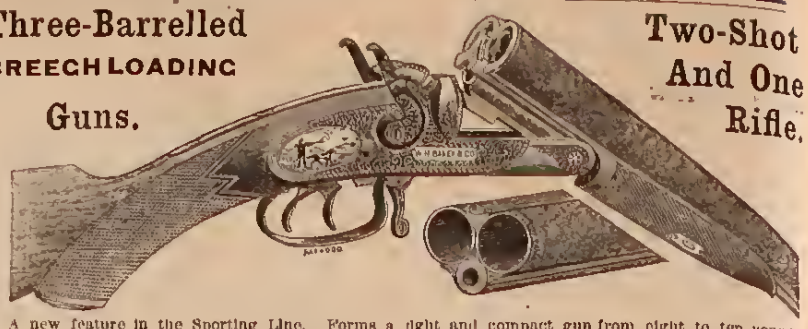

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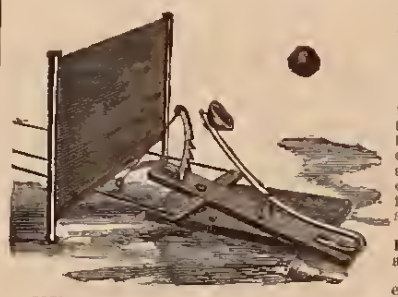

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Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, FEBRUARY 21, 1878.

Volume 10.—No. 3. No. 111 Fulton St., N.Y.

For Forest and Stream and Rod and Gun.

Voyaging on the Upper Missouri.

By Ernest Ingersoll.

No V.—[Continued from page 2.]

Buffaloes—Mouth of the Mussel-shell—Indian Fighters—Wood Cutting and Loading at Night—Corralled in the Ladies' Cabin—Fort Peck and Wolf Point.

COW ISLAND passed, the strikingly grand portion of the Missouri River scenery is left behind, for the mountains are now completely traversed, and ahead are only the vast plains, which stretch in uninterrupted levelness to Lake Superior. Yet the country is by no means flat, and it is only now and then that one can look more than two or three miles away, even from his elevated perch in the pilot-house. But the valley of the river is wide, the tortuous channel winding about between low "bottoms" covered with acres of luxurious grass, or dotted with cottonwood groves, or strewn with sand and drift-wood, the record of past inundations; and the shores are no longer water-gullied ugly exposures of white clay rising steeply from the water, but pretty groups of green and rounded hills, or long slopes whose gentle undulations are defined by gleaming lines of golden light reflected from the polished stems of the sward of ripened grasses. Ahead the eye can trace for many miles the wood-lined trough of the river's course, and northward the tops of the Little Rockies are just visible, while a blue serrated line on the southwestern horizon indicates the Judith range; these are the last glimpses of the Rocky Mountains.

Early on Sunday morning we reach Dry Point, so named by Lewis and Clarke, and come in view of an immensely wide meadow known as Buffalo Flat. Nor was it long before an occupant made his appearance, and then another and another, until a dozen heavy old buffalo bulls were bounding along a narrow path by the river bank, easily keeping pace with the steamer, and undergoing a fusilade from a hundred rifles and revolvers. But I think none of the balls struck where they were aimed, and the shaggy patriarchs were spared for future chase. This was only the beginning of buffaloes. All day long they were present to our vision, and within range of our Winchesters, sometimes singly, sometimes in hundreds, on both sides of the river. Unless in a large herd, they would travel always in single file, and on an even, regular gallop, as though all in the line were somehow connected and operated by a single piece of machinery. Where there were great grassy bottoms there was little indication of paths, but in other places trails, deeply worn, seemed always to be followed. Often these trails passed along the face of some exceedingly steep bluff, yet the huge animals would gallop over the narrow ledge, up-hill and down-hill, with a wonderful sure-footedness. Their agility is surprising. Sometimes in their fright at our cannonading and the puffing of the engines, they would step carelessly, causing the narrow shelf to break away, whereupon they would scramble up the acclivity and leap other breaks in the path in a manner even a dog might emulate. If, as occasionally happened, they did roll over into the river, it seemed to make little difference, for they are admirable swimmers. In one place I saw a large herd rush headlong over the perpendicular bank there fully fifteen feet high, and start to swim across the river, keeping only their eyes and noses above water, and making good speed. But generally they seek conveniently low points of access for crossing, and these places soon become worn down into broad roadways. But a disadvantage of this course is that the soft soil of the bank is soon trodden into a deep, tenacious mud, in which half a herd will get mired. We saw scores of the animals almost completely buried in the blue mud, their frantic attempts to leap out only serving to sink them deeper. This most usually occurs when they are landing, and after exhausting every effort in a vain attempt to leap out, sensible buffaloes will work their way slowly backwards into the water and swim to another landing-place. But often they are entirely unable to get out of the mud backward or forward, and die there of suffocation. Twice the steamer was obliged to stop to allow herds to swim across her bows, where they seemed to have a passion for going; and one old bull we completely keel-hauled from stem to stern. It was a sorry looking bison that rose in the wake of the paddle wheel! The buffaloes afforded us amusement all day, and fresh beef for the rest of the voyage, with small loss to them, I am happy to say, despite the large quantity of ammunition wasted (none of which was mine, mark you!); and if it had not all been written before a vast deal might be said concerning them. After this day's trip, however, we saw no more of them. A finer pasture ground than this part of the Missouri Valley, bounded by the Milk River on the north and the Musselshell on the south, could not be found. The traditions of their abundance here half a century ago read like fairy tales, and even now it is the favorite hunting ground of all the Indians westward and southward for 500 miles.

Now I must take the reader back a little.

The most important tributary the Missouri receives from the south, except the Yellowstone, is the Mussel-shell. It takes its name, I am told, from the Mussel-shell Mountains, which in one aspect have a fancied resemblance to a clam-shell set up on edge. If anybody has a better explanation for the name let them treat this theory charitably. Taking in all its windings, this river is 250 miles or more long, for the last half of the distance flowing through much the same regions of bad-land and prairie as the Missouri below Fort Benton, and like it the water is yellow with clay in solution. The triangular plain between the rivers is a great resort for all large game, and as a central point between hostile tribes has been the arena of almost continued Indian warfare. The junction of the rivers occurs in a broad, beautiful lowland where groves of large cottonwoods are thickly interspersed with thickets of willows and the briery shrubs common to this region, with patches of green prairie here and there. It is no wonder that so charming a spot early attracted the attention of the fur-traders and afterwards of the government, both of whom have had posts here at intervals. Finally, in 1867, an attempt was made to establish a town here which was to be the terminus of a wagon road from the mining regions of Montana to the Missouri. The single log-cabin erected was called Kercheval City, but in a few months it was abandoned, and the river undermining it gave it a free burial. The next year a second town called Mussel-shell enjoyed a temporary prosperity, but the wagon road scheme again fell through, and the town was a second time given to the bears. But there was one man in Montana who had faith in the new enterprise, and the resolution to make a third effort to plant a white settlement in this favored spot, which should be the importing town for the Territory. This was Col. George Clendenning, formerly of the regular army. One of the settlers of the ill-fated town of Mussel-shell, he clung to the locality when the settlement was abandoned, and for four years held it unaided in the interests of civilization, in his trading post of Fort Sheridan. His idea was, that, as steamboats could reach that point long before and long after the state of the river would permit them to ascend to Fort Benton, it would be advantageous to the Territory and profitable to the new town if all the Missouri River freight was discharged there, and transported overland to Helena and the other market towns. His earnest faith brought adherents, and "Carroll" was laid out. The whole town at present is about the size of a Pennsylvania farmer's collection of barns, that is as to the area it covers; but no one building is more pretentious than its log-built fellows. For a while Carroll flourished, and a line of stages, even, ran between there and Helena. But it was finally decided that the cost of constructing a really good road for freighting over the mountains would be much greater than the improvement of the river above Cow Island. Thus Carroll has followed its predecessors to decay, while Fort Benton is rapidly growing in prosperity, being the natural channel of commerce. Col. Clendenning still lives there, keeping an Indian trading post and living an adventurous life.

It was at this point, the scene of so many fights, that an incident occurred which you are sure to hear of all through the West. In 1869 a considerable colony of traders had gathered and had built a stockade fort. One day a company of Sioux, angry at something, attacked the fort, killed some white men and retreated, challenging pursuit. A party under the leadership of Johnson, instantly followed and fought the Indians on the open prairie, killing their chief. Then to terrify the Indians (and to feed his own mad thirst for revenge as well, I suspect), Johnson tore out the chief's quivering liver and ate it in the presence of both parties. He was a "terror" to friend or foe ever after.

Below the mouth of the Mussel-shell the country is even flatter than before, and the shores are lined with groves of aged cottonwood trees, sometimes with underbrush underneath and sometimes as clear of anything but grass as are the glades of Central Park. One of these groves was reported to be the home of millions of hornets and was called "Hornet's Nest Bend" accordingly, but I saw none. Several times black-tailed deer—two or three does and a buck in all the pride of new antlers—were surprised feeding on the shore as we swept quietly round a curve, and would stand gazing at us in stupid surprise till the crack of wanton and ever-ready rifles broke the spell of their wonder, and bade them be off. I am happy to say that none were even wounded, so bad marksmen were our passengers. Looking Southward from this part of the river you see a land-mark known as Round Butte, which is useful to steer by, but not much of a hill, and just as it is beginning to fade out of sight in the twilight we stop for the night where a perfect forest of trees cover the bottoms to the very edge of the high bank.

Standing on the forward part of the hurricane-deck, I watch the steamer slow her speed, see the inky deck hands run a gang-plank half its length over the bow and stand on its hither end, while a slender young darkey, rope in hand, runs out to the trembling extremity. Now he is near enough, and, springing ashore, he clutches the tufts of grass, digs his fingers into the soil, and is lucky enough to scale the almost perpendicular wall before its crumbling drops him back into the water. A cable is drawn ashore and attached, the deck hands swarm up the bank, and with spades cut an approach to the deck down through the edge. Then, firmly fixing a bridge of planks, they are ready to begin their evening's work of loading wood.

Outside the circle of the bustling little throng, nothing could be more peaceful than this Sabbath evening scene on the far frontier, where not a sign of human occupancy distracted the eye from the purity and complete beauty of nature. The sun behind me sheds soft, level rays straight down the stream, illuminating the aisles of the vividly green woods on either shore, so that I can see far between the twisted trunks. Between these emerald walls lies the blue—intensely blue—winding river, interrupted by long lines of yellow sand, like bars of gold on a cerulean field; while the robin's-egg sky overhead is dashed with streaks of cloud as though designed in counterpart. And beyond the azure river and verdant boundary of bushes and spreading breadth of forest, rise the hills, aglow with a light that makes them glitter like gilded domes. To my right stretch miles and miles of russet and yellow plain, a ruined wigwam in the foreground; to my left, a picturesque desolation of white sand and piled up flood-debris; behind, a blaze of sunset light where the curtains of Heaven have been drawn aside.

Meanwhile the passengers have scattered through the groves, cutting canes, picking such berries as are to be found (mainly a very bitter haw), and watching the deck-hands "wood-up." It takes twenty-five cords of wood a day to run these boats down stream; up stream, when they run all night, still more. This is cut by men who live alone, or two or three together, at convenient points along the river long enough to cut large piles of wood. In the upper portion, where wood is scarce, this often has to be chopped at long distances and hauled to the bank on sleds in the winter; but lower down it is piled up just where it is cut. Considering how many boats pass up and down in the course of a season, these solitary wood-cutters must reap a good reward for their labors. Nor do they seem to mind the solitude. An annual trip to Bismarck in order to squander all their earnings in a few days of debauchery; and an occasional visit to some trading post on the river, with the brief appearance of the casual steamboat, satisfies their longing for society.

The wood is taken aboard on the darkies' heads under the lashing tongue of an Irish brute of a mate, whose profanity is simply continuous and coarse, without an atom of the originality and humor in it that distinguishes the swearing of the mountain men. It serves to keep the negroes briskly at work though, and even forces them to curse each other in a fashion always amusing.

"Look aheah!" I heard one say, "you get up outen dat lazy trot er I'll light a fire under yeah 'til start yeah to eternity!"

This work done they go down on the lower deck, get a soap-box for a table, a fruit-can for a dice-box, and play chuck-and-luck by the light of a lantern as long as they can get any one to play with them. Hundreds of dollars sometimes shift hands at these nocturnal games, while disguised faro or draw poker is demanding equal attention in the cabin.

It was at this stopping place that I was called upon to undergo a very trying ordeal. It had got to be pretty late, and nearly everybody had turned in. I had bidden "good night" to the last trio of ladies some time before, but, attracted by the beauty of the night, still sat outside my stateroom and smoked a meditative pipe. Suddenly I heard my name uttered rather hesitatingly in a feminine voice. I turned, and a familiar face peered forth from one of the stateroom doors, with a quizzical look in the blue eyes.

"The ladies wish to see you in their cabin." Then my fair informant disappeared, shutting the door.

"The devil!" thought I. "Do you expect me to open that door and invade that sacred shelter? Not I;" and I went back to my pipe.

In about ten minutes, however, the same messenger reappeared to know why I had not come, since I was urgently in request. This time she did not shut the door, so I followed her into the little cabin.

All the stateroom doors were open, and a pretty disheveled head was visible here and there. Standing by the doors, lolling in the easy chairs, stretched upon lounges, making nice undulating heaps on mattresses in the corners (for berth accommodations were limited), were the occupants of this *sanctum sanctorum* of a steamboat's house.

I halted; my native modesty was not to be trifled with, and I was about to flee as becomes an unprotected male under such circumstances; but by accident the door behind me had been shut. So I stood still, resolved to die sooner than yield, and gradually became less nervous.

Meanwhile a marvellous whispering was going on, and, finally, the lady who had been sent to call me was made to act as spokeswoman.

"Mr. Ingersoll," she began, "the ladies wanted to ask you—— (Oh, Lord! what next!) whether you thought they would better go to bed to-night."

"*Go to bed!* why, you are already a-bed, aren't you?"

There was a slamming of doors and tittering from the blankets. Evidently I had made an unlucky remark in my astonishment.

"Yes—no—but—we're afraid we'll be murdered by Indians."

Ah, that was it, was it? Picture my relief! Then they all found their tongues; told me how the captain had said

this and a boy had seen that, and their imaginations had conjured up a thousand other things, so that altogether they had frightened themselves nearly to death. Now, I knew that there really was danger that we might be fired into by Indians before morning, and for the next forty-eight hours; but would you have me say so? Not a bit of it. I assured them of our complete safety; wasn't an Indian within 5,000 miles; wouldn't dare shoot if there was; no end of valiant men aboard ready to lay down their lives; careful watch kept, etc. The staterooms had all opened again, and now I had an audience not often vouchsafed a man away from home. It was becoming jolly, and I was administering comfort with great unction, when a baby tumbled out of a berth, and there was a diversion of attention which brought so strongly into view the peculiarities of the situation that my auditors all vanished like ghosts at sunrise, and I prudently retreated to my neglected pipe. It is very curious that next morning every lady I consulted was "sound asleep" at the time, "wasn't afraid," and had no knowledge whatever of the seance I had attended! Very curious, wasn't it?

Soon after breakfast the next morning (Monday) we reached Fort Peck, our first sight of it showing some Indian bodies on stagings ornamenting one bluff, and a perpendicular soldier ornamenting another. When the fort itself appeared there was little to be seen but a tall stockade, with bastions at the corners and some roofs. The gates were open, however, and a group of Indians and scarcely less civilized traders were standing on the bank. This is an agency for the Yanktonays—a band of Sioux—and a part of the Assiniboines. It has long been occupied as a trading post by one organization or another, but was being abandoned when I was there. The river had cut into the bank some hundreds of yards, and is still undermining the soil, so that in a few years no ground will be left to build upon. The houses arranged around the inside of the quadrangle are built of adobe, and are dirty things to live in, but that is of small consequence when you can sleep out of doors quite as well as in the house, and have no careful wife to be worried about dust. The whole centre of the fort was occupied by an enormous pile of what looked liked bales of hides which had been eaten through and through by worms, or ruined by long exposure. I heard our Pilgrim groaning to a friend over the waste, and rather enjoyed his dismay when he found that this was "pemmican;" not genuine pemmican, but strips of dried buffalo and elk meat, which is brought in by the Indians and kept to be resold to them in the starvation days of midwinter, or used by the hunters and soldiers who have to make long winter journeys, and can carry food in no other form so condensed. It looks anything but eatable corded up here in the dust, but can be prepared and cooked so as to be not only highly nutritious, but very palatable. As for the Pilgrim, when told what it was, he forgot his mortification in dilating upon the value and utility of this northwestern comestible.

The Milk River comes in here from the north, and is the most considerable of the northern tributaries of the Missouri. I could trace its course for many miles by the groves of cottonwood along its southern bank, and the steep bluffs upon the northern. The Milk River flows from its source near Chief Mountain on the boundary line nearly north of Fort Benton in an almost due East direction, and enters the Missouri at such an acute angle that the meadows between the two rivers, though less pleasant, are even more extensive than those at the mouth of the Mussel-shell. The valleys of the Missouri and the Milk are separated from each other by a slight watershed, the only considerable heights being the Bear's Paw and the Little Rockies, and north of the Milk the same plains country continues, forming an admirable game range and a hunting ground for all the Blackfoot and Hidatsa Indians, although nominally in the possession of the Gros Ventres alone. The soil is said to be highly cultivable, and large settlements are anticipated.

At Fort Peck lived for many years—and died in 1873—one of the most estimable men that ever upheld he reputation of Montana—James Stuart. He was a born leader of men, and conducted with the greatest skill many of the most difficult explorations and prospecting trips which the early settlers and gold seekers of Montana engaged in. But he was more than a sagacious and intrepid mountaineer and hunter. A man of good education and scientific tastes, he embraced every chance to add to his information and improve his knowledge of medicine and surgery. Well acquainted with the Indians of the region, he was careful to observe and record their customs, vocabularies, tribal relations, and everything concerning them, and accumulated a great amount of the most valuable information. He was beloved and honored throughout the Territory, not only by the whites but by Indians. Living a most adventurous life, in constant peril, he survived all danger to succumb at last to acute disease. He had expressed a desire to be buried in Deer Lodge Valley, Montana, and two of his brothers—to one of whom, Mr. Granville Stuart, now cashier of the First National Bank in Helena, I am greatly indebted—went to bring him home. An incident of this trip, which I find in the "Contributions to the Historical Society of Montana" will well illustrate plains life. The body was placed in a metallic case, and on Oct. 24, 1873, the funeral cortege, consisting of the Stuart brothers and nine companions, started from Fort Peck on the weary journey of 500 miles. It occupied twelve days, seven of them being through the Sioux country. At one point in the journey sixty Sioux warriors suddenly appeared on the edge of a ravine close to them, and recognizing Agent Simmons, approached and inquired the meaning of the procession. On learning that the coffin contained the body of Po-te-has-ka (the Long Beard), each Indian dropped his head, clasped his hands and pressed them upon his mouth, indicating in their expressive sign language that a friend was dead.

Fort Peck fortunately escaped the Indian raid it anticipated, thanks to the presence of Capt. Murdock's companies (D and I), of the 6th infantry, who were occupying an extremely pretty little canvas town in a cottonwood grove near by, guarding stores for General Miles, who was looking after Sitting Bull, the Sioux, with one eye, and Joseph, the Nez Perce, with the other; but before now it is abandoned.

Below Milk River the water becomes more and more dense with mud, the sand bars of increasing frequency and the snags innumerable. The hills on either side dwindle so that you can see far away—or could, were it not for the almost continuous forest, in which a few varieties of hardwood trees begin to mingle with the enormous cottonwoods. Everything is utterly wild and untouched, nothing, save here and there a chopper's ruined hut, or a pile of wood ready for our use, or an Indian's body, mounted on a staging, out of reach of animals, with tattered cerements flapping in the breeze, hints that men have ever before looked upon this wilderness. The boat goes steadily on, and at sunset we reach Wolf Point and stop for Monday night, 750 miles from the source, 2,150 miles from the outlet of the noble stream that bears us along.

For Forest and Stream and Rod and Gun.

A SQUIRREL STEW IN TENNESSEE.

IN the month of August, when the cock quail sits on the top rail of the fences, piping his melodious Bob White among the corn-covered uplands, and his mate is hidden away amid the weed-covered fence corners, busy with the cares of incubation, and the nimble gray squirrel makes many a furtive excursion into the cornfields; then it is that the burdened Granger of the Southern States, with his crops laid by and his cotton not yet beginning to open, turns his thoughts to the enjoyment of a social gathering, with a squirrel stew as its principal feature. Accordingly, a day is decided upon, the neighbors notified, and all make ready to enjoy themselves. The place of meeting is always some shady grove surrounding a babbling spring or artesian well, and by nine or ten o'clock the company have arrived, including the hunters, who, detailed the day before, have been out since sunrise with shot-gun and small-bore, and now appear well laden with their feathery-tailed game.

The large iron pot, filled with pure water from the well, is placed on the fire, and into it are put the squirrels, together with tomatoes and okra, while slices of bacon, a few onions, salt and red pepper are added for seasoning, and all is left under the supervision of a sable attendant, who occasionally stirs the slow boiling mixture with a long cedar paddle. Near by the carcasses of a lamb or kid and a shoat or two are barbecuing over a shallow pit, while some white-headed Uncle Tom or "Dan'l" is in attendance and hastes them from time to time with a mixture of butter, vinegar and red pepper. Near by the company are assembled, some engaged in pistol or rifle practice; others, younger, or, perhaps, more energetic, are heating themselves and laying up sore joints for the morrow by jumping, running races or pitching horseshoes. Others still may be seen enjoying a quiet game of euchre or set-back seven-up; while others, more moral or even more lazy than these, recline under the shade and talk of crops, guns, dogs and horses—while all keep an eye upon the fires, where the cooking goes steadily on under the direction of some local authority on matters of gastronomy.

After a while the head cook calls for volunteers to carve and scrape corn. The corn is reserved until the last, and a short time before the stew is done must be scraped from the cob and added to thicken the stew, which, in a short time afterward, is ready to be eaten. The test by which to determine whether the stew is done is to see if all the ingredients have become totally irrecognizable, for not until then is the stew said to be done. In the meantime the barbecue has been taken up, carved and placed in large wooden trays, from which it is distributed to the waiting guests, who stand around rude tables hastily constructed of rough boards. The stew is served in bowls, plates, or pans, as may be most convenient, and as it comes steaming from the large pot—shades of Soyer and Oude! what a savory mess it is! Sliced tomatoes, cucumbers and delicate silver-skinned onions furnish the side dishes; loaves of white bread and pans of corn bread flank the plates, and the whole is washed down with copious draughts of ale and bitter beer. Delicious melons, with thin rind and bright red meat, together with juicy peaches and purple figs, furnish the dessert, and the whole makes a feast that no one who has once enjoyed can ever forget.

One must be careful not to confound these social gatherings with the political barbecue, where rival politicians meet to praise themselves and vilify others, and where a noisy, though generally good-natured crowd, push and grab over tables covered with chunks of underdone or half-burnt sheep meat, pork or beef. It is to be regretted that the squirrel stew is growing to be a thing of the past—a recollection of other days. Alas! the irrepressible freedman, with his rusty musket or pot-metal shotgun has well nigh extirpated the entire race of squirrels.

The roasting ears grow hard along the wood-lot fences unmolested, and the pecan and hickory nut fall only to gladden the heart of the grunting hog, while the frisky little quadruped, whose graceful form and happy chatter used to enliven our Southern forests, and whose savory carcass furnished forth many an appetizing dish, has become, in most places, as rare as a turkey or a deer.

Many experiments have been made in adding other vegetables to the stew, but it is generally believed that okra, tomatoes and corn are all that are needed, while others, though they may detract from its merits, can certainly add nothing to them. I regret that I cannot give an exact receipt by which others may concoct this delicious dish, but my labors have been devoted to the *decomposition* rather than the composition of stews, and my knowledge embraces only a qualitative not a quantitative analysis of their constituents. Perhaps this may elicit a good recipe by which denizens of localities where squirrels are yet to be found may concoct these appetizing messes, much to the delight of their palates. It has been my good fortune to assist in demolishing many of the *chef d'œuvres* of cookery, but I have never eaten anything with greater relish than a plate of squirrel stew cooked and eaten *al fresco* in the society of the social and warm-hearted Southern planters.

WILL.

Fish Culture.

THE FIRST SOLES FOR AMERICAN WATERS.

THE preliminary trial of transporting soles across the Atlantic having just been made at the most unfavorable season of the year, and on so small a scale owing to the difficulty of obtaining specimens, that I had decided to say nothing at present about it, contenting myself with a full report of all connected with it to Prof. Baird, under whose orders I acted; but after hearing all sorts of uncertain rumors concerning the expedition, and seeing a notice in a newspaper that the "experiment was a failure," I have thought it best to give the facts. Some time ago Mr. J. G. Kidder, of Boston, suggested to the Commissioner on Fisheries that it would be desirable to introduce this favorite English fish into the waters of Massachusetts Bay, and offered to secure the necessary accommodation for the person in charge, and the tanks on some steamer of the Cunard Line. My recent trip to Germany was considered as a desirable time to see if it would be possible to transport soles, if not the very best season for procuring them.

We had no knowledge of their tenacity of life or ability to live long in cans, all of which we possess now, therefore the experiment was not, in this sense, a failure. An honored tutor of mine, long since dead, used to say: "No properly conducted experiment is a failure. We may not succeed in all that we undertake, but an experiment undertaken to decide a point at issue is a success no matter which way the results point."

I proved that soles could be brought across even in midwinter, and they seem to be easily killed by cold, according to the reports of the fishermen, who say that they die in the cans or fish-cars at night if there is a frost. Of this I am a trifle skeptical, but they do leave the shores for deeper water in cold weather, hence my failure to get specimens in December from the shrimp netters who fish near the shore. The men who catch soles for market go far out at this time of year and stay from three to four days, using heavy trawls that take an hour to lift and get out again, so they leave them down for a whole tide, and when raised the fish are dead in the net, or so bruised as to be valueless for transporting.

I had despaired of getting fish to make the attempt with, and had decided to return without them, when Mr. Long, Curator of the Southport Aquarium, taking pity on my condition, gave me the specimens from his show tanks which he will not be able to replace before April or May. On the 3d of January I left Liverpool in the Cunard steamer "Siberia" with twenty-four soles, and lost three within a day or two from bruises.

I watched them until midnight each day, aerating the water every three hours, and turned in, trusting to the sailors to give a change of water at 4 A. M. when washing decks, cautioning them against cold water. They went well until the 11th (eight days), when all but two were killed by the change of water in the morning between the hours of four, when the decks were washed, and seven, when I arose. The remaining two were safely brought over, and on the morning of the 16th deposited on "Stelwagen Bank," off Nahant, in eighteen fathoms of water.

The knowledge gained of the habits and seasons, as well as the tenacity of life in limited supplies of water, all of which have been faithfully recorded and sent to Professor Baird, together with the fact mentioned that two specimens that were in a separate can were brought safely in the coldest time of year, will be of great value in future transportations of this fish on a larger scale. Should that pair of fish escape the all-devouring jaws of the cod, it can no longer be said that Americans are a soleless race.

FRED MATHER.

Abstract of the Second Biennial Report of the State Fish Commission of Iowa, 1875-'76, and 1876-'77.

THE report of the Iowa Commissioner, Mr. B. F. Shaw, is a report of progress in nearly every department of the labors of the commission for the past two years. The document is one more indorsement of the continued and nearly uniform success of piscicultural undertakings in every portion of the United States. As the work of the past has been largely that of importing migrating fish, the attention of the commission during the past season has been devoted to native and non-migratory fish. The work promising the best results is that of taking young fish from the sloughs of the Mississippi and planting them in good waters throughout the State.

During the months of May and June all varieties of bass push into these sloughs to deposit their spawn. As the water begins to fall the parent fish retire to deeper water, leaving their young in the shoal water, where they are free from the rapacity of larger fish. Communication between the sloughs and the river is cut off, and the fish are left to perish in what are at first small ponds, then mud holes, and finally dry land.

Having received an appropriation for the purpose, the commission in 1876 equipped a small steamer for fishing in the Mississippi, and an aquarium car for the transportation and distribution of the young fish. The arrangement of the car was very simple, but it answered the purpose admirably. Two large tanks, holding each about twelve barrels, were placed in one end of the car as high as they could be raised, and firmly fixed in position. A tin conductor, extending the full length of the car, was connected with the tanks by rubber hose. Along each side of this conductor was inserted wooden faucets, eighteen inches apart. Beneath these the cans containing the young fish were placed in such a manner that the water from the faucets ran into it in a constant stream at one end, and ran out of the other end through an opening covered with wire cloth. These cans were four feet long, eighteen inches wide, and twelve inches high. The water supply was taken into the casks directly from the railroad water-tanks, through an opening in the top of the car. To guard against accident from lack of water, it was so arranged that after the water had been once used it ran into a reservoir beneath the car, and by use of a pump and hose could be thrown back into the casks for use again as many times as necessary. Air-pumps were also provided, but they found no necessity for their use.

The commission received very material assistance from the railroad corporations, to whose liberality the success of the work is largely due. The total number thus distributed was 319,000, the distribution being made as general and equable as possible. The plants comprised black, yellow and striped bass, croppies, sunfish, perch, drum, wall-eyed pike, river herring, skip-jacks and minnows.

The commission would urge the enactment of a stringent law protecting the fish of the Mississippi and Missouri rivers during the spawning season. The seining as now carried on is surely and rapidly depleting these streams. Of Penobscot salmon 90,000 eggs were received, successfully hatched and distributed in the northwestern part of the State. Only about 25,000 California salmon have been distributed, a portion of these going to private parties. Those previously planted are reported as doing well. There are in the hatching-house 800,000 lake-trout eggs, the fry of which are to be placed in the lakes of the State. It is hoped to obtain from the U. S. Commissioner a large supply of land-locked salmon; ten thousand were duly hatched and disposed of.

There are few good trout streams in Iowa. It is, however, the intention of the commission to have these well stocked, toward which 80,000 fry were deposited in suitable streams in Jan., 1877. The smaller rivers and creeks are thought to be well adapted to the grayling, and it is proposed to secure a

supply of these fish in the spring. Having received from the Holyoke (Mass.) Hatchery 150,000 of the Connecticut River shad, the commission deposited them in the Des Moines, thus making a total of 350,000 which have been placed in that stream. Iowa received, as her share of the whitefish hatched at Northville, Mich., 125,000 young fish, which were safely transplanted into Clear Lake. Although arrangements had been made for a supply of 300,000 eels, owing to the very unfavorable season only 100,000 were received. These were deposited in the main streams crossed by the Northwestern Railroad.

The increased interest in fish culture, and the establishment of private fish ponds is noted with satisfaction, and the conviction expressed that in a few years this pursuit will become one of the leading producing interests of the State. In conclusion, the work of the past two years aggregates a distribution of 5,315,700 fish, and the success attending the work, the improvements in facilities, the marked benefit already resulting from the work of the past and the promise of the future, combine to encourage continued effort and warrant the belief that appropriations of time and money will be rewarded with liberal returns.

EGGS OF THE WHITE FISH AND SALMON FOR GERMANY AND FRANCE.—On the 26th of January, by direction of the United States Commissioner of Fish and Fisheries, Mr. F. Mather received some 50,000 eggs of the *Coregonus albus* (white fish) from Mr. F. Clark, of Northville, Mich. These eggs were forwarded in the steamer Mosel to the *Deusche Fischeri Verein*. On the 16th of February, some 25,000 eggs of the land-locked salmon, coming from M. C. G. Atkins, of Bucksport, Me., were shipped by the Donau to the same association. In a few days a consignment of the eggs of the land-locked salmon will be sent by Mr. Mather to the *Societe d'Acclimatation* in Paris.

Extracts from Letters Concerning the Condition of the California Salmon Eggs on Arrival at their Destinations.

NEW HOPE, Pennsylvania, October 9, 1876.

LIVINGSTON STONE, ESQ.:

Dear Sir—I received the seventy-five thousand (75,000) California salmon eggs on Thursday last. They were in splendid order, there being only eighteen hundred (1,800) dead eggs in the lot, and I have only lost since one hundred and forty-two (142) eggs.

Truly yours, J. B. THOMPSON.

ST. PAUL, Minnesota, October 9, 1876.

LIVINGSTON STONE, ESQ.:

Dear Sir—The salmon eggs assigned to our State came safely on the 6th inst. and were in fine condition, for which accept our thanks.

Very respectfully, R. O. SWEENY.

BELLEVILLE, Illinois, October 13, 1876.

LIVINGSTON STONE, ESQ.:

Dear Sir—The Belleville Fishing Club received one hundred thousand (100,000) California salmon eggs on the 5th inst. The eggs were well packed and in excellent order.

Most respectfully yours, LOUIS C. STARKEL.

WESTPORT, Fairfield Co., Conn., October 16, 1876.

L. STONE, ESQ.:

Dear Sir—I am happy to inform you that our consignment of California salmon eggs was received in good condition, less than two per cent. being dead. Yours truly, E. M. LEES.

MADISON, Wisconsin, December 11, 1876.

LIVINGSTON STONE, ESQ.:

The California salmon eggs are now hatched. A better lot of eggs were never taken from fish. You and your assistants are entitled to great credit for the skill and care with which they were packed.

Yours truly, W. WELCH.

REEDSBURG, Oct. 9, 1876.

LIVINGSTON STONE:

Dear Sir—The eggs arrived this morning in good order, only four hundred and fifty (450) poor eggs among the twenty thousand (20,000). I send thanks for the careful packing. Yours truly, C. F. REED.

BALTIMORE, October, 13, 1877.

L. STONE, ESQ.:

Dear Sir—The two crates of eggs reached me some three days since, and were in very good condition.

Very truly yours, T. B. FERGUSON, Commissioner.

Redding, California.

TOLEDO, Ohio, Oct. 13, 1877.

LIVINGSTON STONE, ESQ.:

My Dear Sir—The consignment of two hundred and fifty thousand (250,000) California salmon eggs reached me on Tuesday last, 9th inst., in good condition, not over one in five hundred being spoiled. They were at once placed in the hatchery here, where they are doing well.

Very truly, EMERY D. POTTER.

CHICAGO, Oct. 15, 1877.

LIVINGSTON STONE, ESQ.:

Dear Sir—The salmon eggs arrived here about ten days ago, in most excellent order. Yours truly, N. K. FAIRBANK.

VIRGINIA MILITARY INSTITUTE, Oct. 21, 1877.

LIVINGSTON STONE:

Dear Sir—The eggs came to hand in good condition, between three and four per cent. showing dead after being in water twenty-four hours. Some of the trays are now hatching, and with no accidents, hope to have a very successful season. Very truly, M. MCDONALD.

ELGIN, Illinois, Dec. 17, 1877.

LIVINGSTON STONE, ESQ.:

My Dear Sir—The California salmon eggs came in very nice shape, and hatched with but small loss. Yours, W. A. PRATT.

[*Extract from the Lyttleton Times, Christchurch, New Zealand, November 14, 1877.*]

FISH CULTURE IN OPAWA.

The Wellington consignment of American salmon ova arrived on Saturday last by the "Rotura." The splendid condition in which they arrived reflects great credit on those in America who had charge of the collecting and packing, which, in general respects, is an improvement on the English method.

—Brookhaven, L. I., has appropriated $200 from the bay revenues for Chester River oyster culture in the bay east of Blue Point, during the coming spring.

Natural History.

BIRDS WITH TEETH.

WE live in an age of surprises; some of them agreeable, but too many saddening. With what feelings of regret do we not contemplate the abolition of time-honored customs, the breaking down of old institutions and the exposure as fables of legends in whose truth we have religiously trusted from earliest childhood. Truly this is a world of change and there is nothing in it which is stable. Those of us who in our secret souls still cling to the beliefs of the past may well cry out, *O tempora, O mores*, whither are you leading us? Many a supposed old fable is now known to be a truth, and what we have always regarded as truths are often, in these latter days, proved to be arrant falsehoods. The kraken, long classed among the myths of the dark ages, has been proved to exist, and even the much ridiculed sea serpent is believed in by many intelligent people. An eminent ornithologist has asserted in a late work that pigeon's milk is no longer a myth, but a fact; and still more recently our trust in that ancient simile, "as scarce as hen's teeth," has been overthrown, and that venerable saying is added to the already long list of shattered beliefs which we must banish from our minds forever.

Figure 1.

SKELETON OF HESPERORNIS REGALIS.—*Marsh.*

Of all the great variety of of fossil animal remains found by the geologist bird bones are the rarest. This is due in part to their small size as compared with the bones of beasts and reptiles, but still more to their extremely delicate and fragile character. A combination of lightness and strength is obviously essential to the conditions of a bird's life, and the bones which make up the skeleton are unusually strong, containing in their composition a much greater proportion of the phosphates of lime than is found in the bones of the mammalia. This, while it adds to their strength, of course increases their weight and to compensate for this increase, most of the bones of the bird-skeleton are hollow, either containing large air cavities, or being partially filled with a cancellated network of bone which, while adding little to the weight, increases very considerably their strength, permitting, however, a free circulation of air. These air cavities not only lessen the weight of the bird, but, being filled with air much warmer than the outer atmosphere, the specific gravity of the bird, and consequently the labor of flying, is considerably diminished.

It is apparent that bones constructed on such principles as the foregoing, while they are of the greatest possible use to their possessor, are badly fitted for withstanding the rough usage to which they are likely to be submitted after death and during the progress of geological changes. This pneumaticity of the bird's bones is therefore very much against their preservation, and when subjected to the great pressure of superincumbent masses of earth they are likely to be crushed and the fragments, when the beds which contain them are denuded, washed away, scattered and lost. Only two specimens of the Jurassic bird, *Archæopteryx*, have been found, both imbedded in the lithographic slate of Solenhofen, a matrix which is exceptionally favorable to their preservation, and but two cretaceous birds are known from England, both in a very imperfect and fragmentary condition. In this country, however, in the soft yellow limestone which underlies so large a portion of the plains of Kansas, and in the green-sand deposits of New Jersey, have been found more cretaceous birds than are known from all the other deposits of this age put together.

In 1872 Prof. Marsh described several species from these localities, and since that time a number of others have been found, mainly in Kansas, so that at present the bony framework of two widely different types is quite fully known. The most extraordinary fact about these ancient forms is that, so far as the skull is known in the different species, they all possess teeth, thus clearly indicating an approach to the reptiles from which it has long been believed that the birds originally sprang.

Figure 2.

ICHTHYORNIS DISPAR.—*Marsh.*

Twice natural size. 1 & 2. Top and side view of left lower jaw; 3 & 4. Front and side views of a cervical vertebra.

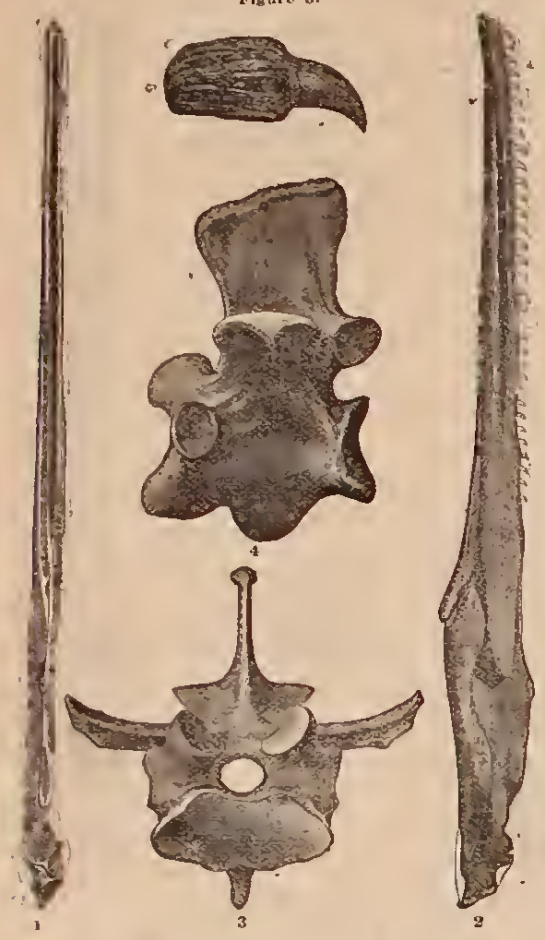
One of these remarkable birds, *Ichthyornis*, the one in which the presence of teeth was first detected, agrees in many points with some of our modern forms, resembling more closely a tern, or gull, than any other existing bird. It was well fitted for flight, having a strong keel on the sternum and very powerful wings, while the legs and feet were comparatively small and weak. Still, the presence of teeth in distinct sockets, the fact that the vertebræ are somewhat *biconcave*, the latter a character only of the fishes and lower reptiles, together with other peculiarities less striking to the non-scientific mind, clearly entitles it to the position of the type of a new sub-class of birds which Prof. Marsh has happily termed *Odontornithes*, or birds with teeth. This form too is so different from another toothed bird discovered by the same paleontologist in substantially the same geological horizon that it has been placed in an order by itself, to which has been given the name *Odontotormae* in allusion to the manner of implantation of its teeth.

The other peculiar group to which we have referred has for its type the genus *Hesperornis*, and differs almost as widely from *Ichthyornis* as from modern birds. Like its contemporary it had teeth, but these teeth were not in sockets, but were implanted in a long groove in both the upper and lower jaws; in the latter, however, the teeth did not extend to the extremity of the bill, but were confined wholly to the middle and posterior portion. *Hesperornis* was a water bird, and in the general configuration of its body approaches quite nearly the loons of to-day. The resemblance, however, is merely superficial and adaptive, being a consequence of its aquatic habits. In total length, measured from the extremity of the bill to the tips of the toes, it was about six feet, and was thus larger than any living bird except the ostrich and its allies. Its legs were enormously stout and powerful, as it was necessary that they should be, since it lacked any other means for locomotion. It was even worse off than the existing penguins, for they can use their rudimentary wings in swimming, while *Hesperornis* had no visible wings. That this was the case was first inferred from the fact that the sternum, or breast bone, is destitute of a keel, being flatter than even that of the ostrich. More recently, the discovery of the humerus, or upper arm bone, has confirmed this supposition, and it appears that this was the only bone of the wing present, and that even this was concealed beneath the skin. Thus *Hesperornis* was, so far as wings are concerned, even worse off than the Apteryx, in which the bones of the wing, although very small, are all present. Many of the characters of the skull on this genus seem to ally it to the *Ratitæ* (ostrich, cassowary, apteryx, etc.), and, in his recently published Nashville address, Prof. Marsh has remarked that it "was essentially a carnivorous swimming ostrich." Too many remarkable features are collected here, however, to admit of its being placed with any known group, and hence it becomes the type of a second order of *Odontornithes* under the name *Odontolcæ* (teeth in grooves).

The two types above described include, so far as known, all the toothed birds hitherto discovered. It is true that the *Archæopteryx* has been thought by some to have possessed teeth, but a careful examination of the specimen by the best

anatomists, warrants us in believing] that the teeth referred to the bird are *fish teeth*, which were accidentally deposited in the same slab with the bird bones. Prof. Owen, too, has described a toothed bird from the Sheppey Eocene, but, in this case, the "teeth" were merely protuberances of the bone of the jaw, and were in no sense true teeth, but were like those irreg-

Figure 3.



HESPERORNIS REGALIS.—*Marsh.*

1 & 2. Top and side view of left lower jaw, half natural size; 3 & 4. Front and side view of dorsal vertebra, natural size; 5. Tooth, four times natural size.

larities in the bone, sometimes seen in the bills of some of our lamellirostral birds. All the known specimens of the *Odontornithes* are in the Peabody Museum at New Haven; and it seems strange that, while Prof. Marsh has secured so many and perfect specimens, representing such diverse forms, none of the exploring parties which, during the past ten years, have so thoroughly explored the West, should have secured a single specimen.

In *Ichthyornis*, then, we have a gull or tern-like bird, about the size of a pigeon, possessed of great powers of flight, no doubt a swimmer and capable of wandering at will over the Cretaceous Ocean, which once spread far and wide over what are now the great plains of the West; in *Hesperornis*, a bird fitted admirably for life upon the water, but probably almost helpless on land, and certainly incapable of flight. Both species, no doubt, lived upon the fish with which this ancient sea was so abundantly supplied, and both, very likely, bred upon the numerous islets which then first faintly foreshadowed the Rocky Mountains of to-day.

Strange creatures—were they not?—and fit contemporaries of the wonderful forms which swarmed in and about the waters of that period. What wonder that in the constant struggle for existence that must have been going on between huge Mosasaurs, Plesiosaurs, Turtles, Sharks and Pterodactyls, almost all the forms perished so completely that our present seas contain but a few genera representative of this epoch of the distant past.

SQUIRRELS AND EMASCULATION.

NASHUA, ., Jan., 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Having for the last few years devoted form ten days to a fortnight's time to hunting squirrels both in the East and West, I have naturally been interested in the discussion in the columns of the FOREST AND STREAM AND ROD AND GUN in regard to the cause of the absence of testicles in a large proportion of the males of the gray and black squirrels. From my own observation and from that of others who have had equal or even better opportunities, and who have noticed the same peculiarity in a large proportion of the males which they had shot, I am convinced that the loss of the organs is not in the majority of cases, though it may be in a few, attributable to the *Œstrus emasculator*.

I have found the grub in the backs of perhaps half a dozen squirrels, though never in the testicles of over five hundred which I have brought to bag during the last ten years. Out of that number it is safe to state that not one in twenty males have been found entire. I have shot more or less red squirrels within the same time, but never noticed that that branch of the squirrel family was devoid of any of its reproductive organs. In many sections it is found in abundance, while the gray and black are very scarce, or not found at all. Why is not the red squirrel equally subject to the attacks of this Epicurean emasculator.

The gray squirrel is not wanting in pluck, for I have frequently witnessed combats between the males in the rutting season that proved that they are hard fighters; on the other hand I have seen the diminutive red chase a gray squirrel out of sight. On one occasion I witnessed a red squirrel drive a gray off a dead tree by the river side plump into the stream

Now, for one, I don't believe that the black or gray squirrel runs from the red from lack of courage, but that they instinctively know that in the contest they would be castrated, and—well, who wouldn't run? The theory that the old males castrate the young I don't believe in, for it is against the natural law of reproduction of species.

WEBB.

MEDFORD, Mass., Jan. 26, 1878.

EDITOR FOREST AND STREAM:

In your last issue of FOREST AND STREAM in regard to squirrels and emasculation, Chili says, "I never saw a gray or red so afflicted, nor ever heard of it, though they live in the same wood." I was much surprised, for here I am positive it is quite different. This last fall I had fair luck in shooting grays, and of all that I have ever shot or have seen that were killed in this neighborhood only two were devoid of testicles, while with the red precisely the reverse was true. While in the woods May 15, 1876, I discovered two nests of the *Hudsonius*, from which I captured eight young ones. They were two-thirds grown, and lively, and when placed in confinement were well able to take care of themselves. Of the eight six were males and without those necessary appendages. During the following summer six others were caught by different persons, and of the lot only two had escaped castration.

May 14, 1877.—I found a nest of the *Hudsonius* in an old apple tree in the thickest part of the wood. It contained six young ones, about a day or two old. With the aid of a pocket lens I came to the conclusion that the males were perfect. I visited the nest six days later expecting to find that the old male had performed the operation, but, to my disappointment, they had disappeared, probably removed by the old ones on account of my former visit.

MEMOIR.

LILESVILLE, N. C., Jan. 28, 1878.

EDITOR FOREST AND STREAM:

While I have no new theory to offer, or new doctrines to promulgate, I have a *fact* or two bearing upon the subject which may not be amiss. The idea of one species, genus or color of squirrel performing castration upon those of another won't do. Nobody in this section of country ever saw a "red" squirrel, unless in some menagerie or "show." The black, or "fox" squirrel, though in years long ago plentiful, has hereabouts almost entirely disappeared. Of the gray we always had, and yet have, an abundance, and of them I have killed, and yet kill, many upon which castration has been performed. The belief has always been that it was done by the older ones upon the young, for "reasons satisfactory to themselves." Certain it is, as before said, it is not *here* at least, the result of enmity or warfare between *one* kind and *another*, for we only have one kind. As to the worm, "wolf," grub or insect theory—having never before seen or heard of it—I have no opinion to advance. I know this though: *Scars*, especially on the *eunuchs* of not over a year old, are plainly to be seen, as any of our hunters will testify. A worm, or insect, would hardly leave such.

And another thing I know; aye, all of us do, that those squirrels which are left, as Baba threatened to "leave" Don Juan, are invariably falter, more delicate and loathsome than all others.

E. R. L.

MOFFLINTOWN, January 28, 1878.

EDITOR FOREST AND STREAM:

It is my opinion, based upon ocular demonstration, that the testicles of the gray and black squirrels are not developed until the second year. I can safely say I have shot hundreds of squirrels that were apparently without these organs, and in every case they were young squirrels, but I found upon skinning them that the testicles were underneath the skin, and about the size of a small soup bean.

I have no doubt that you have observed the same thing. Now, might it not be possible that the "emasculator," when properly investigated, is simply the *age* of the squirrel. I should be pleased to hear from some of your readers what has been their experience in this matter.

Very truly, yours, J. E. H.

BERLIN HEIGHTS, O., Jan. 26, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Regarding the castration of the gray and black by the red squirrel, I am an unbeliever in the whole thing. I believe them, however, as liable to castrate as to bite off an ear or two, or bite them on any part of the body, and no more so. Young squirrels, and old ones out of the rutting season, may and do carry those organs within the abdominal cavity, as the human fœtus is known to until a certain stage of development. 'Tis a well-known fact to zoologists that the squirrel is not the only animal which lacks at certain seasons a development of those organs, though I believe the squirrel stands A No. 1 for inordinate development for an animal of his size. I believe I stand lone in this view of the case, and ask only for fair investigation. Take such specimens as you consider castrated to your M. D., and let him examine for you. They may be very small when found, but nevertheless I believe you will find them.

TONIC.

CLEVELAND, Jan 29, 1878.

EDITOR FOREST AND STREAM:

I send to you by express a box of squirrels we found here on the market. Labels are attached as follows: "Male and Female; Fox Squirrel." This squirrel is often found emasculated. They inhabit a country where the "Chickaree" is a perfect stranger, and the "bot fly" is not known. The pair of black squirrels (male and female) are good specimens of their kind. It is rare in this locality that you find the black squirrels emasculated. This variety of the squirrel is now becoming scarce. Years ago they outnumbered the gray. The female specimen of the gray squirrel is perfect; so are the two males; one an old fellow, the otter a yearling. But now I would call your attention to the pair of *emasculated* (?) gray squirrels, and, if you have good practical anatomist on hand, I would like to have him carefully dissect and search for their generative organs. My impression is he will find them wanting; not as the result of the handiwork of the "Chickoree" or the grubbing work of the "bot fly," but the result of a natural law that has caused an arrest of development. The result of numerous dissections of the male squirrel, with testicles and without, has led me to the conclusion that this anomaly is entirely owing to the non-descent of the gland or its imperfect development *in utero*. Again, I ask for a careful dissection of the two emasculated (?) gray squirrels. As this matter of the male squirrel being often found without testicles has been a disputed question for many years, suppose through the medium of the FOREST AND STREAM we now settle the question.

Yours truly, DR. E. STERLING.

BIDDEFORD, Me., Feb. 16, 1878.

EDITOR FOREST AND STREAM:

I have been always told by experienced gunners that a considerable portion of the male grays were thus maltreated and abused by the little reds, but, up to the present time, and during a careful observation of several years and inspection of a large number of gray squirrels that have been shot by myself and others, I never have found a male squirrel in which the testicles were not to be found. The specimens were numerous in which they appeared to be absent, but upon careful examination, I have always found the apparently missing organs in the cavity of the abdomen; and this condition seems to be quite common in squirrels under one year of age, and occasionally in old specimens. I have found these organs in a similar position, and in almost all, they can be easily pressed through the inguinal canals into the abdomen.

The little red squirrels in this region are much more numerous than the gray. During the past season I shot as much as three or four bushels of them, and have examined many shot by others, and results are as in former years, as previously stated. I think the prevalent idea in this matter must be a mistake—in the main at least. So far as I know, ova, such as have been described in this connection, deposited in the integument of animals, do not go deeper than the cellular tissue beneath the skin during any period of their developement; therefore, they cannot become a destructive agent to these organs.

And again, the organs are protected by a distinct and strong envelope of their own (the *Tunica vaginalis*), which is in no way connected with the scrotum, and is freely moveable within it. Without any doubt these organs are sometimes destroyed by disease and accident in squirrels as in all other animals, but I do not believe this theory of castration that is in vogue. I have often seen the red drive the gray, and watched them all through the performance.

OBSERVER.

[We have received a great number of communications on this subject, from which we have selected the foregoing; and, since it has been so fully discussed in our columns, it seems proper that we should advance a few suggestions in the matter and state, at least, the results of our own experience.

The evidence which has been presented by a number of our correspondents at once negatives the idea that this absence of generative organs is confined to any particular species of squirrel, and the only testimony in favor of the idea that the act of castration is performed by one squirrel on another is that adduced by "Jacobstaff" in a recent communication, where he states that he killed a red and a gray while the operation was being performed. Everything else on this point is mere hearsay: "It is said," "We are told," and "It is the general opinion" that the old castrate the young—the red the grays, or the grays the fox squirrels, etc. Under these circumstances, we think that in the case which came under the observation of "Jacobstaff" the castration must be regarded as a mere accident of the combat which he interrupted. Now we venture to say, and careful observation will bear out the statement, that of all the squirrels supposed to be without testes not one in ten really lacks these organs. The rodents are peculiar in many points, and this is one of them, that their testes are contained in the abdominal cavity, and thus, in the young at all times, and in the old usually, they are not to be found by mere inspection. Often it is necessary to dissect a specimen before these organs can be seen. This point is brought out well by J. E. H. and Tonic, and is hinted at by Dr. Sterling. In support of this position we quote from two of the most eminent living anatomists, Owen and Huxley. Owen says of this order (Com. Anat. Vol. III., p. 649): "The testes undergo a periodical increase of size and change of position, passing from the abdomen into a scrotum, and being again retracted after the rut (except, perhaps, in *Leporidæ*) within the abdomen." Huxley, in speaking of the group, says (Anat. Vert. Animals, p. 436): "The testes do not leave the abdomen, but come down into the groin in the breeding season." This is the view which we have held all along in the discussion, but we have preferred to wait until it should be clearly brought out by some correspondent before alluding to it. Now as to the specimens sent us by Dr Sterling, which, when they came to hand, were unfortunately a good deal decayed, but which (so far as it was possible to determine) only serve to strengthen our belief that this is the correct light in which to put the matter. There were six males in the lot, viz.: one fox squirrel, one black and four grays; and of these, the two first mentioned and the oldest gray, showed at once that they were entire, the testes being very prominent. An examination showed that the three animals were quite old, their teeth being considerably worn down. The second gray, labeled "young male, testicles intact," was dissected, and proved to be as labeled, although we could see nothing of the organs until a knife had laid them bare. The last two grays were labeled "Emasculated (?)," and we examined them with a good deal of curiosity. They proved, however, to have apparently complete testicle, although they were small and withdrawn into the abdomen. *They were both young animals.* We would suggest, then, that the announcement of the absence of the generative organs in squirrels be delayed hereafter until they have been carefully looked for with the knife, for we feel confident that much of the present discussion has arisen from careless observation.

All this, however, does not help us out on the question of *Œstrus emasculator*. That there exists such a parasite we cannot doubt, for it is vouched for by too many eminent scientific men. We acknowledge, however, that we have never seen it.—ED.]

A QUAIL AT SEA.

WAREHAM, Mass., Jan. 10, 1878.

EDITOR FOREST AND STREAM:

A mystery is solved after the lapse of forty years. In 1837 I was a sailor boy on board a brig cruising on the coast of Africa. On the 3d of November in the former year, when eleven degrees north of the equator and between eight and nine degrees from the coast, while at the wheel between the hours of three and four o'clock P. M., starboard tacks aboard close hauled on the wind, under full sail, with light breeze and smooth sea, making a Southeasterly course, I sighted a bird from the direction of the coast crossing the ship's bows some one hundred yards distant, and at an elevation of twenty to thirty yards from the water's surface. At once I recognized him as a stranger in that locality and when he attained the bearing of four or five points off our weather bows, he set his wings and, so to speak, scaled toward the ship, and, as though acquainted with marine etiquette, boarded the ship in the weather waist and fluttered down to the lee scuppers. I told our captain, who was at my side at the time, that a quail had boarded us and now lay on the lee scuppers. Said he: "Fudge! A quail this distance from the land! Not much. But," said he, "go fetch him." I darted

to the spot and secured him without the least trouble, for he lay exhausted and famishing, and, like a well bred setter, retrieved him to my master. "By thunder!" said he "'tis a quail. And yet it can't be a quail. But still he has all the marks of a tame bird—yes, 'tis a genuine quail. But where did he come from is the mystery, for 'tis said quails can only fly while they hold their breath." At last it was admitted by all on board that our new-comer was a quail. I placed him in a cage and nursed him with all of my skill, but on the second morning of his incarceration I found him cold in death, the vital spark having departed during the previous night. The death of my little voyager, and at once my pet, caused me to mourn, as I had laid all my plans to take him home and Americanize him in the old Bay State.

The advent and death of the bird created a forecastle panic on board, as it was looked upon as a harbinger of death by the old and superstitious sailors. For days the principal topic of conversation in watches on deck and watches below was of ghosts, hobgoblins, flying Dutchmen, Will-o'-the-Wisps, Finlanders and the like. "'Twas a bad sign, and something is going to happen," said an old canvas-back, bearing a look of a large amount of suppressed wisdom held for future use. Something did happen. We arrived home as America all well on the first of the following July. On the fourth I dined with a convivial party, when I related the story of my quail, and, naturally enough, the party were unbelievers, and one rose to his feet and moved that with full glasses and standing we sing "Robinson Crusoe."

Hundreds of times I have related this quail story, and as many times my audience were unbelievers. Yes, for forty years I have been jeered and joked for my quail story, but, with all the opposition in those years, I have never for a moment doubted that the bird was a genuine quail. And now, in conclusion, although at a late day, I must give thanks to Mr. Everts, of Vermont, for unveiling the mystery and making clear in my mind as the brilliant sun at noonday that mine was a migratory quail.

CYRUS LIECUM.

A LITTLE AUK ON SHORE.

FORT HAMILTON, Jan. 21, 1878.

EDITOR FOREST AND STREAM:

About ten days ago Mr. Bell, of this place, sent me a little auk (*Hergulus alle*) which had been captured under the following peculiar circumstances.

Mr. Bell's little son was playing in a large open field in the village, when he noticed a singular looking bird on the ground attempting to fly. It would flutter along for a short distance and then fall, as though hurt, or exhausted. The boy, after a short chase, managed to throw his hat over it. He took it home to his father who, after looking over Wilson's Ornithology, found it to be a little auk.

The bird was placed in a cage and fed upon suet and chopped clams. When placed in a tub of water it swam round and round, constantly dipping its bill in the water. Its position when standing was nearly erect, the body thrown slightly forward and the weight resting on the toes. It lived about a week after its capture and seemed to be doing well, when one morning it was found dead in its cage. The cause of its death is unknown, but it was supposed the cat had frightened it to death by springing at it, as on two occasions before the cat had made the attempt and the bird had shown great terror at the sight of the animal. Mr. Bell politely sent it to me. I carefully skinned and prepared it for stuffing, but could not discover that the bird was injured in any way. It was a valuable addition to my cabinet, as they are rare birds about here, or anywhere else I believe.

How the bird came to be in such a place as a grass field half a mile from the nearest beach I cannot imagine, except that it had attempted to fly across Long Island, and becoming fatigued had descended to the earth. Its small wings and heavy body seem to favor this hypothesis. It might have been driven on shore by a violent gale, but I do not recollect any recent storm.

DE LAGNEL BERIER.

—We have received Dr. A. E. Foote's *Monthly Bulletin* of the Naturalists' Agency of Philadelphia. Dr. Foote advertises a large list of minerals, birds' eggs and other specimens, as well as many scientific publications, especially those of the U. S. Government.

A NEW CHIMÆRA.—Under the name *Chimæra plumbea* Prof. Gill has recently described before the Philosophical Society of Washington, a new fish to American waters. Of this ancient group, the Chimæroids, but few species now exist, and the discovery of a new one is a fact of high interest. The specimen upon which this species is based was caught near La Havre Bank, about 250 miles southeast of Halifax. The specific name *plumbea* is in allusion to its color.

THE AMERICAN PREHISTORIC MAN.—To Professor Edward D. Cope is due the discovery of the oldest traces of man in America. It is not yet quite fixed by geologists whether the western hemisphere is positively older than the eastern world. Certain low hills in Canada, not very far from the lakes, were, according to Lyell, asserted to be of the earliest formation. This discovery, then, of Professor Cope's, may be of the most valuable character. In 1877, in a lake basin of Oregon, mingled with strange fossils of animals, these traces of men were found. Flint implements were brought to light in abundance, in a deposit of sand and ashes, mixed with the bones of gigantic extinct llamas, horses, sloths, birds and fishes. As a paleontologist, Professor Cope's labors are of the most distinguished character, and his name must always be associated with these wonderful discoveries.

CALIFORNIA QUAIL WANTED.—Our correspondent, "G. N. B.," who writes us from Latrobe, Pa., asks us where he can obtain California quail for breeding purposes. We should have recommended Reiche, of Chatham street; he failing, we know not to whom "G. N. B." should apply. Will the party referred to in our correspondent's note below, please send us his address? "G. N. B." says:

I saw a notice some time ago in FOREST AND STREAM that some party in Ohio had been successful in raising a brood of California quail. I had a pair, but lost the cock bird. The hen had thirteen eggs, but of course, having no cock with her, the eggs did not hatch; would like to try it again this year, but have tried Reiche and others and have been unable to find birds of that kind east of Rocky Mountain. Will you please give me the address of this party in Ohio, that I may correspond with him, and perhaps secure a cock from him. My paper containing the article has been mislaid.

ALL SORTS.—*Editor Forest and Stream—Salem, Jan. 15.*—I recently mounted a fine snipe (*G. wilsonii*), shot by Mr. R. Nelson, of Peabody, about New Years. This is the latest I ever knew about here, though others have been taken almost as late. The bird was in good order and fine feather. A harlequin duck was recently shot off Tinkers Island. This is rare. I wish some one would inform me why the little auks (*M. alle*) are so plenty this winter. They are not so as a rule, except by severe weather. I am now handling some fine black tail deer heads and antlers, and some fine prong-horned antelopes from Kansas and Colorado. I also saw at a friend's house recently some beautiful specimens of Western natural productions, including a beautiful work-box for a lady, covered on the outside with minerals of thirty-five different kinds, all from Colorado, and also saw fine samples of petrified wood and nuts, and some agatized wood, said to be harder than petrified.

TEAL.

[In a petrifaction, the organic matter may be replaced either by carbonate of lime or silica. If by silica, the resulting rock will of course be the harder of the two.—ED.]

A WHITE OPOSSOM.—Our frequent contributor, Mr. W. Vic, of St. Louis, informs us of the presentation recently of a white opossum with pink eyes to the Zoological Society of St. Louis.

NOT A TURBOT.—A correspondent from Fall River, Mass. sends us a neatly drawn sketch of a flat fish, which he describes as follows:

"When I first caught this fish I thought he was as wide as was long, which was not confirmed by measurement. Color, he spotted side very dark, a rubber black, with irregular white spots, both in size and shape. He was transparent, so that the bones were clearly discernible; the other side white as snow. The fins looked like ice formed from spring water. The mouth opened very large; he would close it with a quick snap."

The inquiry is made of us "whether it is a turbot?" We do not think from the description and size, 12 by 8 inches, that it is by any manner of means a rare fish. It is probably sand flounder, or daylight, window pane or water flounder—the *Lophopsetta maculata*. The American turbot is as yet *non inventus*.

GOPHERS AND THE LEVEES.—The gopher is a serious problem in Mississippi. He honey-combs the levees with his network of holes and passages, and one-half the breaks in the levees are traceable to his mischief. A bit of civil engineering on his part, the projection of a new tunnel, or the excavation of a new and more spacious domicile for the advent of his bride and mother-in-law, may bring the destruction of the floods upon square miles of fruitful lands. The safety of crops, property and lives all depends upon the caprice of a burrowing varmint.

THE OOLACHAN.—Through the kindness of S. R. Throckmorton, one of the Fish Commissioners of Cal., I was shown a candle fish (the Indian name is "Oehalan") that had just been brought from Nass River, near Cook's Inlet. The fish was about seven inches long, and resembles somewhat the N. E. Coast smelt, but more delicate in form and appearance, being longer and more slim, has a sharp nose and is covered with very fine scales of a bright silver color. I should judge by this dried specimen that they must be a fish of great beauty and symmetry. They use this fish for fuel and for light, it being full of oil. They come in in shoals so thick that they take them out in masses with a sort of split-shovel. They are now taking oil from them and shipping it in large quantities as an article of commerce. These fish are said to be of the most delicate flavor and will fairly melt in your mouth. Smoked and dried they are said to excel any herring known. Now there is a fish for you that will keep you warm, and furnish you light and the very best kind of food.

San Francisco, Cal., Feb. 7, 1878. B. B. P.

[The spelling of this fish is not yet quite positively determined. It is called both Oehalan and Oolachan. At the Centennial quite a number of specimens were exhibited. The oil from this fish was remarkably clear and sweet. The dried fish seemed wonderfully fat. We have heard that to capture them the Indians use a flat bit of thin board, into which sharp nails have been driven. When a shoal of fish is approached, the Indians, by striking into the fish, impale them, and thus catch large quantities.—ED.]

ANIMALS RECEIVED AT PHILADELPHIA ZOOLOGICAL GARDENS FOR WEEK ENDING FEB. 12, 1878.—Two opossums, *Didelphys virginiana*, presented; two red-shouldered hawks, *Buteo lineatus*, presented; one eland, *Oreas canna*, purchased; one siren, *Siren lacertina*, presented.

ARTHUR E. BROWN, Gen'l. Supt.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE CROSSING OF LILIES.

MR. FRANCIS PARKMAN is famous as a horticulturist as well as an historian. In a new number of the "Bulletin of the Bussey Institution"—of which he was formerly Professor of Horticulture—he has now given the history of his "Hybridization of Lilies," carried on for ten or a dozen years. He began by crossing two superb Japanese Lilies, *L. speciosum* and *L. auratum*. The first year he failed; the second year brought one splendid success; for it gave us that superb lily, twelve and even fourteen inches from tip to tip of the extended petals, which, when sent to England, astonished the horticultural world, and which there received the name of Parkman's Lily (*Lilium Parkmanni*). The other results obtained in this and the succeeding operations, were of little or no practical value, but were as surprising as the Parkman Lily is magnificent.

We expect offspring to take after both parents, a hybrid to inherit somewhat equally the characters of the two species that compose it. That was the case with the Parkman Lily, which has the fragrance and form of *L. auratum* and the brilliant color of the best races of *L. speciosum*. But this was the result in only one case out of more than fifty. Every other seed that germinated and lived to bloom produced flowers exactly like those of the female parent, *L. speciosum*. But they were hybrids nevertheless. Mr. Parkman took all the necessary precaution to prevent access of own pollen; and the seedlings showed the blood of the male parent in their stems, though not in the blossom; for these were mottled in the manner characteristic of *L. auratum*. Though the male parent showed for so little in the first generation, there was reason to hope it might be impressed on the second. So Mr. Parkman fertilized several of these hybrids with the pollen of *L. auratum*, precisely as their female parent had been fertilized. The result was a very little seed set, but enough to produce eight or ten young bulbs. Of these, when they bloomed, one bore a flower combining the features of both parents. All the rest bore flowers not distinguishable from those of *L. speciosum*.

Was this inveterate habit of taking after the mother only, or mainly, a peculiarity of these two species, or was it a character of Lilies generally? To settle that question, Mr. Parkman crossed *L. umbellatum* with the pollen of *L. auratum*. The progeny was not to be distinguished from *L. auratum*, yet showed its hybridity in the imperfect condition of the stamens of many of the blossoms, and in the abortion of the pistil of some of them. Next he crossed *L. longiflorum* with the pollen of a deep red variety of *L. speciosum*. Seeds were abundantly formed; but the plants raised from them produced the flowers of the female parent, unchanged, the pure white being without tint or spot. Some of these he now crossed with *L. auratum*, in some instances successfully; but in the offspring neither *L. speciosum*, their grandfather, nor *L. auratum*, their father, had produced any effect whatever on the pure white of their petals; yet the anthers had been affected, taking a chocolate tinge from the father; and as before many of the flowers were now tried in the third generation, with pollen both of *L. auratum* and *L. speciosum*; but not one would bear seed.

Moreover our American *Lilium superbum* was fertilized, under every precaution, with the pollen of six foreign species; seeds were abundantly produced in some instances, though in many the pods contained only chaff; several hundred bulbs were raised, but when these came to bloom, not a single flower of them all was distinguishable from that of the pure *L. superbum*. Nor in this case was there any mark of the male parent to be found in the stem, or leaves, or bulbs. All this is very curious indeed. We knew that offspring might take a great deal more after one parent than the other. But that the female sex should be so prepotent in Lilies, is a quite unexpected result. That in so many cases the influence of the male parent should be imperceptible is most wonderful.

PROF. ASA GRAY.

Editor Forest and Stream: The above article, published in the *American Agriculturist*, is of great interest to all who have experimented in this way, or who wish to see the varieties of this lovely class of plants multiplied. I have for a number of years tried the same experiments with that class of plants, and have raised a great number of hybrids from *L. speciosum*, some of them very beautiful, having very large flowers and rich coloring, but all of them were *L. speciosum*. There is one having a flower as large as a *Lilium auratum*, the color dark scarlet, edged with white; it flowered for the first time last summer. Another one grew to the height of eight feet, straight as an arrow, bearing thirty-one flowers on a single stem, the bulb not very large at the time it sent up its flowering stalk; but this fall the bulb is very large. I presume it must be crossed with a *Lilium superbum*, indicated by its straight habit and numerous flowers; the color is the same as *Lilium speciosum rubrum*. One of my hybrids has a buff-colored ground, spotted with deep pink, the petals very broad and greatly reflexed, the flower large; has the shape of *L. tigrinum*. Some hybrids of *Lilium speciosum* have very small flowers, about the size of *Lilium martagon*; some have large spreading white flowers. It would take considerable time to mention all of them, but if there should be any person who is interested in that class of plants they are welcome to come and see them. I have also hybrids of *L. auratum*, but they keep to the mother plant as a general thing. Some have pure white flowers, some with a yellow band; the flower in most part resembles *Lilium auratum*. I have raised seedlings of *Lilium longiflorum*, but without any gratifying result. I would advise those who try to hybridize lilies to experiment with *L. longiflorum takesima*, which has not so much honey coming through the pistil. I have never got *Lilium brownii* to seed yet, and have raised seedlings from *L. martagon*, but without any difference from the mother plant. I have one good hybrid of *Lilium tigrinum*; both male and female can be seen in this plant; it has the flower of *Lilium tigrinum*, the petal broad and bright colored, their base white, with the leaves and growth of *Lilium bulbiferum*. Last summer it had eleven flowers on one stalk, seeded freely, and had small bulblets in the axil of the leaves. There is one also that has the appearance of the mother plant, with flowers about the size of *L. tenuifolium*. Of *Lilium bulbiferum* I have an endless variety, some of them very beautiful. Every seed will produce a variety, and some of them could, without difficulty, be separated from the mother plant. I have expended a great amount of labor on *Lilium superbum* without any success. The flowers I have tried to hybridize have formed blank seed. The seedlings of *Lilium canadense* differ very little from the mother plant. My seedlings of *L. Humboldtii* and *L. Buckingbamianum* have not flowered yet. I will here remark that I have not had so much difficulty in getting lilies to seed as to get the seed to grow. I am trying from year to year to find out how to manage them. Some of the seeds are very tender, particularly that of *Lilium tigrinum*. I advise those who wish to raise seedlings, to sow the seed as soon as ripe in seed-pans and put them in a dry cellar, and keep them there until March, or till the mother plant commences to grow. Remove them to a cool part of the green-house, and do not water them too much. Those who have not got a green-house should have a frame in the garden, covered with sashes, having the glass painted; raise them a little, so that the hot air will escape. Some of them will flower the third summer. The best soil to use is loose, sandy loam. Seeds of American lilies can be sown in frames in the garden, if the frames are filled with dry leaves over the soil during the winter. I will be most happy to see or correspond with any one interested in this badly used class of plants.

PETER HANSON,

119 and 121 Nassau street, New York, Room 34.

THIS YEAR'S NOTES.—*January*—Thresh corn, also your eldest son; it will do them both good. Cast manure to the field and leave it there. Sow peas and darn your stockings. See to your digging, also to your "diggings." Neither are *infra dig.*

February—Sow onions for early crops and give them great attention. Onions should always be strong. A sage always looks after his onions. See to cabbage. If you are unable to, ask your tailor.

March—Plant potatoes; if not in the ground, "plant" them in the saucepan and eat 'em. Leeks should be seen to; especially if they are in your boots. Stick forward peas. Peas should know their position and not be forward, therefore stick 'em.

April—Make up a bed for cucumbers and give them an extra blanket; tuck them in carefully. See to spring vetches—they "vetches" a good price—but don't *tare* them. See to your rye. In fact, always keep your weather rye open.

May—Hoe cauliflowers; in fact, hoe whatever you can and don't pay it. Sow swedes, they're *swede* things. See to maize. May's a good time for it.

June—Make hay while the sun shines. He doesn't shine very often. Wash and shear sheep, especially black sheep, such as "tecs." Give an eye to your "salary." Get a "rise" if you can.

July—Hay just now should be hay 1. Mind your peas; also your q's. Sow collard cabbage. "Collar" it from your next-door neighbor. Hoe freely and defy the County Court.

August—Cut corn crops; also bunions. Sow chickweed and groundsel for your singing birds. It's such a "lark."

September—See to your pigs lest for *pork-you-pine.* Take up onions, especially if there drunk and disorderly. But don't eat them; especially if you're going to see "her." She mightn't like it.

October—See to your cows. Fork over asparagus, but don't fork over your rent if you can help it.

November—Bring dairy cows to the yard, and get your chalks ready. Make cider but don't drink it. Slugs and snails are now active. Let's not be sluggish, but let's (s)nail them. Train up gunpowder. See to squibs and guard your guys.

December—Wheat may still be sown, so may buttons, but leave that to your wife. Repair your fences and offenses, because it draws near Christmas. Prepare your plums for the pudding *pudding* aside all animosity. Sow, that you may reap pleasure from the season.—*Fun (London).*

A HINT TO FARMERS.—Here is a French fashion which deserves to be adopted in this country. In the State forests of France the subjoined notice is pasted in conspicuous places, where the young and old that run may read:

"Hedgehog—Feeds on mice, small rodents, slugs and grubs; do not kill a hedgehog. Toad—A farmer's friend; destroys twenty or thirty insects per hour; do not kill a toad. Mole—Destroys grubs, crickets and insects injurious to agriculture; no trace of vegetable matter is ever found in its stomach; does more good than harm; do not kill a mole. Cockchafer and his grub—Each insect lays 70 to 100 eggs; kill the cockchafers; each department of France loses annually thousands of francs by the injuries of insects. Birds are the only enemies capable of contending with them. Children, do not rob the birds' nests."

LOOK INTO YOUR FLOWER POTS.—We publish the following item, with the fond hope that every one of our lady readers may be incited to root up all their choicest flowers in an apprehensive search for domesticated reptiles:

A lady in Black Rock noticed for several days recently that the earth in one of her flower pots was disturbed, and at last made an examination, which brought to light four live adders about a foot long, snugly curled up in the bottom.

A PRETTY WAY TO TRAIN FUCHSIAS.—When a slip has grown six or eight inches high, nip out the top down to the last set of leaves; it will then throw out branches on each side. Let these grow eight or ten inches, then nip them out as before, the tops of each branch when grown the same height as others, nip out again; then procure a stick the size of your finger, eighteen inches in length; take hoop-skirt wire, twine back and forth alternately through holes made in the stick equal distance apart; place this firmly in the pot back of the plant, tie the branches to it, and you will have, when in flower, a beautiful and very graceful plant. One trained in that way last season was the admiration of all who saw it.—*Small Fruit Recorder.*

—The schedule of premiums offered at the regular meetings, as well as the semi-annual exhibitions of the New York Horticultural Society, is now published; and from the liberal manner in which it has been compiled and the increased interest manifested by growers and others in its welfare, we anticipate still finer exhibitions by the society than those of previous seasons. Any one interested can have a copy free of charge on application to the secretary.

SPLIT BAMBOO RODS.

To our customers and the public:—In reply to the damaging reports which have been circulated respecting the quality of our split bamboo rods, by "dealers" who are unable to compete with us at our reduced prices, we have issued a circular which we shall be pleased to mail to any address, proving the falsity of their assertions.

CONROY, BISSETT & MALLESON,
Manufacturers, 65 Fulton Street, N. Y.

NOTICE TO SPORTSMEN.—Having received so many communications asking us for information in regard to our six-section bamboo trout, black bass, grilse and salmon rods, we have prepared a circular on the subject, which we shall take pleasure in forwarding to any address. We keep on hand all grades, the prices of which range from $15 to $150. We put our stamp only on the best, in order to protect our customers and our reputation, for we are unwilling to sell a poor rod with a false enamel (made by burning and staining to imitate the genuine article) without letting our customers know just what they are getting.

P. O. Box 1,294.—[*Adv.* ABBEY & IMBRIE, 38 Maiden-Lane.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gas of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

St. Louis Bench Show, St. Louis, Mo., Feb. 19, 20, 21 and 22.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb, Secretary.

DIFFERENT TASTES AS TO COLORS OF DOGS.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Under above heading you published a very interesting article written by Mr. Everett Smith in a late number of your valuable paper.

Although I agree with Mr. Smith on many points, yet I think that his love and preference for the "red dog" has led him to make some statements which are at variance with noted authorities and my own experience. I shall give my reason why I don't agree with Mr. Smith, and hope he will accept it in as friendly a spirit as it is given. I fully agree with him in describing the different colors, and can only say: "Let every body suit himself." Color is a matter of taste, and I believe no good dog is of a bad color. Mr. Smith says that he is well-pleased with the red color for general shooting at grouse, partridges and woodcock, and considers it highly preferable for snipe-hunting; but here I beg to differ with him. Everybody must admit that it is of first importance—hunting any kind of game birds—that the dog is constantly in sight, more or less. It is not only to have better control of the dog, but also the hunter is not deprived of the pleasure of seeing his dog make game or come to a point, as also to fill his game-bag in a sportsmanlike manner. Most of our upland shooting is done in fall, when the leaves or vegetation are mostly of red brown or yellowish colors. Especially a great deal of grouse, quail, or cock-shooting is done in alder, scrub or red oak covers, where it is almost impossible to keep sight of a "red" dog; whereas a more or less white one would make a much more striking contrast to all surroundings. The latter undoubtedly would need no bell to tell his whereabouts. I remember on one occasion that a red dog, a son of Foulk's "Tom," was pointing a cock, not thirty yards from us, for over fifteen minutes, while we eat our lunch without noticing the same. I could mention several such instances, where the "red color" was the only fault. I once would undoubtedly have shot a red pup accidentally had not the owner, my companion, just warned me in time, who chanced to see the dog in the proposed line of fire. When on a point, the red dog often looks too much like a stump, and is in fall cover the worst dog to keep in sight.

Now, for snipe shooting. Here, I think, I can talk considerably from my own experience. I have hunted setters of almost all colors on snipe, and again think that "red" is worse than any other color, with the probable exception of light chestnut or brown. I am here, of course, talking about the color only, as I think that the Irish dog, with whom the red color originally belongs, is as good for snipe as any breed in existence. However, I prefer a cross with the English, to have more of the white color, besides some of the Irish spirit. A snipe dog should be as fast as possible, and I prefer one that is not afraid to range off half a mile under certain circumstances. But how would you see a dog at such a distance on meadows, full with yellowish-brown reeds, cat-tails and bluebend? It would be very difficult, indeed. A white dog, however, you can watch, even if there are only a few inches of white visible. Mr. Smith says that he often had shots at plovers, etc., which he would have lost had his dog been of a more striking color. This I do not doubt. However, when snipe hunting, the bag is, with me, by no means of first consideration, as Mr. Smith also says; although I always try not to let an opportunity pass to get a crack at ducks or plovers. I then either let the dog make "down charge" a distance off, or call him in "to heel." But just this statement is a direct admittance of Mr. Smith, that the "red color" is not as easily seen as any other, even in the meadows.

When hunting slow, not far-off-ranging, dogs in the open, it matters not of what color they are, as one is as easily watched and controlled as the other; but it is only natural that red is the worse color to keep sight of in all fall covers, or at a distance in meadow-shooting.

I like the Irish dog on account of his good field qualities and beauty, but have come to the conclusion that his color is the most impracticable for both cover and meadow-hunting, at least for this part of the country.

JUSTUS VON LENGERKE.

COLORS IN SETTERS—*Pomfret Centre, Conn., Feb.* 14.—In the issue of the FOREST AND STREAM of Jan. 31st, Mr. Everett Smith gives us a chapter on the color of setters, and tells us there is no such color as a blue setter. I believe Idstone is considered good authority on setters, and if Mr. Smith will turn to the eighty-third page of Idstone, second edition, and read the bottom paragraph, he will see that the writer acknowledges that there has been such a color, though he has never seen one. And furthermore, if Mr. Smith will call on me I will show him a blue, white and tan setter. Not a black roan one, but much nearer an indigo blue than either Dr. Jarvis' Echo, or Plunkett, formerly owned by Dr. Goldsmith, is a red color. Some of Mr. Smith's ideas remind me of what a neighbor of mine said about his wife. He remarked that if all men were like him they would have all wanted his wife. So it is fortunate we are not all alike in tastes. I think if American sportsmen would breed more for the quality they desire in the field, instead of trying to get some particular color, the setters in this country would soon average better than they now do in this respect. The practical sportsman seldom buys a dog merely to look at, although good looks are desirable if they can be obtained without detracting from their usefulness. I have no objection to breeding to a first-class dog of any color, though, like Mr. Smith, I have my own fancy in this respect. But my taste does not run to so-called *Irish red.* I like white—clean, pure white, if I can get it. I go in for solid colors. If spotted, let each color be clear and distinct—black and white, or orange and white I prefer. This is merely my fancy. Good setters can be obtained of nearly all colors, *blue* not excepted.

ETHAN ALLIN.

HEARING ON THE DOG QUESTION.—At the hearing before the Committee on Agriculture, in Boston, on the 12th inst., at the State House, Hon. T. J. Gargan took the floor for the petitioners; Mr. Brown, of the law firm of Brown & Avery, represented the Kennel Club, and Mr. Lothrop took the part of the Society for the Prevention of Cruelty to Animals. The object of the petitioners is to make the owning of dogs a responsible matter, by having a law passed that will be stringent enough to compel people that own worthless animals to give a bond for any damage their dogs will inflict, and to make this general. To pass a law or license large enough to compel all to own pure breeds, and do away with the mongrels or curs that are now a terror and nuisance to the community. It is believed that if such a law was enforced there would be fewer cases of hydrophobia. The petitioners are eager and hopeful, and desire the support of all those who are interested in this matter. If the license is large enough people will prefer to keep good breeds, if they must have dogs; and if a bond is required from every owner there will be less damages to pay and fewer cases of apprehension.

THE LAW OF DOG BITES IN ENGLAND.—According to the curious reading of the English law in regard to dog bites, in order to sustain an action it is necessary to allege and prove that the dog was a bad dog, and "accustomed to bite mankind." In other words, a dog must make a first bite before he can be judged. In a recent case, a lady in London was bitten by a dog known to be vicious, and the jury gave a verdict of £22 to the plaintiff. In an effort made to set aside the verdict, it was claimed that the bite was only a first bite. The decision of the court was sustained.

SUFFERINGS OF A DOG FROM STRAW IN THE BOWELS.

AN INTERESTING POST MORTEM EXAMINATION.

EDITOR FOREST AND STREAM AND ROD AND GUN:

The following case came under my notice lately, and as I took notes of it at the time, and think it would be interesting to some of your readers, I give it just as it was dotted down. About two months since a friend of mine came to me to ask my advice as to what he should do with his pointer dog (a very fine one, over whom I have killed many a quail), as he knew I prescribed occasionally for dogs as well as men. He said the dog was suffering very much pain, costiveness, and was continually straining. Nothing had passed for several days except blood. His rectum was very much enlarged and swollen. I had him brought over to my office. I carefully examined him both externally and per rectum with my finger, as I expected to find a mass of fœces lodged near the anus, which was very much enlarged. I could detect nothing in the bowels whatever. I gave him an injection of soap and water—about a quart—but nothing passed except the injection and a little bilious colored matter. The dog strained a good deal afterward, and whimpered with pain when he did so.

I gave him five grains of calomel, and ordered him to have an ounce of castor oil in two hours. In about four hours he was relieved quite naturally, a quantity of healthy matter having passed. Still the straining continued more or less. I came to the conclusion that the dog must have swallowed a bone or other hard substance, which had lodged across the bowels some place out of reach, which by its irritation caused him to strain so. I had him dieted on vegetable food with very little meat, and for some time he seemed to get a good deal better, and was able to run about quite lively.

In about three weeks I got an urgent message one morning to say that the dog appeared to be dying, and would I go over to see him. I found him lying in his kennel moaning most piteously. I had him brought out, and observed a very large swelling about the size of a two-quart bowl under his tail. His back was very much curved up and his eye liquid, as if suffering extreme pain. He was very much thinner than he had been, yet he was in good condition. His nose was cool and moist; rather too much so I thought. I examined him again and found some large impacted masses within the rectum. Having oiled my finger well I introduced it carefully, and after a good deal of trouble I managed to dislodge quite a quantity of hard, compact lumps. I worked away at him for a long time, and by pressing with my left hand on the bowels externally, and with the finger of the right hand internally, by degrees I got away about a pound weight of these hard substances, which, very much to my surprise, contained nothing but short straw baked hard together.

I found a good deal of trouble at the inner sphincter, which was just as high as I could reach. The masses which were above it, when forced down by the hand on the outside, were always surrounded by the bowels, and it requires a good deal of manipulation to get the masses free from the upper bowel, which was thus forced down through the inner sphincter. After taking as much as I could (I had to leave off, as my finger got so sore working at the straw which was as hard as a brick) I left him, having ordered him to be well steeped with warm water to relieve the external swelling.

Next morning I again went to work and got away about quarter of a pound of similar matter. I could still feel more higher up in the bowel. I left him another day and again succeeded in getting away a good deal. At the end of this operation the lumps became much smaller and contained more fecuent matter, but still very hard. Had his hindquarters held up and injected about two quarts of warm water, which worked out the bowels and returned very quickly. As he seemed rather cold, and his tongue coil and glazed, I gave him an ounce of brandy and some strong beef tea. He was to have a small dose of castor oil at night, as I believed all the impacted masses were away. The next morning the bowels moved well; not much straw and very little blood. He seemed rather better; was inclined to lie in the "down charge" position, and to be weak. The swelling about the anus was very much reduced. He had quite a quantity of beef tea and some boiled rice and milk during the day.

Next morning he was found at 7 A. M. just giving his last groan, and

did not appear to have struggled much. I performed a *post mortem* on him eight hours after death with the following results:

Body not quite cold, rigor mortis not complete. I carefully removed the skin from off the thorax and abdomen, opened the abdominal cavity by pinching up the muscles so that I could not injure any of the viscera. At first there was a considerable flow of sanguinolentus fluid, about 80 ounces (2 quarts) in all as near as I could estimate. The peritoneum appeared healthy, but a very little congested. The next thing that came into view was the greater omentum, which was in a highly congested state, of a dark, coffee color, and full of dark fluid blood. The lesser omentum was in a similar condition. The stomach appeared healthy, and contained about a pint of half digested beef tea, and a *wad of straw*, which was loosely packed into the pelvic or lower opening. The peritoneal surface of the bowels for their entire length appeared congested, and of a bright red color. They contained nothing whatever except a little mucus, no food of any kind; the lower portion of the colon was much swollen and thickened, but the mucous surface was not as much damaged as might have been expected, considering the amount of rough usage it must have had. All the other organs were healthy.

This is just as I found matters, and now I am at a loss to determine the cause of his rapid and almost to the end painless death. Would the inflammation of the mesenteries with the effusion of blood and serum cause it? Did this inflammation, or rather congestion, take place from the removal of the pressure from the solar plexus of nerves, more particularly the coeliac division of the epigastric nerves, for undoubtedly these large masses of impacted matter must have pressed considerably on the nervous supply of the bowels?

Did the removal of that pressure from both the nervous and arterial trunks cause death from shock? I can't imagine there was much active inflammation, as he would have had more pain on pressure over the bowels at least 12 hours before death, which he certainly had not. Another point to this case, the wad of straw which was in his stomach and none in any other part of the canal. Could it have been possible for the whole amount of straw which was removed from him before death to have remained in the stomach for a length of time, and only be set in motion by the original doses of castor oil? for I have since learned that he had been pretty well dosed before I saw him first, without producing any effect. I suppose the calomel I gave him at the outset of my treatment must have acted on the secretions, and thus produced the stools he passed four weeks before he died.

Question: If he had been given an active emetic at the beginning would he have got rid of the straw by the mouth? This occured to me when I found the straw in the stomach. It is easy to see where the straw came from, as he was a most ravenous feeder and used to carry all the meat and bones he could beg or steal in the neighborhood into his kennel, which was bedded with straw, he must have swallowed the straw with his other food, and as it did not digest it was retained in the stomach and bowels, for he was never observed to pass any straw before I removed the first lot four days before he died.

I think this case teaches one useful lesson, never to allow dogs to carry their food into their kennels if littered with straw or other litter of an indigestible kind.

Perhaps some one may suggest the cause of death in this case, which to me seems rather obscure.

I am yours, etc., J. S. NEVIN, M. B.

London, Ont., Feb. 4, 1878.

ST. LOUIS BENCH SHOW.

ON Tuesday the St. Louis Bench Show opened with great *eclat*. Certainly the most sanguine expectations of the officers of the St. Louis Kennel Club were more than fulfilled. Nearly 1,000 entries have been made. Some of the finest dogs in England have been sent in for exhibition. As we have competent representatives in St. Louis, we will be enabled to give our readers the leading events of the show. We present this week as much of the list of entries as our space will allow. In this catalogue may be seen the names of many of the stars in the canine firmament:

CLASS 1—Imported and Native English Setter Dogs.

T H Scott, Kilvington, Thirsk, Yorkshire, England, Pound, 2 yrs and 4 mos; Quince, Prudence; 1st at Tavistock, 1st and cup at Cambermourne. Rock, 4 yrs; Rock, Polly. Pearl, 3 yrs; Sam 1,433, Snake, 1,561; 1st, Tiverton, 2d, Liskeard.

Geo B Clason, Milwaukee, Wis, Royal Duke, black, white and tan, 19 mos; Carlowitz, True, $500.

Capt J W Foster, Leesburg, Va, Duke, black, white and tan; 27 mos; Pride of the Border, Kirby; not for sale; prize winner Baltimore and New York. Sam Tilden, lemon and white; 19 mos; Rock, Kirby, $100; winner Baltimore and New York.

T Donoghue, LaSalle, Ill, Brussels, black, white and tan; 2 yrs and 7 mos; Leicester, Dart; not for sale; winner Chicago.

P H Bryson, Memphis, Tenn, Gladstone, blue belton; 19 mos; Dan, Petrel; 1st in puppy stakes, Nashville, 1877; not for sale; winner, Memphis, field trials.

L H Smith, Strathroy, Ont, Bronte, white and lemon; 15 mos; Leicester, Victress; winner London, Ont.

J C Higgins, Delaware City, Del, Lincoln, lemon and white; 1 yr and 10 mos; Dan, Lill II; not for sale; winner England.

E A Abbott, Marshalltown, Iowa, Robin, orange and white; 4 yrs; Joe, Fanny; not for sale.

F Mansfield, 821 Preston Place, St Louis, Dan, black and white; 14 mos; Dick, Belle.

H W Gause, Wilmington, Del, Warwick, lemon and white; 10 mos; Leicester, Petrel; not for sale.

J H Whitman, Chicago, Rattler, black and white ticked; 17 mos; Rob Roy, Pickles, $500; winner St Louis.

Arnold Burges, Hillsdale, Mich, Druid, black and white; 5 yrs; Prince, Dora, $5,000; winner, England, field trials.

Henry Otten, Baltimore, Telt, white and orange; 3 yrs.

P H Morris, New York, Lark, orange and white; 4 yrs; Phil, Dido, $2,500; winner, New York, Philadelphia and Pittsburg.

CLASS 1—Imported and Native English Setter Bitches.

T H Scott, Kilvington, Thirsk, England, Pliny, 3 yrs; Sam, 1433; Snake, 1561.

W A Strother, Lynchburg, Va, Frost, lemon and white; 23 mos; Leicester, Victress; not for sale.

Theo Morford, Newton, N J, May, orange and white; 4 yrs; Joe, Nelly; not for sale; winner, Springfield, Mass.

L H Smith, Strathroy, Ont, Pearl, blue belton; 3 yrs; Prince, Lill II; not for sale; winner, New York.

D C Sanborn, Baltimore, Mich, Nellie, black and white; 2 yrs; Belton, Dimple; exhibition only; winner, Hampton field trials.

H W Gause, Wilmington, Del, Belle, black, white and tan; 27 mos; Pride of the Border, Kirby; not for sale; winner, Baltimore.

James H Drew, Columbia, Tenn, Queen, white and black, ticked; 2 yrs; Rob Roy, Pickles; $300.

J H Whitman, Chicago, Floss, orange and white; 2 yrs; Rock, Pickles; $300.

Arnold Burges, Hillsdale, Mich, Queen Mab, black, white and tan; 4 yrs; Dan, Nellie; $5,000; winner, Chicago and Memphis.

CLASS 6—Imported English Setter Dogs.

T H Scott, Kilvington, Thirsk, Yorkshire, Pound, 2 yrs and 4 mos; Quince, Prudence; 1st at Tavistock, 1st and cup at Cambermourne. Rock, 4 yrs; Rock, Polly. Pearl, Sam, 1433, Snake, 151; 1st at Tiverton, 2d at Liskeard.

Geo B Clason, Milwaukee, Wis, Royal Duke, black, white and tan; 19 mos; Carlowitz, True; $500.

Capt J W Foster, Leesburg, Va, Sam Tilden, lemon and white; 19 mos; Rock, Kirby, $100. Duke, black, white and tan; 27 mos; Pride of the Border, Kirby, not for sale.

D C Bergundthal, Indianapolis, Ind, Rake, black, white and tan; 4 yrs and 6 mos; Dan, Ruby; not for sale.

T Donoghue, La Salle, Ill, Brussells, black, white and tan; 2 yrs and 7 months; Leicester, Dart; not for sale.

P H Bryson, Memphis, Gladstone, blue belton; 19 mos; Dan, Petrel; not for sale.

L H Smith, Strathroy, Ont, Bronte, white and lemon; 15 mos; Leicester, Victress; not for sale.

J C Higgins, Delaware City, Del, Lincoln, lemon and white; 1 yr and 10 mos; Dan, Lill II.

E C Waller, Chicago, Prince Peg, blue belton; 16 mos; Rock, Peg; not for sale.

H W Gause, Wilmington, Del, Warwick, lemon and white; 10 mos; Leicester, Petrel; not for sale.

J H Whitman, Chicago, Rattler, black, white, ticked; 17 mos; Rob Roy, Pickles.

Arnold Burges, Hillsdale, Mich, Druid, black and white; 5 yrs; Prince, Dora; $5,000.

Baltimore Kennel Club, Baltimore, Grouse, liver and white; 4 yrs; Sam, May; not for sale. Rock, liver and white; 4 yrs; Sam, May.

CLASS 6—Imported English Setter Bitches.

T H Scott, Kilvington, Thirsk, England, Pliny, 3 yrs; Sam, 1,433; Snake, 1,561; not for sale.

Capt J W Foster, Leesburg, Va, Brenda, black, white and tan; 27 mos; Pride of the Border, Kirby; not for sale.

John W. Munson, St Louis, Mo, Rose, lemon and white; 3 yrs; Rock, Pickles; $200.

W A Strother, Lynchburg, Va, Frost, lemon and white; 23 mos; Leicester, Victress; not for sale.

L H Smith, Strathroy Ont, Pearl, blue, belton; 3 yrs; Prince, Lill II; not for sale; Mersey, black, white and tan; 3 yrs; Leicester, Dart; not for sale.

John Davidson, Monroe, Mich, Doll, black, white and tan; 5 yrs; Prince, Dora; not for sale; exhibition only. Nellie, black and blue, 3½ yrs; Smut, Bell; $200; exhibition only. Ailsa, white and black, 1½ yrs; Royal, Nina; not for sale; exhibition only.

H W Gause, Wilmington, Del, Belle, black, white and tan, 27 mos; Pride of the Border, Kirby.

Jas H Dew, Columbia, Tenn, Queen, white and black, ticked, 2 yrs; Rob Roy, Pickles. Zephyr, black, white and tan, 2 yrs; Whip, Fanny Kean; $200.

J H Whitman, Chicago, Floss, orange and white, 2 yrs; Rock, Pickles.

Arnold Burges, Hillsdale, Mich, Psycho, black and white, 16 mos; Rob Roy, Queen Bess; for sale.

Wm B Wells, Jr, Chatham, Canada, Star, blue belton, 2 yrs and 8 mos; Leicester, Dart; not for sale.

J C Higgins, Wilmington, Del, Pique, lemon and white, 10 mos; Leicester, Petrel; not for sale.

CLASS 6—Imported English Setter Puppies Over 6 and Under 12 Months.

T H Scott, Kilvington, Thirsk, England, 7 mos, Blue Prince II, 6,097, Prue, 5,774; 7 mos, Blue Prince II, 6,097, Prue, 5,774.

D C Bergundthal, Indianapolis, Ruby, black, white and tan, 7 mos; Rake, Fanny, $100.

S Fleet, Spier, M. D., 162 Montagne street, Brooklyn, Wanda, blue belton, 7 mos; Paris, Pearl; not for sale. Maida, black, white and tan, 8 mos; Dick, Cho; not for sale.

John R Clickener, Morrisonville, Ill, Dollar, black, white and tan, 6 mos; Rake, Fanny; not for sale.

D C Bergundthal, Indianapolis, Phyllis, white and lemon, 9½ mos; Leicester, Petrel; not for sale.

Jno C Higgins, Delaware City, Del, Pique, white and lemon, 10 mos; Leicester, Petrel; not for sale.

H W Gause, Wilmington, Del, Warwick, lemon and white, 10 mos; Leicester, Petrel; not for sale.

Arnold Burges, Hillsdale, Mich, Queen Vic, black, white and tan, 10 mos; Rob Roy, Queen Mab, $500.

CLASS 6—Imported English Setter Puppies Under 6 Months.

J McWorter, Canton, Mo, Cumbrae, lemon and white, ticked, 4 mos; Afton, Ailsa; not for sale.

G. W. Bailey, St Louis, Sovereign, liver and white, ticked, 2 mos; Carlowitz, True.

CLASS 7—Native or Cross-bred English Setter Dogs.

Theodore Morford, Newton, N J, Gun, orange and white, 1 yr; Glen, May; not for sale. Don, orange and white, 4 yrs; Joe, Gypsy; not for sale. Quail, orange and white, 1 yr; Joe, Puss; not for sale.

J G Marriott, 2,715 State street, St Louis, Frank, lemon and white, 18 mos.

Alfred S Krekel, Jefferson City, Mo, Jim, liver and white, 5 yrs; Jack, imported bitch, $500.

S C Edgar, St Louis, Josh Billings, orange and white, 2 yrs; by Phil; not for sale.

C P Budd, 612 Olive street, St Louis, Ned, lemon and white, 3 yrs; not for sale.

Charles Stockton, 1,418 Garrison avenue, St Louis, Frank, liver, 22 mos; Nep, Gordon bitch.

John Davidson, Monroe, Mich, Laddie, lemon and white, ticked; 18 mos; Rock, Flora II, $200; exhibition only. Afton, lemon and white, ticked; 18 mos; Rock, Flora II; not for sale; exhibition only.

John S Shaw, St Charles, Mo, Cap, orange and white; 7 yrs; Sancho, Spot, $500.

R E Carr, 3,130 Lucas avenue, St Louis, Grouse, white and brown; 5 yrs; from imported stock.

O F Garrison, Carondelet, Mo, Sport, brown and tan; 2 yrs.

F A Churchill, St Louis, Duke, white and chestnut; 3½ yrs.

Charles De Ward, Lucas avenue, St Louis, Dan, lemon and white; 6 yrs; Grouse, Maude, $300.

E C Waller, Chicago, Jack, lemon and white; 3½ yrs; Rock, Juno, $250. Jeff, lemon and white, 22 mos; Dr Gunn's dog, Juno, $150.

W T Irwin, Topeka, Kansas, France, liver, ticked; 15 mos; Belton, Daisy, $150.

Geo K Hopkins, Alton, Ill, Beppo, liver, ticked; 2 yrs 10 mos; Joe, Bell; not for sale.

E A Abbott, Marshalltown, Iowa, Robin, white and orange; 4 yrs; Joe, Fanny; not for sale.

F Mansfield, St Louis, Dan, black and white; 14 mos; Dick, Bell; not for sale.

Jno H Stuessel, St Louis, Mo, Heck, liver and white; 2 yrs; not for sale.

J J Bailey, 1,542 Chouteau avenue, St Louis, Jeff Davis, lemon and fawn; 18 mos; not for sale.

C O Dutcher, 2,813 Cass avenue, St Louis, Rip, red; 2 yrs; $50.

Wm Vie, St Louis, Fronco, orange and white; 4 yrs; full pedigree; not for sale. Doc, orange and white; 2½ yrs, $50; exhibition only.

Dr I W Steedman, St Louis, Ponto, black; 4 yrs; not for sale.

Fred Schrieber, 416 Soulard street, St Louis, Tom, white and lemon; 3½ yrs, $75.

J McWhorter, Canton, Mo, Frank, black and white, ticked; 3 yrs; Bingo, Lady, $50.

T W Jackson, Chatham, Canada, Bruce, chestnut, ticked; 20 mos; Rock, Flora II.

John O F Delaney, St Louis, Lesse, black and white; 1 yr.

H C Pierce, St Louis, Prince, orange and white; not for sale.

Isaac Weighell, Rochester, N Y, Horton, white and lemon.

A C Waddell, Kansas City Kennel, Kansas City, Shot, liver and white; Frank, Daisy; 3 yrs. Count, 3 yrs; Dash, Rose.

CLASS 7—Native or Cross Bred English Bitches.

Theo Morford, Newton, N J, May, orange and white; 4 yrs; Joe, Nelly; not for sale. Beas, orange and white; 1 yr; Joe, Puss; not for sale.

Chas F Limburg, Mo Pacific Railway, St Louis, Gypsia, brown and tan; 22 mos; J L Patterson's dog out of Lanham's Gyp.

T Donoghue, La Salle, Ill, Daisy, orange and white; 2 yrs and 8 mos; Col Kert's Storm, J B Little's Belle.

Rudolph Burchardt, 716 Locust street, St Louis, Fanny, liver and white; 4 yrs; by Edward's Sport.

Geo K Hopkins, Alton, Ill, Buff, lemon and white; 2 yrs and 10 mos; Joe, Belle.

Wm Vie, St Louis, Russa, orange and white; 8 yrs; full pedigree; $150. Zita, orange and white; 2½ yrs; full pedigree; $150.

Erdmann A Herzberger, New York, Patti, blue belton; 19 mos; Pride of the Border, Jessie.

Fred Utz, Bridgeton, Mo, Belle, white; 8 yrs.

Baltimore Kennel Club, Baltimore, Lady Clotilda, white and liver; 2 yrs. Alexandrina, white and liver; 13 mos; Carlowitz, Orphina. Czarina, white and liver; 13 mos; Carlowitz, Orphina.

A C Waddell, Kansas City Kennel, Kansas City, Mo, Daisy, Dainty, chestnut and white; 2 yrs; Jack, Floss.

C F Demuth, Fort Dodge, Iowa, Kate, lemon and white; 7 yrs; Don, Sallie.

E H Gilman, Detroit, Mich. Not named.

CLASS 7—Native English Setter Puppies, Over 6 and Under 12 Months.

W H Holabird, Valparaiso, Ind, Fanny Davenport, white and black; 11 mos; Rob Roy, Queen Blanche.

Jesse Sherwood, Edina, Mo, Aimee, black and white; 8 mos; Rob Roy, Dream, $100.

J P Schultz, St Louis, Sport, orange and white; 8 mos.

F Fink, 1,000 North Ninth street, St Louis, Tip, orange and white; 11 mos; not for sale. Fritty, orange and white; 11 mos; $50. Belle, orange and white; 11 mos; $50.

A C Waddell, Kansas City, Fanny, liver, ticked; 8 mos; Jack, Daisy, Dainty.

E H Gilman, Detroit, Mich, Prince, lemon and whi , ticked mos; by imported dog out of Isaac Weighell's bitch.

CLASS 7—Native English Setter Puppies, Under 6 Months.

O F Garrison, Carondelet, Mo, Mike, lemon; 5 mos; Sport, Fan. Clipper, lemon; 5 mos; Sport, Fan.

Otto Holzgrehe, 2,211 Franklin avenue, St Louis, Tom, orange; 5 mos; Jerry, Nelly, $50.

J J Bailey, 1,542 Chouteau avenue, St Louis, Bob Lee, lemon and fawn; 3 mos.

E H Gilman, Detroit, Mich Not named.

A C Waddell, Kansas City Kennel, Kansas City, Mo, Sue, orange and white; 1½ mos; Dash, Sue. Jerry, orange and white; 3½ mos; Dash, Sue.

CLASS 26—Imported or Native English Setter Stud Dogs.
(To be shown with two of his get.)

L H Smith, Strathroy, Ont, Leicester, white and lemon; 5 yrs Dan, Lill II.

O F Garrison, Carondelet, Mo, Sport.

W G Thomas, Chicago, Shot, black, white and tan; 2 yrs; Don, Dimple.

Arnold Burges, Hillsdale, Mich, Rob Roy, black, white and tan; 7 yrs; Fred, Rhoebe.

CLASS 26—Imported or Native English Setter Brood Bitches. (To be shown with two of her progeny.)

Capt J W Foster, Leesburg, Va, Kirby, with Duke, Sam Tilden and Brenda.

S E Billbrough, 3,143 Franklin avenue, St Louis, Fanny, orange and white, 3 yrs and 6 mos.

L H Smith, Strathroy, Ont, Dart, Blue Belton, 5 yrs, Prince, Dora.

C F Demuth, Fort Dodge, Iowa, Pickles, lemon and white, 5 yrs, Prince, Lill II.

CLASS 30—For the Best Kennel of English Setters. (To consist of not less than five, imported or native.

T H Scott, Kilvington, Thirsk, England, Pliny, Pearl, Pound, Rock, and two puppies.

Henry Griffith, Butler, Ill, Don, Don II, Andy, Chloe, Juno.

L H Smith, Strathroy, Ont, Leicester, Paris, Bronte, Pearl, Dart, etc.

John Davidson, Monroe, Mich, Doll, Ailsa, Nellie, Afton and Laddie; exhibition only.

Arnold Burges, Hillsdale, Mich, Druid, Queen Mab, and others.

CLASS 2—Imported and Native Irish Setter Dogs.

T H Scott, Kilvington, Thirsk, Yorkshire, England, Pearl, red, 16 mos; Grouse, Maybe.

St. Louis Kennel Club, St Louis, Mo, Thorstein, red, 2 yrs, $1,000; not for competition. Sting II, red, 4 yrs; Grouse, Maybe I, $300. Berkeley, red, 19 mos: Elcho, Loo II; 2d Hampton Field Trials, $1,000.

E F Stoddard, Dayton, Ohio, Bob, red, 2 yrs; Erin, Queen; 1st Market Drayton, 1st Tarpoley, 1st Denbeigh, $300; winner, Ireland.

Dr Wm Jarvis, Claremont, N H, Elcho, rad, 3 yrs 9 mos; Charlie, Nell, $5,000.

James F Duncan, attorney at law, St Louis, Gelert, red, 4 yrs; imported Mark, Queen, $125.

Fred A Churchill, St Louis; Buster, red, 3½ yrs; Don, Rose, $200.

E C Waller, Chicago, Race, red, 22 mos; Elcho, Fanny Fern; not for sale.

T J Churchill, Little Rock, Ark, Duke, red, 2 yrs; Duke, Belle.

James Moore, Toledo, O, Dash, red, 3 yrs; Dick, Jenny, $200. Don, red, 17 mos; Rufus, Moss, $300. Dick, red, 17 mos; Rufus, Moss, $200.

W J Farrar, Toledo, Ohio, Plunkot, red, 10 years; Grouse, Beauty; not for sale; exhibition only.

George S Fowler, Fort Wayne, Ind, Ranger, red, 4 yrs; Larr Lill II.

CLASS 2—Imported and Native Irish Setter Bitches.

T H Scott, Kilvington, Thirsk, Yorkshire, England, Colleen Rhue, red; Grouse, Maybe.

St Louis Kennel Club, St Louis, Loo II, 4 yrs; Grouse, Maybe, $1 500.

H W Gause, Wilmington, Del, Fire-fly, red, 2½ yrs; Rufus, Friend; not for sale.

W M Smith, Sterling, Ill, Bridget, red, 16 mos; April, Colleen, $150.

Isaac Weighell, Rochester, N Y, Breeze, red.

CLASS 8—Imported Irish Setter Dogs.

T H Scott, Kilvington, Thirsk, England, Pearl, red; 16 mos; Grouse, Maybe.

E F Stoddard, Dayton, Ohio, Bob, red; 2 yrs; Erin, Queen.

St Louis Kennel Club, St. Louis, Sting II, red; 4 yrs; Grouse, Maybe. Berkeley, red; 19 mos; Elcho, Loo II. Elcho II, red; 2½ yrs; Elcho, Rose, $500.

Henry Griffiths, Butler, Ill, Dan, red, 18 months; Bob, Fan II. Zip, red; 18 months; Bob, Fan II.

James F Duncan, attorney-at-law, St. Louis, Gelert, red; 4 yrs; Mark, Queen, $125.

F A Churchill, St Louis, Buster, red; 3½ yrs; Don, Rose, $200

Geo B Dongan, Richmond, Ind, Kite, red; 20 mos; Plunkett, Kathleen, $250.

Geo T Fowler, Ft Wayne, Ind, Ranger, red; 4 yrs; Larry, Lill II.

Jas Moore, Toledo, O, Don, red; 17 mos; Rufus, Moss, $300. Dick, red; 17 mos; Rufus, Moss, $200

Baltimore Kennel Club, Baltimore, Flounce, red; 2 yrs; Rover Dora.

CLASS 8—Imported Irish Setter Bitches.

T H Scott Kilvington, Thirsk, England, Colleen Rhue, red Grouse, Maybe.

St Louis Kennel Club, St Louis, Duck, red; 3 yrs; Erin, Rose, 2d Brighton, 1st Birmingham, 1st Wellington, 1st Nantwich and cup, 1st St Louis, $1,500. Biddy, red; 19 mos; Erin, Erin, $500.

Henry Griffiths, Butler, Ill, Fan III, red; 18 months; Erin, Fan II. Peggy, red; 18 mos; Erin, Fan II

E C Waller, Chicago, Fanny Fern, red; 4 yrs; Tippo, Ruby not for sale.

Jesse Sherwood, Edina, Mo, Fanchon, red; 2 yrs; Rufus, Friend, $350. Frisk, red; 4 yrs; imported, $150.
H W Gause, Wilmington, Del, Fire-fly, red; 30 mos; Rufus, Friend, not for sale.
W M Smith, Sterling, Ill, Bridget, red; 16 mos; April, Colleen, $150.
Theodore Tilleston, Chicago, Ill, Star, red; 16 mos; April, Collean.

CLASS 8—Imported Irish Setter Puppies (over 6 and under 12 months.)

St Louis Kennel Club, St Louis, Erin II, red; 10 mos; Elcho, Erin, $250.
Henry Griffiths, Butler, Ill, Nora, red; 10 mos; Erin, Fan II, Mollie, red; 10 mos; Erin, Fan II.
Baltimore Kennel Club, Baltimore, Purdy, red; 3 mos; Champion Palmerston, Lily, not for sale. Lady Palmerston, red; 3 mos; Champion Palmerston, Lily, not for sale.

CLASS 8—Imported Irish Setter Puppies, Under 6 Months.

St Louis Kennel Club, St Louis, Loo III, red, 3½ mos; Thorstein, Loo II, $500.
Dr J P Garvin, Alton, Ill, Bob, red; 5 mos; Elcho II, Rose.
W J Farrar, Toledo, Ohio, ——, red, 4½ mos; Plunkett, Carrie.

CLASS 9—Irish, Native or Cross-Bred Irish Setter Dogs.

E C Waller, Chicago, Race, red; 22 mos; Elcho, Fanny Fern.
Jesse Sherwood, Edina, Mo, Pilot Junior, red; 18 mos; Pilot, Fanny, $75.
W H Linn, Decatur, Ill, Guy, red; 22 mos; Elcho, Flash, $200.
J D Johnson, 1,112 Chouteau avenue, St Louis, Duke, red; 4 yrs; Shot, Nellie, not for sale.
John Krumholz, 1,505 Carondelet avenue, Philo, red; 4 yrs, not for sale. Lincoln, red; 9 yrs; Leo, Nell, not for sale.
James Moore, Toledo, Ohio, Dash, red; 3 yrs; Dick, Jenny, $200.
Charles H Reeves, Baltimore, Top, red; 2 yrs; $250.

CLASS 9—Irish, Native or Cross-Bred Setter Bitches.

O K Garrison, Jr, 3,019 Belle street, St Louis, Flora, red; 3 yrs; $500.
Vincent Boisaubin, St Louis, Flora, red; 5 yrs; Snyder, Fanny, $100.
Jesse Sherwood, Edina, Mo, Carrie IV, red; 1½ yrs; Pilot, Carrie, $200.
S A Kay, Chicago, Ill, Scotchy, red and white, 1 yr and 4 mos; Ranger, Floss, $100.
Chas E Bicker, 702 Olive street, St Louis, Dora, red; 21 mos; Elcho, Grimsley stock, not for sale.
H A Thias, 1,025 Franklin avenue, St Louis, Flora, red; 3 yrs, not for sale.
Jno V Metlar, 700 Olive street, St Louis, Kate, red; 6 yrs, not for sale.
W H Linn, Decatur, Ill, Juno, red; 22 mos; Elcho, Flash, not for sale.
G T Widgeon, Decatur, Ill, Flash, 4 yrs; Mike, Fanny, $100.
Isaac Weighell, Rochester, N Y, Breeze, red.

CLASS 9—Native Irish Setter Puppies, Over 6 Months and Under 12 Months.

W H Holabird, Valparaiso, Ind, Tom Brown, red, 9½ mos; Kahliff, Lilith, full pedigree, $60.
Geo P Raed, 3,411 Washington avenue, St Louis, Don, red and white; 8 mos, not for sale.
W T Irwin, Topeka, Kansas, Karl, red; 10 mos; Elcho II, Katty.
Jesse Sherwood, Edina, Mo, Muldoon, red; 8½ mos; Grouse, Fanchon, $100.
Aldine Kennel Club, Chicago, Red Rival, red; 8 mos; Ranger, Rose. Rose II, red; 8 mos; Ranger, Rose.
George B Dougan, Richmond, Ind, Belle, red, 11 mos; Rufus II, Belle, $100. Queen, red, 8 mos; Ranger, Rose, $50.

CLASS 9—Native Irish Setter Puppies, Under 6 Months.

S A Kay, Chicago, Rustic Ramble, red; 3 mos; Race, Scotchy, $40.

CLASS 27—Imported or Native Irish Setter Stud Dogs. (To be shown with two of his get.)

Dr William Jarvis, Claremont, N H, Elcho, red.
George T Fowler, Fort Wayne, Ind, Ranger, red.
Arnold Burges, Hillsdale, Mich, Rufus, red; 5 yrs.

CLASS 27—Imported or Native Irish Setter Breed Bitches. (To be shown with two of her progeny.)

St Louis Kennel Club, St Louis, Mo, Loo II.
Henry Griffith, Butler, Ill, Fan II, red, Going's Bob, Fan; full pedigree.
E C Waller, Chicago, Fanny Fern, red; 4 yrs; Tippo, Ruby.
W M Smith, Sterling, Ill, Bridget, red; 16 mos.
H Kramer, St Louis, Nellie, red, 2½ yrs.

CLASS 31—For the Best Kennel of Irish Setters. (To consist of not less than five, imported or native.)

St Louis Kennel Club, St Louis, Mo, Loo II, Duck, Sting II, Berkeley, Thorstein, Elcho II, Buddy, Erin II
Henry Butler, Griffith, Butler, Ill, Fan II Fan III, Rip, Peggy, Nora, Moine and six puppies; Peggy and some of the pups for sale.
Jas Moore, Toledo, O, Dash, Don, Dick, Moss and five puppies.

CLASS 3—Imported and Native Black and Tan, or Black, White and Tan Gordon Setter Dogs.

Jesse Sherwood, Edina, Mo, Rupert, black and tan, 4½ yrs; Shot, Rhona, $500; winner, England, New York and St Louis.

CLASS 3—Imported and Native Black and Tan, or Black, White and Tan Gordon Setter Bitches.

T H Scott, Kilvington, Thirsk, Yorkshire, England, Floss; 2½ yrs; Rock, Hadzi II, 1st at Brigg; 1st and cup at Selby. Nell, 3 yrs; Rupert, 4318. Rhona, 1680; 1st Tavistock, 2d Amsterdam.
Thomas M Gallagher, Tower Grove Station, St Louis, Libby, black and tan; 4 yrs and 6 mos, not for sale.
Low & Vincent, DesMoines, Iowa, Gipsy, black and tan; 2½ yrs; Bob, Belle, $350.
Lew H Wright, St Louis, Beulah, black and tan; 6 yrs; not for sale; winner St Louis.
Aldine Kennel Club, Chicago, Belle, black and tan, 3½ yrs; Duke, Rosa, $200.
Wm M Tileston, New York, Lou, black and tan, 3½ yrs imported; not for sale; winner, Baltimore, Philadelphia and Springfield.
W J Farrar, Toledo, Ohio, Fan, black and tan, 5½ yrs, imported; winner, England.
Isaac Weighell, Rochester, N Y, Belle; winner, Detroit and London, Ont.

CLASS 10—Imported and Native Black and Tan, or Black, White and Tan, or Cross-Bred Gordon Setter Dogs.

Robert Baneke, Fourth and Market streets, St Louis, Care, black and tan, 18 mos.
H B Duke, 2,327 Olive street, St Louis, Nick, black and tan, 19 mos; Turner's Joe, Fanny.
B Morris Swander, M D, 1,701 Washington avenue, St Louis, W H Fink, black and tan, 15 mos; Barrick's Yank, Imported Shot; exhibition only.
Jacob G Hawkins, Glendale, Mo, Frank, black and tan, 6 yrs; Mike, Daisy.
David Ranken, 810 North Second street, St Louis, Uno, black and tan, 2 yrs; not for sale.
S Fleet Speir, M D, 162 Montague street, Brooklyn, Romeo, black and tan, 1 yr and 7 mos; Gypsum, Daisy; not for sale. Gypsum, black and tan, 4 yrs; Don, St Kilda; not for sale.
John G Schoeffler, Alton, Ill, Dick, black and tan, 2 yrs.
Dr S J Coyne, Chicago, Barkis, black and tan, 16 mos; Dexter, Belle, $50.
B Bockemarhl, Litchfield, Ill, Dick, black and white, 2½ yrs, $100.
J G Hawkins, Glendale, Mo, Carlo, black and tan, 2 yrs; Frank, Queen.
Aldine Kennel Club, Chicago, Ill, Sam, black and tan, 15 mos; Grouse, Belle, $100. Phil, black and tan, 2 yrs; Rick, Spot, $50.
David Shellabarger, Decatur, Ill, Heck, black and tan, 4 yrs; Mike, Fanny, $150.
J McWerter, Clinton, Mo, Duke, black and tan, 2 yrs, Tom, Jenny, $150.
Baltimore Kennel Club, Baltimore, Ben, black and tan, 3½ yrs, Hero, Maggie, $100. Grand Duke, black and tan, 3 yrs; Duke Queen; not for sale.
W J Farrar, Toledo, O, Dash, black and tan, 18 mos; Ned, Fan; for sale. Rapp, black and tan, 4 yrs; Sancho, imported bitch.
A C Waddell, Kansas City, Cæsar, black and tan, 2 yrs; Milo, Queen. Shay, black, 2 yrs; Dick, Blanche.
Julius Oster, Taylerwick, St Louis County, Prince, black and tan, 8 yrs.

CLASS 10—Imported and Native Black and Tan, or Black, White and Tan, or Cross-Bred Gordon Setter Bitches.

T H Scott, Kilvington, Thirsk, England, Nell, 3 yrs; Rupert, 4,318; Rhona, 1,680; 1st Tavistock, 2d Amsterdam. Floss, 2½ years; Rock, Hadzi II; 1st Brigg, 1st and cup Selby.
Henry B Duke, 2,327 Olive street, St Louis, Lou, black and tan, 19 mos; Turner's Joe, Duke's Fan.
Jacob G Hawkins, Glendale, Mo, Lady Doll, black and tan, 9 mos; Frank, Queen.
Thomas M Gallagher, Tower Grove Station, St Louis, Libby, black and tan, 4 yrs and 6 mos; not for sale.
Dr S J Coyne, Chicago, Ill, Peggoty, black and tan, 16 mos; Dexter, Bell; not for sale. Belle, black and tan, 4 yrs; Don, Belle, $75.
Low & Vincent, Des Moines, Iowa, Gypsy, black and tan, 2½ yrs; Bob, Belle, $350.
W T Irwin, Topeka, Kan, Gypsy, black and tan, 2 yrs; Tom, Jenny, $75.
Lew H Wright, St Louis, Beulah, black and tan, 6 yrs.
Aldine Kennel Club, Chicago, Lulu, black and tan, 3½ yrs, $120. Lady Gordon, 15 mos; Grouse, Belle; not for sale.
Geo W Kerr, St Louis, Sukey, black and tan, 4 yrs; not for sale.
Baltimore Kennel Club, Baltimore, Dream, black and tan, 19 mos; Duke, Dream.
W J Farrar, Toledo, O, Fan, black and tan, 5½ yrs; imported. Nettie, black and tan, 2 yrs; Jerry, Nell; for sale. Nell, black and tan, 6 yrs; Tom, Jessie.
Isaac Weighell, Rochester, N Y, Belle, black and tan.
A C Waddell, Kansas City Kennel, Kansas City, Bettie, black and tan, 4 yrs; imported.

CLASS 10—Gordon Setter Puppies Over 6 and Under 12 months.

A A Mellier, Jr, 709 Washington avenue, St Louis, King, black and tan, 10 mos; Scott Rodman's stock, full pedigree.
Jacob G Hawkins, Glendale, Mo, Lady Dell, black and tan, 9 mos; Frank, Queen, $75. Tramp, black and tan, 9 mos; Frank, Queen, $75. Scall, black and tan, 9 mos, $35; exhibition only.
S Fleet Spier, M D, Brooklyn, Maida, black, white and tan, 8 mos; Dick, Clio.
John W Herman, 2,418 Division street, St Louis, Sancho, black, tan and white; 10 mos; not for sale.
Otto Holzgrebe, 2,211 Franklin avenue, St Louis, Queen, black and tan; 9 mos, not for sale.
W T Irwin, Topeka, Kas, Pride of Kansas, black and tan; 10 mos; Kahliff, Lilith, $50.
Geo B Dougan, Richmond, Ind, Topsy, black and tan; 10 mos; Grouse, Flora, $100.
J S Niven, M D, London, Ont, Moll, black and tan; 10 mos; Richardson's Champion Duke, Leah, $200.
W J Farrar, Toledo, O, Dinah, 11 mos; Rapp, Fan.
A C Waddell, Kansas City, Moke, Rupert, Dot.

CLASS 10—Gordon Setter Puppies Under 6 Months.

Robert H Wright, 2,228 Scott avenue, St Louis, Prince, black and tan; 4½ mos; $25.
Low & Vincent, Des Moines, Ia, Rudolph, black and tan; 5 mos; Rolfe, Gypsy, $35.
B Bockemarhl, Litchfield, Ill, Turk, black; 6 mos; $50.
W J Farrar, Toledo, O, Allie, 4½ mos; Rapp, Fan; for sale.

CLASS 28—Imported or Native Black and Tan, or Black, White and Tan Gordon Setter Stud Dogs (To be shown with two of his get).

Jesse Sherwood, Edina, Mo, Rupert, tan.
Jacob G Hawkins, Glendale, Mo, Frank.
W J Farrar, Toledo, O, Rapp, 4 yrs.

CLASS 28—Imported or Native Black and Tan, or White and Tan Gordon Setter Brood Bitches (To be shown with two of her progeny).

Frank G Hawkins, Glendale, Mo, Queen, black and tan; 6 yrs.
Dr S J Coyne, Chicago, Belle, black and tan; 4 yrs; with Barkis and Peggotty.
Low & Vincent, Des Moines, Iowa, Gypsy, black and tan; 2½ years; Bob, Belle, $350.
Aldine Kennel Club, Chicago, Belle, black and tan.
W J Farrar, Toledo, O, Fan, black and tan; 5½ yrs.

CLASS 32—For the Best Kennel of Black and Tan, or Black, White and Tan Gordon Setters, (Imported or Native, to consist of not less than five).

Frank G Hawkins, Glendale, Mo, Frank Queen, Lady Dell, Carlo, Tramp.
Aldine Kennel Club, Chicago, Belle, Lulu, Lady Gordon, etc.
W J Farrar, Toledo, O, Rapp, Dash, Brough, Barney, Albert, Allie, Alisa, Nattie, Nell, Fan.

CLASS 4—Pointers, Large Size—Dogs 55 lbs and Over, Bitches 50 lbs and Over.

T H Scott, Kilvington, Thirsk, Yorkshire, Bow, 3 yrs; Bang 739, Luna; 1st at Exeter, 2d Islington.
Capt D Tipton, St Louis, Toby, liver; 4 yrs; from imported stock; not for sale.
W H Beck, Cadet, Mo, Andy, black and white; 3 yrs.
S O Edgar, St Louis, Rock, orange and white; 4 yrs; Shot, Fan; not for sale.
Leonard S Reed, Louisville, Ky, Bragg, black; 2 yrs and 7 mos; Trim, May; not for sale; winner Louisville.
Thos H Burit, Jefferson City, Mo, Pat, liver and white; 4½ yrs; Tom, Nellie; not for sale.
E F Stoddard, Dayton, O, Brandy, liver; 3½ yrs; not for sale; winner St Louis.
H J Menown, 915 N Fourth street, St Louis, Dan, black; 8 yrs; Cab, Lord Gordon's stock; not for sale. Dash, black; 5 yrs; Cab, Lord Gordon's stock; not for sale.
E C Sterling, St Louis, Sleaford, liver and white; 2 yrs and 9 mos; MacGregor, Nina, $200; winner Birmingham.
Geo Knapp, St Joseph, Mo, Shot, liver and white; 3 yrs; not for sale.
R M Lindsay, Scranton, Pa, Viscount, lemon and white: 3 yrs; Sultan, Pride, $500.
Westminster Kennel Club, New York, Sensation, lemon and white; 3 yrs and 9 mos; by R I Lloyd Price's Champion Jim, out of Humphries' Nell, G S Whitehouse's champion field trial and bench show winner, Hamlet, G D Nina. Winnings—Seven prizes in England, first at Baltimore, and divided with Rock for the best dog in the show; winner first Birmingham, and thirteen other prizes.
R L Henry, St Louis, Joe, liver, 10 yrs; from imported stock.
A C Waddell, Kansas City, Don, lemon and white, 2 yrs; Ranger, Queen. Phil Jr, black; Larry, Bell; winner St Louis.
Columbus Kennel Club, Columbus, O, Native, formerly Jake, liver and white, ticked, 3 yrs; Dock, Champion Belle, $500.
Isaac Weighell, Rochester, N Y, winner Syracuse and London, Dash, lemon and white.
H J Menown, 915 N Fourth street, St Louis, Kate, white and black, ticked, 3 yrs; Cab, Lord Gordon's stock; winner St Louis.
Jas S Harris, Florissant, Mo, Birdie, liver and white, 2 yrs; Jack, Nellie; not for sale.
R M Lindsay, Scranton, Pa, Dolly, lemon and white, 16 mos; $500.
Alfred Thomas, Dayton, Ohio, Pride, lemon and white, 7 yrs; Gen Prim, Dessy; not for sale; winner England.
A C Waddell (Kansas City Kennel), Kansas City, Fan, liver, 4 yrs; Pedigree recorded; winner St Louis.
A C Waddell, Kansas City, Flirt.

CLASS 5—Pointers—small size—Dogs under 55 pounds—Bitches under 50 pounds.

C P Budd, 612 Olive street, St Louis, Quail, black, 3 yrs; Othello, Dios; bred by Sir Chas Morgan.
Edmund Orgill, Brooklyn, N Y, Rush, lemon and white; Flake, Lilly.
H J Menown, St Louis, Jeff, liver, 11 mos; Mike, Kate.
A C Waddell, Kansas City, Keno, liver, 2 yrs.
H J Menown, St Louis, Flora, liver, 11 mos; imported stock.
Westminster Kennel Club, New York, Daisy, lemon and white, 1 yr and 10 mos; Flake, Lilly; not for sale.
Isaac Weighell, Rochester, N Y, Lolo, white and lemon.
Columbus Kennel Club, Columbus, O, Gillespie's Fan, black, 3 yrs; bred in Maryland; $500.
A C Waddell (Kansas City Kennel), Kansas City, Me, Jesse, liver and white, 2½ yrs.

CLASS 11—Pointer Dogs of 55 Pounds or Over.

T H Scott, Kilvington, Thirsk, England, Bow, 3 yrs; Bang, 739, Luna.
David Tipton, St Louis, Toby, liver, 4 yrs; from imported stock; not for sale.
W H Beck, Cadet, Mo, Andy, black and white, 3 yrs.
J G Marriott, 2715 State street, St Louis, Don, liver and white, 2½ yrs.
S C Edgar, St Louis, Rock, orange and white, 4 yrs.
John B O'Meara, 322 North Third street, St Louis, Max, liver and white, 2 yrs.
Leonard S Reed, Louisville, Ky, Bragg, black, 2 yrs and 7 mos; Trim, May.
Thos H Burtt, Jefferson City, Mo, Pat, liver and white, 4 yrs and 6 mos; Tom, Nellie.
E Swaney, Bement, Ill, Boss, liver and white, 6 yrs.
W Jewel Jones, 1007 Locust street, St Louis, Jasper, liver, 18 mos.
Lewis W Schriver, St Louis, Tony, liver, 2 yrs; Doo, Nelly Gordon, $1,000.
E F Stoddard, Dayton, Ohio, Brandy, liver, 3½ yrs; not for sale.
H J Menown, St Louis, Mo, Dan, black; 8 yrs; Cab, Lord Gordon's stock. Dash, black; 5 yrs; Cab, Lord Gordon's stock.
E C Sterling, St Louis, Sleaford, liver and white; 2 yrs and 9 mos; McGregor, Nina, $200.
John Krumholz, 1,505 Carondelet avenue, St Louis, Heck, liver and white; 2½ yrs.
James S Harris, Florissant, Mo, Jeff, liver and white; 2 yrs; not for sale.
Geo Knapp, St Joseph, Mo, Shot, liver and white; 3 yrs.
R M Lindsay, Scranton, Pa, Viscount.
A C Waddell, Kansas City, Phil Junior, black; 2 yrs; Old Phil, Belle.
Columbus Kennel Club, Columbus, O, Native, formerly Jack, liver and white, ticked; 3 yrs; Doc, Champion Belle, $500. Mack, liver and white; 4 yrs; Dash, Flora; full pedigree; $150.
Isaac Weighell, Rochester, N Y, Dash, lemon and white.

CLASS 11—Pointer Bitches of Fifty Pounds or Over.

J W Munson, St Louis, Queen, lemon and white; 2 yrs; Pat, Nellie, $150.
John Papenbrook, 618 Carr street, St Louis, Kitty, white and lemon; 1 yr and 9 mos; $125.
Thos H Burtt, Jefferson City, Mo, Nellie, liver and white; 4 yrs.
Rudolph Schmidt, 1,177 Hickory street, St Louis, Rose, white and liver; 17 mos; Ned, Nellie, $100.
H J Menown, St Louis, Kate, white and black, 3 yrs; Cab, Lord Gordon's stock.
Jas S Harris, Florissant, Mo, Birdie, liver and white: 2 yrs; Jack, Nellie.
R M Lindsay, Scranton, Pa, Dolly, lemon and white; 16 mos.
Alfred Thomas, Dayton, O, Pride.
A C Waddell, Kansas City Kennel, Kansas City, Fan, liver; 4 yrs; recorded.
Edmund Orgill, Brooklyn, Romp, liver and white; 22 mos; Ben, Bess.

(CONCLUDED IN OUR NEXT.)

SPECIAL PRIZES OFFERED BY THE MASSACHUSETTS KENNEL CLUB.

CLASS A.—For the best kennel of English Setters, either native or imported, to consist of not less than five and to be owned by exhibitor; a fine W. & C. Scott & Sons' breech-loading double gun, presented by Messrs. Wm. Read & Sons, Boston, Mass., value $150.

CLASS B.—For the best kennel of Irish Setters, either native or imported, to consist of not less than five and to be owned by exhibitor; a fine Fox's patent breech-loading double gun, presented by the American Arms Co., Boston, Mass., value $150.

CLASS C.—For the best kennel of Gordon Setters, either native or imported, to consist of not less than five and to be owned by exhibitor; a Fox's patent breech-loading double gun, presented by the Massachusetts Kennel Club, Boston, Mass., value $100.

CLASS D.—For the best kennel of Pointers, either native or imported, to consist of not less than five and to be owned by exhibitor; a fine Daly breech-loading double gun, presented by Wm. R. Schaefer, Esq., Boston, Mass., value $125.

In classes A, B, C and D the entrance fee is $5.

CLASS E.—For the best kennel of Water Spaniels, to consist of not less than four, to be owned by exhibitor; a fine leather shooting suit, presented by Messrs. G. W. Simmons & Sons, Boston, Mass., value $54.

CLASS F.—For the best English Setter Stud Dog, either native or imported, to be shown with two of his get; a fine oil painting (sporting subject), presented by Gaston Fay, Esq., New York, value, $150.

CLASS G.—For the best Irish Setter Stud Dog, either native or imported, to be shown with two of his get; a pair of gold-mounted revolvers and case, presented by Messrs. John P. Lovell & Sons, Boston, Mass., value $50.

CLASS H.—For the best Gordon Setter Stud Dog, either native or imported, to be shown with two of his get; a case of Oriental Diamond Grain Powder, presented by Oriental Powder Mills, Boston, Mass., value $35.

CLASS I.—For the best Pointer Stud Dog, either native or imported, to be shown with two of his get; a case of Eureka Powder, presented by Warren Powder Mills, Boston, Mass., value $30.

CLASS J.—For the best English Setter Brood Bitch, either native or imported, to be shown with two of her progeny, a case of Oriental Falcon Ducking Powder, presented by Oriental Powder Mills, Boston, Mass., value $30.

CLASS K.—For the best Irish Setter Brood Bitch, either native or imported, to be shown with two of her progeny; a sporting rifle, presented by Messrs. E. Remington & Sons, Boston, Mass., value $35

CLASS L.—For the best Gordon Setter Brood Bitch, either native or imported, to be shown with two of her progeny; a silver-mounted split bamboo fly rod, presented by Messrs. Conroy, Bissett & Mallison, New York, value $50.

CLASS M.—For the best Pointer Brood Bitch, either native or imported, to be shown with two of her progeny; one subscription to A. Pope, Jr.'s "Upland Game Birds and Water Fowl of the United States," presented by Messrs. Scribner, Armstrong & Co., New York, value $25.

CLASS N.—For the best display of Fox Hounds, to comprise not less than two couples, to be owned by exhibitor; a handsome gold and silver medal, presented by Messrs. A. W. Mitchell & Co., Boston, Mass., value $25.

CLASS O.—For the best Mastiff, dog or bitch, a silver cup, value $25.

CLASS P.—For the best St. Bernard, dog or bitch, a silver cup, value $25.

CLASS Q.—For the best Pug, dog or bitch, a silver collar, presented by Al. Watts, Esq., Boston, Mass., value $25.

Any further special prizes will be published in the sporting papers as received.

The entrance fee for special prizes (for which separate entries must be made) will be $2, as in the general classes, except in classes A, B, C and D, where the fee is $5.

In the classes for stock dogs and brood bitches it is understood that the progeny to be entered with them need not be the property of the person making the entry.

In order that the catalogue may be prepared at the earliest possible moment, it is particularly requested that exhibitors will not delay sending in their entries. No entries will be received later than March 13th, except in case of foreign exhibitors, who will be allowed until March 18th.

EXPRESS RATES.—Arrangements have been made with the Adams and the American Express Cos. to transport dogs to and from the exhibition at a reduction of one half the usual rates for dogs, with the understanding that they are released from all liability in case of accident.

Arrangements have been made with all the railroads entering Boston for low rates of fare to exhibitors, also for free passes for dogs accompanied by their owners.

CHARLES LINCOLN, Supt.,
P. O. Box 3,008. 53 Congress St., Boston, Mass.
Entries close March 13, 1878.

THE COOKER.—A correspondent asks us to describe the cocker. The old-fashioned cocker of fifty years ago was a smaller dog than the cocker of to-day. About twenty or twenty-five pounds was a full weight. To-day, by crossing with the springer, the weight has been brought up to thirty and thirty-five pounds. True liver color is the shade most in repute, though all colors are found. The adopted points are, for the cocker or field spaniel: Head, 15; ears, 5; neck, 5; chest, back and loins, 20; length, 5; legs, 10; feet, 10; color, 5; coat, 10; tail, 10; symmetry, 5. Tails are mostly cropped. In judging, symmetry is an important point.

A MOST SINGULAR DOG.—Just a year ago, while in Boston, the editor's attention was called to a most singular dog. At first appearance the dog looked like an enormous gray spaniel. It was very shaggy and feathered from stem to stern with hairs several inches long. The tail was as bushy as a Newfoundland's, and the hair hung over the creature's eyes, as it does over a Skye terrier's. The visible make-up of the animal was ponderous and unwieldy, if not absolutely clumsy. So much for appearances. In anatomical reality, the dog was not a spaniel at all, or in any way related to the tribe of spaniels. Its shaggy coat was only a disguise. It was as complete a disguise as the voluminous wrap which transforms the fairy in the play into a decrepit old woman. Take off the dog's hair, and the body of a lithe, gaunt and perfectly formed greyhound remained! It was a mature, full-grown animal, some two or three years old, if we remember aright. It had all the characteristics of a greyhound. It was extremely fleet, and would jump an eight-foot fence like a kangaroo dog. It would follow game by sight and nose. It was a good hunter. At the same time it would take the water. We recall these facts incidentally now, but intended to state them long ago. The question which we have now to propound, and which puzzled both the writer and all who saw him is: What kind of a canine conundrum is this? Did any one ever before hear of such a breed of dogs?

TWO FIRST-CLASS PERFORMERS.—At Newark, in the play of "School," two really good dogs were introduced in the hunting scene. Nick and Ned were perfect in their parts and did quite as well as the comedians. Some bad young man in the gallery whistled to the dogs in order to make them forget their cues, but the dogs only wagged their tails and refused to budge. A dog before a crowded house facing the foot lights looks at an audience in the blandest way. He expresses as plainly as possible that he has no end of friends in that audience, and that he is not a bit afraid. No, not a bit more than is the Count Johannes. Once, in an Offenbach opera in Paris, a whole pack of hounds were put on the boards. It was their duty to howl in chorus. Somebody threw a link of sausages on the stage, and those French dogs made for those sausages, and there were sixteen distinct dog fights all at the same time. Moral: Pitch bouquets to pretty actresses, but never throw sausages to histrionic dogs.

DR. STRACHAN'S DAISY BOUGHT BY THE KENNEL CLUB.—We notice that the Westminster Kennel Club have purchased from Dr. Strachan, the pointer bitch Daisy. She won the first prize in her class at the New York Bench Show, and was pronounced an extremely handsome animal by the Rev. Mr. Macdonna, who acted as judge. Dr. Strachan's pointers have been a long time famous. Flake and Whisky were bred by him, and Daisy is a daughter of Flake, granddaughter of Flash, and great granddaughter of George, who was brought to this country from the Duke of Beaufort's kennel by the late Sir Frederick Bruce, from whom Dr. Strachan got him. George was a grand pointer, as all admit who ever saw him, and Dr. Strachan says he was the handsomest pointer he ever saw in England or out of it. A worthy sire of many worthy descendents, the Westminster Kennel Club have in Daisy a valuable addition to their stock, and in an interview with the doctor he stated that he would not have parted with her but that she went into such good hands, and where the best use would be made of her.

TO RELIEVE SWOLLEN DUGS IN A BITCH.—A correspondent from Philadelphia informs us of the successful treatment of a bitch suffering from distended dugs, by the use of bathing the parts with warm vinegar, and then anointing with cat-fish fat. In taking puppies from their mother the same plan is adopted. We do not think there is any specific value in cat-fish fat, any animal or vegetable oil would have a salutary effect.

For Forest and Stream and Rod and Gun.

AFTER THE HOUNDS.

HUNTING REMINISCENCES—NO. III.

IN my last, I endeavored to recall some of the incidents of a run with a pack at Annapolis, Maryland. The hounds composing the pack were a fair type of the native fox-hounds of that period; they may be described as rather heavy-headed, with immense pendulous ears, rather too long coupled, and not quite straight enough in the fore-legs, which were strong and heavy in bone. Their sterns, with a small but decided feather, were carried with a cimeter-like curve, well over their backs. They had been carefully bred, and had descended without the taint of an impure cross from the original stock imported by the founders of the colony. In all probability, Mr. Waters' hounds were just such as old Squire Western is described as riding to, in Fielding's immortal story of Tom Jones.

But it had been ascertained even then, that these hounds, while they could easily dispose of the native gray-fox, were not a match for the imported reds, and efforts were already making to improve their speed, and these efforts were successful, for in a very few years after the run with the pack above-described, a subscription pack was gotten up in Baltimore with a more modern and a far superior class of hounds. Baltimore, the beautiful commercial metropolis of the State of Maryland, was, and still is, admirably situated for the enjoyment of all sports pursued on land or water. Foxes are yet numerous in the "necks," almost within sound of her church bells. The speckled trout are yet to be found in the neighboring brooks, while the waters of her magnificent bay and its tributary streams are teeming with inexhaustible supplies of those wild fowl, fish, terrapins, oysters and crabs, which have made the flesh-pots of old Maryland as famous as those of ancient Egypt. So noted, indeed, was the locality in the olden days for the quantity of game, that one of the earlier Governors of the State built himself a hunting-lodge to the west of the then village of Baltimore; and this ancient lodge, commanding one of the finest panoramic views on the American continent, is now the residence of Mr. John Serdee, and is known to this day as Hunting Ridge.

The above facts, and probably an inherited taste from their ancestors who founded their beautiful city, will account for the very general fondness for field sports for which Baltimoreans are noted.

But let us "hark back" to the hounds.

When the writer was quite a child, so young as to be going to a "dame's" school (in company, by the way, with his life-long friend, the present venerable Senator from Hartford, the Hon. Carroll Walsh), the most noted fox-hunter in Baltimore was the late Judge Thomas Kell, long since passed away to the happy hunting grounds. The judge was one of those upright magistrates of the ancient regime, without a stain upon the ermine conferred upon him by the selection of the Governor, and not by the usual voice of a greasy mob. With all his legal learning he was a Nimrod in the chase and always happy, on proper occasions, to lay aside the scales of justice to take up the hunting-horn.

The Judge growing old gave up hunting, and turned over his hounds to a club of younger men, who, with his pack as a nucleus, soon got up a subscription hunt, which, for systematic management, the quality of its hounds, its kennels and general appointments had no equal in this country at that day.

The most active members of this hunt, consisting of a number of the most prominent gentlemen of the city, were the late Robert Oliver—grandfather of the Colts and Craigs of New York—and the late John S. Skinner, editor of the old *American Farmer* and Postmaster of Baltimore. The first—the merchant Prince of his day—through his friends, the Duke of Sussex and Mr. Coke, of Holkamin, England, procured several couples of hounds from both Britain and Ireland; and the latter, by means of the wide circulation of his paper and an extensive acquaintance throughout all the planting States, obtained some of the best hounds to be had from the best Southern kennels. Of the hounds imported by Mr. Oliver, the only cross which "nicked" with our Southern blood was the Irish, and to the strain so obtained some of the finest hounds now in Maryland, Virginia, North Carolina and Tennessee trace their descent.

The kennel of the Baltimore hunt was situated nearly opposite to that old land-mark of the city—the Three Sun Tavern [ale houses of entertainment were not hotels in those days], at the corner of Pratt and Paca streets. It was in charge of old Colonel Amy, who had commanded a militia regiment at the battle of North Point, from which he was famous for having effected a precipitate, if not masterly, retreat. Old Amy was simply the kennel huntsman, and rarely accompanied his charge to the field, but when he did, he always carried slung at his back a curious old leather bottle filled with whisky, and over his shoulder a huge tin horn, the hoarse blasts of which might rival the trump of the resurrection. As the hunt had no well-preserved covers as they have in England, and in which a fox may be found at any hour in the day, the sportsmen had to be in the field by times before the evaporation of the dew. This led them to the very pleasant social custom of breakfasting on hunting mornings in squads of half a dozen or more at each other's houses; and this breakfast was none the worse for the competition among the wives for the reputation of setting forth the most luxurious meal. These breakfasts were generally over one, and sometimes two, hours before day-break.

When the pack was not sent on ahead to the "meet," it was the custom to adjourn to the kennel immediately after breakfast, couple the hounds, turn them out, and then proceed at an easy trot to the appointed place.

A sight that would astonish the modern dwellers in the Monumental City now, was common enough then. A procession of a dozen or more horsemen, followed by fifteen or twenty couples of hounds, proceeding from Pratt street, up Paca, to Market, and down Market, over the bridge through Old Town, toward Canton, through the whole length of the silent, sleeping city.

The writer was an actor in such a scene more than forty years ago. About a dozen of the club had breakfasted with the late Mr. Thomas Johnston, then residing on the west side of Howard, below Market street. As we issued from the house, and mounted our horses, the old-time watchman, armed with spontoon and rattle, saluted us with his cry: "Past four o'clock, and a cloudy morning." We all turned down Market street, and at the corner of Culvert we were joined by quite a large delegation from Washington City, who had come over to join the hunt, and who, rather than rise at what they called a barbarous hour in the morning, had made a night of it at Uncle Davy Barnum's. Alas! they are all gone now, save the writer and Sir Andrew Buchanan, lately H. M. Ambassador at Vienna. Among this large party were Osborne Sprigg, Bernard Carter, Columbus Munro, Captains Ramsay of the United States Navy, and Groome, of the Marine Corps, Sir Andrew Buchanan, of the British Legation, and several other young diplomats, and some Southern Members of Congress. At Gay street a blast from a hunting horn brought out Mr. Ohner, Mr. Gibbes, Colonel John Thomas, and several others who had been breakfasting with Mr. O. Our party continued to increase as we proceeded, and as we clattered over Market street we might, had it been war time, have been mistaken for a squadron of Harry Gilmor's raiders.

Just before reaching the old Canton race-track the hounds were uncoupled and cast off, and in less than two minutes, in a place now covered with dwelling-houses, the mellow bass of old "Ringwood" was heard, and in another instant the united cry of thirty hounds made the "welkin ring" with glorious music. By the merest chance the pack had struck the burning scent of a traveling fox, and they went tearing away with it, giving assurance of a gallant run.

The numerous field of horsemen were taken by surprise. Great confusion ensued, and several of the "green uns" came to grief before the chase had fairly commenced; but the steady old Nimrods, familiar with the country, got away with the hounds. The fox headed as straight as the crow flies for North Point, and for five or six miles they had a magnificent gallop right down the country road in full hearing of the cry. Here a check occurred which enabled the stragglers to get up. Reynard, finding that speed alone could not save him, had recourse to stratagem, and such a stratagem! Its wonderful acuteness would have been incredible to all save an old fox-hunter or a veteran hound. Turning sharp to the right, Master Reynard made straight for the river, where, with his feet actually in the water, he ran nearly down to the light-house. If he had had the luck to have made this run on a rising tide his escape would have been certain, for all scent and trace would have been washed away and obliterated by the rising waters; but the tide was running out, and the trail was all the stronger. He then tried the common dodge of running on logs and the tops of fences, but some of the old hounds could play at that game as well as he. Then he first gave signs of weakening by making short doubles, and running from one pine thicket to another; but still the thunderous cry in his rear grew nearer and nearer. The horsemen, now come to a halt in an open field, viewed him repeatedly, as, rapidly failing, he passed from one cover to another in a feeble lope, which at last was reduced to a trot as he passed for the last time from their view, not fifty yards in advance of the leading dogs; but the nature of the ground still concealed him from their sight. He entered a dense thicket of second-growth pines, with the howling pack close on him, when bang! bang! a double shot was heard, the cry of the hounds suddenly ceased, and a dead silence ensued. Presently out issued from the pines a small man with an immense pair of leather gaiters, reaching almost to his hips, a double gun in his hand, and a huge game bag at his back; on his head was an odd-looking foreign cap. It was one of those little Frenchmen, a class of people who to this day infest the suburbs of our large cities, shooting wrens, robins, tomtits, and now and then a chicken, and call it *la chasse*.

Upon being asked if he had seen the fox, the little fellow drew himself proudly up, and pointing exultingly to his bag, as if he had accomplished a great feat, he exclaimed: "Ze fox, Messieurs, I have save him, as he escape from ze dogs. I shoot him pan! pan!" He opened his bag, and there lay, sure enough, our noble fox, murdered by the little pot-hunting frog-eater.

To describe the indignation, the fury, and the profane denunciations of the disappointed hunters, and the astonishment and fright of the little Frenchman as the fox was rudely jerked away from him, and old Mr. Oliver threatened to hang him to the nearest tree with his bridle rein, is beyond my powers.

All this, Mr. Editor, occurred long, long ago; but as I here record the incidents of that magnificent run, the pleasure is dampened by the sad reflection that of all the gallant gentlemen who rode to the hounds that day, there are but two survivors.

F. G. S.

SALE OF SCOUT.—Mr. M. Wadsworth, of Bennington, Vt., has sold to David G. Hartt, of North Port, L. I., his Plunkett-Carrie dog Scout and Plunkett-Nell bitch Bute. Scout is a deep red, and of very much the form of Elcho. He has sired one litter of pups that are very promising. Was whelped March 3, 1876. Bute was whelped March 23, 1876.

SALE.—Mr. E. P. Welsh, York, Pa., has sold to Messrs. B. P. Harrison and W. H. Bernard, of Wilmington, N. C., two black and tan Gordon pups. Dam, Welsh's Kate; sire McConia's Mack.

WHELPS.—A. Bellartin's Rose whelped eight pups, Feb. 4, by Dr. S. F. Spier's Gypsum, six females and two males.

Titusville, Feb. 11.—Fox chasing the chief sport. Proposed new game law greatly opposed by our hunters. G. H. W.

WHELPS.—*Boston, Feb.* 13.—Alexander Pope, Jr.'s, Gordon bitch Jule, six pups, all black and tan; three dogs.

EDITOR FOREST AND STREAM:

During the past season I have, by my advertisement in your paper, been enabled to put the N. Y. Shooting Coat before the public; and by numerous testimonials, I find I have a coat that I can confidently recommend to any who may wish a coat (or suit) of any goods which I manufacture.

I have succeeded in producing a coat that can be worn with the greatest possible comfort, it being cut so as to enable the wearer to have free use of his arms, no matter how great the weight may be which is necessary to be carried at any time.

I am now prepared to fill any orders I may receive, at the shortest notice. Samples and rules for measurement sent on application.

F. L. SHELDON.—[Adv.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, FEBRUARY 21, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith, and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous contributions will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

—*Der Waidman*, the leading field paper of Germany, which is published at Eilenburg, Prussia, by F. Van Ivernois, contains, in its issue of January 7th, a portrait and biographical sketch of Charles Hallock, Esq., the managing editor of the FOREST AND STREAM; a complimentary notice from the other side of the water, which we do not fail to appreciate.

A FOREST AND STREAM SCRAP BOOK.—A correspondent sends us the subjoined suggestion for readers of THE FOREST AND STREAM, which we can most heartily endorse. With the exercise of a little caution in the selection of scraps, a home-made scrap book may in time become a treasure house of most valuable and entertaining matter. We are always greatly interested in looking over these collections; they are interesting in two ways—for the intrinsic excellence of the matter contained in the clippings, and equally suggestive as an index of the collector's taste. Our correspondent writes:

"Newspaper Cuttings" is the title of a very complete scrap-book we have lately adopted. It is published by Marcus Ward & Co., of London, and on sale by Claxton, Remsen & Haffelfinger, Philadelphia. They will mail it to any address on receipt of the price. Although we are in no way connected with either of the above named firms, we especially recommend this scrap-book to all who may not particularly wish to save all numbers of THE FOREST AND STREAM, and yet would like many of the letters and different articles for future reference. Being of such a class, we find it suits our wants admirably, and now have our first scrap-book of 120 pages full of the choicest selections. The book is just suited for pasting the wide columns from FOREST AND STREAM, and we are particularly proud of our "FOREST AND STREAM Geography," as including in detail accounts and descriptions of many countries and localities nowhere to be found in our modern geographies. We have interspersed the letters and descriptions throughout with a few choice editorials and reminiscences of the editor, together with portraits of the American and English team of the late international rifle match, cut of "Hunters' Camp" at the Centennial, "Edward Laverack," "A Friendly Service," "Red Irish Setter Dick," property of Wm. Jarvis, Esq.—all of which, when neatly pasted into the book with a strong solution of gum arabic, make a volume well worthy the pride of any true gentleman and sportsman. J. LEE SMEDLEY.

JOTTINGS FROM COLORADO.

JACK SNIPE IN PARTICULAR AND MATTERS IN GENERAL.

DENVER, Jan. 8.

EDITOR FOREST AND STREAM AND ROD AND GUN:

In your issue of December 27 I notice that "B." very gracefully and truthfully states the fact in reference to the existence of jack-snipe in Colorado.

I can confirm the statement that they were comparatively plentiful here last fall. A number of local sportsmen had the pleasure of bagging a few on several different occasions, though the bag of F. F. Griffin, made the last week in September, was the most successful in point of number of which I have heard.

The writer of this article has seen jack-snipe in Colorado every spring and fall during the past three years, and apprehends it may be truthfully asserted that they were more plentiful last fall than at any time hitherto since the settlement of the State. It is further believed and predicted that the birds will become more numerous as our agricultural acreage increases, which is tantamount to asserting that as irrigation increases the bird will visit us in still larger numbers. As irrigation increases artificial lakes, with mucky, soft surroundings, now covered by overflow, and now exposed by the water receding, will multiply and give *Scolopax wilsonii* decidedly increased accommodations over those of former years. Stubble and corn-fields overflowed by the irrigating ditches will also afford admirable places of resort for this wierd bird, and thus it is that in these parts those who love and reverence this bird, not only for the admirable sport he brings to those fond of the gun, but as well for his gastronomic value, delight in the anticipation that wisps of this bird will be more numerous in the future than in the past, and that he will prove himself to be a power, viewed from the sportsman's stand-point, in making "the desert bloom as the rose."

While upon this topic, it will not be amiss to allude to the fact that it is one of the wonders of the age that our astute Solons did not legislate against shooting jack-snipe in and out of season, inasmuch as in "an Act for the Protection of Game and Insectivorous Birds," passed by the General Assembly of Colorado last March, "the killing, ensnaring, trapping or netting of curlew or plover" is prohibited! What electrifying sport "trapping or netting" curlew or plover would be! For a wonder *Scolopax wilsonii* was not enumerated—nor owls, which latter omis ion, as a matter of protection to the far-seeing legislators themselves, was an inexplicable oversight. You see, jack-snipe, owls and the average legislator do not eat grasshoppers, but plover and curlew do (?), and hence the mighty arm of the law is raised in behalf of the latter, and assists in securing a "survival of the fittest."

Before bidding adieu to Solons, owls and jack-snipe, I have only to add that I saw two of the latter hanging in front of James Cella's restaurant, on Fifteenth street, this city, on Christmas-eve. Inquiry developed the fact that they were killed the preceding day a short distance from town. It is a curious fact that during the month of Nov., the thermometer at the Signal Service Office here registered 18 degs. below zero, while it lingered near zero for several days. Bold, indeed, must be the jack and lady snipe who dare confront such hyperborean blast, and linger in the lap of winter till winter solstice is accomplished, to die an ignominious death at the hand of a "pot-hunter," as is evidenced by the fact that the worthy pair found their way to the doors of a noted *restaurateur* rather than to the table of the slayer.

But not only were jack-snipe more numerous in the vicinity of Denver last fall than usual, but also were ducks of numerous varieties, and swan. Several of our more assiduous gunners shot splendid specimens of the latter on Sloan's Lake, a sheet of water, not more than three miles distant from the post-office.

Elk, deer, antelope, bear and bison have been in market since November 1, not constantly in the above variety, to be sure, yet with the exception of elk and bear.

Coming up Fifteenth street to-day, I was impressed at seeing so many quail and grouse at the various provision stands on that thoroughfare. I wondered where they came from. Was well aware of the fact that Kansas has statutory provision against shipping either of the above birds out of the State at this or any other season of the year. Curiosity prompted me to investigate the source of supply, partly with a view of ascertaining where to go next year to get good quail and grouse shooting. A due regard for truth, Mr. Editor, prompts me to gently whisper in your ear that the quails and grouse in question came, one and all, from "bleeding Kansas." Be it understood that Colorado is a neighbor of Kansas on the west, and on neighborly terms. Colorado, as yet, does not produce dunghills, geese, ducks, eggs, hogs and the like in sufficient quantities to supply the demands of her citizens for the same, and the same may be asserted of prairie chickens and quails; so she calls on her generous sister, Kansas, to furnish these much-needed commodities. But the majesty of the law interposes not when it comes to ship the dunghill, the domestic goose or duck, or swine from Kansas to Colorado. But it interposes when it is proposed to attempt a similar exploit on the artless quail or noble prairie chicken. Still, cunning dealers, either recognizing the "eternal fitness of things," or induced by mercenary motives—let us suppose the former—simply pack featherless dunghill and *Cupidonia cupido*, domestic duck, and *Ortyx virginianus*, in the same box or barrel, and in each instance consign the former to the dealer in this city; and it still remains a question, undecided in Colorado at least, whether duck or quail, if permitted to go unmolested, nay, if surrounded with every condition favoring rapid increase of his respective species, would devour the greater number of nascent grasshoppers for the Kansas agriculturist. Be this as it may—and further, by way of mitigating the offense so far as Colorado is concerned—I would respectfully suggest that when plover and curlew get to be "as the sands of the sea shore" here, and devour all our "hoppers," Kansas will either have none of the latter, or otherwise shall have our plover to exterminate them.

I was decidedly interested in the communication of "Veteran," which appeared in your issue of December 27. He is evidently no "sounding brass or tinkling cymbal." He is a grand old "knight of the trigger," and I should like to meet him. As such, his opinions are entitled to respect. He confesses "to a mild kind of mania for new guns," and as proof of the assertion, cites the fact that he orders a new gun nearly every year. He must be one of that fortunate class of persons upon whom the inconveniences of *res angusta domi* rest lightly. He gives some excellent advice to young sportsmen about to select a gun, which, among other suggestions, is "to order from an honest maker of established reputation," but then adds, "to avoid all great establishments which make for the trade." This tabooes many well-known and skillful manufacturers, and that I may deliver myself of certain ideas I shall quote "Veteran" once more, and then "say my say." Nearer the beginning of his article he states: "I do not disparage such great names as Lancaster, Purdy, Boss and Grant, for their works speak for them, but when forty-five pounds will command as much real value as 60 guineas, I not do see the necessity for paying the excess." Nor do I. And when forty-five pounds, or less, will buy a gun turned out by "one of the great establishments which make for the trade," and which is as elegantly finished accurately jointed, as nicely balanced, and shoots as strongly, evenly and killingly in the field or at the traps a forty-five pound gun made by one or any of the makers "who does not make for the trade," I cannot see why the forty-five pounds, with the order for the gun, had not as well be placed in the hands of the former as the latter; for, Mr. Editor, it seems to me that the facts are those: While Messrs. W. & C. Scott & Son, and W. W. Greener, of Birmingham, England, and Parker Bros., of America, and doubtless others, of whom I know less, are the heads of "great establishments which make for the trade," they, also, through their agents or local dealers, take orders for special guns, which they construct with special care, putting to such work artists skilled to perfection in the various departments of gun-manufacture, and in this way succeed in manufacturing guns which the manufacturers, or persons for whom they are made, are quite willing to pit against any other gun in the world, whether or not the latter be made by prodigiously high-toned, and still higher-priced makers who do not make for the trade. It is an indisputable historical fact, that Messrs. W. & C. Scott & Son, and W. W. Greener, in England, and Parker Bros., in America, have done more, been most instrumental, as *manufacturers*, to bring to the notice of the public, and enforce the merits of the "choke-bore" system and its modifications, which, even according to "Veteran's" own testimony, increases the effective range of shot-guns "fully fifty per cent." more than any maker who does not make for the trade. For the Messrs. Scott, Capt. A. H. Bogardus has announced this fact wherever his Scott choke-bore has rent the air. And where has it not? But another grand ultimatum for the sportsman of average means is, the same enterprising manufacturers furnish excellent shooting weapons of good wearing qualities at moderate cost.

So much: not that I wish to disparage the work of any maker, or class of makers, but that I felt disposed to present a few stern facts.

INTAOLIO.

GAME PROTECTION.

THE PENNSYLVANIA GAME BILL—*Sunbury, Feb.* 18.—We are having a lively time just now with our new game bill, which is just reported as amended from the Committee on Agriculture, to whom it was referred back on second reading by the Senate, reported from committee on the 14th, and now awaiting first reading as amended. I wish I had a spare copy to send you, to laugh over the combined wisdom of our Solons. We can do nothing with it in the Senate, but will try and rectify it as much as possible when it gets into the House, or else defeat the whole thing. Think of a section allowing fishing with fike nets of one inch mesh the whole year round, and consider the prospects of resuscitating our rivers, etc., by artificial propagation. A. F. C.

Our correspondent must remember that the English common law of to-day is a monument of the accumulated wisdom of many centuries, having for its foundation the Roman code. Perhaps it is necessary for their highest excellence that the Pennsylvania game statutes should also be the work of many decades. When it does reach its perfection our friends may rejoice in its precepts, even though there is then neither fish nor game left.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship

And three team medals, which will be awarded to the teams making the first, second and third best scores. Other prizes will be offered also, to take place at Conlin's shooting gallery. Open to teams from any organized rifle club.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Off-hand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. Entrance Fee—Five dollars to be paid at the office of the FOREST AND STREAM AND ROD AND GUN, No. 111 Fulton street, N. Y. All teams desiring to compete must be entered ten days before the time the match is announced to take place. The match to be governed by the rules of the N. R. A. relating to teams. Captains of the competing teams shall meet one week before the commencement of the match, make all preliminary arrangements, choose referees, and decide in what order their respective teams shall shoot. The referees shall elect an umpire, whose decision in all cases shall be final.

The match will commence on Monday, March 11.

MASSACHUSETTS RIFLE ASSOCIATION.—We acknowledge the annual report of the Massachusetts Rifle Association. The officers are: C. A. Longfellow, President: Vice-Presidents, N. Wales and J. F. Shepard; Secretary, H. T Rockwell, No. 39 Arch street, Boston. There are 18 life and 137 annual members. With the excellent results already achieved by the M. R. A., they should expect the most liberal encouragement in the present year.

NEW HAVEN RIFLE ASSOCIATION.—A regular meeting of the directors of the New Haven Rifle Association was held on the 15th—Colonel Smith presiding. Prizes will be shot for on Washington's Birthday. In addition to the matches at all ranges there will be bull's-eye shooting. The entrance fee will be twenty-five cents, one-half of the total receipts going to the person making the most bull's-eyes. The shooting will be in accordance with the rules of the association. The new year of the association will begin April 1. Being free from debt, the association desires to erect new butts in the spring. It is proposed to connect the butts with the firing points by telephone. The Association will have on the grounds, on the 23d, cartridges for the Springfield gun, so that the military men will have a chance to try the new arm.

THE HELVETIA.—This well-known rifle club will celebrate its twenty-fifth anniversary with a grand shooting festival to be held in September next. Various committees are now consulting to perfect their arrangements. We shall give the public due notice of the leading event.

TARGETS FOR GALLERY PRACTICE.—In reply to a great many inquiries, we give the following general directions as to making targets for gallery shooting. We must state that the construction of these targets is rather conventional than philosophical, as far as proportion goes, the size being adapted to the average skill of the general rifleman. Mr. Conlin's targets, which are generally adopted, are as follows: The 100-feet

target, equivalent to the 200 yard target; bull's-eye, 1¼th-in. diameter; centre, 3-in. diameter; inner, 5¼-in. diameter; target 5¼ by 8¼ in. The 200 feet targets and 300-feet targets are made in the same proportion.

RIFLE SHOOTING IN 1878.—PROGRAMME OF THE SPRING MEETING N. R. A. OF AMERICA.—The spring meeting at Creedmoor will be as follows: The first day, May 23, will be given up entirely to the "Leech Cup" match, fifteen shots per man at each of the long ranges. This match determines the individual championship of America for the succeeding year. In all the other matches seven rounds per man, with no sighting shots, will be the rule, and except when otherwise specially provided, duplicate entries will be permitted. The matches are:

FRIDAY, MAY 24.

300 *Yards*—1. Open to members of N. R. A.; any rifle; standing position. 2. Open to all comers, for stated prizes; any rifle. 3. Open to members of N. G. S. N. Y.; Remington state model rifle. 4. Open to all comers; Remington military rifle. 5. Open to marksmen N. G. S. N. Y.; Remington State model rifle. 6. All-comers match; any military rifle (not special). 7. All-comers match; kneeling position; any carbine. 9. Open to teams of four from any rifle club in U. S.; any rifle. 10. Open to teams of four from N. G. S. N. Y; Remington military rifle. In the above matches the entries will be limited to 512.

800 *Yards—Any Position.*—11. Open to N. R. A. members; any rifle. 12. Open to all comers for stated prizes; any rifle; no re-entries. 13. Open to teams of four from any club; any rifle. 14. Open to teams of four; all comers; any rifle. 15. Open to members N. G. S. N. Y.; Remington military rifle. Special match for four rifles offered by Sharps Rifle Co; open to teams of four from any military organization to shoot at 800, 900 and 1,000 yards, with any military rifles (not specials); half of entrance money to go to teams making best scores at the several distances. In the 800 yard matches the entries will be limited to 288.

900 *Yards—Any Position.*—16. Open to members of N. R. A.; any rifle. 17. For all comers, for stated prizes; no re-entries; any rifle. 18. Open to teams of any four men; any rifle. In the 900 yard matches total entries limited to 144.

1,000 *Yards—Any Position.*—19. Open to members of N. R. A.; any rifle. 20. All-comers match; any rifle 21. All-comers teams, four men each; any rifle. In the 1,000 yard matches entries are limited to 288.

SATURDAY, MAY 25.

200 *Yards—Position Standing.*—22. Open to directors of N. R. A. for special medal; any rifle. 23. All comers for stated prizes; no re-entries; any rifle. 24. Open to teams of five from any military company; regulation weapon. 25. Open to members of any troop N. G. S. N. Y.; State carbine. 26 Open to members N. R. A.; any rifle. 27. Open to members N. R. A.; any military rifle. 28. Open to members N R. A.; Remington military rifle. 29. All-comers match; any military rifle. 30. Open to members N. G. S. N. Y.; Remington military rifle. 31. Open to marksmen in N. G. S. N. Y.; Remington military rifle. 32. Open to members of any military organization; regulation weapon. 33. Members of N. G. S. N. Y.; Remington State model carbine. 34. Open to all comers; any carbine. The 200 yard shooting will be limited to 512 entries.

500 *Yards—Military Position*—35. Open to all comers; Remington military rifle. 36. Open to members N. G. S. N. Y.; Remington State model rifle. 37. Open to members N. R. A., Remington military rifle. 38. Open to all comers; any military rifle. 39. Open to members of any military organization; regulation weapon. 40. Open to teams of four from any military organization; regulation weapon. 41. Open to all comers; any military rifle and any position. Entries in 500 yard matches limited to 541.

600 *Yards—Military Position.*—42. All comers match; any military rifle. 43 Open to members of N. G. S. N. Y; Remington military rifle. 44. All-comers match; any rifle and any position. 45. Open to teams of four from any club; any rifle and any position. 46. Open to teams of four from any military organization; regulation weapon. 47. Open to any members N. R. A., any rifle and any position. In the 600 yard matches entries are limited to 614.

CREEDMOOR, JR., 260 Broadway.—The following are the scores of the prize winners in the $100 gold match, which was concluded on Saturday the 16th:

E H Yohr	5	5	3	4	5	5	4	5	5	5—48	Prize, $30 gold	
T S Conlin	5	4	5	4	5	4	5	5	5	5—47	"	15 "
J W Todd	5	5	4	4	5	4	5	5	5	5—47	"	10 "
J B Raene	5	5	4	5	4	4	5	5	5	5—47	"	5 "
W M Farrow	5	5	4	5	5	4	5	4	5	5—47	"	5 "
C Bydenburg	5	4	5	5	5	5	4	5	4	5—47	"	5 "
Dr Dudley	5	5	5	5	5	4	4	5	4	5—47	"	5 "

The next match at this 100-yard range will be for $50 gold, divided into three prizes of $25, $15 and $10 for the first, second and third best aggregate scores made in ten strings of ten shots each; position, standing; rifle, any of .32 cal. or under.

YORKVILLE RIFLE CLUB, Feb. 16.—The following are the scores in the regular weekly practice, at 100 feet, .22 cal. rifle, Creedmoor rules and targets.

G See	5	5	5	4	5	3	5	5	4	4—45
M Maltey	4	5	5	5	5	4	5	3	3	5—44
A Smart	3	5	5	5	4	5	5	5	3	4—44
O Kolz	4	4	5	5	4	5	5	4	4	3—41
J L Paulding	5	4	3	4	4	5	5	5	3	4—42
J R S Smith	5	3	5	5	4	5	4	3	3	4—41
J R Grohman	3	4	5	3	3	4	4	5	4	5—40
J O Hauft	3	4	3	4	3	4	3	4	3	5—36
W W Dodge	3	5	4	3	3	5	3	3	4	2—35

ZETTLER RIFLE CLUB, *Feb.* 12.—One hundred feet; off hand; Creedmoor targets, reduced; possible 50.

C Judson	47	B Zettler	43
M L Riggs	43	D N Ward	41
P Fenning	46	R Zimmerman	41
Thos Kiesrath	45	Wm Klue	43
D Miller	44	M L Hirsh	41
G G Zettler	44	F Patterson	39
M Dorrler	43	L Braese	40
M B Engel	41	G A Shurmann	41
H Oehl	45		

A CHALLENGE.—The Empire Rifle Club hereby challenges any similar club to a match at Creedmoor between the 10th and 20th of April Ranges, 200 to 300 yards; rifle, any within National Rifle Association rules; position, standing; rounds, two sighting and ten scoring; teams of eight or ten as may be agreed upon. Answers received on or before the 15th of March.

M. M. MALTBY, Secretary,
No. 33 East Twenty fourth street.

THE NEW JERSEY RIFLE ASSOCIATION.—The Board of Directors of the New Jersey State Rifle Association met on Thursday last. Col. E. H. Wright, the President, in the chair. The Law Committee reported that the act incorporating the association had been passed by both houses of the Legislature of New Jersey, and had received the signature of the Governor. In accordance with the report a certificate of incorporation was drawn up, and the directors present signed it, the Secretary being instructed to secure the signatures of absent members of the board at his earliest convenience, and Major Anderson Thomas, of Englewood, was chosen to fill the place of Gen. J. B. McIntosh, resigned. The Range Committee will probably select a plot at Elizabethport.

CIRCULAR FROM THE GENERAL-INSPECTOR OF RIFLE PRACTICE.—Colonel G. W. Wingate has issued a circular to division and brigade inspectors. Special attention is directed to the fact, that it is in the armories and not in the field that the primary instruction of the soldier should take place. The failure of a large proportion of the troops to qualify has arisen from the fact of their not having been previously drilled in the kneeling or lying position. The General-Inspector trusts that by precept and example a feeling of emulation may arise in the ranks, and that to be in the awkward squad will be thought discreditable.

LONG-RANGE TARGET RIFLES FOR HUNTING PURPOSES.

ST. LOUIS, MO., Jan. 26, 1878.

EDITOR FOREST AND STREAM:

I have taken an especial interest in the discussion now going on in the English and American shooting papers, as to the relative merits of the American long-range breech-loader and the English long-range muzzle-loader. It is in this connection I would submit a few thoughts based upon my own experience with the American arm.

It does seem to me that the mere discussion of the relative merits of the two arms is a great waste of time and thought. It becomes, however, a much more serious matter, and one of greater astonishment, when we reflect upon the amount of time and money and mechanical skill annually expended by the best gunmakers of Great Britain in getting up their fine muzzle-loading target rifle.

Concede, for the sake of argument, that their gun is all, and much more, that they claim; that its accuracy as a target-rifle is much greater than the American arm possesses, what Government would now entertain the idea of arming its soldiers with such an obsolete weapon, when any of the approved, rapidly-firing breech-loaders of the present day can be obtained? What hunter, in pursuit of game, whether a gray squirrel, buffalo or grizzly bear, would be bothered with a muzzle-loader, however fine, when any of the approved breech loaders could be had? What Englishman, when in pursuit of tigers and lions, dare trust himself with their finest muzzle-loader? The idea is absurd for all practical purposes. The day of the muzzle-loader is passed. The British gunmakers have produced the finest breech-loading shot-guns in the world. Let them then abandon their muzzle-loading rifle, and expend all their thoughts and mechanical skill in the development of their breech-loaders, and there is no good reason why they should not soon produce a weapon that will compete with ours in any long-range match. They must, however, devise a breech action superior to any now used on that side of the water, such as the Snyder, Martini-Henry, or any modifications of these arms. No long-range rifle will be a success, unless it can be not only cleaned from the breech, but thoroughly inspected from the breech, as in the Sharps, Remington or Ballard. This is impossible with the above-named English arms. The same remark will apply to the military arm of the future, and that constitutes the defect in the Martini-Henry, as well as our new Springfield .45-cal arm.

The conditions of the rifling of neither of these arms can be thoroughly inspected under a full glare of light, as should be the case. An inspecting officer, with every facility for inspection, is too apt to be governed by outside appearances.

The report of Colonel Peel to the National Rifle Association takes a more practical view of this question than anything written on that side of the water, especially in the recommendation, at the conclusion of the report, that the efforts of the association should alone be directed to perfecting the best breech-loading military arm. It would have been still more to the point had he recommended the total exclusion of the muzzle-loader from competition at their matches. But even he, in conjunction with Halford, Rigby and others, has taken up the impression that the American breech-loading long-range rifle is as useless for all other purposes, except target practice, as the British muzzle-loader.

My own experience for the past eighteen months with one of the American long-range rifles, satisfies me that with a modification of sights and ammunition, it is as well adapted for hunting as any gun in the world. It can be as well adapted to neatly take off the head of a squirrel or grouse, and for killing large game it has no superior.

On the first of December I returned from a hunting trip to Montana, where I had been for the past sixteen months hunting large game. I took with me one of Sharps long range rifles, of model of 1876, .44 cal, 34-inch barrel, straight hand-made stock, using a 2⅞th shell. I had it fitted up with sights suitable for hunting, Beach combination front sight, ordinary open back sight, and on the small of the stock a short sporting peep-sight, so fitted that it could be readily folded down out of the way. (The peep-sights on most sporting rifles are an abomination, as they are always in the way when turned down, and at every discharge, when using the open sights, it comes back against your choke-bore and leaves a gash.) The open-sights were used at 100 yards, but at distances for 200 yards and over, the peep-sights were thrown up and used with the pin-ball front sight. It required only a few minutes' work to substitute the Vernier peep and wind-gauge target sights for the hunting sights, and *vice versa*, so that its use as a target rifle was not interfered with. For hunting, the shell was loaded with 95 grains of powder, and a 450 grain patched ball, wad on the powder, then lubricating wad, then bullet. A good deal of the time I used American ducking, No. 2, a coarse powder, which was packed in shell without much difficulty. Eleven of the sixteen months was passed hunting and fishing in the mountains and prairies lying between Port Benton and the Yellowstone National Park, lying on the head-waters of the Yellowstone and Madison Rivers. My various travels and hunts embraced over 2,100 miles of travel, and during the whole time this gun, strapped to the horn of the saddle, was my constant companion. The surroundings induced me to have it constantly within reach. I hunted all the large game of that magnificent game country, and killed, in more or less numbers, and at distances ranging from one hundred to five hundred yards, antelope, white-tail and black-tail deer, elk, buffalo and grizzly bear. It was exposed to numerous rain and snow storms; was twice "bucked off" by a "Kyus" horse, the gun going one way and the rider the other, and, in a few words was exposed to all the accidents and mishaps of mountain and prairie hunting for two hunting seasons, and in temperatures ranging from summer heat to 15 degs. below zero. It was never once out of order, and though fired more than 2,500 times at game and target, is to-day, excepting a few bruises in the barrel and stock, substantially in as good condition as when turned out of the shop. Of course, the best of care was taken of it. The inside of the barrel was never once allowed to become rusted. No gun could well go through a rougher experience. I met two Englishmen on the Yellowstone last fall, who had with them two of Reilly's finest double Express rifles, but with pistol-grip stocks. The stock of each gun had been broken, and had to be bound and patched up. These facts are mentioned, probably, in too much detail, but do so to show that at least one American match breech-loader is not the "delicate" arm that Messrs. Rigby, Halford and Peeton would make the world believe. I will close this communication by an allusion to the charge that the American arm cannot be used without wiping after each discharge. I never considered the accuracy of my gun materially affected by eight or ten discharges, and have used it as many as twenty times without wiping. Of course I recognized the fact that any gun is more accurate when clean, and whenever one band of game had been fired at as often as possible, and there was leisure, the gun was wiped out with a short willow cleaning rod, cut from the willow thicket, and carried in my belt.

I recollect killing a black-tail deer, 500 yards off, after having fired eight cartridges without wiping, and then threw balls close around the band as they scampered off. In very rare cases a shell would stick by the jamming of the patching, and occasionally, after six or eight discharges, leading of the rifling would occur; but the same thing is liable with any class of gun. If a muzzle-loader does not jam shells it misses fire from defective tube. Shells would occasionally become expanded in firing; but they were easily brought back to their original dimensions by putting them through the shell-swage. The loaded shells were carried in an ordinary cartridge-belt, wide enough to cover the patching to protect them from dust. A belt full of shells weighs about five pounds. By keeping the belt well down on the hips, the extra weight was not noticeable.

I hope these details will not appear tedious. Facts, and the experience of hunters in the field is what is needed, and not theorizing. The above is my experience with one of the American match rifles. It is not doubted that other makers turn out equally as substantial an arm. Let us hear from other hunters who have used them in the field.

Were I to advise any one who was just commencing the use of the rifle as to what class of rifle to purchase, I would advise him by all means to get one of the long-range American rifles from such maker as he might elect. Ten pounds is the proper weight for off hand shooting, and with a proper modification of sights and ammunition it is the best for long, short or mid-range target practice, or hunting all kinds of game, and using 95 grains powder and a patched ball of from 1 1-16th-in. to 1¼-in. long, according to circumstances. The objection to using it in the settlements at game, is that you would not know when the ball would stop. For small game use the short ball.

W. D. P.

A NEW PLAN OF EXPLODING POWDER IN ARMS.

NEW YORK, January 28, 1878.

EDITOR FOREST AND STREAM:

I have made some experiments in relation to the mode of connecting the ball to cartridges and the firing of explosive compounds. I connected the ball to a roll of paper, said paper is lined with a quick explosive compound. The roll is about one-eighth of an inch thick and about two inches long. The roll is intended to reach to the rear end of the cartridge case, and the gunpowder filled in around it. The other end of the roll should touch the base of the ball. In firing gunpowder in this manner there is an accumulation of pressure and effective force. Thus the roll, although burning with rapidity, is to be so proportioned in length as to continue to burn as the powder is progressively ignited. Thus a comparatively small pressure is exerted as the ball starts, but the pressure accumulates with irresistible rapidity as the entire charge is ignited, and the roll continues to convey the necessary fire of ignition until all the powder is burned, the explosion not putting out the roll or allowing any grains of gunpowder to escape unconsumed. This arrangement causes the ultimate force of the explosion to be directed upon the ball, but my extended tests lead me to know that if the explosion commenced next to the ball by my mode of firing and run back to the breech, the main force would be exerted there, and but comparatively little on the projectile; so that by arranging my coil or roll accordingly, the force of the explosion can be directed to the bursting of cannon or the performance of other similar work under whatever condition may be understood, and this peculiarity availed of. Thereby a small amount of powder is rendered very powerful and efficacious, the accumulated force of explosion being directed against the desired portion of the substances surrounding the powder chamber. My experiments leads me to know that in firing charges of gunpowder the pressure of the gases in the portion first exploded causes the powder to pack and the flame to be excluded. It will be apparent by this mode of firing projectiles, the velocity being increased, less weight can be employed to effect a given object, because the increased velocity given to the ball will make up for its less weight. Also, by my method of firing the powder, the flame that sets the powder on fire penetrates the interstices in advance of any compressing action, so that all particles are consumed and lend their force in the explosion. I also find that the recoil is very much lessened for the reason that all the powder is consumed just as the ball leaves the gun or rifle, and the penetrating force given to the ball is very great.

EDWIN GOMEZ.

SIR HENRY HALFORD AND THE SHARPS RIFLE.—We are in receipt of the following interesting letter from Sir Henry Halford, which we gladly give a place in our columns:

WISTOW, Leicester, England, January 30, 1878.

EDITOR FOREST AND STREAM:

Dear Sir—Having read a letter in FOREST AND STREAM of January 17 from Sharps Rifle Co., in which they quote a letter of mine, written in 1875, I must beg for a small space in your columns to vindicate myself. Much has been written in the *Volunteer Service Gazette* about both American and English rifles with which I do not agree, and for which I cannot be held responsible, and I feel that I should not be credited with statements which I have never made. I shall not shrink from upholding what I believe to be true.

I have, perhaps, taken it too much for granted that the criticisms which I passed upon the American rifles after the match at Creedmoor would be taken as applying only to long-range match rifles. I will, therefore, explain what I do mean, namely: That a long-range Creedmoor rifle, with from 100 to 105 grains of powder, and a close fitting long-range bullet, in hot weather, will not take a second cartridge without wiping out. I do not mean that it will *never* take one, but that nearly all will stick, and have the paper rucked back on the bullet. In winter (the time at which that target published by the Sharps Co. was made, and with snow on the ground) most of the cartridges will enter, and in wet weather, too, when there is damp enough in the air to melt the products of combustion. My criticism does not apply to low

charges in military and sporting rifles, nor to 95 grain charges of Curtis & Harvey's powder in Sharps sporting rifles with wads, and a 400 grain bullet, well home in the shell. I have never called American rifles "despicable abortions," for the simple reason that I have never thought them so, nor have I called your riflemen mere trigger pullers; but I do believe that the best results will be got from a team when its members yield to the judgment of their coacher in the matter of wind, and do not argue the matter out over each shot at the firing point. It stands to reason that the coach, who watches every shot, and whose attention is not taken off by the wants of his rifle, must be a better judge of little variations than the shooter who, between his shots, has his whole time, or nearly the whole of it, taken up with cleaning and preparing his rifle.

I think the *Spirit of the Times* match was a conclusive proof of the assistance your team received from their coacher in the Centennial match. All honor to them for their ability, and to your team for their good sense and skill in taking advantage of it. I have said, and again say, that with your team and your coachers, in my opinion, you would have beaten us had the match been shot in England. I am, yours faithfully,

H. ST. J. HALFORD.

P. S.—I see a very able letter from "T. S. Van Dyke" on sporting bullets. I think he will find the bullets made by Sharps Rifle Company for me in 1876 all that he can desire. The pattern has been in use on deer in this country for more than a dozen years. Metford's shell composition is safer and far stronger than a .22 cartridge.

EXPLOSIVE AND EXPANSIVE BULLETS.

DUBLIN, Jan. 29, 1878.

EDITOR FOREST AND STREAM:

Under this heading, "T. S. Van Dyke" has a very practical letter in yours of January 17. He has found out by actual experiment much in connection with sporting rifles which is already known, but his experience is valuable as a confirmation of the truth of those arguments which I have urged in support of Express rifles during the last dozen years. The merits of the Express rifle are no longer a matter for discussion among British sportsmen. They are admitted unanimously, and the only question remaining is as to the size of calibre most suited to each description of game. The following are the proportion of the rifles which we supply to Indian sportsmen:

"For bison and large, dangerous animals, such as tiger, bear, etc., calibre, .577; powder, 6 drachms; bullet, 480 grains.

For mixed shooting in the jungles, tiger, deer, etc., calibre, .500; powder, 5 drachms; bullet, 400 grains.

For hill shooting, ibex, markoor, etc., also for antelope on the plains, and deer, calibre, .450; powder, 4 drachms; bullet, 300 grains.

For antelope, and all the smaller deer, calibre, .400; powder, 3 drachms; bullet, 200 grains.

For the same, a lighter rifle, calibre, .360; powder, 2 drachms; bullet, 150 grains.

In all these five sizes the bullets are hollowed in front, the hollow varying in depth according to the amount of penetration desired. The shells used are of brass drawn solid, and can be reloaded many times.

No explosive powder is required to expand these bullets. The resistance suddenly developed by their high velocity is so great that the effect of an explosion is evident when they strike, and this is especially remarkable in soft bodied animals. About ten days since I was hunting fallow deer in a large park in the north of Ireland. The herd was shy, and I had great difficulty in getting a shot, but having at last crept to within 200 yards, I drew a bead and missed. Suspecting that the rifle I carried—a double .450 Express—was undersighted, I resolved, as the deer had vanished at the report, to test the sighting on the first object I could find suitable. This appeared in the shape of a hare sitting up about 100 yards ahead, and presenting her side as an easy mark. I took a full sight and fired. The report of the rifle was followed by a minor explosion, like the bursting of an inflated bladder. The hare lay on one side, which was uninjured; the other side, that next to me, had been blown clean out, showing an opening about nine inches long and three wide, and the whole viscera were on the grass beside her. This bullet, which did not penetrate a hare, was 350 grains weight, one inch long, and made of lead hardened with tin, and swedged. The propelling power was 4 drachms of Curtis & Harvey's No. 6.

I once fired a similar bullet into the head of a wounded hind in the Scotch Highlands. The whole of the top of the head over the eyes exploded, and disappeared, and then fell all around in small fragments. A similar effect may be produced by firing into a bag of wet sawdust—a small bag not bigger than a man's head will expand one of these bullets, which will fly into small fragments. The bag may burst, but flakes of lead will be found in the sawdust. These effects will not be produced by moderate charges of powder—about one grain of strong powder to three grains of lead is the least proportion which develops properly the Express principle.

Your correspondent falls into a not uncommon error when he says that it is necessary to stop up the cavity in front with something to insure accuracy. I do not find that it makes any difference in the shooting when the cavity is left open.

For all American game, except bear, and perhaps buffalo, I would prefer the .400 Express to any other. It takes the American shell 40-70ths, and is very light and handy, about seven pounds being ample weight for a *double*. It will drop any deer in his tracks, if shot anywhere forward, and not too high.

For a grizzly, however, it has not sufficient lead. If I ever meet a large specimen of that animal where there are no iron bars between us, I will not feel comfortable without a double .500 bore, and five drachms in my cartridges. Nothing is so calculated to inspire confidence under such circumstances as a barrel in reserve. Yours faithfully,

JOHN RIGBY.

EFFECTS OF FIRING WITH HEATED GUN BARRELS.

FORT STEPHENS, Oregon, January 25, 1878.

EDITOR FOREST AND STREAM:

One correspondent asks "Why his gun shoots better after the barrel is heated?" and another (Lara), "Why a ball from an over-heated rifle barrel rises or shoots over?" If you will refer to Benton's "Ordnance and Gunnery," you will find that the temperature of the gaseous products of inflamed gunpowder is estimated at about 4,300 Fahr. It will be seen, also, that Count Rumford, in his experiments to determine the absolute force of gunpowder, fired twenty-five grains in an eprouvette by heating the stem of it with a red-hot cannon ball; that experiments were continued by which this absolute force was found to be 29,118 atmospheres, and that "this pressure is much greater than that developed in the explosion of projectiles and mines, owing to the low temperature of the surrounding surfaces, and the large amount of heat which they absorb. It is the same with cannon, for the most rapid firing does not raise the temperature of the bore above 210 degs. Fahr., which is much below that of the eprouvette." The theory is that much of the explosive energy of the charge, resulting from the high temperature of the inflamed products, is absorbed by the cold metal; but as the barrels grow warmer the force of the charge increases, and therefore the energy which was lost in heating the gun is saved after becomes heated, and acts on the projectile.

Very truly, P. L.

Game Bag and Gun.

GAME IN SEASON IN FEBRUARY.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocets, etc., coming under the group *Limicolæ*, or Shore Birds.

MASTER EUGENE BOGARDUS.

A NEW ASPIRANT TO SHOOTING FAME.

Master Eugene Bogardus, whose picture we give, is thirteen years of age. About two years ago he first commenced shooting, picking up the art in a rudimentary way. His gun which he used then is the same breech-loader that he shoots with now, and is a 10-bore, weighing 8 pounds. Master Bogardus' first practice was on black birds and meadow larks, always shooting them on the wing. About a year ago, having passed, as it were, through the freshman and sophomore studies in the field, he entered the junior class, that is, he solved the mysteries of prairie chickens. With such a mentor as his father he was taken into the prairies. Captain Bogardus informs us that with a dog he often accompanied his son, the boy being instructed to shoot the first bird and leave the second for the father. "But," said the Captain, "I never had a chance at the first bird in case the boy missed it, and just as often when there were two birds Eugene would take both of them. It used to tickle me to see men in the party miss a bird and how Eugene always bagged that chicken as he kept sweeping past. The boy will shoot, maybe, as well as I can, after a while." Master Eugene made his *debut* on the 11th before the public, and has so far, out of 98 balls, a weeks' shooting, only missed 4 balls. Eugene is a modest, quiet, handsome lad, and takes his laurels with dignified composure.

CANADA.—*Danville, Quebec, Feb.* 14.—On the 8th ult. I shot two cariboo about fifteen miles from here. J. C. D.

MASS.—*Nantasket, Feb.* 16.—The effect of the game law was very perceptible the past season, as quail and partridge were more plentiful than ever before. Our whistler shooting has been fair, and as soon as our ice goes out we shall have good sport for a few weeks. The birds remain with us all winter, also old squaws; but during the period of ice they are outside, so we get no gunning. Rabbit shooting is very good now. S. K., JR.

PENNSYLVANIA.—According to the Reading *Times*, snipe have appeared in Berks County, nearly two months before the usual spring arrival.

Sharon, Feb. 7.—The season here has been a good one, and the boys have laid aside their guns well satisfied with the success of the past and with hopes of equally fine sport next season. LEM.

Waynesburg, Feb. 13.—Fall shooting not so good as in other years. Pheasants scarce and wild. Prospects for next season partridge shooting is good, as there were many birds left over. Breech-loading arms are just being introduced among our shooters. E. W. W.

VIRGINIA—*Lawrenceville, Feb.* 11.—The season closed with a stock of game on hand unprecedented for twenty years, and a general recognition and obedience to the game law. W. L.

MISSISSIPPI—*Boonville, Feb.* 11.—Partridges are very plenty this fall. Good many turkeys, deer and foxes. We are having fine sport. The most successful bird hunters are Judge Boone, T. K. Young, T. S. Hamilton, W. G. Smith. I made a bag of ten partridges and one rabbit the other day. Bags range from twenty to seventy-five. R. B. S., SR.

OHIO—*Lancaster, Feb.* 11.—A *bona fide* old fashioned wild cat, weighing seventeen pounds, was killed in the neighborhood of Pratt's Mill one day last week. A gray fox, the only specimen of the kind I ever heard of in this part of the country, was run down, holed and caught, near Clearport, recently. Mr. John Hamilton, proprietor of the Sportsman's House, on the Big Reservoir, shot two wild geese on Saturday last from a flock flying over. He reports but few ducks on these waters as yet. Mr. Hiram Hughes, who resides in Clear Creek Valley, shot a fine twenty-pound wild turkey on Saturday last. A rat hunt, gotten up by the farmers of Hocking Township, resulted in the slaughter of twenty-seven thousand two hundred and twelve of the destructive "varmints" in sixty days. The event was celebrated by a princely banquet, paid for by the defeated side, at the residence of Mr. Peter Crumley, on Thursday last. S. G. V. G.

Our correspondent writes that the bags of quail made in the past season by himself and friend—130 birds a day—are not at all an uncommon record in one of the best quail countries in the world. Our Chinese subscribers will read with peculiar pleasure the account of that rat hunt. We anticipate the reception of twenty-seven thousand two hundred and twelve missives—one for each rat—from as many Mongolians of the Pacific slope, containing all sorts of inquiries about the price of land in the pleasant vales of Hocking rich-in-rats. This immigration will doubtless solve the rat question, and at the same time afford a new species of game for the shot gun of the Ohio sportsman, for, according to the San Francisco hoodlum, there is no close season for Chinese.

MICHIGAN.—Fully twenty-five hundred deer were killed in Green Bay peninsula during the season just closed, and two-thirds of the meat spoiled owing to warm weather.

CALIFORNIA.—A correspondent writes to the San Francisco *Chronicle:* "Roderick Lang, a 14-year-old son of John Lang, residing at Lang's Station, on the Southern Pacific Railroad, Los Angeles county, killed, between the 10th of August and 28th of December last, fifty-five deer."

Napa, Feb. 10.—A sportsman's club has been formed with the following officers: Pres., Charles Pearch; Sec., J. H. Howland; Treas., F. A. Sparrow.

PHŒNIX SPORTSMEN CLUB OF SENECA FALLS.—We have to thank this club for copy of the Constitution and By-laws. This club, organized in 1870, has 75 members.

WILD PIGEONS.—A correspondent writing from Painesville, O., Feb. 16, says: "Pigeons are roosting in the big swamp at Bloomfield, Trumbull county, Ohio. They are feeding in that county; also Portage and Ashtabula counties."

KILLING SPARROWS IN ENGLAND FOR A PREMIUM.—In January last, a question was put to us in regard to the killing of sparrows. "A bet B that in England a premium was paid for killing sparrows, and that the person so killing them can have the premium applied to paying his taxes." Our reply was as follows: "A has lost. There are no such foolish things done in England." On the publication of our reply, we received quite a number of letters from various portions of the United States, in which our answer was found fault with, some of our correspondents citing their own experience. To set the matter at rest, we wrote to the *Live Stock Journal and Fanciers' Gazette*, of London, and the editors have very kindly sent us the following in regard to sparrow killing in England:

LIVE STOCK JOURNAL AND FANCIERS' GAZETTE,
LA BELLE SAUVAGE YARD, Ludgate Hill, E.C., Feb. 4, '78.

DEAR SIRS: In reply to your inquiry, there is no recognized public reward for the destruction of sparrows or their eggs. A few cases have been known in which private families have offered *private* rewards to village boys, etc., but even these cases have been very few and exceptional. All the course and spirit of English legislation is against such rewards.

Truly yours, THE EDITORS.

—Our Montreal correspondent, whose pseudonym is appended to the paragraph below, recently paid a fortnight's visit to New York, in the course of which he honored us with a call:

"Among other reminiscences of my voyage to New York, I recall an evening at the Tivoli, giving me an opportunity to witness Captain A. H. Bogardus' wonderful exhibition of glass-ball shooting. The following week I saw Mr. Ira A. Paine display his no less remarkable skill with the shot gun and pistol. His performance with the pistol especially is worthy of notice. In fact I don't quite understand how a man, even with any amount of practice, can acquire sufficient skill as to enable him to break, with a pistol loaded with powder and a *solid bullet*, almost every glass ball sprung from a trap. I say I don't understand it, *if* the weapon is loaded as above mentioned, which I presume Mr. Paine expects me to believe. However, his performance was really a very good one, and contributed largely toward making up what we Canadians call "a jolly good time." But in justice to the editor and manager of the FOREST AND STREAM AND ROD AND GUN, I must acknowledge that I look upon my visit to their office as the most pleasant incident of my visit in New York. ROYAL II.

HOW TO COOK AND SERVE THE CANVAS-BACK.—Upon the table canvas-back makes a royal dish. It is seldom served precisely as it should be anywhere out of Maryland. If allowed to remain in the oven five minutes too long it is unfit for the table. A great deal also depends upon the carving. A good, quick oven will cook a full-sized duck in twenty-two minutes. It should never remain in over twenty-five. After a duck is picked and drawn it should be simply wiped dry. Water should never touch it. When done the birds should be placed in pairs in hot, dry dishes. There is no need to prepare a gravy; immediately they are cut they will fill the dish with the richest gravy that ever was tasted. One canvas-back to each "cover" is considered a fair allowance at a Maryland table; but when the bird is only an incident of the dinner and supper, of course half a bird is sufficient for each person. Slicing the bird is unheard of. The two-pronged fork is inserted diagonally astride the breast bone, and the knife lays half of the bird on each side, leaving the "carcass" on the fork between. The triangle of meat an inch thick comprised between the leg and wing, with its apex at the back and its base at the breast, is considered the most delicious morsel of meat that exists. The canvas-back in Maryland is served with large hominy fried in cakes, celery, and a dry champagne, or a bottle of Burgundy that is Burgundy.—*Scribner's Monthly.*

RECOIL.—A correspondent thinks that recoil sometimes occurs in guns in an unaccountable way, from the fact that the powder chamber extends back of the nipple in a M. L. Also, that in a B. L., if the shells do not fit, when the gun is fired, additional recoil occurs. In other words, our correspondent is of the opinion that powder, when igniting toward the centre of the charge, causes exaggerated recoil.

A RECOIL PAD.—The use of a pad to slip over the butt of the stock is not only a method of preventing the shock of recoil, but is oftentimes used to save the stock of the gun. In old times, when muzzle-loaders were used, in charging a piece the natural position was to bring the butt to the ground. We have seen good sportsmen always place the butt of their gun on their foot when loading, in order to keep the stock in nice order. Mr. Charles L. Ritzmann's New Recoil Pad, made on the principle of an overshoe, is the best contrivance we have yet seen, and we have no hesitation in recommending it as an accessory to a sportsman's outfit. We can even understand how this pad can be advantageously used, when the stock of a gun does not exactly fit the shoulder. Mr. Ritzmann's place of business is 943 Broadway, where the new recoil pads may be seen.

LARGE AND SMALL BORES.—*Mr. Editor:* In your issue of Feb. 9 is a letter from your correspondent "Boone," in which he asks if it was myself or the lamented "Royal" that, in conjunction with yourself, advocated a 12 in preference to a 10-bore gun for ordinary field shooting. I reply that it was both myself and "Royal." True, I have been much abused for my views on this and other subjects in connection with guns, but I hold to them still, and for all, except market shooters, I predict a speedy return to the lighter guns, though to be sound they are a far greater test of the gunmakers' skill. Some months ago I received a kind letter from "Boone," but, owing to the fact that the signature was much blurred, I could only direct my answer to it by guess. Having never heard from him since then, I fear my answer was not received by him, and I take this opportunity of letting him know why it happened, if he did not receive my letter. I should be very glad to hear from him often. REGAPPER.

MORE CHILLED SHOT.—We beg to acknowledge the receipt of various samples of chilled shot, made by Mr. T. W. Sparks, the well known Philadelphia manufacturer. The shot is true in form and is quite hard.

IN DEFENCE OF HAMMERLESS GUNS.—*Brooklyn, Jan. 18—Editor Forest and Stream.*—Your very interesting but slightly sarcastic correspondent Rupee is a little severe upon the improvement of Greener's gun, *i. e.*, the hammerless. Does he not tangent from the idea when he claims greater quickness is the desired ultimatum? I am very heartily in favor of the gun, and yet hope to see one brought forth that will be cocked and discharged by a single motion, not because of quickness, but that it will be nearer to perfection. The Winchester rifle is my notion of a perfect arm, except that it should have the lock of the Peabody. Martini, Sharps Rifle Co., have become converted to the hammerless idea, and have placed upon the market a rifle with such an improvement. I have been a shooter for the past fourteen years, and have owned many fine guns, my first a Richard Hollis M. L. 14-bore, an A1 shooter, and the last a pin-fire Westley Richards, also second to none. My present fowling peice is of American manufacture, two pairs of barrels, 12 gauge cylinder and 10 choke, with all recent improvements, harlocks, etc., and I prefer it to all the guns I have ever handled during my shooting experience, and when the hammerless stocks reaches my desire I shall certainly have one applied to my favorite. Why? because it is quicker? No, sir; but because the fewer the parts the nearer to perfection. Mr. Rupee ridicules the improvement without advancing any reason therefor, except that of mere quickness, though that of itself is a very strong argument in its favor. The U. S. Government has called upon the Magazine Rifle Co., to come forward with their arms for adoption for Army use, Sitting Bull's Poor Los having taught them that quickness is a commendable quality in an arm (Rupee's 900 cartridge spiral apparatus for the "Sick Man" may prove a Godsend). The hammerless gun will have many reasons in its favor; it will never have a broken or lost hammer to repair, the pulling of the trigger will not cause some shooters to blink as is now the case with many excellent shooters; in cleaning or oiling they will not be an obstruction as they now are, and when in the field you will never throw your gun to your shoulder and in vain endeaver to shoot a bird where you have been remiss in not putting up your hammers; in cover after woodcock you will not need to keep one hand upon your hammers to prevent entanglement with cat briars and brambles; in getting in or out of a wagon or boat need you fear that your hammers will get fast and be raised sufficient to cause a discharge, as has fatally been the case from time to time—Bogardus, who shot himself through the hip, for instance. I am personally acquainted with a gentleman who lost a son, a fine young man, who, when crossing a fence, allowed the hammer of his gun to catch against a rail, caused a discharge, sending the load into his head immediately below the left ear and passing out through the right temple; death was of course instantaneous. There have been more accidents from the raising and lowering of hammers than in any other way. With my old M. L. I had a habit of putting the caps upon the nipple and then dropping the hammers to press the caps home and render fire more sure. Upon several occasions I have discharged the gun in so doing. Give us the new improvement by all means, and as sportsmen we will test its merits. "The proof of the pudding is in the eating." Should the hammerless gun be a failure it will soon go the way of all things useless, but if success attends its use then let us welcome it and its inventor with due appreciation, that we may encourage him and others to more ingenuity that will benefit us as sportsmen in particular and all mankind in general. MARQUE.

CHILLED SHOT.

EDITOR FOREST AND STREAM:

I have been much pleased to read the different ideas concerning chilled shot that have appeared in your columns, and your correspondent Knowlton, in your last issue, certainly gives us something to think about in the difference of weight between old fashioned and chilled shot. But still another thing concerning all shot has been puzzling me. You probably remember, Mr. Editor, the good old times, ten or twelve years ago, when every sportsman took his station in pigeon trap-shooting, especially in England, 21 yards from the trap, or fired at the bird as he rose, with a No. 9 or 10 gauge gun and No. 6 shot. Every body shot No. 6 in those days at pigeons from the trap. Now, in these days we have choked-bored guns and yet shoot No. 8 shot at pigeons from the trap. If chilled shot is brighter than old-fashioned shot, the larger pellets you use the longer the range. And what is the use or purpose of a choked-bored gun, if it be not to put a greater number of pellets of any given sized shot in a circle of thirty inches at 40 yards distance than a cylinder-bored gun will do, having at least equal penetration?

Now, if No. 6 was considered small enough to kill pigeons from the trap in years gone by, why should not No. 4 chilled shot (equalling about No. 5 old-fashioned shot) be used in choke-bored guns? You certainly obtain greater range by increased size of shot; or, as I have said, if No. 6 old-fashioned shot used to do the work in cylinder bores, why not be consistent and use No. 4 chilled in choked-bored guns, attaining two advantages—greater range, hence greater penetration? In firing at targets with a choke-bored gun (W. & C. Scott & Sons) at 40 yards with No. 7 chilled shot (equal to about No. 8 old-fashioned shot) I have noticed that the gun, No. 10 gauge, did not need the number of pellets placed in a circle of thirty inches, when loaded with 1¼ oz., to kill game within that space. In other words, No. 6 chilled shot did the work apparently just as well, and of course the penetration and range were increased by the use of this latter size. In the use of No. 7 chilled many shot were superfluous, and by marking out pigeons on the target, some would contain as high as 24 pellets, many of which of course were needless and of decreased range and penetration to the weightier No. 5. If any one can give me a good reason why we should choke-bore guns to shoot close and then use smaller shot than in the old cylinder guns to kill game at and beyond 40 yards I should like to be enlightened. I can but think that fashion alone rules in this matter, and that with larger shot even than has been used and choke-bored guns to keep it together, the range at which game can be killed should be greatly increased; but it will not be as long as we experiment in the direction of smaller shot neutralizing the action of the choke-bored gun. As chilled shot is brighter and, in my opinion, more killing than the other shot, it applies with more force to it than to the old fashioned shot.

FUSIL.

DITTMAR AND BLACK POWDER MIXED.

WINCHESTER, MASS., Feb. 1, 1878.

EDITOR FOREST AND STREAM:

In your issue of Jan. 24, in reply to some question in regard to mixing Dittmar and black powder, you say, "Such a mixture is possible, provided a person is well acquainted with the character of each powder."

About two years and a half ago I obtained a can of Dittmar, and commenced experimenting with it, acting upon the best information I could obtain. The results were very unsatisfactory, sometimes I would make a good target, at others the shot would fall short of the mark or fail to produce any decided execution. My experiments were mainly with brass shells, but, owing to the more thorough confinement, the paper shells worked better. I was told that I did not ram my powder hard enough. I loaded my next shell with 3¼ drs. Dittmar and two good wads on top. In order to be sure that I rammed it hard enough, I took a mallet, and gave it three or four hard blows. There has always been a doubt in my mind as to the effect of this charge. I have a confused recollection, after firing it off, of putting my hand to the top of my head to make sure that it was still there. However, I am quite certain of one thing: I took the Dittmar and laid it away, and there it would have remained till this day, had it not been that soon after, while engaged in building the Lawrence fishway, I found it necessary to have some blasting done at the foot of it. The man I employed to do this work used a compound called Rendrock, the invention of which, I was told, belonged to Mr. Dittmar. This powder I found to be perfectly harmless and non-explosive, unless there was an exploder used with it. From my experience with both, I felt pretty sure that there was, to a certain extent, a similarity between these two powders, and to test this idea, the discarded can of Dittmar was again brought out, and from a series of experiments, which it is not necessary to detail here, I became perfectly satisfied that the Dittmar powder alone, as now made, could not be safely or successfully used by the mass of sportsmen without an exploder much heavier than the common percussion cap. As I had neither time nor tools to construct such a shell and cap, I availed myself of the next best thing within my reach. I made two measures, one to hold one-half drachm, the other two drachms. After clearing my shells and putting them into a form I use for loading them, I capped them, turned the form over, and with the small measure put one-half dr. fine (quick) black powder into each; then with the other measure, put in two drachms of Dittmar powder, in quality the same as that now marked E. I then, with a brass wire flattened at one end, mixed the two powders together in the shells, and over this put two strong wads in each, well pressed down upon the powder—giving a blow to each with the palm of my hand, equal to about five pounds in weight, sending the wad well home; then put in the shot with a light wad on top.

The gun I use for ruffed grouse, quail and woodcock, is a 12 gauge—used thirty-six years as a muzzle-loader, but now changed to a breech-loader. The barrels are very thin, and only 22½ inches long. The whole gun weighs about six pounds. With the above charge of powder I use, in the early season, ¾ oz. No. 10 shot; in November and December, the same of No. 9. Some might object to so small a charge of shot, but I have found it very effective, having repeatedly killed ruffed grouse on the wing over sixty yards.

I have been thus particular in stating the amount and my manner of using this powder, so that any one who attempts to mix the two in any other way, or to use a larger charge in a light 12 gauge gun, does so on his own responsibility. The weight of charge here given, in my gun, is sufficient for anything that flies inside of fifty yards.

It takes one-third longer than in the ordinary way to load these shells, and the question naturally arises—"What, then, is to be gained by it?" I answer: "There is little or no recoil; the jar or concussion from the report is much less than from any powder I have ever used; there is no smoke to prevent seeing what has been done, or, if need be, to put in a second shot; it is easy to mark down the game, few, if any, wounded birds get away to die a lingering death; the gun does not foul, and between the explosion of the cap and the time the shot reaches the mark, is perceptibly less than with black powder."

I have done all my shooting for the last two years with this powder, and have found it very effective, and much more pleasant to use than any other; and would on no account be without it.

E. A. BRACKETT.

A PLACE TO DIE.

Hon. Davy Crockett died in the Alamo; his grandson, Col. Robert Crockett, also chooses "A Place to Die."

NEAR TWYMAN'S STORE, SPOTTSYLVANIA CO., VA., Feb. 12, 1878.

EDITOR FOREST AND STREAM:

Pleasant were the feelings engendered by hearing of the weal and comfort of an old army aquaintance, the gallant Col. Robt. Crockett, of Ark., through your entertaining correspondent's ("Ouyou") story, "Perkins' Pilgrimage," in your issue of Jan. 31, 1878. I propose to tell your readers a story of Col. C. which occured in 1861. The writer, then a resident of Western Texas, so soon as he learned that his native State, Virginia, had passed the ordinance of secession, at once returned to her, and connected himself with the batteries on the Potomac River at Aquia Creek, reserving to himself the right to join a Texas Regiment when one should arrive. It was here that I first met Col.—then Capt.—Crockett, of Col. Jim Faglo's 1st. Ark. Inf. I frequently met the Capt., and upon one occasion I called upon two young lady cousins in the town of Falmouth, who were about moving to Shreveport, La., to join their uncle and guardian's family, who had moved out to that pleasant place some months before. Their uncle, the Hon. Jno Conway Moncure, was then upon the staff of Gen'l. (Prince) Polignac, late C. S. A. Of course these ladies besieged me with all manner of questions with regard to the aforesaid town. Before I had time to answer, Capt. Bob. Crockett was announced. I then told the ladies that "I only knew Shreveport slightly, but that Capt. C. knew all about it and could tell them all they wished to know." Seven questions to the second from each lady at the same time were hurled at Crockett; but, like his Hon. grandfather, he was good game and equal to the occasion. The Capt. steadied himself and said: "Ladies, I know Shreveport well—man and boy I have known it long and truly, and I had rather die right there than any place upon earth," this without a smile. "O! Captain Crockett what in the world do you mean? Why?" "Because," said Capt. C., "I think I could leave it with less regret than any other place."

Now if this should fall under the eye of the Col. (and if he is a subscriber of FOREST AND STREAM AND ROD AND GUN it will; and if he is not he is missing all the good things) let me advise him to get his grandfather's rifle ready and back it with a "navy six," for he has got those Shreveport people to fight, while I, who make this story public, am safe signing myself, as I do respectfully. BIRD SHOT.

THE PAINE FEATHER FILLED GLASS BALL.—In our last issue, in answer to a correspondent, J. H. W., of Kansas, we made an error as to where the balls could be had. They can be obtained at all gun dealers throughout the country. Send for circular and price lists to the headquarters, Bohemian Glass Works, 214 Pearl street, New York.

HANDICAPPING GUNS.—In answer to correspondents in our last issue an error was made. The differences allowed as to calibres of guns is one-half of a yard, not a yard. If, then, a 10 and a 16 bore shoot, the 16 has (3) three yards given it. If we follow any rules, let us adopt, then, the English ones.

PIGEON MATCHES.

WISNER AND WOOD.—The match between Clint. Wisner and Henry W. Wood, thirty birds each, ten at 21 yards, 80 yards boundary, and ten pairs at 18 yards, 100 yards boundary, came off at the Long Island Shooting Club Grounds last Thursday. The score was as follows:

Wisner	0	1	1	0	1	1	1	0	1	1	—7
Wood	1	1	1	0	1	0	1	1	0	0	—6
Wisner	10	10	10	10	10	10	11	10	10	11	—12
Wood	00	11	10	11	10	10	11	10	10	10	—12

After the match Messrs Broadway, Wisner, Gildersleeve, Wood, Durfee, Lucker and Wynn shot a sweepstakes at three birds each, 25 yards rise, 80 yards boundary, 11 and 7 traps. Mr. Broadway won first money. Messrs. Tucker, Gildersleeve, Broadway, Durfee, Heming and Wynn shot a sweepstakes at three birds each, which resulted in a tie by the first three named, who divided the money, and the two last named tied and divided second money.

MORRISTOWN VS. JERSEY CITY HEIGHTS.—The Jersey City Heights Gun Club entertained the members of the Morristown Gun Club at their shooting grounds on Wednesday, the 12th inst. The Morristown members partook of a solid collation at the club-room, in John Platt's Arcade Saloon, before being escorted to the grounds, and were in good condition for an afternoon's work. The attendance of spectators was very large, and a more substantial and gentlemanly gathering of sportsmen is very seldom seen, many gentlemen being prominent merchants, doctors, lawyers, insurance officers, Custom-house officials, etc. The occasion was also honored by the presence of the champion, Captain Bogardus, with his little son, whose unobtrusive manners are much admired. Of the grounds and the entertaining club, we can say that this young club is thoroughly organized, and have their shooting grounds surrounded by a high board fence, with a commodious club-house near the entrance, and an immense screen for catching the stray shot on the opposite side of the field. The three Bogardus' traps were set at full eighteen yards distance, and with wires running over a framework in such a manner that it was impossible for the shooter to tell which of the three would be pulled, making it as difficult as possible. The match was closely contested, as the following scores will show, although the shooting was not up to the average of most of the members. After the match, hearty cheers were given by the visiting club, and as heartily returned. Following is the score:

Jersey City Heights Gun Club.

Wm Hughes	1	0	1	0	1	1	0	0	0	0	0	1	1	0	0—6
A Hertlage	0	1	1	0	1	0	0	0	0	1	0	0	0	0	1—6
J J Toffey	1	0	0	0	0	0	1	0	0	0	0	1	0	0	1—4
G B Eaton	1	0	0	0	0	0	1	*0	1	0	0	0	0	1	0—5
J Harrison	0	0	1	1	0	0	1	1	0	1	1	0	0	0	0—6
T Henry	0	0	0	0	0	1	1	0	0	1	1	0	0	0	1—5
J B Burdett	1	0	1	0	1	1	1	0	0	1	1	1	0	0	1—9
F M Thomson	1	0	1	1	0	0	1	1	0	1	0	0	1	0	1—8—(43)

Morristown Gun Club.

E M Quimby	0	1	0	1	0	1	1	1	1	1	1	0	0	0	0—8
J D Stewart	0	0	0	0	1	1	1	1	1	1	0	0	1	0	1—8
D B Fuller	0	0	1	1	1	0	0	0	1	0	1	1	1	1	0—8
E E Willis	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0—1
B Athro	0	1	1	1	0	0	0	1	1	1	0	0	0	0	1—7
J Leek	0	0	0	0	1	1	0	0	0	0	0	1	1	1	0—5
J B Ayers	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0—1
P E Cramer	0	0	0	0	1	0	0	0	0	1	1	0	0	1	1—5—(13)

PENNSYLVANIA—*Roxbury, Feb.* 13.—Match at ten birds each, 21 yards rise, 80 yards boundary, Rhode Island rules:

Daniel Karsner	1	1	1	1	1	1	1	1	1	1—10
Miles Johnson	1	1	1	1	0	1	1	1	1	1—9
Frank Klintz	1	0	1	1	1	1	1	1	1	1—9
William Greenwood	1	1	1	0	1	0	1	1	1	1—8
Richard Woods	1	0	1	1	1	1	0	1	1	1—8
Rodney Levering	1	1	0	0	1	1	1	1	0	1—7
Samuel Wilson	0	1	0	1	1	1	1	1	0	1—7
Thomas Cassell	1	1	1	1	0	1	0	1	0	0—6
Frank Whiting	0	1	1	0	1	1	1	1	0	0—6
William Wiggans	1	0	1	0	1	1	1	1	1	0—6

Second Match—Same conditions.

Miles Johnson	1 1 1 1—5	Richard Woods	1 1 1 0 1—4
Daniel Karsner	1 1 1 1 1—5	Rodney Levering	1 1 1 1 0—4
Frank Klintz	1 1 1 1 1—5	Wm Wiggans	1 1 1 0 0—3
Wm Greenwood	1 1 1 1 0—4		

Ties divided first money.

LOUISVILLE GUN CLUB.—We append the score made by members of the Louisville (Ky.) Club at their last meeting,

Feb. 12. Match between Mr. S. Hutchings and J. V. Cowling, Jr., at fifty single pigeons, H and T traps, 21 yards rise.

J V Cowling....0 1 1 1 0 1 0 1 1 1 0 1 0 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1
1 1 0 1 1 1 0 1 0 1 0 0 1 1 0 1 1 1 0 1 1 1—36.
S Hutchings....1 1 0 1 0 1 0 1 1 1 0 0 1 0 1 1 0 0 1 0 1 1 0 0 1 1 1
1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 0 0—34.

Second match—J. V. Cowling and Dr. J. W. Bedford vs. Dr. Hutchings an Jos. Griffiths, at five double birds, 18 yards rise:

J V Cowling, Jr.. 11 01 11 11 11—9 S Hutchings.....01 10 10 11 11—7
Dr Bedford.....11 10 11 00 11—7 Jos Griffith.....01 11 01 01 01—6
Total.....16 Total.....13

Third Match—R. Harlin and Tom Gaulbert vs. E. Y. Peake and Charles W. Moore, at five single birds, 21 yards rise:

R Harlin .....1 1 1 0 1—4 E Y Peake.....1 1 0 1 1—4
W Gaulbert.....1 1 1 1 1—5—9 C W Moore .....1 0 0 0 1—2—6

Fourth Match—Same distance.

Isaac Tyler.....1 1 1 1 0—4 H S Gilmore..... 0 1 1 1 1—4

Ties on four.

Isaac Tyler..... 0 H S Gilmore..... 1

Fifth Match—Same distance.

Jno E Green.....1 1 1 1 1—5 J M Barbour.....1 1 1 0 0—3

Sixth Match—Five double birds, 18 yards rise.

Jno E Green.....11 01 11 01 10—7 J M Barbour.....11 11 10 01 10—7

The shoot off.

Jno E Green..... 1 1—2 J M Barbour..... 0 0—0

Seventh Match—Three double birds, 18 yards rise.

J V Cowling, Jr .....11 11 11—6 S Hutchings .....00 10 11—3

Eighth Match—Seven single birds, 21 yards rise.

John E Green.....1 0 1 1 1 1 1—6 H S Gilmore.....1 1 1 0 1 0 1—5

Ninth Match—Sides, at eight single birds, 21 yards rise, H and T traps.

Mr S. Hutchings' Side.

S Hutchings.....1 1 1 1 0 0 1 1—6
J S Griffith.....1 1 1 1 1 1 1 1—8
C W Moore.....1 1 1 0 1 1 1 1—7
W Gaulbert.....1 1 1 1 1 0 1 0—6
T W Thompson .....1 1 0 1 1 0 1 1—6
R Haldane.....1 0 1 0 1 1 0 1—5
J S Noyes.....0 0 1 1 0 0 1 0—3—41

Dr. Bedford's Side.

Dr Bedford.....1 1 0 1 1 1 0 0—5
J V Cowling, Jr.....1 1 1 1 1 1 1 1—8
H S Gilmore.....1 1 1 0 0 1 1 1—6
J M Barbour.....1 0 0 1 1 0 1 1 5
E Y Peake.....1 1 1 0 1 1 0 1—6
Isaac Tyler.....1 1 1 0 1 1 1 1—7
Jno E Green.....1 0 1 0 0 1 0 0—3—40

Tenth Match—Five birds, 21 yards rise.

John E Green.....1 1 1 1 1—5 J M Barbour.....1 1 1 0 0—3

Eleventh Match—Five birds, 21 yards rise.

John E Green..... 0 1 1 1 1—4 H S Gilmore.....1 1 1 0 1—4

In the shoot off Green won.

There is room here for some club matches between the Louisville Club and those of Cincinnati, Lexington, Bowling Green, Henderson, Nashville, etc. Why do not some of the latter challenge the Louisville boys?

EMPIRE STATE VS. THE WOLVERINE STATE—Match for $500, $250 a side, at Hurlingham Park, Feb. 14, 1878, between Greene Smith, of Peterboro, N. Y., and E. H. Gillman, of Detroit, Mich., at 100 birds each, English rules.

Greene Smith... 1 1 1 1 1 0 0 0 0 0 1 1 1 0 0 1 0 0 1 1 0 1 0 1 1 1 1
1 0 1 1 0 1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 0 0 1 1 1 0 1 1 1 0 1 0 0 0 1 1
1 1 0 0 0 1 1 0 1 1 1 1 0 1 1 1 1 1 1 0 0 1 0 0 0 1 1 1 0 0 1 1 0 0 1 0—
59 dead birds.

E H Gillman .. 1 1 0 1 1 0 1 1 0 1 1 1 0 1 1 0 1 1 1 0 1 1 1 1 1 0 1 1
1 1 0 1 0 0 1 1 0 0 0 1 1 1 0 0 0 1 0 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1
0 1 0 1 1 1 1 1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—75
dead birds, and wins.

RED RUFUS.

MONTREAL, P. Q., *Feb.* 17.—Side shoot.

Campbell. .....0 1 0 1—2 Herbert.....1 1 1 1—4
King.....0 1 1 1—3—5 Normandeaw.....1 1 1 1—4—8

MILWAUKEE, *Feb.* 14.—The members of the Kinnickinnic Gun Club had a right royal time at the National Home grounds, yesterday. The pigeon shoot, at 27 yards and within regulation bounds, resulted as follows:

J C Weber.....0 1 1 1 1 0 0 1 1 1—7
S J Williams.....0 1 0 1 1 1 0 1 0 0—5
E Fielding.....0 0 1 1 0 1 1 0 1 1—7
H T Drake.....0 0 1 0 1 1 1 1 1 0—6
T H Brown.....1 1 1 0 * 0 1 0 1 1—6
C A Williams.....0 0 1 1 1 1 1 1 * 1—7
S Murray.....0 0 1 0 1 0 0 1 1 1—5
N P Carpenter.....1 * * 1 1 0 0 0 0 1—4
Louis Durr.....0 1 1 0 1 1 1 0 1 1—7
D D French.....1 0 0 * 1 * 0 1 1 1—5
G Knowles, Jr.....1 1 0 0 1 1 0 0 0 0—4

In a sweepstakes at four birds Mr. Murray won with all. The tie on three birds, between Messrs. Drake, Carpenter, Durr and French resulted in a division of the second and third money between French and Drake.

A rattle at glass balls followed the pigeon shooting; twenty balls to each man, with the following result:

J C Wells.....15 E Fielding.....13
S J Williams.....11 T H Brown.....13
H T Drake.....15 S Murray.....8
Geo Knowles.....14 M P Carpenter.....7

PULL.

A SHOOTING-BOX WANTED.—Parties having a small property on the Chesapeake Bay, or in Maryland, may find a purchaser. See our advertising columns.

Rational Pastimes.

LACROSSE.—The Canadian Indians who, some time visited England, and gave an exhibition of lacrosse, playing before the Queen, are to be present at a series of these games in Gilmore's Garden, the 5th, 6th and 7th of next month. The Lacrosse Club of New York University and others will compete for a silver cup. Flat and snow shoe races and other events will add interest to the programme.

BOGARDUS VS. MILLER.—Captain Bogardus and William Miller are to compete in trials of strength at Gilmore's Garden, March 4th. Main strength and grip will govern.

PERPETUAL MOTION.—R. N. Cartier, the dancing master, who has won some notoriety by his feats of endurance, is out in a challenge, wagering that he can waltz longer without rest than O'Leary, Weston, Schmelz or Von Hillern can walk without rest on condition that they average four miles an hour; they are not permitted to stop at any time, and are duly bound to keep their average up to that standard.

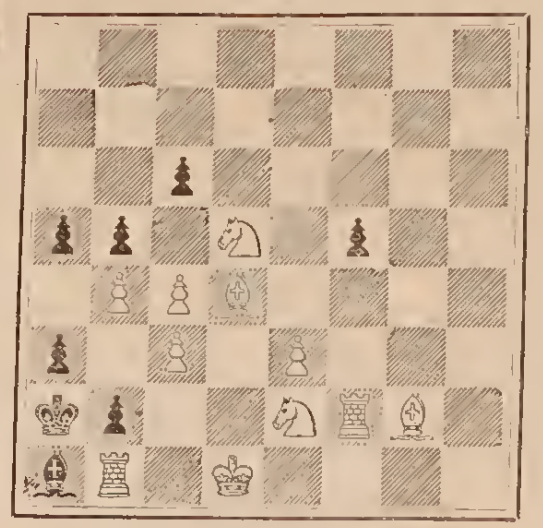
☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 6.

Tourney set, No. 5. Motto—Success to Literature in Chess.
Inscribed to John G. Belden.



White to play and give mate in three moves.

SOLUTIONS—PROBLEM NO. 4.

1—Q-Q B1 1—Kt-B7
2—Q-K B2 ch 2—K tks Q
3—Kt-K1 ch mat

1— 1—Kt-K6
2—Q-K Kt4 ch 2—K tks Q
3—Kt-R2 ch mate

1— 1—B-K 2
2—R-Q B3 ch 2—K-Kt7
3—B K4 ch mate

1— 1—Kt-K16
2—Q-K B2 ch 2—K tks Q
3—Kt Rc8 mate

Several solvers consider this a pretty problem. We hope that all of our solvers will bear in mind our request of last week to forward brief reviews for publication.

In last week's issue we published one of the problems of a set that was, some time since, withdrawn from the tourney, hence the now publication of its companion.

The subjoined game we take from the *Nuova Rivista Degli Sacchi* for January. This Italian chess magazine is the equal of any now published and we commend it to our readers. Address as above, Livarno *via Vittorio Emanuel, N. 35 p. p:*

Game No. 12.—ALLGAIER GAMBIT.

Played at Windsor, Eng., Nov. 5, 1862, between S. Dubois and the Rev. Wayte, of Eton College.

White. Dubois.	Black. Wayte.	White. Dubois.	Black. Wayte.
1—P-K4	1—P-K4	14—P tks B	14—Q-R5 ch
2—P-K B4	2—P tks P	15—K-B	15—Q-R5 ch
3—Kt-K B3	3—P-Kt4	16—K-K2	16—Q tks P ch
4—P-K R4	4—P-Kt5	17—K-K3	17—B-K Kt5
5—Kt-K5	5—Kt K B3	18—R tks K B P!	18—K tks R
6—B-Q B4	6—P-Q4	19—Q tks B	19—Q-B7 ch
7—P tks P	7—B-Q3	20—K-Q3	20—Q-B8 ch
8—P-Q4	8—Kt-K R4	21—K-Q4	21—Q-B7 ch
9—B-Q Kt5 ch	9—K-B?	22—K-B4	22—Q tks P ch
10—Castles	10—Q tks R P	23—Kt-B3	23—Q-K Kt3
11—Q B tks P	11—P-K Kt6	24—R B ch	24—K-K2
12—B-R6 ch	12—K-Kt	25—B-K Kt5 ch	25—Resigns
13—R-K B3	13—B tks Kt		

Game No. 13.—PARTIE PONZIANI.

Played at the saloons of M. Gifford, Paris, France, on Nov. 21, 1877, between the Polish France champion and Mr. M— V——. Mr. Rosenthal plays six games—the following being one of the number—blindfolded.

White. Rosenthal.	Black. M— V——.	White. Rosenthal.	Black. M— V——.
1—P-K4	1—P-K4	14—P tks B	14—Q tks P
2—Kt-K B3	2—Kt-Q B3	15—Q Kt-Q2	15—P-Q4
3—P-Q B3	3—Kt-K B3	16—Kt tks Kt	16—B P tks Kt
4—P-Q4	4—P tks P	17—Kt-Q4	17—Q-Q2
5—P-K5	5—Q-K2	18—P-K B3	18—B-B4
6—P tks P	6—P-Q3	19—P tks P	19—Castles K R
7—B-Q Kt5	7—B-Q2	20—P-K5	20—B tks Kt ch
8—Castles	8—Kt K5	21—Q tks B	21—P Q B4
9—B tks Kt	9—B tks B?	22—Q tks Q B P	22—Q R-Q B
10—P-Q5	10—B-Q2	23—Q-Q6	23—Q tks Q
11—R-K	11—P-K B4	24—P tks Q	24—R-K B2
12—B-K Kt5!!	12—Q-B2	25—R K7	25—P-K R3
13—P-K6	13—B tks P	26—P-Q7 and wins.	

Game No. 14.—GINOCCO PIANO.

The entire moves to the following game were played by telephone on the night of January 21, 1878, at Detroit, Mich.

White. Rogers, Sexton and Brant.	Black. Allardt, Bell and Davis.	White. Rogers, Sexton and Brant.	Black. Allardt, Bell and Davis.
1—P K4	1—P K4	18—Q tks Q	18—S tks Q
2—S K B3	2—S Q B3	19—R B2	19—P K K5
3—B R B4	3—B Q B4	20—S K B3	20—K K B2
4—P Q B3	4—S K B3	21—S tks R P	21—R R1
5—B Q4	5—P tks P	22—P K6†	22—K tks P
6—P K5	6—P Q4	23—S tks B	23—K tks P
7—K B S5	7—S K5	24—K S2	24—S K B8
8—B-S4	8—P tks B	25—K tks R	25—S tks B
9—P-P	9—B S3	26—K Q2	26—S Q B5
10—Castles	10—Q B K S5	27—R K2†	27—K Q3
11—Q3 K3	11—Castles	28—S K5	28—S tks Q S P
12—P K R3	12—B K R4	29—S R3	29—P R3
13—P K S4	13—B K S3	30—R B1	30—S Q B5
14—K S Q2	14—P K B4	31—Q S tks S†	31—P tks S
15—P K B4	15—Q K R5	32—K tks P	32—P Q B4
16—Q B3	16—P K R4	33—P tks P†	33—Resigns
17—P K S5	17—P K S6†		

Game No. 11.—SCOTCH GAMBIT.

Played by correspondence between New York and Washington in the year 1840.

White. Washington.	Black. New York.	White. Washington.	Black. New York.
1—P-K3	1—P-K4	17—K-R	17—B-K3
2—Kt K B3	2—Kt-Q B3	18—Q Kt-Q2	18—Castles
3—P-Q4	3—P tks P	19—Kt-Q B4	19—B tks Kt
4—B-Q B4	4—Q-K B3 (a)	20—B tks B	20—K Kt R3
5—Castles	5—P-Q3	21—B tks Kt	21—Kt tks B
6—P-Q B3	6—P-Q6	22—B tks P	22—P-K R5
7—Kt K13 (b)	7—Kt K4	23—P Q Kt4	23—P-K Kt4
8—B Kt5 ch	8—P Q B3	24—B B6 ch	24—K Kt
9—P-K B4	9—Kt-K 5	25—Kt-B6	25—K-R
10—B-Q B4	10—Q Kt-K R3	26—P-Q R4	26—R-Q7
11—P-K5	11—Q-Q	27—P-R6	27—Q-Kt4
12—B tks Q P	12—P tks P	28—Q-K3	28—R-K7
13—P tks P	13—R-K7	29—Q tks Kt P	29—Q tks K P
14—Kt K4	14—Kt-K5	30—Q-Kt4	30—R-K Kt
15—B-K B4	15—P-K R4		
16—Q-K B3	16—Q-Kt3 ch	31—Q tks B? (c)	

(a) An inferior move—B-B4 or Kt K B3 are better.
(b) Too hasty, as yields only a superficial attack.
(c) Black now mates in four moves. The Washington players discovered their error soon after the move was sent, but too late to retract.

CURSORY JOTTINGS.

—Our published programme of the problem tourney has not generally been thoroughly understood. A set consists of *two* problems, and problems entered *singly* can win only one of the following announced prizes, viz: Prizes Nos. 4, 5, 6, 7 and 8; while two, or a set of problems, may win any one or more of the eight prizes. The photograph tourney is entirely distinct from the prize tourney above alluded to, and no problem entered in this competition shall exceed two moves, and must be accompanied by a photograph of the composer. Hurry up your sets, friends, and also your photographic problem.

—The *Nuova Rivista Degli Sacchi* and *La Strategie* for January, have just reached our table. Both of these journals have a world-wide reputation, and the games and problems found therein are invariably good. We translate a problem from each of these publications, but, owing to want of space, omit the notes published with these games.

—Now that the prize chess literary tourney is over with, the Hartford *Times* is brightening up a bit. In its last issue it announces as a possibility a telegraphic chess match between New York and Elizabeth, N. J. But what is more interesting to its local readers and the Captain's many chess friends in America and Great Britain is the following: "Captain O'Farrell, who, as a chess player, has plentifully sprinkled his 'checks,' lately received a $1,000 check from the government, which was due him as pension money, he having received only a private's pension when he was entitled to a captain's pension. When the check came 'Cap' didn't try to move—he was mated." Ho there, Belden, what kind of a mate mean you? When the check came we are inclined to think that the "Cap" was human, and did move at a gait for the bank where he cashed the check, and then moved on again, as free and happy as mortal man with an equal amount ever was.

—The Hartford *Globe* has temporarily suspended publication. We shall miss this exchange, but under the new management (if there be one), we expect to see Mr. Peller's double column of chess continued. Farewell, *Globe* of the past!

—In the New York Chess Club tournament Mr. Eltner leads the score. Although placed in the second class, his play is of a higher order.

—Brownson's *Chess Journal* for February (Box 2157, Dubuque, Iowa) is on time, and its contents embrace games, problems, gossip and two articles from the pen of E. Barbe, of Chicago. The problem department, which Teed contributes for the solvers' and problemists' enjoyment, is one of the best collection of problems we have ever seen in a chess magazine.

—Foster's chess column in the St. Louis *Globe-Democrat* is doing good work. There are now three chess Clubs in St. Louis.

Sea and River Fishing.

FISH IN SEASON IN FEBRUARY.

SOUTHERN WATERS.

Pompano, *Trachynotus carolinus.*
Drum (two species). Family *Sciænidæ.*
Kingfish, *Menticirrus nebulosus.*
Sea Bass, *Sciænops ocellatus.*
Sheepshead, *Archosargus probatocephalus.*
Snapper, *Lutjanus caxus.*
Grouper, *Epinephelpus nigritus.*
Trout (black bass), *Centropristis atrarius.*
Striped Bass, or Rockfish, *Roccus lineatus.*
Tailor fish, *Pomatomus saltatrix.*
Black Bass, *Micropterus salmoides; M. nigricans.*

THE TROUT LAW IN NEW YORK STATE.—Sec. 20. No person shall kill, or expose for sale, or have in his or her possession, after the same has been killed, any speckled trout, save only from the first day of April to the first day of September, under a penalty not exceeding twenty-five dollars for each fish. (Amended Ch. 411, Laws of 1877.)

NEW BRUNSWICK—*St. John, Feb.* 8.—A correspondent writes that good trout fishing may be had in May and June at Lake Quaco, three hours drive from St John. Last spring, a two days' trip, 72 fish were taken; a second trip, 82 fish.

J. S. C.

NEW HAMPSHIRE—*Dover, Feb.* 11.—Fishermen complain that the great number of black bass in the ponds prevent successful pickerel fishing. The bass crowd about the holes and frighten the fish away.

G. A. W.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals reported at this port the past week has been twenty-eight, viz.: Two from Fortune Bay, one with frozen herring and one light; one from Grand Menan with frozen herring; ten from the Banks with 425,000 lbs. fresh halibut; and sixteen from Georges with about 470,000 lbs. round codfish and 15,000 lbs. halibut.—*Cape Ann Advertiser, Feb.* 15.

SEALS ON LONG ISLAND.—John Howell, one of the crew of Life-Saving Station No. 16, off Southampton, Long Island, while patrolling the beach on Thursday night, found a live seal asleep on the shore, and despatched it with a club.

NOVEL BAIT.—A Palmyra (N. Y.) fisherman caught grasshoppers, and taking his cue from the amber-preserved flies, dipped his hoppers in gum arabic and put them away last summer. Now he is having wonderful success fishing through the ice. When once a fish is hooked it is sure to stick.

A HINT TO OUR LADY READERS.—According to the *Portland Transcript.* "When the down-east fisherman, using two hooks to a line, hauls up a pair of fish at one pull, he ascribes it to the fact that his wife or sweetheart, ashore, is sitting cross-kneed at the time."

Take the hint, ladies, and patiently sit cross-kneed at home while your swains are angling for the finny prey. So shall the happy fishermen send in glowing reports to the FOREST AND STREAM AND ROD AND GUN.

FLIES, LINES, RODS, REELS, HOOKS AND MATERIAL.—Miss McBride's skill in fly tying has long been known to the angling fraternity. For neatness, finish and skill, the flies made by Miss McBride have but few equals. Having removed from Mumford to New York city, this lady has now opened an establishment at 889 Broadway, where flies adapted to all seasons or localities may be found. Amateurs desirous of making their own flies can be supplied with all the materials necessary. The general fishing public can find a full selection of rods, reels, lines, with all the newest trolling baits.

In her present locality it is to be trusted that Miss McBride will not only retain her former extensive patronage, but will be able to secure a large portion of new business.

ANOTHER FINE SALMON PAINTING.—"After the Battle" is the title which Mr. Walter M. Brackett has given to a large salmon picture which he has recently painted for Allan Gilmour, Esq., of Ottawa, Canada. It has been on exhibition in Boston the past week, attracting crowds of visitors. It is the most pretentious work which the artist has yet undertaken, and is pronounced by the best critics to be a long way in advance of his former productions, which is high praise when we recall his masterly representation of "killing a salmon." The subject, a fresh-run 25-lb. fish, is safely landed upon a rocky shore, partly overgrown with weeds and grass; beside him lies the rod and reel. A foaming rapid and a still pool, from whose surface is reflected the ledge and forest of the opposite shore, with a bit of blue sky in the distance, make up the background. The fish, however, is the all-absorbing idea, and it is difficult to say which most challenges our admiration—the perfect symmetry of his form, or the endless variety of tints with which his coat of mail actually sparkles. The wonderful irridescence which constitutes one of the principal charms of a salmon fresh from the sea, is rendered with an artistic skill, which I venture to say has never been equalled. The absence of the gaff-mark shows that he has been captured by a skillful angler; not a drop of blood mars the purity of his silvery side. Although Mr. Brackett has for years stood without a rival as a painter of game fish, yet this picture cannot fail to add greatly to his already enviable reputation.

TOWING EXTRAORDINARY—VERY MUCH LIKE A WHALE.—While the schooner John O. Cowell was fishing off the Banks of New Foundland, with her cable out some 200 fathoms, all of a sudden off went the schooner at racing speed. The astonished captain wondered what was up, when a whale blowed some 100 fathoms ahead. Along swept the schooner at the rate of twenty knots. "Hard larboard and starboard," was that intelligent captain's order, but broadside, too, the schooner swept on her way. At last, with a jerk, something parted, and on examination it was found that a kink in the cable had got round a whale's tail. Whether whales can be made useful in towing schooners has yet to be determined. The story dates from July 15th, and the New York *Sun* records the fact. We have long wanted some kind of economical traction for our State canals.

FISHING SNOODS.

January 20, 1878.

WHILE writing about collecting the cocoons of the *Attacus cecropia*, I was reminded of two letters lately published in the FOREST AND STREAM—one from Mr. Wm. Gray, of Iowa, the other from Dr. Richardson, of Toronto, Canada. Mr. Gray's interesting letter describes well the way of making snoods from the worm, and also describes some lengthy ones (30 inches long) in his possession. Now, as far as I know, there has been no improvement in the manufacture of this article from Mr. Gray's time until to-day. The fish tackle dealer offers us nothing in the way of "silk worm gut" beyond the length of 12 or 15 inches, "sure and sound."

Dr. Richardson, in his letter, mentions the *Attacus cecropia*, of Ohio, and proposes to cultivate it for the purpose of making long and stout fishing snoods. I can here inform the Doctor that they can be procured in this locality by the thousands, and are as easily bred and raised as white mice. They feed on the sassafras, the wild plum, and many other plants, but their choice is the button bush (*Cephalanthus occidentalis*). This bush grows in Upper Canada, and in Michigan as far north as parallel 43 deg. 50 min.

As this plant furnishes him his most acceptable food, I have no doubt he will be found wherever the button wood abounds. Several years ago Dr. T. Garlick propagated this moth in his house. He fed them mostly on the leaves of the plum tree, the currant bush and the snow-ball shrub. The doctor often informed me that he could make snoods from this caterpillar three feet long, and as strong at each end and throughout as the best gut in the present market is in its strongest parts. From my own experiments and what I had previously learned from Dr. Garlick, I am confident that a very superior snood for the fly fisher can be made from this source. And I also agree with Dr. Richardson that sufficient interest should be excited in this matter to induce some one to commence this industry. "It will not only pay, but it will be a great boon to fishermen."

In continuation I will say that the caterpillar of the *Attacus cecropia* is about three times the length and bulk of the common silk worm (*Bombyx mori*), from which the snoods of to-day are principally made. Also, wherever you find a marsh or a river side on the south side of Lake Erie producing the button bush, you may be sure to find the *Attacus cecropia* in abundance.

DR. E. STERLING.

CALIFORNIA SALMON FISHING AND THE GAME LAWS.

SAN FRANCISCO, Feb. 16.

EDITOR FOREST AND STREAM:

Contrary to our expectations and most sanguine hopes, the young salmon, which, for these three years past, appeared in the winter season in our bay, and afforded good sport in bait fishing, have not yet arrived in any numbers. At present not more than two or three a day have been taken by eight or ten rods. Most of the few which have been taken are larger than usual, being about three or four pounders, whereas, in former years, they would average only about one pound. We are all at a loss to account for their scarcity this year. Their very small numbers cannot be altogether satisfactorily traced to the great destruction of young fish by the small and unlawful meshes of the nets used by the Italian and Chinese fishermen, because the let-up has been too sudden for that. The cause must be found elsewhere.

Fish, of course, change their feeding grounds, and are directed in their movements by the places frequented by their prey. We may observe this uncertainty of the migrations and advent of fish of the salmon tribe, from the analogy in the case of other families of the finny tribe. Two years ago our bay was full of the tom cods, and thousands upon thousands were taken with rod and reel. So with smelts, which, three or four years ago, were captured in about equal quantities with the tom cod. Now very few of either of these fish are to be found in our harbor.

If the destruction of small fish here should go on in the same ratio that it has for many years past, it is easy to see that our fisheries will be almost entirely destroyed. The State Fish Commissioners, sportsmen's clubs and a committee on the game laws of our Assembly at the Capitol are now busy in devising and framing laws to remedy this monstrous evil of our fisheries; and we trust that this time, at any rate, something will be effected in earnestness and wisdom to enforce the law against all offenders. Differences of opinion as to the times and season for both fishing and shooting must necessarily exist and it will take time, patience and disinterested and unprejudiced judgment to arrive at just results, beneficial conclusions in the public interests, and a proper firmness and determination to carry out the laws when wisely agreed upon.

E. J. HOOPER.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
Feb. 22						
Feb. 23	3	03	M		11	24
Feb. 24	3	59	0	49	M	
Feb. 25	4	58	1	37	0	52
Feb. 26	6	01	2	35	1	59
Feb. 27	7	19	3	40	3	08
Feb. 28	8	19	4	49	4	12
	8	19	5	48	5	18

—The sloop yacht Addie Voorhis, Seawanhaka Y. C., will be lengthened, re-rigged as a schooner and re-named.

—The steam yacht Lurline has been sold by Mr. Philip Phœnix to Mr. Pierre Lorillard, N. Y. Y. C.

BROOKLYN YACHT CLUB.—The annual regatta will take place June 18.

A SCHOONER IN A MARL BED.—The Lumberton, N. C., *Times* has this account of a schooner found in a strange place. Such freaks of the winds, waves and sands are occasionally discovered long after all clue to the time and circumstances of the catastrophy are destroyed:

"Some men, while digging marl in a swamp about eighteen miles northeast of Lumberton, N. C., near the Cape Fear River, found embedded, eight or ten feet below the surface of the earth, a schooner or vessel in its natural shape, sixty feet in length and forty in width. It was of the same consistency as the surrounding marl, and the nails or spikes with which it was put together were made of wrought iron. There were various kinds of bones and teeth around and near it."

—Ross has agreed to row Hanlon for $1,000 a side, the contest to take place on the Kennebecasis River, St. John, N. B., June 20.

LOUISIANA STATE ROWING ASSOCIATION.—The State regatta will come off early in the season, and there is every prospect that the coming season will be an unusually interesting one.

New Publications.

WHITNEY'S FLORIDA PATHFINDER: Season 1878. New York, John P. Whitney, 66 John st. Price 25 cents.

The new edition of this reliable guide to Florida will be found to contain much information additional to that which has already made it so popular among Florida tourists. There are very full, and so far as we may judge, accurate schedules of routes, fares, etc., with a complete list of hotels and winter boarding-houses. The intending visitor will do well to consult the pages of the "Pathfinder," and the tourist will find it of material value.

HARVARD INDEX.—It is the custom of the students of nearly every one of our colleges to issue a student's catalogue which shall contain a full and reliable compendium of information not to be found in the regular college catalogue. The *Index* has a *resumé* of the of the athletic sports of the year, lists of college literary and social associations, and miscellaneous matter of more than transient value to the Harvard student.

THE AMERICAN BICYCLING JOURNAL, published at Boston, is intended to cater to the interests of the velocipede riders. The paper is filled with a variety of matters relating to this theme, and will doubtless find a limited circulation among the devotees of the awfully revolving wheels. We doubt, however, if this sport is popular enough to support an organ.

WE have received from T. B. Peterson & Co., Philadelphia, "The Devoted Bride," a novel, by St. George Tucker, of Virginia.

THE AMATEUR'S MANUAL; Or, Specific Mating of Thoroughbred Fowls." This little volume contains practical directions for the breeding of the thoroughbred varieties of fowls. The book is the result of the author's own experience, and will doubtless prove a valuable assistant in the breeding of choice poultry. Written and published by J. K. Felch, Natick, Mass.

The *Popular Science Monthly Supplement* is always interesting, for it contains the cream of what appears in the English journals. We can call attention only to two or three of the articles in the February number, but every thing between its covers is well worth reading. That article which will be found of greatest interest to the majority of our readers is entitled "Dog Poison in Man," by Henry W. Acland, M. D. This essay, which is reprinted from the *Contemporary Review*, discusses hydrophobia at some length, and in a manner somewhat unlike that employed by any recent writer on the subject with whom we are familiar. Dr. Acland gives some interesting statistics in reference to the disease in England, showing, among other things, that from 1850 to 1876 the annual deaths from hydrophobia in that country were one to each million of inhabitants. Other interesting points we have no space to introduce here.

The "Little Health of Ladies," by Francis Power Cobbe, is also from the *Contemporary Review*, and treats an important subject in what would seem to the average male intelligence a very sensible fashion. How it may strike the female mind we dare not conjecture. "Little Health," it should perhaps be said, is here used as an equivalent of the French *petite-santé*.

This Supplement seems to be quite equal to former ones in its contents, and is very pleasant and instructive reading.

—The opening article in the *American Naturalist* for February is from the pen of Prof. E. D. Cope, and treats of a very interesting and little known group of extinct animals, the Dalosauria. The discoveries which have recently been made in the Rocky Mountain region of bed containing new and wonderful forms of this order are most important, and will, no doubt, before very long, furnish us with a great deal of information concerning this group, of which at present we know so little. Some questions appear to have arisen as to the age of the bed which yield the remains under discussion, for, while Prof. Cope declares them to be lower cretaceous, Pr f. Marsh, as noted in a recent number of the *American Journal of Science*, announces their age to be upper jurassic. Dr. T. H. Streets contributes an interesting article on "The Discolored Waters of the Gulf of California," and Prof. J. E. Todd one on the "Distribution of Timber and Origin of Prairies in Iowa;" but the most interesting paper in the present issue is one on the "United States Survey of the Territories" by Dr. F. V. Hayden. This, which is really a sort of advance report, gives us a very clear idea of the work accomplished by the survey during the past year, 1877. The splendid work done, by this survey in the past and the superb character of its publications are a source of pride and pleasure to all scientific men in America, and it is extremely satisfactory to know that their past years' work has been very successful.

Recent Literature contains notices of many important works lately issued, while General Notes contains a number of items of interest.

FABLES, BY G. WASHINGTON ÆSOP, taken "Anywhere, anywhere out of the world," with illustrations by F. S. Church, New York. The World, 1878.

For the last year or more the brilliant articles of the New York *World* have been supplemented by a series of comic fables, which have been of the most clever character. That staid pomposity of Æsop and La Fontaine has been capitally hit off, and fables, with morals of the most humorous kind, have furnished the numerous readers of the *World* with an endless source of amusement. Mr. Lanegan, the author of these clever bits of fun and satire, has a fund of quaint originality. There is a sincere farcicality about these fables which invariably produces honest merriment. All those old saws which we are taught to believe, as inculcated by fables (rather because they were hammered persistently into us than for the reason that they were true), are purposely perverted and upset. In the fable of the hare and the tortoise, it is not the tortoise which wins, but the hare. In the fox and the crow the old crow cannot be gulled by the fox. The crow will sing if the fox insists on it, only after "Depositing the Cheese in a safe Place on the Limb of a Tree." Thinking over fables, one wonders at the influence they once had in this world and the little effect they would produce now. Did the literary allegory find in Æsop and La Fontaine such masters that no one has ever attempted to do the like again? Still we return to these lessons, when grown in age, which have been imparted to us in our days of childhood, and unwittingly we use the fable. Mr Lanegan, it is likely, may become the Cervantes of fables, writing them as did the great Spaniard, knight errantry. Mr. Church's illustrations are fully up in cleverness to the text, and both the author and artist have succeeded in making a little book, not a page of which can be read without a good, hearty laugh.

BITS AND BEARING REINS AND HORSES AND HARNESS, by Edward Fordham Flower. Cassell, Petter & Galpin, London, Paris and New York.

It is very certain that many persons inflict an unnecessary amount of cruelty on horses. There is some absurd idea that, in order to look finely, a horse should hold his head unnaturally high, should champ at his bit, deck himself with foam, and that when at rest (?) his fore and hind legs should assume any other position than the natural one. We follow fashion in the harnessing of animals, just as we clothe ourselves in accordance with the dictates of the tailor—only, that, while we may discard what is uncomfortable or hurtful to our health, the poor beasts have no such power of expressing the suffering the harness maker puts them to. Now, once the best and most pious of all men—John Wesley—learned his lessons on horseback. Wandering over the broad English land, jogging along on his horse, Wesley mostly rode with book in hand, the bridle of his horse hanging uncared for around the beast's neck. "Why," asked John Wesley, "is it that my horse never stumbles?" Thinking over it, the great leader of Methody came to the opinion that it was because "he rode his horse with a loose bridle." Mr. Flower, the author of the pamphlet under review, may be said to have been the first who, in England, it recited attention to the cruelty caused by the bearing-rein and the exaggerated bits in common use. An occasional letter of Mr. Flower's, addressed to the London *Times* and to other leading journals in England, first awakened sympathy for the poor horses, so that, at present, the stupidity and cruelty of trammeling every action of the horse by means of over-tight bearing-reins or terrible bits is looked on with increasing disfavor. Sir Arthur Helps said something about bearing-reins and the people who used them, which is quite pertinent. Sir Arthur declared that when he saw an equipage where the horses were suffering from tight bearing-reins that the owner of such horses must be "either unobservant of what he ought to observe, or very ignorant of what he ought to know, or pompous or cruel * * * When I observe equipages where the irrational tight bearing rein is used I then look at the arms on the carriage, and I know who are the greatest fools in London in the upper classes." Apart from the cruelty of the use of the bearing rein, what many people do not know, is that it is the cause of disease in the horse. The leading English veterinary surgeon, Mr. Gill, asserts that the use of the bearing-rein induces "roaring, apoplexy, coma, megrims, inflammation and softening of the brain," and concludes by stating "I feel sure those who continue to use this torturing instrument have no idea of the pain they are inflicting, otherwise they would abolish this unnecessary portion of the harness, consigning it to the tomb of past absurdities." Now, people who have carriages, or own horses, when they do not drive themselves, ought to know what they are about. It is absurd to trust all matters relative to one's horses to the coachman alone. It is both a sin and shame that people do not become acquainted with the animals who labor for them. For just such people Mr. Flower has compiled his work, and we trust that not one of our readers who uses a horse, in harness or otherwise, for their pleasure or profit, will fail to read how they should rein in or bit their horses.

UPLAND GAME BIRDS AND WATER FOWL OF THE UNITED STATES, A. Pope, Jr. Published by Scribner, Armstrong & Co., New York, 1878.

The second part of this series has just been received by us, and, in point of perfection of illustration, is quite equal to the initial numbers. The subjects chosen are precisely such as allow of the fullest artistic scope. The russet brown woodcock, with its soft and fleecy plumage, is contrasted with the finely-feathered mallard duck. There is a guileless innocence in the look of a woodcock, with his round, soft eye and dainty step, which Mr. Pope has most cleverly delineated. The artist sportsman seems to have the faculty of hitting off the precise individuality of each species in the ornithological family. Now, your mallard is a bold dashing bird, at least in looks, and flaunts his sleek, dapper

sides with his bits of gaudy color. We have had so much true pleasure in looking at these fine illustrations that we have thought it a pity to consign the prints to a portfolio, and have had them neatly framed. We will certainly have the whole of the pictures treated in the same way, and they will decorate the walls of our office. There is probably, not even excepting a museum of natural history, any place where criticisms on the form and general appearance of game birds are more generally criticised than in the office of the FOREST AND STREAM AND ROD AND GUN. We have yet to hear of a single exception made as to the excellence of the design and color in the "Game Birds and Water Fowl of the United States."

VOYAGE OF THE PAPER CANOE.—We learn from Mr. N. H. Bishop that his forthcoming book will be issued next month from the Riverside Press. It is to be published by Lee & Shepard, of Boston. Those of our readers who followed Mr. Bishop's fortunes, as related in these columns at the time of his novel voyage, will find the narrative in its new form full of fresh interest.

FIELD, COVER AND TRAP SHOOTING, AND APPENDIX, by Capt. A. H. Bogardus.

Captain Bogardus' book is now in the binder's hands, and will be on sale by the 1st of March. It will be, in every sense, a practical book, and this second edition will contain a most valuable addition. In this Appendix will be found the later experience of the author; a full account of his trip to England, and matches shot in England, Ireland and Wales; his California experience and California quail shooting; full instructions on glass-ball shooting; how the novice may become proficient by practicing at glass balls; rules for glass-ball shooting; also rules governing the championship medal of America for glass-ball shooting; the official score of 5,000 ball match at Gilmore's Garden, Jan. 3, 1878; cuts showing position and manner of holding gun when at the score in glass ball or pigeon matches; a chapter on breeding and breaking dogs, by the well-known dog-breaker, Miles L. Johnson, of New Jersey.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

BERO, Red Bank.—Send address to this office. Have information for you.

H. B., Philadelphia.—The name of the maker was a good one thirty years ago.

N. R. L., Montreal.—What will reduce excessive fat from dogs? Ans. Exercise and low diet.

A. B., Manchester, N. H.—Dr. Lewis, author of the "American Sportsman," died some months ago.

C. F. G., Phila.—What will you charge me for the FOREST AND STREAM 1876 edition unbound? Ans. $4.00.

B. Von K., Baltimore.—Captain Bogardus' book will be out on March 1. He can then furnish you with a copy.

T. S., Brooklyn.—It is very unusual to kill a Wilson's snipe so early as Feb. 6, the day you killed the one recorded.

A. B. S.—Can you furnish us with the address of a dealer in tortoise-shell? Ans. Kaldenberg, Fulton st., near Nassau.

C. D. K., Halifax, N. S.—The name of the canoe builder at Peterboro, Ontario, is Thomas Gordon, at Lakefield, Peterboro.

B. F. G., Boston.—For identification of birds consult "Key to American Birds." You will there find Latin and English names.

H., Huntingdon, Tenn.—What charge shall I use for glass-ball shooting, 12 gauge, choke? Ans. 4 drs. powder, 1⅛ oz. No. 8 shot.

"NEDLAM."—Will "Nedlam," who contributed "Trout Fishing in Maine," published in this paper last March, send us his address?

R. E. B., Pittsfield.—See account of cocker in to-day's issue. We do not know of any spaniel with what is generally understood as a rat tail.

D. J. CLUB, N. Y.—Please inform us if Mr. Ira Paine has only one arm? Ans. He has two good arms. You are thinking of Ward, of Canada.

A. F., Homer, N. Y.—Could a dog over three or four years old be cured of distemper? Ans. More likely to recover at such an age than if younger.

W. S. B., Ridgeway, N. Y.—Where can I get shot-concentrators for a 13 bore? Ans. This is such an odd gauge that you could not get a concentrator.

C. A. B., Bangor.—I want a repeating rifle for deer. Would you recommend the Spencer? Ans. Spencer no longer made. Buy a Winchester, or an Evans. Cost from $35 to $50.

C. H. C., Broad St., Philadelphia.—Our rule is not to give a correspondent's name, unless at the pleasure of the correspondent. We have written to "Viator," however, for his consent.

H. M. P., Boston.—You write about a 22-inch barrel and a .62 cartridge. The shortness of the barrel, in conjunction with the size of the cartridge, makes a problem no fellow can answer. Give it up.

W. H. E., Bryant, Kansas.—We were in error as to Kay in regard to his making wire cartridges with buckshot. They are manufactured by Kay, and are for sale in the leading gun stores in New York.

J. C. W., Wheeling.—Where can Dudley's patent pocket cartridge loader be obtained, and what is the price? Ans. Almost any gun dealer. Send to Mr. Squires, No. 1 Courtland st. Price $1.50 to $2.00, according to finish.

A. J. S., Memphis.—What would be the proper name for a cross between a water spaniel bitch and a Gordon setter? Ans. He is not entitled to any special name as to breed, being a cross, or superior sort of mongrel.

J. A. D., Boston.—My Newfoundland dog is eighteen months old. He keeps thin. Is fed on scrap meat and Indian corn bread and milk. Good appetite. I keep him chained by day. What shall I do to strengthen him? Ans. Keep him chained at night and give him his freedom for the most part by day.

LEX, Baltimore.—The fly you require is a black hackle, furnished with English pheasant hackle, ribbed and tipped with tinsel. Tail, guinea feather, dyed yellow and mixed with mallard. Wing, guinea feather. Hook, No. 3 or 4. Miss McBride, of No. 889 Broadway, New York, can furnish you.

H. S., Rosedale, N. Y.—1. Give me the names of some of the best makers of Express Rifles (with address). 2. Does the "Sportsman's Gazetteer" tell in what localities fur-bearing animals may be found? Ans. 1. Henry, of Edinburgh; Rigby, of Dublin, and all the leading English makers. 2. It does.

XAC, Richmond.—1. Has ——, of London, any reputation as a gun-maker? 2. Where can I get Belmontyle oil? or is this good for rust in gun barrels, or only a preventive? Ans. 1. Not well known. 2. Riggs is the maker. Most all gunsmiths have it. Both a preventive and cure. Try Eaton's rust preventive. See advertisement.

E. R. B., Newark.—1. My D. L. gun, modified choke, leads badly. What will prevent it? 2. How shall I get the lead out? 3. Is the Newark Glass Ball Club in Newark? Since when was it formed? Ans. 1. Use chilled shot. 2. Eaton's rust preventer and lobricator with a scratch brush. 3. In Newark, N. J. At the close of last year.

N. D., Boston.—Can you give me the name of a reliable book giving good shooting and fishing resorts in New England? Ans. The best books are "Hallock's Fishing Tourist" and the "Sportsman's Gazetteer." You will also, by applying at the offices of the various New England railroads, procure guide books and excursion routes which are of value.

MUZZLE-LOADER, W. Philadelphia.—1. Have a double barrel muzzle-loader 30-inch barrels, 7 pounds, plain steel barrels. Do you think it would be safe to choke-bore the gun? 2. Give me the name of a book on taxidermy with cost. Ans. 1. With plain steel barrels would not advise choke-boring. Don't. 2. Brown's Taxidermist's Manual, price $1.00.

G. H., Philadelphia.—The regulation size for a cocker is from twenty to twenty-five pounds for what is called in England the modern cocker. There are good dog prize-winners nearly thirty pounds. We incline to the idea of the judges that eighteen pounds is rather undersized, though we may inform you that twenty years ago fifteen pounds was an average.

E. H., Philadelphia.—Have a water spaniel four years old. Has never been sick before. A week ago he rolled in some filth. I washed him under a hydrant, thoroughly scrubbing him. He shivered a good deal. Has been sleepy and sluggish. What shall I do? Ans. The dog probably took cold from the cold water played on him by the hose. Keep him housed and he will probably get all right in time.

T. C., Providence.—1. My pointer pup is five months old. Lately blotches of humor have come out on his body. Hair falls out; rather weak on his legs. Feed him on boiled Indian meal, milk and a little meat. What must I do? 2. Is the "Sportsman's Gazetteer" a bound volume? Ans. 1. Feed no meat for a month and rub in a little kerosene oil upon the parts affected. 2. A handsomely bound volume.

J. W., Cincinnati.—1. Have a Gordon setter bitch, 10 mos. old. I want to breed, but cannot afford the $25 asked for use of a good Gordon setter. I am offered the services of a fine English setter for $15. What would you do? 2. Give me the name of a book on the treatment of hunting dogs? Ans. 1. Better keep the breeds distinct, although the cross may be a very good one. 2. Stonehenge, Idstone, Hallock's "Gazetteer."

L. H., Hillsboro, Pa.—1. Where can I obtain chromos of game birds? 2. Where can I procure cinnamon spaniels? 3. Are such dogs good for ruffed grouse and woodcock? Ans. 1. Currier & Ives, 117 Nassau st., N. Y. 2. We can recommend as breeder of good cocker spaniel M. P. McKoon, Franklin, Del. Co., Pa. 3. Better for woodcock generally than for ruffed grouse, though if carefully trained make good dogs for ruffed grouse.

GRASS, Philadelphia.—We have looked over the various seed catalogues and made inquiries as to where the seed of *Calamagrostis arenaria* may be procured, but have failed. We have no doubt, however, that Mr. A. Veitch, New Haven, Conn., the author of the article on its uses, etc., will have much pleasure in gathering our correspondent (whose note we have unfortunately mislaid) some seeds of it during the coming season.

B., Fort Hamilton.—Are the smelts of the Passaic and Raritan rivers the same as those caught in other waters? 2. Does the Columbarian Society publish reports or journals, and if so, where can I obtain them? 3. Where is the "Nutall Bulletin" published, and what is the yearly subscription? Ans. 1. Believed to be identical. 2. Write to the Secretary, Mr. J. O. Thurston, Sing Sing, N. Y. 3. Address R. Deane, Esq., Cambridge, Mass. $2 per annum.

L. B. McC., Brownsville, Tenn.—1. What would be the load for general shooting in a 32-in., 14 bore, for snipe, woodcock and squirrel? 2. What do you think of —— collars? 3. What do you think of Hazard's powder? 4. Where can I get a book on taxidermy, and price? Ans. 2½ to 3 drs. powder; 1⅛ oz. shot. If your gun is 7 to 7½ lbs. you can use the 3 drs. 2. Do not know about them. 3. An excellent powder. 4. Get Brown's "Taxidermist's Manual," price $1.00.

M. C., Boston.—My setter dog, seven months old, has a running of the right eye. Seems healthy otherwise. Coat rather rough, bowels and secretions all right. Good appetite. Good kennel and plenty of ground to run on. Save his eye he is in first rate order. Have bathed his eye in milk and water, but it is no good. Will you prescribe? Ans. Use a lather for the eye composed of two grains of sulphate of zinc to an oz. of water and apply three times a day. Your address attended to.

S. G. C., Boston.—1. Has the —— rifle for '78 been proven, beyond a doubt, to be as good as that of '77? 2. If I buy one of the above from a gun dealer am I as sure to get a true rifle as if I ordered it direct from the manufactory? 3. Is there more than one make of cartridge for the '78 rifle, and if so direct me which to get for target practice at 1,000 yards. Ans. 1. A question no fellow can answer. 2. Any respectable dealer will sell you a genuine rifle. 3. The U. M. C. Co., of Bridgeport.

F. H. O., Peoria.—1. Do you consider a —— rifle, .38, as good as any of a different make? 2. Let me know which is the best. 3. Can I use a short cartridge for a rifle that chambers a long one? 4. Can I put a small charge in a long shell? 5. Which do you consider the best ball trap? Ans. 1. There are better. 2. Respectfully decline answering. 3. Not with good results. 4. Yes, by filling the shell over powder with dry sawdust or bone dust. Have seen good shooting done this way. 5. Respectfully decline answering.

F. H., Elizabethtown.—1. What is the best and most accurate breech-loading, .44 cal., rifle? 2. Is the —— mid-range accurate from 100 to 500 yds.? 3. I can get one for $31. Would you advise the purchase? 4. What is the difference between the sporting and Creedmoor stock? 5. Is the "Sportsman's Gazetteer" illustrated? Ans. 1. Either Sharps', Remington's, or Ballard's. 2. Wonderfully so. 3. Advise purchase if in good order. 4. The sporting stock is cut to fit into the shoulder, the Creedmoor is like the butt of a gun stock. 5. Not illustrated.

F. A. C., Northampton, Mass.—1. Do you think a —— a good gun? 2. Do you think American or English guns the better? 3. Which is the best American gun? 4. Is —— a good maker? 5. Do you think I ought to get a good B. L. for $75? 6. Do you think that the —— is a good single-barreled gun? 7. Where can I get the Mass. game laws? Ans. 1. The name you mention is put on all guns, and is no name at all. 2. and 3. Respectfully decline answering. 4. A very good maker. 5. Yes. 6. A very good gun. 7. Apply to your member of the Legislature.

AMATEUR, Portland.—1. Have a setter pup six weeks. Feed him on crackers and milk. Puppy does not seem satisfied. Is it good food, if not what shall I use? 2. At what age does distemper attack dogs? Are they more liable to die of worms than of distemper? 3. My puppy is kept in a warm kitchen. Is that the proper place? Would it be likely to give him distemper? Ans. 1. Crackers are too fine; give mush and milk. 2. From six months to one year. Not so liable. 3. Should be out of doors in the day time. Kitchen very good place at night. Will not have distemper at his age.

C. T., Meriden.—Have a setter dog and pointer bitch. They are kept together. On the bitch coming in heat she was separated from the dog for twenty days. One week afterward she was visited by a pointer. Would it be possible by associating with the setter that the puppies would be marked like the setter? The bitch never was visited by the pointer? Ans. It is not probable that association will have any effect in the mother you refer to, although physiologists are somewhat divided on this point. Jacob's little trick upon Laban in the matter of the ewes, as recorded in the Bible would seem to favor the idea of positive influence.

G. W. A., Philadelphia.—1. What is considered a good pattern at 40 yards, 30 inch circle, 4 drs. of powder, 1⅛ oz. No. 8 shot for a 10 bore gun? 2. Where can I get Captain Bogardus' rules for glass-ball shooting? 3. What action is the strongest on a breech-loader? Ans. 1. As a general rule with the calibre and charge you name divide the number of pellets by two and this is a good penetration. See our tables to prove this rule at the trial of chilled shot. 2. In the second edition of Captain Bogardus' book to be published on the 1st of March. 3. Generally the old-fashioned double grip is thought to be the strongest, but there are many different opinions.

F. H. W., Elmira.—1. Is the —— as good as any other American gun for the price? 2. Would a 12 bore, 28 or 30, be good for general shooting? 3. Would the above guns be suitable for hunting deer? 4. Is the opening of the trout season the same in Pennsylvania as in New York? 5. Would a .38 cal. muzzle-loading rifle be better for deer hunting than a 12 bore —— gun? Ans. 1. Yes. 2. See a general article on this subject in the F. AND S. AND R. AND G. of Feb. 7, on 10s and 12s. 3. They would. 4. Both on the 1st of April. 5. Depends on the character of the country, and above all on the skill of the sportsman. Generally deer are more readily killed with buckshot at close quarters, but you can shoot at longer distances and, of course, more effectively with a rifle.

AN OLD SUBSCRIBER, Philadelphia.—A beagle resembles a small harrier in shape, but with larger body and shorter legs in proportion. The head must be wide and round (for head, judges' points are fifteen); nose squarish; soft, full and drooping ears; not too much hair on him, and slight brush even at the end of the tail. A rough beagle varies somewhat, having a coarser coat, possibly from some terrier crossing. Both of these breeds—the old-fashioned and the rough—average about fourteen inches. The dwarf beagle is a delicate little fellow, following the trails of the larger breeds, though his height should not be much more than ten inches. Colors about the same as in foxhounds. Tail not fine in any of the breeds, and should be brushy at the end. Ears pendulous and not too close to the head.

DEDHAM.—1. Who advertises a dog collar, etc., in your paper at 7 cents? 2. What is the difference between a shepherd's dog and a colley? Ans. 1. Thomson & Son, 301 Broadway. Think their price is $1. 2. The difference between the English sheep dog and the colley are plain. The sheep dog is built like a strong low greyhound, but covered with a woolly hair. Tail long and bushy. Mostly a peculiarity is that they have a double dew claw. They are of all colors. The colley has a thicker coat, with more body. Is stouter in form. Color mostly black and tan, with a little white. The true colley is said to have the outline form something like the dingo. A colley has mostly one or two dew claws on the hind legs. We may add that some of the best breeds of the English sheep dogs are tailless. There is a certain forever-alert air, a liveliness in a colley which an English sheep dog does not have.

F. D. W., Auburn.—1. My left barrel (full choke) at 10 yds., with No. 4 shot, 1⅛ oz., and 5 drs. powder, puts 82 shot in a 30-in. circle. At 40 yds. with 1⅛ oz. No. 8 shot, not chilled, it puts 250 pellets in same circle. What kind of shooting is that? 2. How many pellets of common shot, No. 4, using 5 drs. Hazard's powder, at 50 yds., would you consider extra shooting? 3. How many No. 2's? 4. Will 30-in. barrels, as a rule, shoot as well as longer barrels—10 gauge? 5. What charge of powder would you advise for my gun? 6. What kind of target is 84 pellets at 60 yds., with 5 drs. powder and 1⅛ oz. No. 6 shot? Ans. 1. The target with the larger sized shot is very good, and that with the smaller shot not so good. 2. 100 to 110. 3. 60 to 65. 4. Not much difference, if any. The best makers build 30 and 32 inches. Matter of taste. 5. Think you use too much powder for pattern; try 4 drs. 6. It is a very long distance. You ought to have put over a hundred on the target.

J. H. P., Augusta, Maine.—1. Give me the correct size of bull's eyes for Creedmoor targets for off-hand shooting at 100 and 200 yards. 2. The rules and regulations published by you give a "third class target for all distances up to and including 300 yards as having an eight inch bull's eye," while Dennison's Creedmoor target marked "100 yards practice" has only a four-inch bull's eye. Which is right? 3. Is there any book that gives any useful information about off-hand rifle shooting? 4. Is the practice of scoring by the Creedmoor system superior to actual measurement, or "string?" If so, why? 5. What is the best score on record of off-hand shooting at 100 yards, Creedmoor score? Ans. 1. For 100 yards, four inches diameter; for 200, eight inches. 2. According to the rules of the N. R. A. we are right. 3. Not any. 4. Not as good as the string system for accurate measurement, but adapted to military shooting. The only rational method is the system of rings used by the Germans. 5. Forty-seven. This has been made several times.

A. H. H., Nova Scotia.—Would otter and mink breed if confined in small enclosures? Do they breed more than once a year; if more, how often? How long do they carry their young? What is about the average number of young at a birth? Would it be necessary to have a stream of running water through the enclosures? Some two or three years ago I saw an article in an American paper concerning mink breeding, and stating that some persons in New England had gone into the business. Have you ever heard of such establishments? If so, how are they constructed? Can you recommend me a good work on the breeding or habits of fur-bearing animals? Ans. We are really very sorry that we have not the space in which to answer all your questions, but to do so we shoul l have in issue an extra. Back numbers of FOREST AND STREAM contain what you want. See F. & S. Oct. 24, 1871, and July 2, 1874. Also consult Coues' "Fur Bearing Animals," and write to Fred. Mather, care this office. "Fur Bearing Animals," by Elliott Coues, U. S. A., is the book you want—"Miscellaneous Publications," No. VIII, published under the auspices of Hayden's Survey.

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—(*Adv.*)

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Tiffany & Co., Silversmiths, Jewellers, and Importers, have always a large stock of silver articles for prizes for shooting, yachting, racing and other sports, and on request they prepare special designs for similar purposes. Their TIMING WATCHES are guaranteed for accuracy, and are now very generally used for sporting and scientific requirements. TIFFANY & CO. are also the agents in America for Messrs. PATEK, PHILIPPE & CO., of Geneva, of whose celebrated watches they have a full line. Their stock of Diamonds and other Precious Stones, General Jewelry, Artistic Bronzes and Pottery, Electro-Plate and Sterling Silverware for Household use, fine Stationery and Bric-a-brac, is the largest in the world, and the public are invited to visit their establishment without feeling the slightest obligation to purchase.

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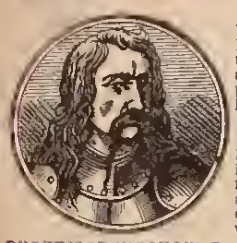

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Jan31 4t

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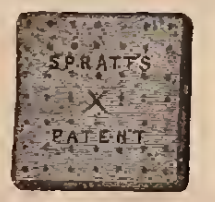

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SETTERS FOR SALE.—"Fan," black and tan, pure Gordon, imp. stock, out of "Maud," by Marbles' "Orouse," two years old; taught first lessons; bred to "Lelaps" Jan. 5, 1878; price $75. One dog, two years, white and chesnut, sire Tucker's dog, Providence, R. I., Copeland's "Old Pete" grand sire, dam English imported, very handsome, 23½ inches high; taught first lesson, and game shot over; price $75. "Bell," half imported red Irish and half English, color orange, two years old, taught first and second lessons (see circular), extra in field, fast, stanuch and handsome, 23½ inches high, never bred, price $125; will breed her to "Lelap," same price. Dogs trained and boarded. For terms and particulars, send for circular. FRANKLIN SUMNER, Milton, Blue Hill, Mass. j17 4t

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FULL-BLOODED—Two Irish setter bitches, four months. Sire of pups, Don, imported from J. C. Cooper, of Limerick, Ireland, by C. H. Turner, Sec. Nat. Kennel Club, St. Louis, Mo.; dam, Countess, by Rodman's Dash. One Gordon bitch, eighteen months old; hunted this fall, stanuch on quail and very fast, with good nose; will make a good one. One Gordon bitch eight months old. Full pedigree given with pups. H. B. VONDERSMITH, Lancaster, Pa. Nov22 tf

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Our chilled shot will be found **free from shrinkage,** more **spherical,** more **uniform in size heavier** and of **brighter** and **cleaner** finish than any other. SEND FOR CIRCULAR.

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Thoroughbred Gordon Setter puppies, out of our Gordon setter bitch "Border Lily," by L. H. Leonard's Gordon dog, "Pride of the Frontier," whelped January 25, 1878.

The above stock comprises the celebrated Major S. Stockton, Dr. J. H. Gautier, Jobling (of Morpeth), Langataff, Sir Arthur Ohicheater, and George, Duke of Gordon airedales.

See article on "The Gordon Setter," in the *Chicago Field* of January 19, 1878.

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SPIKE COLLARS.—Spike Collars, by means of which dogs of ANY AGE OR BREED, no matter how long hunted, or what the disposition, can be taught to fetch and carry, and to retrieve game in a most perfect manner, with no play about it. Dogs broken of gun shyness and whip-shyness, made steady before and behind, and "to heel" steadily; prevents lugging on the chain, besides a much more extended sphere of usefulness. Price, with directions for using, $3. Kennel collars, which no dog can get over his head, price $1. Address M. VON CULIN, Delaware City Del. feb7 tf

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WANTED A SHOOTING LOCALITY IN MARYLAND—A gentleman is desirous of purchasing on Chesapeake Bay, or on the Eastern Shore of Maryland, a small property where good duck shooting and game may be found. It must be easy of access. No great improvements required. Price must be moderate. Address J. E. S., care of FOREST AND STREAM. feb21 tf

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WANTED—A copy of Roxton's Life in the Far West, Harper & Bros., 1856; also Marcy's Prairie Traveler, Harper & Bros., 1857. Address this office. feb7 tf

SHETLAND PONY WANTED.—Black, diminutive, gentle, sound, and not over nine years old. Must be low. Address HENRY D. ATWOOD, Taunton, Mass. feb14 4t

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I want to send some SMART, HONEST Man or woman, Boy or Girl, in every town, a very pretty CHROMO, 12x15 inches in size, and a sample of a large family paper, circulars and full particulars how any one can make a few dollars, easily and honestly. The above sent on receipt of 15 cts.

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FFFG, FFG, and "Sea Shooting" FG, in kegs of 25, 12½ and 6¼ lbs, and cans of 5 lbs. FFFG is also packed in 1 and ½ lb. canisters. Burns strong and *moist*. The FFFG and FFG are favorite brands for ordinary sporting, and the "Sea Shooting" FG is the standard *Rifle* powder of the country.

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BOSTON SHOOTING SUIT.

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Flexible, Waterproof, Tan-Color, Duck.

Each article—coat, trousers, vest and hat—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

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We make no discount except to the trade. The price of the suit complete is $13.

The suit consists of coat, trousers, vest and choice of either cap with havelock, or hat.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are copper riveted, and nothing is neglected to make the whole suit complete in every way.

This is what one of our best sportsmen says of it, writing from camp: "Miserable, drenching rain, pouring down in a perfect deluge, as if a second flood had come upon the earth, two portages to cross, and a swamp between them; that was the prospect before we reached our camping ground. Such a swamp, too; almost impassable, for where the ground was firm was an almost impenetrable thicket of thorns and what not, that looked as if it would tear you to pieces. Well, we got to our camp, and I must confess I was agreeably surprised on my arrival. Although I had been nearly eight hours under incessant rain, laboring and striving along under the adverse circumstances above mentioned, yet I found myself comparatively dry, and my clothes without a tear. For the benefit of our brother-sportsmen, let me advise one of Messrs. Simmons' (of Boston, Mass.) Waterproof Suits. Oh! what a relief it was to find one's tobacco was dry, and that one could light a pipe; that you could laugh at your miserable friend, who stood shivering and shaking as if he had the palsy; and then, next morning, oh! what fun it was to see him mending his clothes, while I had not a tear to complain of. Ventilation, also, that great bugbear of waterproof suits, is legislated for in the most ingenious manner. No sportsman should fail to supply himself with a suit which is at once cheap, practical, and will last a nalmost indefinite time."

Our Leather Jackets and Vests
are the great wind protectors. They are made from soft, pliable black leather, flannel lined, and sell at $9 and $7.

Our Flexible Tan-Colored Waterproof Leather Coats and Breeches
are considered the finest things ever made. They sell at $22 and $15.

An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

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G. W. SIMMONS & SON,
OAK HALL, BOSTON, MASS.

PRICE, BOXED, WITH DARTS, SLUGS, TARGETS, &c., $10.
FULL NICKEL PLATE $12.

THE NEW IMPROVED AIR RIFLE.
Especially Adapted for Target Practice,
SPLENDID FOR SHOOTING SMALL GAME and touching up
CATS OR DOGS.

Just the thing for Taxidermists to collect specimens. There is no report or danger attending its use, or any auxiliaries required to operate it. It can be handed with ease and rapidity. It is extremely simple, and has no delicate parts to get out of order or wear out. For sale by the Trade generally. Sent upon receipt of price or C. O. D.

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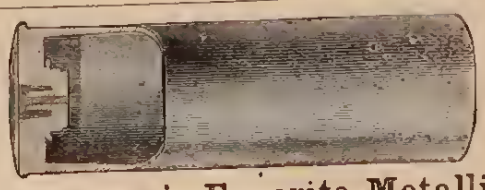

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These Shells are easily loaded, and the caps easily extracted from inside. Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2⅝ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOANE, Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

W. W. Greener's Patent Wedge Fast, Hammerless Breech-Loader.

THE GUN OF THE FUTURE.

It has already made its mark in Great Britain. The self cocking is effected by the raising of the breech ends of the barrels for loading, and works smoothly and without requiring much force to open the gun and cock the locks. There is a safety bolt at the side which answers for half cock. The mechanism of this action is exceedingly strong and simple, and is better suited for hard work than any other gun in use.

W. W. GREENER winner of the great London Gun Trials of 1875 and 1877, beating 121 guns by all the best makers of London, Birmingham, Edinburgh and Dublin.

These guns are warranted to kill game at 100 yards. Read W. W. GREENER'S book on Choke-Bore Guns and How to Load, published by Messrs. Cassell, Petter & Galpin, New York.

Address, ST. MARY'S WORKS, Birmingham and 68 Haymarket, London.

SHARPS' RIFLES---MODEL 1878.

ORDERS FOR THE NEW MILITARY AND LONG-RANGE RIFLE ARE NOW BEING FILLED.

SEND FOR ILLUSTRATED PRICE LIST.

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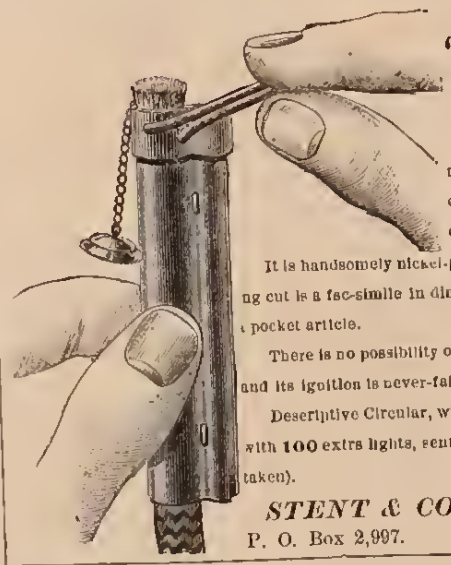
NEW YORK WAREROOMS, 177 BROADWAY.

Colt's Revolvers.

Great reduction in the price of the New Model; 22, 30, 32, 38 and 41 calibres. Send for new reduced price list of Revolvers, Boxing Gloves, Air Guns, Novelties and Sportsmen's Goods.

Fish & Simpson,
P. O. Box 4 968. 132 NASSAU ST., N. Y.

CHEAPER than the CHEAPEST.



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CIGAR LIGHTER.

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It is handsomely nickel-plated; is no way complicated, and the adjoining cut is a fac-simile in dimension, rendering it all that could be desired for a pocket article.

There is no possibility of the "Smoker's Companion" getting out of order, and its ignition is never-failing.

Descriptive Circular, with directions, accompanies every Lighter. Sample, with **100** extra lights, sent prepaid, on receipt of 40 cents (postage stamps taken).

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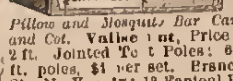

Valise Lounge, $5 to $8. Trade discounts. *Free Circulars. Pillow and Mosquito Bar Canopy with every Lounge and Cot.* **Valise Cot, Price $10.** Spreads 6 ft. x 2 ft. Jointed Tent Poles: 6 ft. poles, $3 per set; 9 ft. poles, $4 per set. Branch Offices—1 Cortlandt St., N. Y., city; 13 Faneuil Hall Square, Boston; 16 Calle Tejadillo, Havana; 415 Sansome St., San Francisco. Agents wanted. jy12 cow

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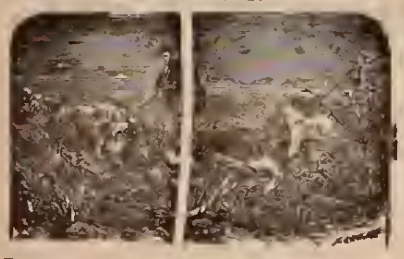

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A MONTHLY JOURNAL DEVOTED EXCLUSIVELY TO BIRDS AND BIRDS' EGGS.

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Time, New York to Grand Rapids, 37 hours

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BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
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STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 5:30, 12 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

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NOW A FAVORITE AND DELIGHTFUL WINTER RESORT, is reached in seventy hours from New York, and being surrounded by the warm waters of the Gulf Stream enjoys an equable temperature of about 70 deg.

The elegant British Steamships "Bermuda," and "Oamina," 1,030 tons, fitted expressly for the passenger travel, are dispatched from New York for Bermuda fortnightly, making connection at Bermuda with steamers for St. Thomas and West Indies. For full information apply to A. E. OUTERBRIDGE, Agent, 29 Broadway, N. Y. Dec 21 1y.

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The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep 25 1y

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By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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For Fernandina, Fla., Port Royal, S. C., and Brunswick, Ga.

Sailing every FRIDAY from Pier 20, E. R., at 3 P. M.

Close connection made at each port with all railroads for the interior, and at Fernandina with the steamer Carrie (which has been refurnished), for Jacksonville and the St. John's River.

For through rates of freight and passage to a points in the South and Southwest, apply to

G. H. MALLORY & CO., Agents, 153 Maiden Lane,
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Freight & Pass'ngerLine.

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The South and the Southwest

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FLORIDA PORTS,

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At 3 o'clock P. M. From Pier 27, N. R.

CITY OF ATLANTA, Capt. M. S. Woodhull. CHARLESTON, Capt. R. W. Lockwood.
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The above steamers have been handsomely fitted up for the convenience of passengers, and are unrivalled on the coast for

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Close Connections at Charleston with the favorite and well-known Florida packets, DICTATOR, Capt. Vogel; CITY POINT, Capt. Scott, for FERNANDINA, JACKSONVILLE, ST. AUGUSTINE, PALATKA, ENTERPRISE, MELONVILLE and all points in Florida.

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VIA THE
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To Boston and Return, $5.

Magnificent Steamers NEWPORT and OLD COLONY leave New York daily (Sundays excepted) at 4:30 P. M. This is the only Sound line giving passengers a FULL NIGHT'S REST. Passengers take any one of the FIVE MORNING TRAINS from Fall River to Boston.

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From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

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Steamship Carondelet, February 6 and March 9, and monthly thereafter from Pier 16, East River, New York.

For all particulars, illustrated guide, &c., apply to

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FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

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Dec14-1y

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

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Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

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Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

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THE PENNSYLVANIA R.R. CO.

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The lines of

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Split Bamboo Rods a Specialty

Every Rod bearing my name is six strands from butt to extreme tip, and mounted with my "patent waterproof ferrule," and warranted against imperfections in material and workmanship.

Any style of finish, hexagonal or round, as may be desired. Rods of Greenheart, Ash, or Lancewood, MADE TO ORDER.

I was awarded a MEDAL and DIPLOMA at the Centennial for my Split Bamboo Rods.

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A variety of my rods may be found at

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One French Double Gun, pin-fire, 16 gauge..... 25
One More & Harria Muzzle-Loader, 10-gauge, 8½ lbs., double gun..... 35
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One Ballard Rifle, .44-cal., 10 lbs..... 20
One Colt's Revolving Rifle, 6 shot..... 18
One Maynard Rifle, little the worse for wear.... 8
One Single Muzzle-Loader, 10-gauge, cost $45.. 15
One Single Breech-Loader, Stephen's make..... 10
One Skeleton Stock Stephen's Rifle, .22-calibre, in case..... 19
One General Fishing Rod, will make up five different rods, German silver-mounted, cost $40.. 20
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J. HOLLIS & SONS—12-bore, side lever, pistol grip, 9 lbs. weight; good as new; in case with shells; cost $85; price..... 55
WEBLEY—12-bore, 7 lbs.; laminated barrels; scroll-fence breech; good as new, and a bargain..... 48
ESMINGTON—10-bore, 8 lbs. weight, $45 grade; last one for..... 30
SINGLE BREECH-LOADER—Damascus barrels, 10-bore, 8½ lbs. weight, pistol grip; made by Nichols & Lefever, and cost $85; present price..... 50
Also a very fine Hollis muzzle-loader; 30-inch, 8½ lbs., nearly new; cost $85; price..... 25
Also a Wm. Moore breech-loader, back-action locks, twist barrels, for..... 28

The above guns are nearly all the property of gentlemen who have no further use for them, and are sold at a great sacrifice. Each gun is exactly as represented, and will be sent for examination on satisfactory reference, or receipt of sufficent money to pay express charges. List of second-hand rifles next week.

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Mortimer & Kirkwood,
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Feb14 6m

SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, Jan. 24, 1879,

at 11 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AESY, President.
J. H. BESSENS, Cor. Sec., 37 Bowery, New York.

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Anglers will find at the

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a choice selection of Trout and Black Bass Flies, tied with great care on the best steel hooks. Every Fly Warranted.

Trout Flies per dozen. $1

Flies selected for any locality, whether for trout or black bass fishing, and any desired information, as to when, how or where to fish, cheerfully given.

Material furnished for fly tying.

SIX-SPLIT BAMBOO FLY RODS.
Best quality, two tips and tip case, $18.

Holberton's full-length, genuine Russia Leather Fly Books, with the 'Hyde Clip,' holding one gross, $8; 8 doz., $5.

GLASS BALL TRAPS and GLASS BALLS of all makes, and in large and small quantities. Send for prices.

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The best and cheapest breech-loaders made. New model now ready.

New Styles of Soft Duck Shooting Suits, Leather Jackets, Rubber Goods, Tents, Stoves, Lamps, etc.

DEAD SHOT POWDER.—TRY IT.

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Blank Score and Note-book, with rules and receipts for sportsmen, 50 cents.

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P. O. BOX 5,109.

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Manufacturer and Importer of
Fishing Tackle.

FLIES selected for the different seasons and for any given stream or locality.

TAPERED CASTING LINES for trout and salmon Also, the celebrated Salmon Lines without knots, Tapered and Reel Lines of horse hair and English waterproof braided silk.

REEL LINES of every style and quality.

RODS and REELS of the best manufacture.

HOOKS, Gut, Colored Mohair, Feathers of all kinds, Tying Silk, Tinsel and all material necessary for making flies supplied to amateurs.

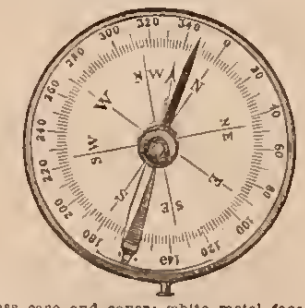
BAITS for trolling, artificial Minnows and spoons. The best BAITS of the PERIOD for pickerel, perch, bass, sea trout and salmon.

Medal, with Special Diploma, Decreed at International Exhibition, 1876.

My motto is, THE BEST GOODS AT THE LOWEST FIGURES.

BOATS! BOATS! BOATS!—The lightest and most durable boat in the world. Weight, 25 lbs. and upward, built of white cedar. H. M. SPRAGUE, Manufacturer, Parishville, St. Lawrence County, N. Y. Jan17 3m

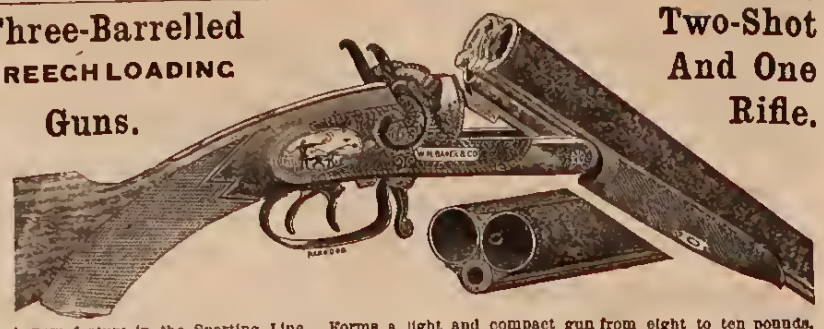
LOST!
BECAUSE HE HAD NO
COMPASS.
THIS IS AN EXACT FAC-SIMILE.



Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

RONAN'S Metal Shell Cleaner. Sold by the trade or sample by mail, $1.50—10 and 12-bore. J. F. RONAN, 788 Shawmut ave., Boston, Mass. feb14,3m

Three-Barrelled BREECH LOADING Guns.
Two-Shot And One Rifle.



A new feature in the Sporting Line. Forms a light and compact gun from eight to ten pounds, giving to sportsmen the very thing so often wanted in all kinds of shooting. We are also manufacturing a Double-Shot Gun, containing more good points than any other gun in the market.

PRICES—Three barrel, $75 to $250. Double barrel shot guns. Damascus barrel, $50 to $200. Twist barrel, $35. SEND FOR NEW CIRCULAR.

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FEATHER FILLED GLASS BALL.
PATENTED OCTOBER 23, 1877.
The "Standard" Ball.

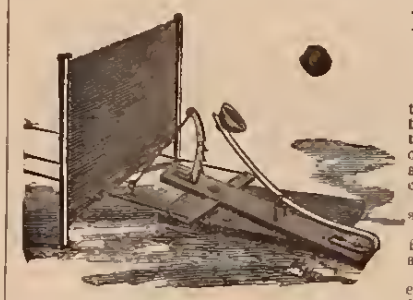
The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against having in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade.

HEADQUARTERS BOHEMIAN GLASS WORKS, 214 Pearl Street, N. Y.



Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. Price $8.

Parties buying glass balls will receive score book for glass ball shooting in each barrel.

HEADQUARTERS FOR BALLS, HAGGERTY BROS., 10 Platt Street.
FOR TRAPS, HART & SLOANE, Newark, N. J.

Second and enlarged edition of "Field, Cover and Trap Shooting," containing instructions for Glass Ball Shooting, will be ready Feb 1. Price $2, by mail, postage paid. Address,
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NEW YORK SHOOTING COAT.

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Coat, Vest, Trousers and Cap complete if desired.

I have also completed a Canvas Fishing Jacket, with a necessary pockets, etc.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, FEBRUARY 28, 1878.

Volume 10.—No. 4. No. 111 Fulton St., N.Y.

For Forest and Stream and Rod and Gun.

Voyaging on the Upper Missouri.

By Ernest Ingersoll.

No VI.—[*Concluded.*]

WOLF POINT—THE NORTHERN PLAINS—A FRIGHTENED NEGRO—FORT UNION AND ITS HISTORY—"GOOD BYE."

WOLF POINT occupies little space in my notes and lingers loosely in my memory. It was the serene and luminous first hour of twilight when we came to a stop under the bluff, amid the yells of a hundred Indians, the swearing of the mate, the roar of escaping steam and the raising of clouds of dust consequent upon planting a dead man;* all of which somewhat disturbed both the serenity and the luminosity of the evening. A gay and lively scene was to be witnessed from the hurricane deck, which was just level with the top of the bank. The plain was perfectly level and overgrown with brown stubble which lightened up in the distance, until the horizon was reached in a low range of bright hills, where the sunset rays still rested. Coming quite to the water's edge on the left hand was a grove of heavy timber quite as sharply defined as though the ax had trimmed its boundary straight; and all along it, on this side, were fields of corn, with stalks not over three feet high, that bore ears close to the ground, and other fields of fine-looking potatoes, etc. Half a mile back from the river a group of low buildings indicated the Ageney. The whole foreground was soon filled with Indians. They came, like a flock of gay birds, racing their ponies—the poor little beasts carrying two or three apiece—at the top of their speed, each one decked out in his brightest and best, while the neglected squaws and children trudged along afoot. Many of them could talk English pretty well, and we had a good deal of sport with them, particularly one old fellow—some kind of a "chief"—whose face had a startling resemblance to the late Prof. Agassiz. Wolf Point is an agency for the Assiniboines. A part of the Sioux nation was also assigned to this post, but as the two tribes do not agree, the latter are to have a separate trading-post at Poplar Creek, a few miles below, to which point the Fort Peck equipments were then being removed. Both agencies, I understood, were controlled by the Rev. Dr. Bird in the interest of the Methodist Episcopal Church.

This evening my midnight pipe and meditations were not disturbed by demands for consolation. It is so very hot at mid-day that no comfort can be had anywhere, and it is only at early morning and evening that the deck was comfortable. My good friend Conrad at Fort Benton may enjoy the inward happiness of one great good action done in giving me a dozen bottles of St Louis lager. I put them in the ice-chest and they lasted me to Bismarck. They were a great blessing.

When I got up in the morning we were many miles on our way. The whole country through which the river flowed was a level plain, with occasional heavy groves of timber of various sorts and broad, low bottoms of sweet grass. The sandbars became more and more frequent, and wide wastes of old channel occurred every few miles, strewed with snags and drift-wood. Occasionally behind them would be a little swamp, and at such places ducks, geese and sand-hill cranes were always to be seen, but birds or animals otherwise were exceedingly rare. On one of these bars, now called Disaster Bend, just below Poplar Creek, the steamboat Chippeway was burned in 1861. It is said that the owners, the American Fur Company, were smuggling alcohol through to Fort Benton for the Indian trade, and one of the deck hands, in the act of stealing a drink, ignited the alcohol with the candle he was carrying. She was loaded with Indian annuity goods, etc., among the rest twenty-five kegs of powder. When the fire reached the powder the boat blew up, and "packages of merchandise were found three miles (!) from the disaster." Not far below, at the mouth of the Big Muddy, a considerable stream entering from the North, there used to be an important trading-post called Fort Stewart, or Fort Kipp. It was built on the Missouri, but since then the channel has changed, and the site is now far inland.

Although the distance in a straight line was not great, the bends were so numerous that uninterrupted steaming failed to bring us to the mouth of the Yellowstone, and we spent a pleasant night in the shadow of a grove of mighty cottonwoods which crowned the bluff. An incident of this camp was the bringing aboard with the wood of a live rattlesnake. The rude Othello who had unconsciously carried it turned as pale as a darkey can turn, when he discovered his freight. It was the Missouri rattlesnake (*Crotalus confluentus*), and looked much like the Massassanga, except that the colors were duller and the spots less sharply defined. The length, I should say, was not over three feet, and the body very slender. They are exceedingly common in this region.

The next morning (Wednesday) I was careful to be up early, so as not to miss seeing the mouth of the Yellowstone. I had been at its source, and now here was its mouth; if anything can be told by seeing both ends of a stream, I can be said to know this river. Compared with the broad Missouri, the branch looked much smaller than I anticipated. The banks were low and muddy, and the water was the same yellowish-brown as the larger stream, but the current swept along with a steady power which verified the river's reputation.. It did not seem possible for steamboats as large as ours to have gone hundreds of miles up this tortuous, narrow water-course, but it has been done, and will continue to be. The Yellowstone can never vie with the Missouri, however, as a steamboat route to Montana, though the navigation of its lower portion may be a very important aid to civilization when the Northern Pacific Railway is pushed through to its banks, and Sitting Bull is Christianized by the leaden Testaments of such missionaries as Crook and Miles. The district, being well watered, is verdant and beautiful. Along the river are strips of timber, and luxuriant grass lands stretch back to the barrenness of the distant hill tops, where the drought of the great plain is again supreme. In the angle of the two rivers a wide prairie lies, which is one vast bed of flowers, interspersed with pretty copses and thickets of wild rose.

For some time before reaching it we had caught glimpses of the most important point on the Missouri between Fort Benton and the outpost of civilization at Bismarck—Fort Union.

There was such a bustle of soldiery as we rounded up to the landing, so many citizens, Indians, carriages and freight teams, that the fort seemed a metropolis after our experience of adobe fortifications and wood-cutters' cabins. A cluster of storehouses and sheds at the landing seemed grand to our eyes, but beyond them could be seen the village and fort; houses with clap-boarded sides and shingle roofs, and—think of it!—green blinds. The larger of these pretentious domiciles enclosed a quadrangle, defended outwardly by a stockade, with corner towers; but outside were many small houses—dwellings of traders, laundresses, teamsters and others living at the post—until a considerable village was accumulated upon the level bluff. I wish I were able from observation to describe it more in detail, for Fort Union is a very interesting place.

This post and village, however, is not exactly *the* Fort Union which occupies such a prominent position in the annals of the Northwest. Old Fort Union was two miles farther up, and what there is left of it is now inhabited by Indians. This was the first fort built on the Upper Missouri. In the summer of 1829 Kenneth McKenzie, a trader from near where St. Paul now stands, came across with fifteen men, looking for a good place to establish a trading post for the American Fur Company, selected a site opposite the mouth of the Yellowstone, and built a stockade, 200 feet square, of logs, about 12 inches in diameter and 12 feet long, set perpendicularly, with two block-house bastions on diagonal corners of the stockade pierced with loop-holes. The dwelling-houses, warehouses, and store were built inside, of the same height as, but not joining, the stockade, leaving a space of about four feet between the walls of the buildings and the stockade. All the buildings were covered with earth, as a protection against fire by incendiary Indians. This was substantially the pattern of all the early forts; they were easily built, convenient, and good for defense. The object was to trade with the Assiniboins, a large tribe of Dakota Indians, ranging on the north side of the Missouri, from White Earth River to the mouth of Milk River, and northward into the British possessions. They were a peaceable, inoffensive people, armed with bows and arrows, living in lodges made of buffalo skins, and roving from place to place, according to the seasons of the year, occupying certain portions of their country in the summer, and during the winter remaining where they could be protected from the cold with plenty of wood. The Assiniboins call themselves Hohays or "fish netters." The Chippeways call them Assenary Bawns, or Stone Sioux, because, living on the wide prairie, they were, for want of fuel, obliged to cook their fish by warming the water with stones. So runs an old Jesuit narration. It is easy to explain this curious error on the part of the Chippeways—granting the truth of the Frenchman's account—by the fact that it was not want of fuel which caused them to boil their fish by putting hot stones in the water, but lack of vessels that would stand fire. Almost all savage tribes, before contact with the whites, did often cook their meat in this manner in water-tight baskets or troughs. As to the other assertion, that "because wood was scarce and small with them, Nature had taught them to burn stones in place of it," it probably arose from war parties of the Chippeways—their hereditary enemies—watching at a distance on the naked prairie the Assiniboins gathering buffalo chips, supposed their foes were simply picking up stones, which by some magical power they were able to ignite.

St Louis was the point from which traders brought their goods. They would start from there as soon as the ice went out with mackinaw boats, 50 feet long, 10 feet wide and 4 feet high, loaded with about 14 tons of merchandise to each boat, and a crew of about 12 men. Six months was exhausted in getting to Fort Union. In 1832, however, the steamboat Yellowstone succeeded in reaching this point with supplies. This was a decided triumph, and no more freight was tediously "cordelled" below the mouth of the Yellowstone. Farther than this progress was slow, so that it was not until about 1860 that Fort Benton was reached by steamer.

One great obstacle in the way of steamboating on the Upper Missouri was the difficulty of procuring experienced pilots. A Mexican and an Indian half-breed were employed in the earlier voyages of the Yellowstone and Assiniboin, who, comprehending the advantage of being the only steamboat pilots possessed of a thorough knowledge of the river, exercised a kind of petty tyranny over the company, often stopping the boat or purposely running it aground to gain time for a game of cards or lazy slumber. It was not long, however, before enterprising American pilots possessed themselves of a full knowledge of the river and took the places of their two wretched predecessors. No trouble has since been experienced upon this score, and in view of the difficult navigation, the Missouri pilots conduct boats up and down the river with a safety and celerity that entitle them to an honorable prominence among their brethren of the craft everywhere. In the early days of Missouri navigation, snags and sawyers were far more abundant in the river than now, consequently no boat ever ventured to run by night. There was then an abundance of dry wood all along the river, and it is probably to the gradual thinning out by the woodcutters of these dead and fallen trees within the sweep of high water that the present diminished number of snags is to be attributed. Government snag-boats did good service in removing from the lower river these terrors of the steamboatman, but were never employed upon the Upper Missouri.

Kenneth McKenzie, the founder of Fort Union, was the pioneer trader of the Northwest. He was a native of the Highlands of Scotland, and when young came into the service of the Hudson Bay Company and was sent to Hudson's Bay. He remained there until 1820, when he quitted their employ, explored the country southward to Lake Winnepeg, then across through all the Red River region to Lake Superior, finally concluding to settle on the Upper Mississippi. In 1822—a long time ago for that region!—he went to New York, secured an outfit of Indian goods and returned to his chosen ground, where he remained until he became connected with the American Fur Company, went westward and established Fort Union in 1829. For ten years afterward he was in charge of all the Northwestern fur trade. Then he resigned, went to St. Louis and engaged in business, until his death in 1857. His successor was Alexander Culbertson, who enlarged the field of operations as has already been indicated, and built Fort Benton. McKenzie was well fitted for his post by training and nature, and many stories are remembered of his adventures, hunting exploits, wars and diplomacy with the Indians and rule over his scarcely less treacherous and turbulent trappers. Catlin has immortalized him in his "North American Indians," a work by which he also has immortalized himself. He was a man of great generosity, courage and tact.

But, *tempus fugit!* When I get to talking about these old romantic fur-trading times—the knightly age of the West—I hardly know what to tell first or where to stop.

Two miles below, if you go by land across the neck of the peninsula, but nine miles around the bend by water, stands Fort Buford, another fine army settlement, the headquarters of this military district and the residence of General Hazen. The garrison consists of five companies of the 6th Infantry under Colonel More. It is as pretty and homelike as Fort Union, and appears to be even larger, being more scattered, and having a permanent village of Indian houses, or huts, near by. Between the two forts runs the boundary line between Montana and Dakota, and we are now in the latter Territory.

Here ends the "Upper Missouri," a thousand miles from the beginning, two thousand miles from the mouth of the mighty river. If I have given you any information or any pleasure in my drifting down its turbid, tawny current I am glad; if not, possibly a suggestion will linger in your mind prompting you to take the same voyage when next the restlessness of migration comes on and you are casting about for novel roads to travel. Try the Upper Missouri, above all, if weariness calls for recreation unattended by devouring excitement, or ill health requires gentle stimulus.

The Lake steamers or the railway will carry you from the East to Duluth, whence you can journey by rail to Bismarck. Thence a steamer will slowly work you up the Missouri. But a better way, unless you have no terror of the tedium of a month's voyage, is to go by the Union Pacific railway and stages to Montana, and then go down the river by steamboat from Fort Benton. And may you have the good fortune to strike the good old Benton and her hospitable officers!

Vale!

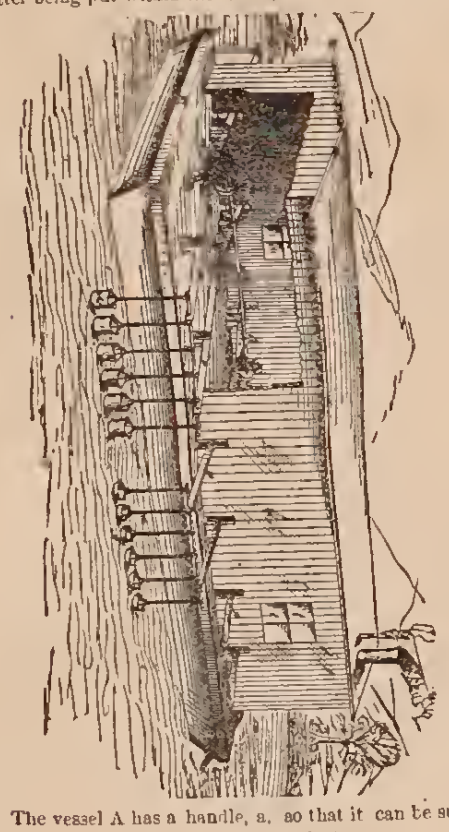
* Planting a "dead man" has no reference to burying a cadaver, so to speak, but is simply burying a stick of timber in a trench, so as to form a fixture which a steamer can tie its hawser to in the absence of trees or posts.

Fish Culture.

REPORT OF THE COMMISSIONER OF FISHERIES OF MARYLAND.

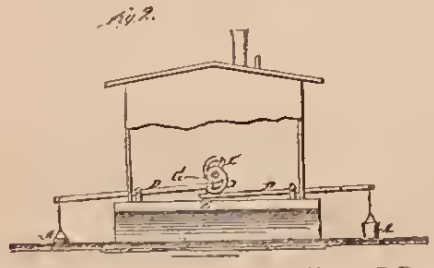
THE fisheries of Maryland are perhaps of greater importance to that State than any similar interests in the United States. With the Chesapeake Bay and numerous rivers a very large proportion of her inhabitants gain their living by fishing. The depletion of her waters, caused by overfishing, having been apparent, no other State has paid greater attention to restocking her waters.

Maryland is fortunate in possessing as Fish Commissioner a gentleman who, to a very thorough acquaintance with the subject of fish culture; combines a mechanical skill which has facilitated the surmounting of a number of difficulties. The eggs of the shad, when artificially impregnated in order that they shall hatch, have given a great deal of trouble. Before the method employed in the hatching box invented by Mr. Seth Green it was thought almost impossible to bring the eggs of the shad to maturity. Fishculturists, sometimes, used to agitate the boxes containing shad eggs in order to keep the germs alive. In the sluggish waters of Maryland, where there are no currents, it was found impossible to use the Seth Green shad-hatching boxes, as some movement in the water was a *sine qua non* of success. Accordingly, Mr. Ferguson, quite equal to the emergency, devised a mechanical process which rendered him quite independent of currents. The invention consists in a series of vessels in which the spawn is placed combined with a mechanism that will impart motion to the vessels, thus creating the necessary current and change of water. The illustrations we give fully explain the mechanism. A A represent a series of cylindrical vessels made of sheet metal, which are slightly tapering. Each vessel is provided at its lower end with a bottom, B, of wire cloth, which is held in place by a metal band C. If necessary the top of the vessel is provided with a wire cloth, B', held by the band C', the latter being put within the vessel, while C is outside.



The vessel A has a handle, a, so that it can be suspended. (Fig. 4). In fig. 3 E is the hull of a boat or scow or pier in

Fig 3.

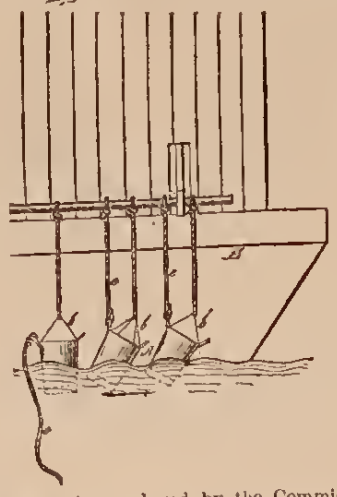


each side of which are arranged a series of levers, D D, pivoted to the boat or pier, with their outer edges projecting a suitable distance beyond the sides of the same. The vessel A thus hung is so suspended that it is never more than two-thirds deep in the water. The levers to which the vessels are attached are operated by a series of concentrics, I I, set at various angles upon a continuously rotating shaft, G, connected to and rotating by a steam engine, or any motive power.

The vessels being cylindrical in form, presenting no angles or corners, can collect no sediment or matter deleterious to the life or development of the spawn. By this invention of Mr. Ferguson the hatching of the eggs of the shad can be carried on in still waters, or even in waters exposed to storms.

This invention of Mr. Ferguson of course seems very simple, but it has required a good deal of practical judgment and experience to perfect it. In the last report of the Commissioner mention was made of a peculiar apparatus consisting of tanks in which the water circulated, when the power used for propelling the steamer served to keep the eggs which might be collected on board alive and in good order until carried to the hatching nurseries. Last spring on the Lookout,

Fig 3.

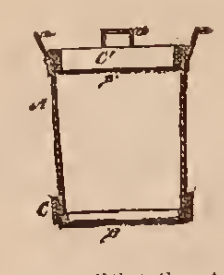


a small steam yacht employed by the Commissioner, over 1,000,000 eggs were easily kept during fifteen hours until safely placed in the hatching apparatus.

Mr. Ferguson says "that in judging of the efficiency of the means to restock our waters with shad, we must not lose sight of the fact that there has been an alarming and steady decrease in the field of shad. * * * * Surely, if the decrease can only be arrested, even if there is no marked increase for several years to come, the work of artificial propagation, as yet scarcely more than yet begun, should be prosecuted with the utmost energy."

In 1875, some 2,305,000 young shad were placed in the Patuxent River, and about half as many in the Chester River. Now fishculturists are pretty well satisfied that it is the male fish which arrive earliest in the season, though they do not penetrate far up the river. Mr. Ferguson, then, had the right to expect that the young male shad would put in an appearance last year in the Maryland waters. These anticipations were realized, for in April of last year, the testimony furnished by fishermen was, "that the catch of buck shad had been larger than known for many years; in fact, that they had not taken as many male shad in forty years."

Fig 4.



During the last two years an aggregate of 1,645,000 young of the California salmon have been hatched and planted in Maryland waters by the Commissioner. A very interesting series of experiments with the smelt taken from the Raritan have also been a subject of careful study. The report of the Commissioner—quite voluminous of the kind—is of a most interesting and novel character, and we particularly recommend the many carefully executed illustrations of the spermatazoa and ova of fishes.

AMERICAN FISH CULTURISTS' ASSOCIATION.—As we are going to press the seventh annual meeting of the association is taking place, the Hon. R. B. Roosevelt presiding. The attendance is unusually large, and consists of various fish commissioners of the States, and of the leading fish culturists in the United States and Canada. We shall be able in our next issue to give a detailed account of the meeting.

BROOK TROUT AT THE AQUARIUM.—The brook trout raised at the Aquarium, in the Ferguson jars, are thriving famously. The eggs were first placed in the hatching jars on January 2. Some 48,000 young trout are now swimming about in the most lively way. These trout are for stocking Mr. Percy Belmont's streams. Some 5,000 more fish are now being reared for Mr. Reiche. The whole process of hatching and rearing fish may be seen at the Aquarium.

STOCKING ESOPUS CREEK—A SUPPLY OF FISHES COMING.—Seth Green, of the State Fishery Commission, at Rochester, has written to George B. Styles that he will, within a few days, send on a man with a requisite number of cans, to contain full one hundred fully-matured black bass, weighing between two and three pounds each, and the female to be filled with spawn. Much credit is due to Mr. Styles for his perseverance in the matter of stocking Esopus stream with these and other game fish. OUR HARRY.

THE POSSIBLE APPEARANCE OF SALMON IN THE MISSISSIPPI.—The Memphis *Avalanche* of a late date states that salmon have been caught in abundance near Memphis. As it is possible that the *Salmo quinnat* may have grown somewhatin size since their introduction into the river, we await with a great deal of interest the confirmation of the above assertion. We only trust it may be true. If salmon are found in the Father of Waters it will be the triumph of American fish culture.

TROUT FARMS FOR SALE.—Two excellent opportunities offer through our columns to any persons wishing to engage in the culture of trout—one in this State and another in Wisconsin. We can furnish fullest particulars of the same at this office.

Natural History.

☞ Correspondents in this and other departments of our paper will excuse us for curtailing their favors, as otherwise our limited space would prevent their publication. We take care to preserve the gist of all articles.

SECURE YOUR LIVE QUAIL AT ONCE.

RUTLAND, Vt., Jan. 25, 1878.

EDITOR FOREST AND STREAM:

Having frequently seen letters of inquiry concerning live quail for stocking purposes, and as the chances for their procurement seem desperate, I would suggest that there is one way in which we of New England may have quail, and I believe it to be our only chance. The American quail cannot endure the rigor of our New England winters, at least in the northern portions of New England. This fact will necessitate the purchase of a new breeding stock each year. The migratory quail will, however, escape the danger of destruction by such causes. They are a fine game bird, breed enormously, and can be easily and cheaply procured. Mr. Geo. H. Owen, American consul at Messina, Sicily, will be happy to assist American sportsmen to procure them in the spring, through Mr. D. Bonano, of Messina, who is a large ship owner and broker, and will give timely notice of the date of shipment and expected time of arrival in New York. Orders should be made at once to make sure of the birds this season, and should be accompanied by the guarantee of a bank that Mr. Bonano's draft will be promptly honored. The cost cannot, of course, be accurately stated now. The birds imported by me last season cost about eighteen cents (18 cents) each, delivered here. Arrangements should be made at the Custom-house in New York, so that there may be no delay there. An affidavit that they are for breeding purposes and not for merchandise, will bring them in free of duty. I am well convinced that the migratory quail is to be the game bird of New England, and that at no distant day. An order is now on the way for more of them, to be turned down in this vicinity. The affidavit above alluded to can be placed in the hands of the express company which is to transport them from New York; the company will thus be enabled to pass them through the Custom-house without delay. The company will also pay the ship's charges, which will also include a small fee to the ship's steward for food, care, etc. So much for quail. On another subject I wish simply to say now that I am getting together facts and figures for an article on dog breaking and dog breakers, particularly the latter, to some of whom I propose to pay my respects. The article will, I hope, be of interest to gentlemen sportsmen having fine young dogs which they wish broken.

Yours, M. G. EVERTS.

[Every sportsman must feel grateful to Judge Everts for the lively interest which he has taken in this matter, and we feel confident that there will be many, especially in New England, who will be only too glad to act upon the recommendations of the above note. The interest in this topic, however, is not confined to us of the East, but is manifested very generally throughout the country. In a recent issue of the Chicago *Field*, Ubique, of Winnebago City, Minn., gives some pleasant notes on the quail of the Old World, which, in this connection, are certainly worth reprinting. While it is not improbable that the birds introduced by Messrs. Everts and Hapgood may do well, it is certain that more general and widely-extended action must be taken before this species can become sufficiently abundant to be valuable to sportsmen. We desire, therefore, to encourage all who can devote time or money to the undertaking, to obtain and turn out at the earliest moment possible as many of these birds as may be practicable. The extract to which we have referred is as follows:]

"The American is the finest and best quail I have ever come across, but in view of the complaints of his scarcity, which are so constantly expressed in your columns, I believe it would be well to import foreign varieties of the same bird, even though they are not half his size. In India there are two varieties of quails, the "lohar" and "buttair," or the button and rain quail. The former are indigenous and breed in the country; the latter are a trifle larger than the native, and come into the country from the far north during the rainy season. Neither variety is more than half the size of the American quail, but they are wonderfully prolific and delicious eating. They breed and live in the tall grass of the open, and thirty to fifty brace a day is a very common bag of them in many localities. They are very easily caught and reared, and become quite tame; they are very pugnacious, and the natives keep them for fighting purposes, if they cannot afford rams or cocks. The Mediterranean quail is about half way in size between these and the American bird. They breed principally in Albania and migrate about October to Northern Africa, returning in the spring. At these times the whole air seems alive with countless flocks of quails and woodcocks. I have bought the latter in Malta for fewer cents than I should have to pay shillings in England at the time of their migration, while thousands of stragglers of both these kinds of birds drop on that island, and are too tired to escape even boys armed with sticks alone, and the market is, *pro tem.*, glutted. In Sicily the flights of quails are looked for as giving rise to one of the great industries of the island, and I have seen literally millions of them caught and caged in and about Messina, from whence they are shipped to London, Paris, St. Petersburgh, and wherever the lover of a "Salmi de Cailles aux truffes" can be found. These are the birds that I would propose to have introduced to the States. When caught they are placed in shallow cages which contain from one to two hundred. They don't seem to care in the least about captivity, and will travel any distance. Their cost on the spot is not more than a few cents apiece, and a letter from any organization or individual to the American consul at Palermo, Messina or Malta, would ensure the sending over a shipload if required, or I would gladly arm any person or body corporate with a letter of introduction, which would secure the purchase and careful packing and forwarding of a consignment for this country."

[After the very full details given by Judge Everts, there is no good reason why we might not have a thousand or more of these birds turned out this spring at various points in this country. We hope soon to be able to report some action in this matter on the part of sportsmen in general.—ED.]

WINTERING QUAIL.

GREENWOOD LAKE, Orange Co., N. Y., Feb. 18.

EDITOR FOREST AND STREAM:

I read with much interest in your issue of Jan. 31 the communication of Mr. S. M. Eaton, of Watertown, Wis., upon the winter protection of quail, and I take great pleasure in contributing my own experience of the same subject. We have tried the experiment several times at Greenwood Lake of keeping quail over the winter in confinement, and our experience is that it is difficult to obtain an enclosure sufficiently close and secure to preserve birds from vermin, and which will, at the same time, allow them sunlight, fresh air and room enough for exercise. If the quail are kept too warm and close during the winter, the birds, when turned out in the spring, seem to have lost their energy and to have become dull and listless, staying just where they are put out, apparently expecting still to be fed, and making no effort for their own subsistence. From their sluggishness they become an easy prey to vermin after all the trouble taken for their preservation. For these reasons we prefer, in winters of ordinary severity in this climate, not to place the birds in confinement. When the haunts of the birds are found we place there in severe weather food for their support. If their chosen location is a favorable and well protected one this will be sufficient, but if it is a bleak, exposed situation, a few piles of old rails or wood, together with some brush and straw, should be loosely and openly piled together for their protection, and it will be found that if properly located and a little grain is occasionally scattered through these piles, the quail will habitually resort to them.

This winter a bevy of at least thirty quail are being fed and protected here, and so far are thriving and doing well. They come regularly to be fed, and are so tame as to show no alarm at the presence of the person feeding them. No restraint is placed upon the movements of these birds, but a careful watch is kept for cats, hawks, poachers and other vermin The history of a part at least of this covey of quail is interesting. A pair of quail nested and bred in a swale known as the "Little Swamp" on the property of Mr. S. C——, and on which he would allow no hunting. In the early fall the birds could be daily seen and heard in the swale, and became very tame and bold, frequently flying out to adjoining fences, and when approached running away rather than flying back to their cover. Unfortunately, one day in November, a party of boys got into the swale and shot several times at the birds and killed one at least before they were discovered and driven out. Complaint was made, and the whole party were arrested and fined for trespass, which has had such a salutary effect that the quail have since remained unmolested. Now comes the singular part of the matter. The original covey was only a dozen or fifteen birds, of which *one at least* is known to have been killed, while the present one now being cared for is three or four times as large, which suggests the idea that the establishment of shelters and feeding spots draws to these spots other coveys from the surrounding country, which, being well treated remain. Should this prove to be the fact it will much facilitate the winter protection of these birds, as a few quail placed and fed in any given spot as a nucleus will thus draw to them the stray, unprotected birds of the neighborhood. One great advantage of thus feeding is that it saves all the trouble of trapping or otherwise catching the birds, to say nothing of the injury they often do themselves in their efforts to escape from the trap or from the enclosure when first put in it. Hoping some of your readers may try this plan and be successful with it,

I am very truly yours, GREENWOOD.

THE BRONCHOS AND DOGS AT THE AQUARIUM.

IF we are not hippic, still evidences of the docility and perfect training of animals are always most pleasant for us to tell about. At the Aquarium we must declare that the troup of trained Broncho horses are perfect marvels. Now who would think, that into the much-maligned Broncho of the plains could be inculcated so much obedience? Our general impressions of these horses are, that they are coarse, scrubby brutes, with a talent for kicking, biting, squealing and kicking, induced by a paucity of food and a plethora of whippings. Here you see a troup of ten handsome animals, which seem endowed with the sense of men. Think of a grand military drill, performed in a way which recalls the movement, the *tout ensemble* of a squad in a crack regiment. Without any flourishing of the whip, simply at the word of command, those Bronchos form into line, march by platoons, halt, and file by the right and left when ordered to do so. Every horse knows his name, and when called upon, marches to the front as would any other full private. Bravo and Bonito are twin steeds, who hide handkerchiefs in boxes and find them again. Perhaps the most comical thing possible is to see an intelligent collie going through an act of equestrianism. One amazing feat is, where the dog, with a graceful bound, lights on a little staging, while the horse continues on his course around the arena. It is the funniest thing imaginable to see the collie, when safe on the staging, wait for a moment, as if enjoying the applause, and then suddenly be all anxiety, lest he should miss his jump when the horse comes around again. He hangs forward on the staging all he can, looking for the coming horse under the platform, and just in the nick of time on he is again. Boys and girls see-saw, but do horses ever enjoy themselves that way? Yes, they do; at the Aquarium one horse tries it first on the plank, and having had a good bit of fun by himself, invites another horse to teeter with him, and away they go see-sawing until they make a perfect balance, and there they stand like statues in perfect equipoise. The neatest trick, and one which probably only a Broncho could perform, is for one of the twins to stand in the middle of the narrow plank, not more than two and a half feet wide, and absolutely pirouette on it, as would a ballet dancer. We are pretty sure that only a horse with Spanish blood in him could do that kind of a thing. Then there are goats—long-horned, ample-bearded patriarchs, the most grave, respectable and solemn looking animals, who in a dignified manner mount their flying steeds, and the capricorns caper and jump, and perform in a double act, just as if they liked it. It is a beautiful sight to see a Billy go careering around the ring with his beard floating in the wind. The big, handsome cream-colored horse Nettie, who comes in with head and tail all up in the air, is a glorious animal. Nettie jumps as if life depended upon it. First he looks at his jump and calculates exactly whether he shall spring over one or four or six horses. Having inspected the whole matter for himself, off he goes at a good round canter, and, with a bound, over he goes. Mr. Fryer, the trainer, has dogs under just as thorough subjection as his horses. Dogs dance and cut all kinds of shines, and behave in the most elegant and accomplished way. One dog steals a collar from another dog and is judged on the spot. That kleptomaniac is condemned by a dog jury to sudden death; a slip-knot is put around his neck, then a terrier and a collie rig a scaffold, one dog jumps over the cross-beam with a rope in his mouth and enacts Jack Ketch. Of course it is a little yaller dog who is the thief, who, after a slight neck-stretching—a kind of canine lynch law—is let off again, under promise of never doing the like any more. One trick after another follows, the dogs being the performers. The concluding performance is a Mademoiselle Dockril act; a spaniel going through an act of high equestrianism on a bounding Newfoundland. It is in fact a dog circus, all composed of the most distinguished performers. We have no hesitation in declaring that the troup of Bronchos are the most wonderful animals we ever saw, and with the dogs, the entertainment at the Aquarium is of the greatest excellence.

THE CHIMPANZEES AT THE AQUARIUM.—Poor Nip! when we saw him he lay moaning, wrapped up in his blanket. It was a pitiful sight. Every now and then the poor creature would toss his head about, as would an uneasy child One languid paw lay outside of the cover, and occasionally the slender, delicate fingers would open and close. It was a pitiful sight to see! Sickness in an animal, when nothing can be done for it, excites the warmest sympathy. Nip, the young chimpanzee, died on Friday of acute rapid consumption, and Tuck, his sister, mourns his loss. During a long winter voyage Nip caught cold, and, as with chimpanzees and monkeys generally this disease is as swift as it is fatal, poor Nip was the victim. On Saturday, at the Aquarium, Drs. Hammond, J. R. Wood, Valentine, Mott, Little, Sayre, Bates, Darling, and Janeway, assisted by Dr. Spitzka, made Nip's post-mortem examination. The cause of death, as had been expected, was enteritis, with tuberculosis of the lungs. It was curious for the physiologists present to examine the brain of the deceased. The brain was found to have many convolutions, and to resemble strikingly that of a child. That portion of the brain which is supposed in human beings to give the power of speech, was found to be fairly developed. Dr. Spitzka remarked the resemblance between this brain and that of a person of feeble intellect. What seemed to strike those most familiar with the human brain, was that in this poor monkey's skull the higher intellectual mechanism predominated largely over those purely devoted to the automatic or reflex functions. It is to be hoped that the Neurological Society of New York will examine the brain most carefully. Tuck, the female chimpanzee, is disconsolate, and would break her poor heart if not for the care and affection her keeper bestows on her. If she had her own way she never would leave her attendant. It is a wierd kind of look Tuck gives you when you take her delicately formed hand, as she gazes at you gravely with her soft brown eyes. Nothing could separate her from her keeper. One hand she gives to the curious, but with the other she holds tight to her friend. In order to put her in her cage, she must be cajoled, by means of a bit of biscuit. When she is left alone she throws herself on the ground, and cries like a disconsolate child. Then repressing her grief as with an effort, she looks with longing eyes for her friend. Tuck is now left all alone in this world. How long she may be alive, no one can tell. Those who wish to see this curious specimen among the rarest of all monkeys, would do well to visit the Aquarium as speedily as possible.

A ZOOLOGICAL GARDEN FOR NEW YORK.—Professor Albert S. Beckmore presented last week to the Board of Apportionment the plan for the establishment of a Zoological Garden in Central Park. The proposition is conceived on a most liberal basis. It is not to be at the cost of the city, and the request was made that the Board only approve of the bill to be presented to the Legislature. The following statement embodies the leading features of the Zoological Garden:

First—Capital to be not less than $200,000, to be disbursed during the first three years.

Second—Admission: Sundays free; Saturdays free to the pupils of the public schools when visiting in a body under the care of their teachers—one day, fifty cents; other days, twenty-five cents.

Third—Receipts to be applied, first, to maintenance; second, to interest at 7 per cent. on stock and bonds paid for; third, the surplus, if any, to be devoted to purchase of more animals, the improvement of the grounds, or reduction of admission.

Fourth—The city is not to be at any expense, either for the construction or maintenance of said gardens, except furnishing policemen to preserve order.

Fifth—The city authorities to have the right to investigate the accounts of the corporation.

We trust our legislators and the general public will fully endorse and support Professor Beckmore's plans. Both Philadelphia and Cincinnati have their zoological gardens, due to private enterprise, and both of them are wonderfully successful. New York, with its large population, should be able to support a zoological garden, which ought to be in time the rival of the one in London.

CINCINNATI'S GRIZZLY CUBS.—In one of Mr. Lancgan's inimitable *World* Fables, an elderly elephant, touched with compassion for the pitiable plight of a motherless partridge nestling, and thinking to fill that mother's place, herself sits down upon the nest. It was perhaps a like maternal impulse that led the huge grizzly bear in the Cincinnati Gardens to shield her cub from the cold by an equally fatal act of devotion. We have received the post mortem of the cub, which was as follows:

Male—Weight, 1 lb. 3 oz.; length of body from tip of nose to tip of tail, 11½ inches, from upper edge of scapula to sole of foot, 3¾ inches; girth of body behind fore-leg, 7 inches. Body apparently healthy and well nourished; much bruised, with coagulum around the head of femers, and in the thoracic cavity; the lungs filled with coagulated blood, sank in water; the heads of five ribs separated at vertebral articulation; skull broken at occipital suture; color of hair or bristles white, darker on the back; nose and lips flesh-tinted.

Female Weight, 1 lb. 1 oz.; bruises on back, neck, top and side of head; thoracic cavity containing coagulated blood. Considering the large size of the adult grizzly bear, which weighs about eight hundred pounds, and, compared with the embryonic human (who sometimes weighs thirteen pounds at birth), these young are very small and present many interesting features. It is hard to realize in them the terrible *Ursus horribilis*, whose tremendous strength is proverbial, and whose appearance creates consternation in the "Digger camp;" though the well-developed claws on these infants at birth give a premonition of what would follow. C. D.

DEER SHEDDING THEIR HORNS.—The interesting article under this head which recently appeared in these columns from the pens of Hon. J. D. Caton and Penobscot has called forth from our friend Everett Smith, of Portland, Me., the following experience in regard to the wapiti (*Cervus canadensis*). The incident is remarkable, for the horns of this species are usually hard and bare of velvet by Sept. 1. Mr. Smith writes:

"Visiting the beautiful zoological garden at Hamburg, I was attracted by the motions of a fine wapiti as he stood striking ing the ground repeatedly with his fore-feet, throwing the earth into the air. As I approached the enclosure, which was surrounded by a strong iron fence of bars and netting, the deer made a rush at me, striking the fence with great force, and repeating his charge again and again. His horns were well developed, but not yet fully hardened, and the velvet hung in shreds from the bloody points, which I had good opportunity to closely examine, as he once thrust them through the netting so as to get caught and held for a while. This was in the month of October. EVERETT SMITH."

Portland, Me., Jan. 28, 1878.

BRANT IN MINNESOTA.—Evidence that the true brant frequently occurs away from the seaboard continues to accumulate. Our correspondent, Mr. D. F. Stacy, writing from Albert Lea, Minn., says:

"I have seen in a late issue of your paper that some one is questioning the occurrence of the true brant away from salt water. We frequently kill them here. The Canada goose is very common here; next comes the brant (*Branta bernicla*), then the snow goose, white-fronted goose and Hutchins' goose. (I name them in the order of their number.) Such gentlemen as Mr. Fred Jones, Mr. Leggett, C. F. Frame and Col. Sam A. Hatch, all of New York, and Mr. Thos. H. Palmer, of Stonington, Conn., can testify as to the occurrence of the true brant in the Minnesota."

AN ALBINO THRUSH.—A very curious specimen of an albino trush, the *Turdus pallassii*, has been shown to us. The bird was killed by Mr. W. H. Sanford near Stamford, Conn, last year. As is well known, the natural color of this thrush—called the hermit thrush—is, under part white, with buff tints, olive shades, and breast and sides marked with distinct dusky spots.

LATE AND EARLY BIRDS.—Our correspondent, "S. E. B.," who writes to us from Oneida, N. Y., under date Jan. 26, says:

"Can you account for English snipe remaining in this section through the winter? The mercury has marked 13 deg. below zero; still in swampy places they are yet to be found. Hawks are yet with us, as are also the robin, occasionally found."

It is certainly very unusual to find snipe so late, and especially when it is so very cold.

Another friend—"Memoir"—writing from Medford, Mass., announces that the song sparrows are out in full song on Monday, Jan. 21. "Observer," a Long Island correspondent, relates his experience as follows:

"On Long Island, on Jan. 18, I noticed robins in large numbers, and also a few bluebirds. On Jan. 21 and ever since, we have had on a drained pond bed, 12 to 15 killdeer (snipe), and yesterday I was within fifteen feet of an English snipe. How is this for rushing the season? Yours, OBSERVER."

TWO NEW SPECIES OF FISHES.—We beg to acknowledge from Prof. G. Brown Goode, a preliminary catalogue of the reptiles, fishes and septocardians of the Bermudas, and from G. Brown Goode and Tarleton H. Bean the descriptions of two fish recently discovered by the United States Fish Commission, called the *Macrurus bairdii* and *Lycodes cerillii*.

PTARMIGANS.—We acknowledge the receipt of a pair of beautiful Canadian ptarmigans in winter plumage from Dr. R. A. Alloway, of Montreal. The ptarmigans are a species of grouse common to high latitudes, whose plumage varies with the seasons. In summer they are mottled, with dark brown, and tawny and white, but in winter they are pure white, excepting two black feathers in centre of the tail. The doctor, we learn, has some fifty specimens in skin, ready to be wired and mounted.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE VEGETABLE GARDEN.

DURING a spare hour or two we have amused ourselves reading over the various seedsmen's catalogues for the year, and, notwithstanding our experience of over twenty-five years, we really feel bewildered over the great variety of seeds offered. To the amateur, the names and sorts must be puzzling indeed, and, while not discouraging the testing of the many new and perhaps good things described, we now propose to give a list of those best suited for general purposes, as well as for the garden of limited extent. We here draw on Mr. Peter Henderson's tests in his trial ground, as well as on our own observations during the past season. Taking a catalogue at random as a guide, Conover's Colossal Asparagus takes the lead, and a fine variety it is. In Bush Beans, Early Valentine is best for the general crop, though Early Rachel is a desirable variety and a few days earlier. The Black Wax Bean, though yellow in color, and consequently rather unsightly on the table, is solid, stringless and of excellent flavor, and is gaining in favor rapidly. Refugee is a late variety, and on account of its thick flesh is largely used for pickling. Of Pole Beans, the large Lima still holds its own, and is the most delicious bean grown. In Beets, the early Bassano, closely followed by the deep red Egyptian Blood-Turnip, are best for early crops, while the Long Blood Beet is the best for fall and winter use. A few Brussels Sprouts should be grown in every garden; this is the most delicious of all the cabbage-tribe, especially after it has caught the first frost, and it is not nearly so much appreciated as it ought to be. For an early cabbage, the Wakefield still stands pre-eminent, though we understand the Early Summer is only a week or so later and double the size and weight. Winningstadt Flat Dutch and Drumhead Savoy follow for fall and winter use, with a few Blood-red Cabbages for pickling. Cauliflower, in a well-regulated kitchen garden, is indispensable; and we find the Erfurt early dwarf one of the best for early use. In fall, our markets are full of splendid heads of Cauliflower from the southern part of Long Island, probably a good stock of Walchern or Early London; Veitch's Autumn Giant is much praised in England for late crops, but our experience with it has been too limited to test it thoroughly. If carrots are required—and where are they not—take the French Short Horn or Early Horn for early use, and the improved Long Orange for the main crop. Many buy their Celery plants in preference to being at the trouble of raising them, and they may generally rely on getting a good solid Celery if they do so. Turner's Incomparable Dwarf is perhaps the best in cultivation, though many prefer the Boston Market, which, from its branching habit, is of little use for the New York market. The so-called Mammoth Giant, etc., sorts are hollow, stringy and worthless in this climate. Early Sweet Corn is always in demand, and he who can get his corn in a week ahead of his neighbor is a happy man indeed. The Minnesota is the earliest "decently large" sweet corn we know of, and for general crop, notwithstanding fine names, keep to a good stock of the old eight-rowed as the sweetest and most toothsome; for a late variety nothing beats Stowell's Evergreen. As for Cucumbers we will leave them to the Onions; any variety is good enough for us, but for pickling try the Early Cluster.

The New York Improved Egg Plant is good, while Henderson says the black Pekin is the best flavored; and in Lettuces grow "All the year round," and Simpson for spring and summer use, and Boston Market for winter. Melons, when just off the ice, are admired by all in the sultry days of August and September. For an early sort take the white Japanese, and no variety can surpass the Nutmeg for a general crop. See that they are not grown too near your Cucumbers or Squashes. The Red Wethersfield Onion is the Onion for the people, and the seed is now exported to England in large quantities. Yellow Danvers and the New Queen (white) are also desirable, though the former is the best keeper. Some five years ago we waded through an interminable lot of Peas on trial at Chiswick (London), and after all the varieties described in the report, we found our old favorite (under half a dozen names, however), Dan O'Rourke, at the head of the list for earliness and productiveness. Champion, of England, for general crop is not yet excelled, notwithstanding the many claimants for public favor; while for dwarf sorts, Little Gem and Blue Peter divide the honors equally. To those who are fond of Salads, Radishes, especially early in the season, are always welcome. A cosy, warm corner is the place, and the Scarlet Turnip, or new Scarlet Olive-shaped, or French Breakfast, the varieties to give satisfaction. For later use the long Scarlet, white and black Spanish are in order for those who desire them.

Spinach—We find that the Savoy-leaved is by far the best, giving nearly twice the weight of crop on the same space. It is somewhat singular that the great value of this variety seems to have been overlooked by the market gardeners of New York, and they have only recently woke up to it on seeing it sent in by the growers from Norfolk, Va., and other Southern points. —*Henderson, in American Agriculturist.*

Tomatoes are a vexed question. One of the best we have seen was exhibited at a meeting of the New York Horticultural Society last fall, called "Compondie's Favorite." It was early, solid and of excellent flavor. Canada Victor, Arlinton, New York Market, etc., are all good, but for the general crop stick to the "Trophy." Last, but not least, comes the Turnip. The strap-leaved varieties are best for general purposes, while the flat Dutch is preferable for early use. Yellow Globe and Orange Jelly are excellent for winter use—juicy and tender, while in Ruta Bagas grow the purple top, "American", in preference to any other.

TENNESSEE LIVE STOCK AND POULTRY.—The Stock Breeders' Association of Tennessee hold their meeting at Nashville on the 19th of February. Our correspondent writes:

Several interesting papers were read by some of the members, notably the one upon sheep raising and the cultivation of grapes. This association is composed of the most respectable farmers in the State, and has had the effect of drawing a great many purchasers of stock here for one is sure, in buying from any one of them, of getting what he bargains for. Any false representation of pedigree, or any unfair dealing if made known, is immediately taken cognizance of by the Association, and the offender expelled from the society and his name published. Much interest is being manifested in the coming spring meeting of the Blood Horse Association of this State. A large number of horses are expected from the South and Kentucky, besides a number already here being gotten ready to take part in the different events.

The Poultry Breeders Association of Tennessee are now holding their First Annual Poultry Show. A large number of fowls of all the well-known breeds are on exhibition, and some of them are very fine specimens. The principal takers of prizes have been V. L. Kirkman, Esq., S. G. Woods, and W. T. Johns, Secretary of the society. They have also on exhibition turkeys, geese, ducks, pigeons, rabbits and cats. I noticed two remarkable hybrids, which are worthy of attention. One is said to be a cross of a chicken and duck. Its form, short legs, high breast and waddling motion are very like the duck, but the plumage, shape of head, with its topknot, resembles the Poland fowl. The other is a cross between the buff Cochin China and the Guinea fowl; in this as in the former, both species are apparent. The shape and motions are very like the Guinea fowl, but the plumage and color that of the Cochin China.

Nashville, Feb. 21. J. D. H.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7 Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gas of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb, Secretary.

[FROM OUR SPECIAL CORRESPONDENT.]

THE ST. LOUIS BENCH SHOW.

ST. LOUIS, Feb. 23, 1878.

EDITOR FOREST AND STREAM:

In spite of wet weather and muddy streets the St. Louis Bench Show, which opened on Tuesday morning and closed this evening, has been a grand success so far as patronage and enthusiasm are concerned. The interior of the mammoth rink, elaborately decorated with flowers and evergreens, presented an attractive sight to the thousands of visitors who daily gathered to see the dogs. The northern and western sides of the structure were devoted to sportsmen's goods; the southern section of the apartment was given up to performing dogs. Specimens of the taxidermist's art were numerous, a deer in the clutches of a panther being especially noteworthy. Among the prominent visitors from abroad who arrived among the first were Col. J. G. Skinner, of the FOREST AND STREAM AND ROD AND GUN; J. Addison Smith, of Baltimore; Captain J. A. Foster, of Virginia; L. H. Smith, of Strathroy; Arnold Burges, of Michigan; Gen. Morgan, of St. Paul; Edmund Orgill, of Brooklyn; Young Nicholls, of Syracuse; Gen. Rowett, of Carlinville, Ill.; Holabird, of Indiana; Gen. Churchill, of Little Rock; Mr. L. C. Bruce, of New York; Dr. Rowe, of the *Chicago Field;* Griffith, of Butler, Ill.; Patterson, of Florescant, and Donohue, of Lasalle. Later came Francis Leisler, of New York; Hayes, of Hastings, Minn.; Higgins, of Delaware; Dew, of Columbus, O.; Waddell, of Kansas City; Griffith, of Butler, Ill.; Jesse Sherwood, of Edina; W. J. Farrar, of Toledo, and a host of others. The Baltimore delegation brought thirty-three dogs through in a special car, all reaching here in good order. The representatives of the Westminster Kennel Club did not get here until Tuesday morning, but had better luck than the English entries which reached here Wednesday night, terribly used up. After many annoying delays on the ocean and in New York, Mr. Scott reached here Wednesday morning to find that his dogs were still twelve hours behind him, owing to the carelessness of the express company. The irate gentleman accuses railway and custom house officials of being very unaccommodating. The Executive Committee of the Association postponed the judging in classes in which the English dogs were entered until Wednesday morning, but were unable to wait any longer; an arrangement, however, being made by which Mr. Scott had the right to contest the ribbons held by the rivals of his kennel. Somewhat of a shadow was over the show on the death of the New York dachshund Devil, an animal highly prized by its owner Mr. Leisler, of New York. The show was formally opened on Tuesday night by Col. J. O. Broadhead who made an excellent speech, and that morning the judging began, Mr. John Davidson making the awards for setters and pointers, Col. J. G. Skinner for hounds and Dr. L. H. Twaddell for spaniels, Chesapeakes, terriers, etc. The native Irish setter class was one of the first disposed of, and Elcho's get swept all before them—every one of the winners, with a single exception, being got by the famous old dog. Race, Juno, Guy and Dora were the principal victors. In the Irish water spaniel class sire and son met, and Mike the champion, had to cede the blue ribbon to his offspring King of the River and rest content with second place. Lulu, the far famed deer hound, had a walk over for the first prize. The visiting Dachshunds Nellie and Pink, referred to in the judge's note as by far the best but too large, were beaten by Sectycel and Scotycel II, owned in St. Louis. Col. Skinner decided that no Dandie Dinmonts, St. Bernards, nor Newfoundlands were exhibited, and consequently no prizes were awarded in those classes. A pleasant feature on the first day was the presentation to Superintendent Lincoln by Dr. Rowe, on behalf of the association, with a splendid gold medal. On it was a dog's head, and around the rim "Presented by his St. Louis friends."

On Wednesday afternoon the awards were made in the champion classes, Gladstone, winner of the puppy stakes at the Nashville field trials, carrying off the money prize in class 1 from such renowned dogs as Lincoln, Druid, Duke, Royal Duke, Rattler, Lark and seven others. This superb young son of Dan and Petrel made the big heart of his owner, Bryson, glad by his Success. In the same class Burges secured first with Queen Mab, Frost and Queen being her principal rivals. In the Irish class Elcho won as was generally anticipated, although closely pressed by his promising son, Berkley. Many regrets were expressed at Rufus not being entered, Dr. Jarvis having sent the champion out expressly to meet his Michigan opponent, Loo II., again secured the blue ribbon as the champion bitch, being immeasurably superior to the other entries, barring Fire Fly and Bridget, who were very highly commended. Jesse Sherwood's Rupert maintained his reputation as the Champion Gordon; Farrar's Fan carrying off the first prize for bitches in this class and also in class 10, but the next day she had to yield the honors to Scott's Floss. Mr. John Davidson had a more than usually onerous duty devolve upon him in deciding the pointer championship, for which there were twenty-three entries, and it is a compliment to him that his decision is unanimously approved by owners of the defeated aspirants. Sensation was to the fore, while the Birmingham winner Sleaford and Stoddard's Brandy, a former St. Louis winner, secured very high commendation. Gillespie's famous Fan, as usual, secured the blue ribbon in this class. Of the smaller sized pointers Orgill's Flake and Waddel's Jessie secured the ribbons.

The English dogs brought out by Mr. T. H. Scott, of Yorkshire, eleven in all, including one belonging to a friend, did not arrive until a late hour on Wednesday night. They were all sadly out of condition, and consequently but five were exhibited. Pound, a black and white English setter, 2 yrs. and 4 mos., was pitted against the champion Gladstone, but could not reverse the decision. In the imported class Pound was again pitted against Gladstone, Druid and Royal Duke, but again failed to reverse the awards, being highly commended, however. Pound is by Prince out of Prudence, and has carried off the blue ribbon at Tavistock and Camberwell in England. Mr. Scott had better luck in the Gordon setter classes. As the best bitch, Farrar's three prize winners, Fan, Nettie and Nell, contested with Scott's Nell and Floss, and the latter was declared the first prize winner; Fan, second; Nettie, third. In class 3 also Floss conquered Fan, thus being declared the champion Gordon bitch. The winner is 2½ years old, by Rock out of Hadzi II. She took first at Brigg, first and cup at Selby, and second at Kendall. In Scott's lot was Bow, a fine pointer, 3 yrs., liver and white ticked, by Bony out of Luna, who captured the first prize at Exeter and second at Islington. Since entered for competition here Bow took first and an extra cup in Westmoreland field trial, beating the Birmingham winner Behul; when shown on Thursday he did not compare with Sensation, and ranked fourth as against Sterling's Sleaford and Lindsay's Viscount.

Thursday was a field day for the St. Louis Kennel Club, Elcho and Leo, Irish companions, sweeping everything before them. Elcho's handsome son Berkley led off by winning the first prize in class 8, imported Irish setter dogs, Stoddard's Bob taking second, and Berkley's kennel companion, Sting II., third; in the same class bitches, first and second prizes went to Biddy and Duck, owned by the St. Louis Club, while Firefly, the get of Rufus, had to rest content with third. Elcho, shown with Berkley and Race, secured the Irish setter stud dog prize, Burges' Rufus and Fowler's Ranger being his opponents. In the same class brood bitches, Loo II., with Berkley and Loo III., the latter an extremely promising pup, 2 mos. old, defeated Griffith's Fan II., Waller's Fanny Fern, Smith's Bridget and Kramer's Nelly. With Loo II., Duck, Sting II., Berkley and Biddy in St. Louis club also won the prize for the best kennel of Irish setters. Smith's Leicester defeated Burges' Rob Roy, his most formidable competitor in the English setter stud dog class; while Demuth, of Iowa, secured the prize for brood bitches with Pickles. The best kennel of English setters was shown by Smith, of Strathroy, including the renowned Leicester, Paris, Bronte, Pearl and

Dart. Arnold Burges lodged a protest against Bronte, and the association telegraphed immediately to Mr. Charles Murray, the eminent London banker, former owner of Bronte, who replied by cable, disclaiming any interest in the dog, so the protest fell through. By the way Burges has borne his reverses in a manly manner. He had great hopes of winning the championship with Druid, but when the decision in favor of Gladstone was announced he admitted its justness. W. J. Farrar, of Toledo, swept the board with his Gordons, Rapp and Fan, winning firsts as best stud dog and brood bitch, and Rapp, Dash and their companions taking first for the best kennel.

Probably the most exciting time in the awarding-ring during the whole progress of the show was, when a decision had to be given on pointer stud dogs and their get, and the bitches with their progeny. In the former, there were Beck's Andy, Orgill's Flake, Sherwood's Sancho, the great Sensation, and others. It was soon seen that the merit lay between Flake and Sensation. Rose and Ruby, out of Lilly, first at Baltimore, appeared as the get of Flake; Sefton and Oytie, out of Lilly, already awarded first prizes, as the get of Sensation. Both gets having the same mother, the turning-point rested on the father's strain of blood, and the scale tilted over to the side of the aristocratic New Yorker, the Westminster Club securing another well-deserved victory. When it came to the brood bitches with two of their progeny, Lilly, with Sefton and Oytie, were given the prize. For the best kennel of imported or native pointers, not less than five, Mr. Orgill was the winner, with Flake, Ruby, Rose, Belle and Rush. Against these cracks, the Westminster Club showed Sensation, Till, Daisy, Eileen, Whisky, Regalia, Duchess, George McKee, Lula, Gertie and Flake II. Mr. Orgill also secured the first in small pointer special on Flake—his Ruby got second in the small pointer bitch class; Flake and Ruby received first for the best brace, and Rush and Rose the second. Mr. John W. Munson, the popular Secretary, had the unexpected pleasure of seeing his brown and white two-year-old pointer bitch Queen get second prize in class 11, Lindsay's Dolly taking first (beating Pride, the great winner, and Mr. Orgill's Romp). An offer of $300 for Queen was refused; the St. Louis Kennel Club, however, disposing of Thornton for just twice that amount to Mr. W. B. Shattuc, of Cincinnati.

Of the English entries, it should be stated that Mr. Scott allowed the fox terriers, Vick and Lottery, to stand a decision of the judge as against Mr. Walton's Tricksey and Trap. The judge considered the latter the best, at which Scott felt somewhat sore, their ears having been tampered with to make a better pendant. "In England," says Scott, "such mutilation would cause the dogs to be thrown out."

A nice point as to whether the progeny of a dog imported *in utero* can be considered a native, or whether the dog itself, being imported *in utero*, is to be considered the same as if whelped on the other side of the Atlantic, came up on the pedigree of Prince Peg, a splendid animal entered in the English setter class by E. C. Waller, of Chicago. The question was, whether Peg, having been imported *in utero*, her progeny should not be classed as "natives," and the decision of the Association is, that a dog imported *in utero* is the same as a dog whelped in Europe, basing it on the principles applied in breeding cattle and horses; therefore, to all intents and purposes, such a dog is imported, and consequently ineligible, according to the kennel club rules, in the native class.

Sleaford gained a victory over Lindsay's Viscount in the pointer class, first and second prizes being awarded them.

St. Louis won 21 first prizes, 13 second, and 4 third, 12 of which were taken by the St. Louis Kennel Club; Farrar, of Toledo, scored six firsts and one second.

At the last moment, the management determined to keep the show open one day longer; but it is closed at last, and the main features of the week have been given above.

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ENTRIES AT THE ST. LOUIS BENCH SHOW.

[*Concluded from page 40.*]

CLASS 12—Pointer Dogs Under 55 Pounds.

O P Budd, 612 Olive street, St Louis; Quail, black, 3 yrs; Othello, Dina, bred by Sir Charles Morgan.

Thos H Burtt, Jefferson City, Mo; Dick, orange and white, 20 mos old, from imported dog and bitch by Gen. Shelby.

Oliver Labadie, 1,423 Spruce street, St. Louis; Dash, liver and white, 6 yrs; not for sale.

John M Marshall, 809 Tayon avenue, St Louis; Horace Greeley, liver and white, 2 yrs. Tom, liver and white, 1 yr and 3 mos; $25.

C P Ellerbe, 515 Olive street, St Louis; Dan, lemon and white, 2 yrs; not for sale.

Jesse Sherwood, Edina, Mo; Sancho, liver and white, 5 yrs; Don, Juno; $250.

H Menown, St Louis; Jeff, liver, 11 mos; Mike, Kate.

Westminster Kennel Club, New York; Flake II, lemon and white, 1 yr and 10 mos; Flake, Lilly.

Baltimore Kennel Club, Baltimore; Sefton, lemon and white, 1 yr; Sensation, Lilly; not for sale. Black Prince, black, 16 mos; Ranger, Fan.

A C Waddell, Kansas City; Keno, liver, 2 yrs.

Isaac Weighell, Rochester, N Y; Jim.

W T Irwin, Topeka, Kansas; Drop, Jr, liver, 14 mos; Phil, Beauty; exhibition only; $60.

CLASS 12—Pointer Bitches Under 50 Pounds Weight.

Francis Coyle, 1,210 Broadway, St Louis; Fly, liver and white, 3 yrs; not for sale.

Edmund Orgill, Brooklyn, N Y; Rose, lemon and white, 1 yr and 9 mos; Flake, Lilly. Ruby, lemon and white, 1 yr and 9 mos; Flake, Lilly. Belle, lemon and white, 1 yr and 9 mos; Flake, Lilly.

Charles Stratbridge, 716 South Fifth street, St Louis; Fanny, black and white, 4 yrs; not for sale.

John M Marshall, 809 Tayon avenue, St Louis; Mary's Kitten, liver and white, 5 yrs.

Jesse Sherwood, Edina, Mo; Dream, black, white and tan, 3 yrs; Phil, Belle; $150. Jule, red, 2½ yrs; Ben, Belle; $125.

Louis W Schriever, St Louis; Nellie Gordon, liver, 4 yrs.

H Menown, St Louis; Flora, liver, 11 mos; imported stock. Belle, black, 1 yr; Dan, Lord Gordon's stock; $100.

Benton Blackstone, Decatur, Ill; Queen, black, 18 mos; Pete, Nellie; $100.

E C Sterling, St Louis: Clytie, lemon and white, 1 yr; Sensation, Lilly; not for sale.

John Krumholz, 1,505 Carondelet avenue, St Louis; Dora, liver and white, 2 yrs; not for sale.

G A Storr, Canton, Mo; Lola, white and liver, 32 months; Snow, Zula.

Westminster Kennel Club, N Y; Duchess, lemon and white, 1 yr; Sensation, Whiskey.

Baltimore Kennel Club, Baltimore; Lilly, lemon and white, 4 yrs; Sam, Lilly.

Isaac Weighell, Rochester, N Y; Lolo, lemon and white.

Gustave Oster, 2,000 Carr street, St Louis; Ruby, liver and white, 2 yrs.

Columbus Kennel Club, Columbus, Ohio; Lady, white and liver, ticked, 16 mos; Dilly's Ranger, Gillespie's Fan.

A O Waddell, Kansas City Kennel, Kansas City, Mo; Jessie, liver and white.

Columbus Kennel Club, Columbus, Ohio; Nellie, white and liver, ticked, 16 mos; Dilly's Ranger, Gillespie's Fan; $250.

T H Scott, Kilvington, England: ——, whelped June 1, 1876; Moody, Ruby; ——, whelped June 1, 1876; Moody, Ruby.

CLASS 13—Pointer Puppies, Dogs or Bitches, Over 6 and Under 12 Months.

W H Holabird, Valparaiso, Ind; Mack, liver and white, 6½ mos; Ranger, Queen; $75.

C P Ellerbe, 515 Olive street, St Louis; Jack, liver and white, 8 mos.

S A Kay, Chicago; Dick, liver and white, 9 mos; Shot, Sue; $50.

J W Harriee, Dayton, Ohio; Rook, lemon and white, 8 mos; Don, Dolly; $150.

R F Welliver, Belleville, Ills; Dash, liver, over 6 mos.

Theo Tillotson, Chicago; Julep II, liver and white, 8 months; Sancho, Julep; $75.

W F Fullager, 914 N Main street, St. Louis; Vic, liver and white, 7 mos.

H Menown, St Louis; Jeff, liver, 11 mos; Mike, Kate. Flora, liver, 11 mos; imported stock.

W M Smith, Sterling, Ills.; Rosette, liver and white, 7 mos; Ranger, Queen.

Robt W Barker, 2,119 Walnut street, St Louis; Fannie, white and liver, 9 mos; Rock, Juno; $20.

Westminster Kennel Club, New York; Geo McKee, liver and white, 8½ months; Sensation, May.

A O Waddell, Kansas City; Demon, liver, 6½ mos; imported dog, Nally; $85.

Gustave Oster, 2,000 Carr street; Hector, liver, over 6 months.

W H Holabird, Valparaiso; Mollie, liver, 10 mos; Don, Lina.

CLASS 13—Pointer Puppies, Dogs or Bitches, Under 6 Months.

W H Beck, Cadet, Mo; Toby, black and white, 5 months; Andy, Daisey. Andy II, black and white, 5 mos; Andy, Daisey. Juno, black and white, 5 mos; Andy, Daisey.

G H Moll, 519 Washington avenue, St Louis; Mark, Jr, liver and white, 4 months; imported Don out of Nell.

Oliver Labadie, 1,423 Spruce street, St Louis; Gypsey, liver and white, 3 mos; Dash, Fanny; $20.

H J Menown, St Louis; Ponto, black, 5 mos; Mike, Kate.

Henry Burlen, 1,126 N Twentieth street, St Louis; Don, liver and white, 5½ mos; $50.

A G Fleischbein, Belleville, Ills; Whitford, liver and white, 3½ mos; Dilley's Ranger, Dolly.

CLASS 29—Imported or Native Pointer Stud Dogs. (To be shown with two of his get.)

W H Beck, Cadet, Mo; Andy, black and white, 3 yrs, with Toby and Juno; not for sale.

Edmund Orgill, Brooklyn, N Y; Flake, lemon and white, 3½ yrs; Flash, Juno.

Oliver Labadie, 1,423 Spruce street, St Louis; Dash, liver and white, 6 yrs; not for sale.

Jesse Sherwood, Edina, Mo; Sancho, liver and white.

H Menown, St Louis; Dan, with Dash and Belle.

Westminster Kennel Club, New York; Sensation, see class 4.

CLASS 29—Imported or Native Pointer Brood Bitches. (To be shown with two of her progeny.)

W H Beck, Cadet, Mo; Daisey, black and white, 2 yrs; with Toby and Andy II.

Francis Coyle, St Louis; Fly, liver and white.

Charles Stratbridge, 716 S Fifth street, St Louis: Fanny, black and white.

Louis W Schriever, St Louis; Nelly Gordon, with Tony and Harness.

H Menown, St Louis; Kate, with Jeff and Flora.

A C Waddell, Kansas City; Fan, liver, 4 yrs; pedigree recorded.

Columbus Kennel Club, Columbus, Ohio; Gillespie's Fan, black, 3 yrs.

CLASS 33—For the Best Kennel of Imported or Native Pointers. (To consist of not less than five.)

Edmund Orgill, Brooklyn, N Y; Flake, Rush, Rose, Ruby, Belle and Romp.

H Menown, St Louis; Dash, Dan, Kate, Jeff, Flora, Belle, Ponto.

Westminster Kennel Club, New York.

A C Waddell, Kansas City; Phil, Jr, Fan, Flirt, Jessie, Keno, Don.

Columbus Kennel Club, Columbus, O; Native (formerly Jake), Mack, Champion Belle, Gillespie's Fan, Lady and Nellie.

CLASS 14—Chesapeake Bay, Otter Breed, Short-haired Sedge, Dogs or Bitches.

Dr J B Newby, 1,206 Washington avenue, St Louis; Nellie, sedge, 2 yrs; $50.

Jesse Sherwood, Edina, Mo; Dracco, sedge, 1 yr; Turk, Trick; $50.

J L Beck, Chestertown, Md; Boaz, 4 yrs; $5,000.

Tip Crisp, Baltimore; Rob, sedge, 6 yrs; brother to Dr. Keene's Rose.

Baltimore Kennel Club, Baltimore; three entries.

E H Gillman, Detroit; Pride of the Chesapeake, sedge.

CLASS 15—Chesapeake Bay, Red Winchester Breed, Curly or Straight-haired Dogs or Bitches.

S J Martinet, Jr, Baltimore; Sinbad, 4 mos; Turk, Flora.

Chas L Hunt, Normandy, St Louis county; Joe, red, 2 yrs; Turner's Old Joe, Munson's Nellie.

Paul J Marrs, Henderson, Ky; Milo, red, three yrs; Turner's Old Joe, Munson's Nellie.

C T Aubin, 312 N Third street, St Louis; Diana, red, 2 yrs; Munson's Joe, Nallie.

CLASS 16—Irish Water Spaniel Dogs.

J H Whitman, Chicago; King of the River, liver, 2½ yrs; Mike, Liffy; $300.

Big Point Kennel Club, Chatham, Ont; Mike, liver, 4 yrs; Shamrock, Champion Duck.

R A Turtle, Chicago; Sinbad, liver, 5 yrs; Dyke, Fan.

CLASS 16—Irish Water Spaniel Bitches.

J H Whitman, Chicago; Liffy, liver, 3½ yrs, Doctor, Bridget, $800.

Big Point Kennel Club, Chatham, Ont; Bridget, liver, 5 yrs; Bingo, Champion Quail.

CLASS 16—Irish Water Spaniel Puppies.

(Dog or bitch under 12 months of age.)

Peter W Tichacek, St Louis; Bob, brown, 6 mos.

J D Olcott, Milwaukee; Lottie, liver, 7 mos; Sinbad, Bridget; $35. Diver, liver, 6 mos; Bob, Elgin, bitch; $35.

Jas Moore, Toledo, O; Blondy, liver, 4½ mos; Drum, Undine.

CLASS 17—Retrieving Spaniels, other than pure Irish Dogs or Bitches.

H S Brown, 604 N 4th street, St Louis; Fan, liver, 2½ yrs; $500.

Paul J Marrs, Henderson, Ky; Bob, black, 8 mos; not for sale.

J H Whitman, Chicago; Duck, liver, 2½ yrs; Sinbad, Queen; $200. Bob, liver, 2 yrs; Sinbad, Queen; $000.

E C Sterling, St Louis; Jack, liver, 3 yrs; Sinbad, Queen; $75.

Baltimore Kennel Club, Baltimore; Scamp, liver, 6 yrs; Imported.

CLASS 18—Cocker Spaniel Dogs.

David O Magnire, 1116 N 21st street, St Louis; Bob, liver, 5 mos; not for sale.

Henry Gruenenwald, 1025 N 5th street, St Louis; Dick, liver and white, 7 yrs; Joe, Fanny.

Mrs Andrew Warren, 2600 Olive street, St Louis; Uno, liver and white, 2 yrs and 9 mos; imported.

Miss Mary Whitman, Chicago; Dick, liver and white: 4 yrs; Ethan Allen stock; $200.

CLASS 18—Cocker Spaniel Bitches.

Henry Werner, Edina, Mo; Belle, black and tan; 2½ yrs; Blanche, Bean; $250. Two puppies, 5 mos old, for sale, $125 each

A A Julian, St Louis; Queen, liver, 3 yrs; not for sale.

L Spelbrink, St Louis; Fanny, liver, 5 mos.

Mrs Andrew Warren, 2600 Olive street, St Louis; Nellie, liver and white, 2 yrs and 6 mos.

Miss Clara Whitman, Chicago: Dixie, liver and white, 3 yrs; $100.

R L Henry, St Louis; Tillie, liver, 10 yrs. from imported stock.

CLASS 19—Field Spaniels, other than Cockers, Dogs and Bitches.

T H Scott, Kilvington, Thirsk, England.

U J Livingston, Chamber of Commerce, St Louis; Dan, liver, 11 mos. Jim, liver, 11 mos.

Jesse Sherwood, Edina, Mo; Flax, lemon and white, 3 yrs, Royal, Belle; $100. Flounce, lemon and white, 3 yrs; Royal, Belle; $100.

J H Whitman, Chicago; Fido, liver, 3 yrs; Adam, Eve; $25.

Otto Bauman, 407 Carroll street, St Louis; Fido, liver; 4 yrs. $60. Duck, liver, 18 mos; $50.

CLASS 20—Fox Hounds in Couples, Dogs or Bitches.

Chas L Hunt, Normandy, St Louis County; Tray and Sweetheart, black, white and tan, 2 yrs; imported by Col Bruce; not for sale.

O F Garrison, Carondelet, St Louis county Mo; Blucher and Mate, black, white and tan, 5 yrs; Gen Harney's stock.

Jesse Sherwood, Edina, Mo; Sing and Sharp, black, white and tan, 2 yrs; Harper, Walters; $150.

J P Schulte, 831 Morgan street, St Louis: Major and Mate, black, white and tan, 3 yrs.

Arthur Mittelberg, 609 Chestnut street, St Louis; Mozo and Julia, black and tan, 2 yrs; $100 pair.

Milton Smith, Kirkwood, Mo; Carlo and Kate, black and tan.

E F Patterson, Florissant, Mo; 4 pups; for exhibition only. Trueboy and Spot, full pedigree. Drummer and Streak.

R L Henry, St Louis: Dash and Sank, black and tan, 17 mos; Virginia stock.

Isaac Weighell, Rochester, N Y; Buck and Mate, black, white and tan.

A C Waddell, Kansas City; Ring and Sting, black and tan, 2 yrs.

Isaac Weighell, Rochester, N Y; Frank and Mate.

CLASS 21—Beagle Dogs.

Chas L Hunt, Normandy, St Louis county: Jupe, white and black, 2 yrs; Warrior, Music. Warrior, black, tan and white, 3 yrs; imported.

Jesse Sherwood, Edina, Mo; Lee, black, tan and white, 1½ yrs; Turner's dog, Rowett's bitch; $100.

Chas Rowett, Carlinville, Ill; Ringgold, black, tan and white, 2 yrs; Warrior, Rosy; $75.

CLASS 21—Beagle Bitches.

St Louis Kennel Club, St Louis; Susie, black, white and tan, 18 mos; Warrior, Beagle; $100

Jesse Sherwood, Edina, Mo; Lillie, black, white and tan, 18 mos; Turner's dog, Rowett's bitch; $100.

Chas Rowett, Carlinville, Ill; Rosy, black, white and tan, 3 yrs; Sam, Dolly; $100.

CLASS 22—Dachshunde, Dogs or Bitches.

M Peiztee, 2216 Carondolet avenue; Seetyeel, Seetyeel II, black and tan, 4 yrs; imported, exhibition only.

Francis Leisler, P O box 1935, New York; Nellie, fallow red, 3 yrs, imported; not for sale. Pink, fallow red, 3 yrs, imported; not for sale. Devil.

W D Hayes, Hastings, Mich; Waldman, black and tan, 3 yrs, imported.

CLASS 23—English Greyhounds, Dog or Bitches.

J C Branch, St Louis; Willie, black; not for sale. George, black; not for sale.

Henry Foerg, St Louis: Black, black, 2½ yrs, imported stock; not for sale.

R L Henry, St Louis: Don, mouse color, 3 yrs.

CLASS 24—Scotch Deerhounds, Dogs or Bitches.

Miss Mary E Hunt, Normandy, St Louis county; Duke, gray, 2 yrs; Gen Custer's breed.

Dr Charles Digges, 2452 Chestnut street, St Louis; Rosamond, gray, 8 yrs; imported.

Geo M Wright, St Louis; Oscar, gray, 9 mos; Gen Custer's breed.

J H Whitman, Chicago; Lulu, brindled, 4 yrs; Sir Walter Scott's breed from Queen Victorias kennels; $60,000.

CLASS 25—Fox Terrier Dogs.

T H Scott, Kilvington, Thirsk, England; Caradoc, Jester II, 2d Stockton, 2d Darlington.

J A Doyle, Plas Dulas, Abergle; Lottery, late Tricard, 2 yrs; Tichborne, Nectar II, full pedigree. Spigot, 15 mos; Trounce, Barnard, by Bitters; full pedigree.

J D Olcott, Milwaukee: Billy, black, white and tan, 12 mos; Raggs, Viper; $100.

Chas Walton, 40 E 32d street, New York; Trap, white, black and tan; full pedigree.

CLASS 25—Fox Terrier Bitches.

T H Scott, Kilvington, Thirsk, England; Vick, Pinch, dam by Vandall; 1st Cleckheaton, 2d Durham, 2d Stocton, 2d Pickering, 2d Hartlepool.

W P H Turner, St Louis; Judy, black, white and tan, 2 yrs; full pedigree; not for sale.

Chas Walton, 40 E 32d street, New York; Tricksey, white, black and tan; full pedigree.

DIVISION SECOND—DOGS NOT USED IN FIELD SPORTS.

CLASS 34—Mastiffs, Dogs or Bitches.

Jesse Sherwood, Edina, Mo; Nero, 2 yrs; $75.

CLASS 35—St Bernards, Dogs or Bitches.

Martin P Donahoe, Fifth and Washington avenue, St Louis. Budge, brown, 6 mos, from imported stock.

Geo W Wilson, 601 N Main street, St Louis; Doctor, yellow or buff, 9 mos; $50.

G P Fay, Carrolton, Ill; Jim, black and white, 16 mos; $200.

A D Stahl, 810 Leffingwell avenue, St Louis; Lion, black and white, 19 mos.

CLASS 36—Newfoundlands, Dogs or Bitches.

F J Cafferata, 2809 Clark avenue, St Louis; Flora, black, 8½ mos.

Mrs Ellen McQuaid, 817 Biddle street, St Louis; Fanny, black, 2 yrs; exhibition only; Pups for sale.

CLASS 37—Rough Shepherd or Colly Dogs or Bitches.

J W Downey, M D, New Market, Frederick Co, Md; Duke, gray and white, 2½ yrs; Shepherd, Belle; not for sale.

Jas Cox, Strathroy, Ont.

Geo B Dougan, Richmond, Ind; Fred, yellow, 1½ yrs.

CLASS 38—Smooth Shepherd or Colly Dogs or Bitches.

W P H Turner, St Louis; Nellie, fawn and white, 2 yrs, imported stock; not for sale.

Jas Cox, Strathroy, Ont.

J J Kane, St Louis; Rover, black and tan, 3 yrs, imported stock. Shep, black and tan, 3 yrs, imported stock.

C C Leather, St Louis; Dick, black and tan, 9 yrs. Charley, 8 mos.

CLASS 39—Dalmatians.

(Dogs or Bitches,)

No entries.

CLASS 40—Bull Dogs.

(Dogs or Bitches.)

No entries.

CLASS 41—Bull Terriers, Dogs or Bitches.

Dogs over 20 pounds, Bitches over 16 pounds.

John Nolan, 16th and O'Fallon streets, St Louis; Finkey, white and brindle spot, 2½ yrs, by Dandy out of Noble's bitch; $100.

J H Busby, 1019 N 5th street, St Louis; Blinker, white, 16 mos; Bob, Netty; not for sale. Nell, brindle, 2 yrs; Bob, Sal; not for sale. Buff, white, 2 yrs; Bob, Netty; not for sale. Sailor, dark brindle, 3 yrs; Nailer, Nance; not for sale.

Richard Daly, St Louis; Tyke, brindle, 2 yrs.

Charles Hottes, St Louis; Touch, white, 16 mos; Billy, Nell; not for sale. Daisy, yellow, 15 mos; John, Cruel; not for sale.

CLASS 42—Bull Terriers, Dogs or Bitches.*

Dogs not over 20 pounds, Bitches under 16 pounds.

John Nolan, 16th and O'Fallon streets, St Louis; Crab, fawn, 6 mos; Bob, Nell; $4. Rose, white and fawn, 4 yrs; Dandy, Fanny; $15.

J H Busby, 1019 N 5th street, St Louis; Belle, white and brindle spots, 6 mos; Bob, Nell; not for sale.

J D Olcott, Milwaukee; Rose, tan, 11 mos; Billy, Gipsy; $50.

F Fink, 1,000 N 9th street, St Louis; Spot, lemon and white, 3 yrs.

CLASS 43—Black and Tan Terriers.

Dogs or Bitches over 13 pounds.

H Pulhoff, Eleardsville, St Louis; Fanny, black and tan, 5 yrs.

W F Johnstone, 2,618 Dayton street, St Louis; Toby, black and tan, 2 yrs; Nix, Beauty.

CLASS 44—Black and Tan Terriers, Dogs or Bitches.

(Not over 13 pounds.)

Richard Garvey, 407 Chestnut street, St Louis; Scalper, black and tan, 2 mos; $25.

T J Bueridge, 1420 Poplar street, St Louis; Dot, black and tan, 9 mos; Dick, Dolly.

Andrew Kirk, 7th and Oliver streets, St Louis; Mike, black and tan, 1 yr, out of imported Fannie; full pedigree.

Mrs Josephine Snell, 910 Morgan street, St Louis; Nellie, black and tan, 1 yr; not for sale.

J H Busby, 1,019 N 5th street, St Louis; Jim, black and tan, 3 yrs; not for sale. Mollie, black and tan, 3 yrs; not for sale.

A McC Hargadine, 503 N 5th street, St Louis; Dick, black and tan, 14 mos; Trick, Nell; $50.

Benj G R Ward & Bro, Gatesborg, Ills; Gipsy, black and tan, 5 yrs; Fritz Topsey; $100. Zip, black and tan, 3½ yrs; Charloy, Gipsy; $20.

Geo Lumelius, 2,112 N 5th street, St Louis; Tip, black and tan, 1½ yrs; $15.

CLASS 45—Skye Terriers, Dogs or Bitches.

No entries.

CLASS 46—Yorkshire Terriers, Dogs or Bitches.

No entries.

CLATS 47—Dandie Dinmont Terriers, Dogs or Bitches

John Curran, St Louis; Monk, Dick, Wasp.

Geo T Fowler, Fort Wayne, Ind; Nellie, 8 mos.

CLASS 48—Scotch Terriers, Dogs or Bitches.

J H Busby, 1019 N 5th street, St Louis; Bob, fawn, 17 mos.

Jos G Marriott, St Louis; Prince, fawn, 6 yrs; not for sale.

Geo M Wright, St Louis; Jack, fawn, 5 yrs; not for sale.

L Richmond, St Louis; Tommy, fawn, 9 mos; not for sale.

Jno R Porter, 1015 Chestnut street, St Louis; Fanny, sky and snuff, 11 yrs.

J H Whitman, Chicago; Fan, fawn, 2 yrs; $20.

CLASS 49—Long Haired or Silk Haired Terriers.

(Dogs or Bitches, not over 5 pounds.)

No entries.

CLASS 50—Pugs, Dogs or Bitches.

W P H Turner, St Louis; Victoria, fawn and black points, 18 mos; imported; not for sale.

CLASS 51—Italian Greyhounds, Dogs or Bitches.

C H Wright, 1307 Newhouse avenue, St Louis; Fred, white and brown, 7 yrs; $25.

J C Blanch, St Louis; Bessie, fawn; not for sale.

C E Stoss, 217 Olive street, St Louis; Daisy, fawn, 18 mos; not for sale.

CLASS 52—For the Largest Dog Exhibited.

Jesse Sherwood, Edina, Mo; Nero.

Geo P Fay, Carrollton, Ill; Jim, black and white, $200.

A D Stahl, Leffingwell avenue, St Louis, Lion.

T B Raymond, St Louis; Dragon, blue and black mottled, 3½ yrs; Siberian bloodhound; $75.

CLASS 53—For the Smallest Dog Exhibited.

T J Burridge, 1420 Poplar street, St Louis; Dot, black and tan, 6 mos; Dick, Dolly.

Andrew Kirk, 7th and Olive, St Louis; Mike, black and tan, 1 yr.

CLASS 54—Miscellaneous, Dogs and Bitches.

Frank A Murrell, 21 S Fourteenth street, St Louis; Hero, white and black, 2 yrs and 3 mos; cross between Newfoundland and bull.

T J Burridge, 1420 Poplar street, St Louis; Dolly, tan, 4 yrs and 7 mos; English tan terrier.

Marshall Hodgman, 121 N Third street; Esquie, gray brown, 2 yrs; pure Esquimaux, imported.

Edward Trayter, 1,010 N Tenth street, St Louis; Frank, tan, 3 yrs; cross pug and tan terrier.

Richard Daily, Grand and Lindell ave, St Louis; Spot, white and black spots, 6 years; imported Siberian or Ulm: Duck, white and black spots, 18 mos; imported Siberian, with pups; price of pups $10 each.

Frank P Walsh, cor Grand and Easton avs; Tip, white and black spots, 2 years; imported.

A D Stahl, 810 Leffingwell ave, St Louis; Lion, black and white, 19 mos; $100.

Dr C H Foster, 2 937 Choteau ave, St Louis; Waif, black, 4 yrs.

C Heath, Newark, N J; Minute, white, 4 years; $150.

Barton H Vennewitz, St Louis; Belle, dark red, 8 years.

Ralph B Wilts, Jefferson City, Mo; Mike and Coon, orange and white, 22 mos; English harness; exhibition only.

T B Raymond, St Louis.

DIVISION THIRD—SPECIAL CLASSES.

CLASS 55—For the Best Brace of Native Setters of Any Strain—A finest quality double-barreled hammerless breech loading shot-gun, new model, manufactured and presented by W. W. Greener, St Mary's Works, Birmingham, England. Value, $350.

Theo Morford, Newton, N J; Don and May.

J F Duncan, St Louis; Gelert and Luck.

John S Shaw, St Charles, Mo; Cap and Dan.

E C Waller, Chicago, Ill; Prince, Peg, Jack.

T J Churchill, Little Rock, Ark; Duke and Chester.

CLASS 56—For the Best Brace of Imported or Native English Setters, a double-barreled shot-gun, manufactured and presented by Parker Brothers, Meriden, Conn., through Simmons' Hardware Company. Value, $175.

Capt J W Foster, Leesburg, Va; Kirby and Brinda; Duke and Sam Tilden.

L H Smith, Strathroy, Ont; Leicester and Paris.

John S Shaw, St Charles, Mo; Cap and Dan.

E C Waller, Chicago; Prince, Peg, Jack.

Geo K Hopkins, Alton, Ill; Beppo and Buff.

H W Gause, Wilmington, Del; Belle and Warwick.

J H Dew, Columbia, Tenn; Queen and Zephyr.

Arnold Burges, Hillsdale, Mich; Druid and Queen Mab.

Baltimore Kennel Club, Baltimore: Rock and Mate.

CLASS 57—For the Best Brace of Imported or Native Irish Setters, a double-barreled breech-loading shot-gun, manufactured and presented by Nichols & Lefever, Syracuse, N Y. Value, $200.

St Louis Kennel Club, St Louis; Berkley and Loo II.

Henry Griffith, Butler, Ill; Don and Zip.

J F Duncan, St Louis; Gelert and Luck.

H W Gause, Wilmington, Del; Fire-Fly and Kelpie.

Jas Moore, Toledo, Ohio; Dash and Don.

CLASS 58—For the Best Brace of Imported or Native Gordon, or black and tan Gordon setters, a double-barreled breech-loading shot-gun, manufactured and presented by Remington Arms Co., through their St. Louis agents, Brown & Hilder. Value, $100.

Henry B Duke, 2,327 Olive street, St Louis; Nick and Loo.

Frank G. Hawkins, Glendale, Mo; Frank and Carlo; Tramp and Lady Dell.

Dr S J Coyne, Chicago; Belle and Peggoty.

W J Farrar, Toledo, Ohio; Rapp and Fan.

CLASS 59—For the Best Brace of Imported or Native Pointers, any size, a fine double-barreled breech-loading Greener gun, presented by Simmons' Hardware Co, St Louis. Value, $100.

For the second best brace, one finest quality velveteen or corduroy hunting suit, to order of the winner, manufactured and presented by Mr John V Metlar, St Louis. Value, $50.

Thos H Burtt, Jefferson City, Mo; Pat and Nellie.

Edmund Orgill, Brooklyn, N Y; Rush and Rose; Flake and Ruby.

C P Ellerbe, St Louis; Jack and Dan.

Jesse Sherwood, Edina, Mo; Sancho, Dream.

H J Menown, St Louis; Dan and Dash; Jeff and Kate.

Jas S Harris, Florissant, Mo; Jeff and Birdie.

V Boisaubin, 601 North Main street, St Louis; Lee and Dash.

R M Lindsay, Scranton, Penn; Viscount and Dolly.

Westminster Kennel Club, New York; Sensation and Till; Flake and Daisy.

Baltimore Kennel Club, Baltimore; Sefton and Black Prince.

A C Waddell, Kansas City; Fan and Flirt.

Columbus Kennel Club, Columbus, Ohio; Native, formerly Jake, and Champion Belle.

CLASS 60—For the Best Imported Native Pointer, Dog or Bitch, a silver tea service, manufactured and presented by F A Durgin, silversmith, St Louis. Value, $75.

Capt D Tiptoe St Louis; Toby.

W H Beck, Cadet, Mo; Andy.

J C Marriott, 2,715 State street, St Louis; Don.

S C Edgar, St Louis; Rock.

C P Budd, St Louis; Quad.

J B O'Meara, St Louis; Max.

Francis Coyle, St Louis; Fly.

Leonard S Reed, Louisville, Ky; Bragg.

Edmund Orgill, Brooklyn, N Y; Flake and Rush.

E F Stoddard, Dayton, Ohio; Brandy.

Jas S Harris, Florissant, Mo; Birdie.

E C Sterling, St Louis; Sleaford.

G Knapp, St Joseph, Mo; Shot.

R M Lindsay, Scranton, Pa; Dolly, Viscount.

A Thomas, Dayton, Ohio; Pride

Westminster Kennel Club, New York; Sensation.

R L Henry, St Louis; Joe, liver,

A C Waddell, Kansas City; Fan; Flirt.

Columbus Kennel Club, Columbus, Ohio; Native formerly Jake, liver and white, ticked, 3 yrs; Don, Champion Belle; $500; Gillespie's Fan, black, 3 yrs.

CLASS 61.—For the Best Imported or Native Pointer Dog, any size, for stud purposes, to be shown with two of his get, handsome silver plate, donated by E Mead & Co, jeweler, St Louis. Value, $50.

W H Beck, Cadet, Mo; Andy, with Toby and Andy II.

Edmund Orgill, Brooklyn, N Y; Flake, with Rush and Rose.

Jesse Sherwood, Edina, Mo; Sancho,

H Menown, St Louis: Dan, and Dash and Belle.

Westminster Kennel Club, New York; Sensation.

CLASS 62.—For the best imported or Native Pointer Bitch, any size, to be shown with two of her progeny, a handsome oil painting by Gen J Mook, St Louis. Value, $50.

Also, one (sporting scene) Excelsior game belt, presented by Case & Bedell, Chetopa, Kan. Price, $5.

W H Beck, Cadet, Mo; Daisy, with Toby and Andy.

John M Marshall, St Louis; Mary's Kitten.

H Menown, St Louis; Kate, with Jeff and Flora.

Baltimore Kennel Club, Baltimore; Lilly.

A C Waddell, Kansas City; Fan and pups.

Columbus Kennel Club, Columbus, Ohio; Gillespie's Fan.

CLASS 63—For the Best Native English Setter Dog, a handsome silver cup, donated by F. O. de Luze, agent for Spratt's Patent, London. Value, $25.

Theo Morford, Newton, N J; Don.

Alfred S Krekel, Jefferson City, Mo; Jim.

C P Budd, St Louis; Ned.

Chas de Ward, St Louis; Dan.

E C Walter, Chicago; Prince Peg

F Mansfield, St Louis; Dan.

J W Jackson, Chatham, Ont; Bruce.

Hy Otten, Baltimore; Tell.

P H Morris, New York; Lark.

CLASS 64—For the Best Imported or Native English Setter Dog for stud purposes, to be shown with two of his get, a handsome silver plate, presented by L Bauman & Co, St Louis. Value, $50.

L H Smith, Strathroy, Leicester.

Arnold Burgee, Hilledale, Mich; Rob Roy.

CLASS 65—For the Best Imported or Native English Setter Bitch, to be shown with two of her progeny, two prizes, viz.: 2,000 paper shells, presented by the St Louis Patent Shell Company, value $20, and one case powder, presented by Laflin & Rand Powder Company, value $20. Total value $40.

Capt J W Foster, Leesburg, Va; Kirby.

S E Billbrough, 3,143 Franklin ave, St Louis; Fanny.

L H Smith, Strathroy; Pearl.

CLASS 66.—For the Best Imported or Native Irish Setter Dog, to be shown with two of his get, a handsome silver wine stand, with three decanters, presented by J P Capello, jeweler, St Louis. Value, $50.

Dr Wm Jarvis, Claremont, N H; Elcho, red.

Geo T Fowler, Fort Wayne, Ind; Ranger,

Arnold Burges, Hillsdale, Mich; Rufus.

CLASS 67.—For the Best Imported or Native Irish Setter Bitch, to be shown with two of her progeny, a fine English gun case, presented by H Folsom & Co, gun dealers, St Louis. Value, $40.

St Louis Kennel Club, St Louis; Loo II.

Henry Griffith, Butler, Ill; Fan II.

Jesse Sherwood, Edina, Mo; Fanchon.

Jas Moore, Toledo, Ohio: Moss, with progeny.

Hy Kramer, St Louis; Nellie.

CLASS 68.—For the Best Imported or Native Irish Setter Dog or Bitch, a handsome clock, presented by E Jaccard & Co, jewelers, St Louis. Value, $75.

St Louis Kennel Club, St Louis; Loo II.

Henry Griffith, Butler, Ill; Don; Zip; Fan III; Peggy. For sale.

F A Churchill, St Louis; Buster.

W M Smith, Sterling, Ill; Bridget.

Dr Wm Jarvis, Claremont, N H; Elcho.

Geo T Fowler, Fort Wayne, Ind; Ranger.

Jas Moore, Toledo, Ohio; Dick; Don; Dash.

CLASS 69—For the Best Imported or Native English Setter Dog or Bitch, fine gold watch, presented by Mermod, Jaccard & Co, jewelers, St Louis. Value, $100.

Theo Morford, Newton, N J; May.

Geo B Clason, Milwaukee, Wis; Royal Duke.

Capt J W Foster, Leesburg, Va; Sam Tilden; Duke.

John W Monson, St Louis; Rose.

D C Betgunthal, Indianapolis; Rake.

W A Strother, Lynchburg, Frost.

C P Budd, St Louis; Ned.

P H Bryson, Memphis; Gladstone.

L H Smith, Strathroy, Bronte.

O F Garrison, Carondelet, Mo; Sport.

F A Churchill, St Louis; Duke.

J C Higgins, Delaware City; Lincoln.

Geo K Hopkins, Alton, Ill; Buff.

E A Abbott, Marshaltown, Iowa; Robin.

C O Dulcher, St Louis; Rip.

Arnold Burges, Hillsdale, Mich; Rattler.

J H Whitman, Chicago; Floss.,

Arnold Burges, Hillsdale, Mich; Hillsdale, Mich; Druid; Queen Mab.

Henry Otten, Baltimore; Tell.

CLASS 70—For the Best Imported or Native Gordon or Black and Tan Setter Dog, for stud purposes, to be shown with two of his get, a handsome silver wine stand, donated by a member of the Association. Value, $40.

Frank G Hawkins, Glendale, Mo; Frank.

Jesse Sherwood, Edina, Mo; Rupert.

W J Farrar, Toledo, Ohio; Rapp.

CLASS 71.—For the Best Imported or Native Gordon, or Black and Tan Setter Bitch, to be shown with two of her progeny, a set of sporting works, presented by the St Louis Book and News Company, value $20; also, a handsome shooting suit, donated by Brown & Hilder, gun dealers, St Louis. Value, $25.

Frank G Hawkins, Glendale, Mo; Queen.

Lew & Vincent, Des Moines, Iowa; Gipsey.

Aldine Kennel Club, Chicago; Bess.

W J Farrar, Toledo, Ohio; Fan.

CLASS 72—For the Best Native Irish Setter Dog or Bitch, a handsome silver cup, donated by a member of the Association. Value $25.

J F Duncan, attorney at law, St Louis; Gelert.

C K Garrison, Jr, St Louis; Flora.

Jesse Sherwood, Edina, Mo; Carrie IV.

Chas E Bicker, St Louis; Dora.

Geo B Dougan, Richmond, Ind; Belle.

D T Widgon, Decatur, Ill; Flash.

Jas Moore, Toledo, O; Dash.

CLASS 73—For the Best Native Puppy Setter Dog or Bitch, of any strain, under 12 months of age, a fine shooting suit. Presented by W H Holabird, "The Sportsman's Clothier," Valparaiso, Ind. Value, $25.

A A Mellier, St Louis; black and tan, 10 mos; full pedigree.

S Fleet Spier, M D, Brooklyn, N Y; Maida, black, white and tan, 8 mos.

Jesse Sherwood, Edina, Mo; Aimee.

Aldine Kennel Club, Chicago; Red Raval.

A C Waddell, Kansas City; Moke.

CLASS 74—For the Best Irish Water Spaniel Dog or Bitch, a handsome silver cup, donated by a member of the Association. Value $25.

J H Whitman, Chicago; Liffey.

Big Point Kennel Club, Chatham, Ont, Mike.

CLASS 75—For the Best Irish Water Spaniel Dog or Bitch, the get of Sinbad or the King of the River, a silver cup, presented by J H Whitman, Chicago. Value $20.

For the second best, as above, a silver cup, presented by J H Whitman, Chicago. Value $10.

J D Alcott, Chicago; Molly, liver; Sinbad, Bridget.

E O Sterling, St Louis; Jack, liver.

CLASS 76—For the Best Chesapeake Bay Dog or Bitch, Short or Long-Haired, a rubber suit complete, presented by George B Thompson, St Louis, Agent of Goodyear Rubber Co. Value $25.

S J Martinet, Jr, Baltimore, Md: Sinbad, reddish brown.

Charles L Hunt, Normandy, St Louis County, Joe, red.

Paul J Marrs, Henderson, Ky, Milo.

O T Aubin, St Louis, Diana.

J L Beck, Chestertown, Md, Boas.

Tip Crisp, Baltimore, Rob.

CLASS 77—For the Best Beagle Dog or Bitch, a silver cup donated by a member of the Association. Value $25.

Chas L Hunt, Normandy, St Louis County; Jupe.

Jesse Sherwood, Edina, Mo; Lee.

Chas Rowett, Carlinville, Ill; Ringgold. Rosy.

CLASS 78—For the Best Brace of Foxhounds, a set of Frank Forrester's works, presented by the Gray & Baker Book and Stationery Co. Value $20.

Chas L Hunt, Normandy, St Louis County; Tray and Sweetheart.

O F Garrison, Carondelet, Mo; Blucher and Mate, black, white and tan.

Jesse Sherwood, Edina, Mo; Sing and Sharp.

Arthur Mittleburg, St Louis; Muzo and Julie.

E F Patterson, Florissant, Mo; Trueboy and Spot.

A C Waddell, Kansas City; Ring and Sting.

CLASS 79—For the Best Fox Terrier Dog or Bitch, Havana cigars, presented by Girardi & Stickney, Cigar Dealers, St Louis. Value $25.

J D Olcott, Milwaukee; Billy.

O Walton, New York; Trap. Tricksey.

CLASS 80—For the Best Black and Tan Terrier Dog or Bitch, Large Size, a silk umbrella, presented by John W Loader, Hatter, St Louis. Value, $15.

H Pulhoff, Eleardsville, St Louis County; Fanny, black and tan.

W F Johnstone, 2 618 Dayton street, St Louis; Toby, black and tan, 2 yrs; Nix, Beauty.

CLASS 81—For the Best Black and Tan Terrier Dog or Bitch. Small Size, a dozen fine shirts, made to order of the winner and presented by George S Fowler, Dealer in Gents' Furnishing Goods, Fort Wayne, Ind. Value, $42.

Andrew Kirk, 7th and Olive, St Louis; Mite, black and tan; 1 yr.

Mrs Josephine Snell, 910 Morgan street, St Louis; Nellie, black and tan, 1 yr.

J H Bisby, St Louis; Jim. Mollie.

A McO Hargadine, 503 N Fifth street, St Louis; Dick.

B C R Ward & Bro, Galesburg, Ill; Gipsey.

CLASS 82—For the Best Yorkshire Terrier Dog or Bitch, a fine silk hat, made to order of the winner and presented by M J Steinberg, "The Hatter," St Louis. Value, $10.

No entries.

CLASS 83—For the Best Bull Dog or Bitch, any Size or Age, cash prize, donated by Hon. Erastus Wells, President Missouri Railroad Company. $25.

No entries.

CLASS 84—For the Best St Bernard Dog or Bitch, cash prize, donated by Hon Erastus Wells, Pres Mo R R Co. $25.

Martin P Donahoe, St Louis; Budge.

Geo P Fay, Carrollton, Ill; Jim.

A D Stahl, St Louis; Lion.

CLASS 85—For the Best Setter Dog or Bitch, of any Age or Breed, bred in America, a prize of value of £10 sterling, donated by J H Scott, Kilvington, Thirsk, Yorkshire, England. $50.

St Louis Kennel Club, St Louis; Berkley.

Henry Griffith, Butler, Ill; Don. Zip. Fan III. Peggy.

Theo Morford, Newton, N J; May.

Geo B Clason, Milwaukee; Royal Duke.

Capt J W Foster, Leesburg, Va; Duke.

John W Munson, St Louis; Rose.

C P Budd, St Louis; Ned.

L H Smith, Strathroy; Bronte.

R E Carr, St Louis; Grouse.

E C Waller, Chicago; Prince Peg.

E A Abbott, Marshalltown, Iowa; Robin.

H W Gause, Wilmington, Del; Warwick.

Geo B Dougan, Richmond, Ind; Kite.

Arnold Burges, Hillsdale, Mich; Rattler.

J H Whitman, Chicago; Floss.

Wm H Wells, Chatham, Ont; Star.

Hy Otten, Baltimore; Tell.

P H Morris, New York; Lark.

Isaac Weighell, Rochester, New York; Horton.

CLASS 86—For the Best Pointer Puppy Dog or Bitch Under 12 Months of Age, 2,000 St Louis Conical Base Paper Shells, donated by the St Louis Patent Shell Manufacturing Co. Value, $25.

W H Beck, Cadet, Mo; Toby; $50.

G P Elerbe, St Louis; Jack.

John W Harris, Dayton, Ohio; Rock.

R L Welliver, Belleville, Ill; Dash.

H J Mentown, St Louis; Jeff Flora.

A H Fleischhein, Belleville, Ill; Whitford.

Westminster Kennel Club, New York; George McKee.

A C Waddell, Kansas City; Demon.

CLASS 87—For the Best Native English Setter Dog or Bitch, a Colt's New Model, Lightning Gold-plated, Pearl-Handled Revolver, calibre 41, with satin-lined case, donated by A F Shapleigh & Co., Hardware Dealers, St Louis. $50.

Theo Morford, Newton, N J; May.

S C Elgar, St Louis; Josh Billings.

C P Budd, St Louis; Ned.

R E Carr, St Louis; Grouse.

Chas De Ward, St Louis; Dan.

E C Waller, Chicago; Prince Peg.

E A Abbott, Marshalltown, Iowa; Robin.

F Mansfield, St Louis; Dan.

Hy Otten, Baltimore; Tell.

P H Morris, New York; Lark.

CLASS 88—For the Best Brace of Pure Laverack Setters Under One Year Old, a fine shooting suit, new design, manufactured and presented by J J Snellenburg, New Brighton, Pa. $40.

No entries.

CLASS 89—For the Best Imported or Native Setter Dog or Bitch, any Strain, a silver vase, ornamented with the portrait of "Guy Mannering," the Laverack Setter, modelled from life; manufactured and presented by Tiffany & Co, Jewelers, New York. Value, $75.

St Louis Kennel Club, St Louis; Loo II.

Henry Griffith, Butler, Ill; Don. Zip. Fan III. Peggy.

Geo B Clason, Milwaukee; Royal Duke.

Capt J W Foster, Leesburg, Va; Duke, 27 mos.

W A Strother, Lynchburg, Va; Frost.

P H Bryson, Memphis; Gladstone.

L H Smith, Strathroy; Bronte.

J C Higgins, Delaware City, Del; Lincoln.

D C Bergundthal, Indianapolis; Phyllis. Rake.

H W Gause, Wilmington, Del; Firefly.

Arnold Burges, Hillsdale, Mich; Rattler. Druid. Queen Mab.

J H Whitman, Chicago; Floss.

G T Fowler, Fort Wayne, Ind; Ranger.

Hy Otten, Baltimore; Tell.

CLASS 90—For the Best Imported or Native Gordon or Black and Tan Setter Dog or Bitch, a handsome silver cup, presented by the St Louis *Herald* $50.

John G Schoeffler, Alton, Ill; Dick, black and tan, 2 yrs.

Jesse Sherwood, Edina, Mo; Rupert, black and tan.

Levi H Wright, St Louis; Beulah, black and tan.

W J Farrar, Toledo, O; Fan.

CLASS 91—For the Best Couple Imported or Native Foxhounds, fine Scott English double-express rifle, presented by Wm Read & Sons, Boston, Mass. $225.

Chas L Hunt, Normandy, St Louis County; Tray and Sweetheart.

O Garrison, Caroncelet, Mo; Blucher and Mate.

Jesse Sherwood, Edina, Mo; Sing and Sharp.

J P Schulte, St Louis; Major and Mate.

Arthur Mittelburg, St Louis; Muse and Julie.

Milton Smith, Kirkwood, Mo; Carl and Kate.

E F Patterson, Florissant, Mo; True Boy and Spot.

R L Henry, St Louis; Dash and Sank.

Isaac Weighell, Rochester, N Y; Buck and Mate.

A C Waddell, Kansas City; Ring and Sting.

CLASS 92—For the Best Brace of Imported or Native Irish Setter Dogs or Bitches, a handsome oil painting (game piece), painted and donated by Miss Josie McKellops, St Louis. Value, $150.

St Louis Kennel Club, St Louis; Berkley and Loo II.

Henry Griffith, Butler, Ill; Don and Fan III. Zip and Peggy.

Don and Peggy. Zip and Fan III.

E C Waller, Chicago; Fanny Fern and Race.

CLASS 93—For the Best English Retriever Dog or Bitch, Wavy or Curly Coated, a handsome plated revolver, presented by Brown & Hilder, Gun Dealers, St Louis. Value, $25.

Major F F Hilder, St Louis; Don, black, 4½ yrs; $10.000.

John H Albert, 2,006 Jackson street, St Louis; Sneider, liver, 21 mos; $20.

Chas L Hunt, Normandy, St Louis County; Hero, black, 6 yrs; imported by John Gosling, Esq.

CLASS 94—For the Best Setter Dog Bred in the United States, a Fox Gun, presented by the American Arms Company, Boston. Value, $100.

St Louis Kennel Club, St Louis; Berkley.

Henry Griffith, Butler, Ill; Don. Zip. Fan III. Peggy.

Theo Morford, Newton, N J; May.

J F Duncan, St Louis; Gelert.

Robt Beecke, St Louis; Caro.

John W Munson, St Louis; Rose.

C P Budd, St Louis; Ned.

O F Garrison, St Louis; Sport.

S C Elgar, St Louis; Josh Billings.

Geo K Hopkins, Alton, Ill; Beppo.

Capt J W Foster, Leesburg, Va; Duke.

E A Abbott, Marshalltown, Iowa; Robin.

H W Gause, Wilmington, Del; Warwick.

P H Morris, New York; Lark.

NOTE—T H Scott telegraphed in time, claiming entries for all specials when eligible.

PRIZES.

DIVISION I—CHAMPION CLASS, FREE FOR ALL.

Class 1—1st, $50, Gladstone. 1st in puppy stakes, Nashville, 1877, P H Bryson, Memphis, Tenn. V h c, Royal Duke, Geo B Clason, Milwaukee, Wis; Duke, Capt J W Foster, Leesburg, Va; Lincoln, J C Higgins, Delaware City; Druid, Arnold Burges, Hillsdale, Mich. H c, Rattler, same owner; Lark, P H Morris, New York.

Same class, bitches—1st, $50, Queen Mab, Arnold Burges, Hillsdale, Mich. V h c, Frost, W A Strother, Lynchburg, Va; Queen, James H Dew, Columbia, Tenn; Floss, J H Whitman, Chicago. H c, Pearl, L H Smith, Strathroy, Ont; Belle, H W Gause, Wilmington, Del.

Class 2—1st $50, Champion Irish dog, Elcho, Wm Jarvis, Claremont, N H. V h c, Berkley, St Louis Kennel Club; Sting II, same club; Bob, E F Stoddard, Dayton, Ohio; Race, E C Waller, Chicago; Ranger, Geo S Fowler, Fort Wayne, Ind. H c, Don, James Moore, Toledo, O.

Bitches—1st, $30, Champion bitch, Loo II, St Louis Kennel Club. V h c, Firefly, H W Gause, Wilmington, Delaware; Bridget, W M Smith, Sterling, Ill.

Class 3—1st, $50, Rupert, Shot, Rhona, Jesse Sherwood, Edina Mo.

Bitches—1st, $50, Floss, T H Scott, England. V h c, Fan, J, Farrar, Toledo, O; Belle, Aldine Kennel Club, Chicago; Lou, Wm M Tileston, New York. H c, Libby, Thomas M Gallagher, Tower Grove Station, St Louis; Beulah, Lew H Wright, St Louis.

Class 4—1st, $50, Sensation, Westminster Kennel Club, New York. V h c, Brandy, E F Stoddard, Dayton, O; Sleaford, E C Sterling, St Louis; Viscount, R M Lindsay. H c, Rock, S C Edgar, St Louis; Bragg, Leonard S Reed, Louisville, Ky; Native, Columbus Kennel Club, Ohio.

Bitches—1st, $50, Gillespie's Fan, Columbus Kennel Club, O. V h c, Dolly, R M Lindsay, Scranton, Pa; Pride, Alfred Thomas, Dayton, Ohio; Fan, A C Waddell, Kansas City Kennel. H c, Flirt, A G Waddell; Romp, Edmund Orgill.

Class 5—1st, $50, Flake, Edmund Orgill, Brooklyn, N Y. V h c, Russ, Edmund Orgill.

Bitches—V h c, Jesse, A C Waddell, Kansas City. H c, Daisy, Westminster Kennel Club, New York.

OPEN CLASSES.

Class 6—1st, $50, Gladstone, P H Bryson, Memphis. 2d, $20, Druid, Baltimore Kennel Club. 3d, $10, Royal Duke, Geo B Clason, Milwaukee. V h c, Duke, Capt J W Foster, Leesburg, Va; Brussels, T Donoghue, La Salle, Ill; Bronte, L H Smith, Strathroy, Ont; Lincoln, J C Higgins, Delaware City, Del; Pound, Scott, England; Rattler, Arnold Burges, Hillsdale, Mich. H c, Rake, D C Bergundthal, Indianapolis, Ind; Prince Peg, E C Waller, Chicago; Grouse, Baltimore Kennel Club; Rock, Baltimore Kennel Club.

Bitches—1st, $30, Floss, J H Whitman, Chicago. 2d, $20, Brenda, Capt J W Foster, Leesburg, Va. 3d, $10, Queen, Jas H Dew, Columbia, Tenn. V h c, Frost, W A Strother, Lynchburg, Va; Pearl, L H Smith, Strathroy, Ont; Star, Wm B Wells, Jr, Chatham, Ont.

Same class, puppies over 6 mos—1st, $15, Wanda, S Fleet Speir, M D, Brooklyn. V h c, Phyllis, D C Bergundthal, Indianapolis; h c, Warwick, H W Gause, Wilmington, Del.

Same class, puppies under 6 mos—1st, $15, Cumbrae, J McWhorter, Canton, Mo.

Class 7—1st, $30, Jack, E C Waller, Chicago. 2d, $20, Don, Theo Morford, Newton, N J. 3d, $10, Dan, Chas De Ward, St Louis. V h c, Jim, Alfred S Krekel, Jefferson City, Mo; Jeff, E C Waller, Chicago; Robin, E A Abbott, Marshalltown, Iowa; Dan, F Mansfield, St Louis; Bruce, T W Jackson, Chatham, Ont. H c, France, Wm Vie, St Louis.

Same class, bitches—1st, $30, May, Theo Morford, Newton, N J. 2d, $20, Kate, C F Demuth, Fort Dodge, Iowa. 3d, $10, Daisy, T Donoghue. V h c, Alexandrina, Baltimore Kennel Club; Clarina, same owners. H c, Buff, Geo K Hopkins, Alton, Ill; Lady Clotilda, Baltimore Kennel Club.

Same class, puppies over 6 mos—1st, $15, Fritty, F Fink, St Louis. V h c, Aimee, Jesse Sherwood, Edina, Mo; Tip, F Fink, St Louis; Belle, F Fink. H c, Prince, E H Gilman, Detroit, Mich.

Same class, under 6 mos—1st, $15, Mike, O F Garrison, Carondelet, Mo. V h c, Bob Lee, J J Bailey, St Louis.

Class 8—1st, $30, Berkley, St Louis Kennel Club. 2d, $20, Bob, E F Stoddard, Dayton, Ohio. 3d, $10, Sting II. V h c, Don, Henry Griffiths, Butler, Ill; Zip, same owner; Kite, Geo B Dougan, Richmond, Ind; Ranger, Geo T Fowler, Fort Wayne, Ind; Don, James Moore, Toledo, O; Dick, same owner. H c, Elcho II, St Louis Kennel Club; Buster, F A Courchill, St Louis.

Same class, bitches—1st, $30, Biddy, St Louis Kennel Club. 2d, $20 Duck, St Louis Kennel Club. 3d, $10, Firefly, H W Gause, Wilmington, Del. V h c, Fan, Henry Griffiths, Butler, Ills; Fanny Fern, E C Waller, Chicago; Flounce, Baltimore Kennel Club. H c, Bridget, W M Smith, Sterling, Ill; Star, Theo Tilotson, Chicago.

Same class, puppies over 6 mos—1st, $15, Henry Griffiths, Butler, Ill. V h c, Nora, same owner; Purdy, Baltimore Kennel Club.

Same class, puppies under 6 mos—1st, $15, Loo III, St Louis Kennel Club. V h c, Bob, Dr J P Carver, Alton, Ill.

Class 9, dogs—1st, $30, Race, E C Waller, Chicago. 2d, $20, Guy, W H Linn, Decatur, Ill. 3d, $10, Dash, James Moore, Toledo, O. H c, Pilot, Jr, Jesse Sherwood, Edina, Mo; Lincoln, John Krumbolz, 1,505 Carondelet avenue.

Bitches—1st, Juno, W H Linn. 2d, Flash, G T Widgeon, Decatur, Ill. 3d, $10, Dora, Chas E Bicker, 702 Olive street. V h c, Flora, C K Garrison, Jr, 3,019 Belle street. H c, Kate, Jno V Metlar, 700 Olive street.

Puppies over 6 mos—1st, $15, Red Rival, Aldine Kennel Club, Chicago. V h c, Karl, W T Irwin, Topeka, Kas; Belle, George B Dougan, Richmond, Ind. H c, Tom Brown, W H Holabird, Valparaiso, Ind; Rose, Aldine Kennel Club.

Puppies under 6 mos—1st, $15, Rustic Ramble, S A Kay, Chicago.

Class 10—1st, $30, Frank, Jacob G Hawkins, Glendale, Mo. 2d, $20, Raff, W J Farrar, Toledo, O. 3d, $10, Heck, David Shellaberger, Decatur, Ill. V h c, Sam, Aldine Kennel Club; Grand Duke, Baltimore Kennel Club; Dash, W J Farrar. H c, Ben, Baltimore Kennel Club; Pall, Aldine Kennel Club, Chicago.

Bitches—1st, $30, Floss, T H Scott, England. 2d, $20, Fan, W J Farrar, Toledo O. 3d, $10, Nettie, W J Farrar. V h c, Nell, W J Farrar; Libby, Thomas M Gallagher, Tower Grove Station, St Louis; Peggoty, Dr S J Coyne, Chicago; Belle, same owner; Lady Gordon, Aldine Kennel Club, Chicago; Dream, Baltimore Kennel Club. H c, Sukey, George W Kerr, St Louis; Lulu, Aldine Kennel Club.

Puppies over 6 mos—1st, $15, Dinah, W J Farrar, Toledo. V h c, King, A A Meltzer, Jr, 709 Washington avenue; Pride of Kansas, W T Irwin, Topeka, Kas. H c, Tramp, Jacob G Hawkins, Glendale, Mo.

Puppies under 6 mos—1st, $15, Rudolph, Low & Vincent, Des Moines, Iowa. V h c, Prince, Robert H Wright, 2,228 Scott avenue, St Louis; Allie, W J Farrar, Toledo, O.

Class 11—1st, $30, Sleaford, E C Sterling, St Louis. 2d, $20, Viscount, R M Lindsay, Scranton, Pa. 3d $10, Row, T H Scott, Kilvington, Thirsk, England. V h c, Brenda, E F Stoddard, Dayton, O; Shot, Geo Knapp, St Joseph, Mo; Phil, Jr, A C Waddell, Kansas City; Native, formerly Jake, Columbus (O) K C. H c, Bragg, Leonard S Reed, Louisville, Ky.

Bitches—1st $30, Dolly, R M Lindsay, Scranton, Pa. 2d, $20, Queen, J W Munson, St Louis; 3d $10, Kitty, John Papenbrook, 618 Carr street, St Louis. V h c, Pebble, Alfred Thomas, Dayton, O; Fan, A G Waddell, Kansas City; Romp, Edmund Orgill, Brooklyn.

Class 12—1st, $30, Sefton, Baltimore Kennel Club. 2d, Blake II, Westminster Kennel Club. 3d, $10, Dick, Thomas H Boeit, Jefferson City, Mo. V h c, Quail, C P Budd, St Louis; Black Prince, Baltimore Kennel Club.

Bitches—1st, Clytie, E C Sterling, St Louis. 2d, $20, Ruby, Edmund Orgill, Brooklyn, N Y. 3d, $10, Lilly, Baltimore Kennel Club. V h c, Rose, Edmund Orgill; Belle, same owner; Duchess, Westminster Kennel Club; Jessie, A C Waddell, Kansas City; Nellie, Columbus Kennel Club.

Class 13—1st $15, Rosette, W M Smith, Sterling, Ill. V h c, Mack, W H Holabird, Valparaiso, Ind; Dick, S A Kay, Chicago; Rock, J W Harries, Dayton, O; Julep II, Theo Tilotson, Chicago; Vic, W F Fullagar, St Louis; Jeff H Menown, St Louis; Flora, same owner; Demon, A C Waddell, Kansas City. H c, Jack, C P Ellerbe, St Louis; Fannie, Robt W Barker, St Louis.

Same class, under 6 mos—1st, $15, Gipsey, Oliver Labadie, St Louis. V h c, Whitford, A G Fleishhein, Belleville, Ill. H c, Toby, W H Rock, Cadet, Mo; Andy II, same owner; Jane, same owner; Mark, Jr, G H Moll, St Louis; Ponto, H J Menown, St Louis; Don, Henry Berlen.

Class 14—1st, $20, J L Beck, Chestertown, Md. 2d $10, No name given, Baltimore K C. C. No name given, Baltimore K C.

Class 15—1st, $20 Milo, Paul J Marrs, Henderson Ky. 2d, $10, Diana, C T Aubin. V h c, Sinbad, S J Martinez, Jr, Baltimore. C, Joe, Chas L Hunt, Normandy, St Louis county.

Class 16—1st $20, King of the River, Mike, Luffy, J H Whitman, Chicago. 2d, $10, Mike, Shamrock, Champion Duck, Big Point Kennel Club. 3d (no prize), Sinbad, Dyke, Fan, R A Turtle, Chicago.

Bitches—1st, $20, Bridget, Bingo, Champion Quail, Big Point Kennel Club, Chatham, Ont. 2d, $10, Luffy, Doctor, Bridget, J H Whitman.

Irish water spaniel puppy, under 12 mos—Diver, Bob, Elgin, bitch, J D Olcott, Milwaukee.

Class 17—1st, $20, Bob, Sinbad, Queen, J H Whitman. 2d, $10, Duck.

Class 18—1st, $20, Dick, Ethan Allen stock, Miss Mary Whitman, Chicago. 2d $10, Uno, Mrs Andrew Warren.

Bitches—1st, $20, Dixie, Miss Clara Whitman, Chicago. 2d, $10, Nellie, Mrs Warren.

Class 19—1st, $20, Flax, Royal, Belle, Jesse Sherwood, Edina, Mo. 2d, $10, Florence.

Class 20—1st, $20, Tray and Sweetheart, Charles L Hunt, Normandy, St Louis county. 2d, Major and Mate, J P Schulte.

Class 21—1st, $20, Lee, Turner's dog, Rowett's bitch, Jesse Sherwood, Edina, Mo. 2d, $10, Ringgold, Warrior, Rosy, Charles Rowett, Carlinsville, Ill.

Bitches—1st, $10, Rosy, Sam, Dolly, Charles Rowett. 2d, $10, Lillie, Turner's dog, Rowett's bitch, Jesse Sherwood.

Class 22—1st, $20, Seetveel, Seetveel II, M Peixtee. 2d, $10, Nellie and Pink, Francis Leisler, New York. (Judge's note—By far the best, but too large.)

Class 23—1st, $20, Willie, J C Branch, St Louis. 2d, $10, Dan, R L Henry, St Louis.

Class 24—1st, $20, Lulu, J H Whitman, Chicago. 2d, $10, Rosemond, Dr Charles Digges, St Louis.

Class 25—1st, $20, Trap, Charles Walton, New York. 2d, $10, Billy; Ragge, Viner; J D Alcott, Milwaukee.

Bitches—1st, $20, Trickey, Charles Walton, N Y. 2d, $10, Judy, W P H Turner, St Louis.

Class 26—1st, $25, Leicester, L H Smith, Strathroy, Ont.

Bitches—1st, $25 Pickles, C F Demuth, Fort Dodge, Ia.

Class 27—1st, $25 Elcho (Berkley and Race, his get), Dr Wm Jarvis, Claremont N H

Bitches—1st, $25, Loo II (Berkley and Loo III, her progeny), St Louis K C.

Class 28—1st, $25 Rapp W J Farrar, Toledo, O.

Bitches—1st, $25, Fan, W J Garrar, Toledo, O.

Class 29—1st, $25 Sensation Westminster K C.

Bitches—1st, $25 Lilly, Baltimore K C.

Class 30—1st, $100, Leicester, Paris, Bronte, Pearl, Dart, etc, L H Smith, Strathroy, Ont.

Class 31—$100, Loo II, Duck, Sling II, Berkley and Biddy, St Louis K C.

Class 32—$100, Rapp, Dash, Brough, Barney, Albert, Allie, Alice, Nettie, Nell, Fan W J Farrar, Toledo, O.

Class 33—$100, Flake, Rush, Rose, Ruby, Belle and Romp, Edmund Orgill, Brooklyn, N Y.

Class 34—Nero, Jesse Sherwood, Edina Mo.

Class 37—1st, $20 dog exhibited by Jas Cox, Strathroy, Ont. 2d, $10, Fred, Geo B Dougan, Richmond, Ind.

Class 38—1st, $20, Nellie, P H Turner, St Louis. 2d, $10, dog exhibited by Jas Cox. [Judges' Note—The others offered in this class not smooth coat dogs.]

Class 41—1st, $10, Finkey, John Nolan, Sixteenth and O'Fallon streets. 2d, $5, Nell.

Class 42—1st, $10, Rose; Billy, Gypsy; J D Olcott, Milwaukee. 2d, $5, Spot, F Fink.

Class 43—1st, $10, Fanny, H Puthoff, Ellearsville, St Louis county. 2d, $5, Toby.

Class 44—1st, $10, Nellie, Mrs Josephine Snell, St Louis. 2d, $5, Zip.

Class 48—1st, $15, Jack, Geo M Wright, St Louis. 2d, $10, Fan, J H Whitman, Chicago.

Class 50—1st, $10 Victoria, W P H Turner, St Louis.

Class 51—1st, $10, Daisy, C E Ross.

Class 52—1st, $10, Jim, 167½ lbs, O P Fay, Carrollton, Ill. Lion, 158½ lbs.

Class 53—1st, $10, Dot, 3 lbs.

Class 54—1st, $10, Lion, A D Stahl, Leffingwell avenue.

SPECIAL CLASSES.

Class 55—A fine W W Greener breech-loading shot-gun, value, $350, Don and May, Theodore Morford, Newton, N J.

Class 56—A double-barrelled Parker shot-gun, value, $115, Druid and Queen Mab, Arnold Burges, Hillsdale, Mich.

Class 57—A Nicholls & Lefever double-barrelled shot-gun, value, $200, Berkley and Loo II, St Louis Kennel Club.

Class 58—A Remington double-barrelled shot-gun, value, $100, Rapp and Fan, W J Farrar, Toledo, O.

Class 59—A $100 double barrelled Greener Gun, Flake and Ruby, Edmund Orgill, Brooklyn, N Y. 2d, a $50 hunting suit, Jack and Dan, C P Ellerby, St Louis. V h c, Viscount and Dolly, R M Lindsay, Scranton, Pa; Sensation and Till, Westminster Kennel Club; Fan and Flirt, A G Waddell, Kansas City; Native (formerly Jake) and Champion Belle, Columbus Kennel Club, Ohio. H c, Flake and Daisy, Westminster Kennel Club; Sefton and Black Prince, Baltimore Kennel Club.

Class 60—A $75 silver tea service, Sensation, Westminster Kennel Club.

Class 61—A $50 silver plate, Sensation, Westminster Kennel Club.

Class 62—Sporting scene painted in oil, Lilly, Baltimore Kennel Club.

Class 63—$25 silver cup, Jack, E C Waller, Chicago.

Class 64—$50 silver plate, Leicester, L H Smith, Strathroy, Ont.

Class 65—$40 worth of shells and powder, Pearl, L H Smith, Strathroy, Ont.

Class 66—$50 silver wine stand, Elcho, Dr Wm Jarvis, Claremont, New Hampshire.

Class 67—$40 English Gun, Loo II, St Louis Kennel Club.

Class 68—$75 clock, Elcho, Dr Wm Jarvis, Claremont, New Hampshire.

Class 69—$100 gold watch, Gladstone, P H Bryson, Memphis, Tenn.

Class 70—$40 silver wine stand, W J Farrar, Toledo, O.

Class 71—$20 worth of sporting books; $25 shooting suit, Fan, W J Farrar, Toledo, O.

Class 72—$25 silver cup, Flash, D T Widgeon, Decatur Ill.

Class 73—$25 shooting suit, Red Rival, Abline Kennel Club, Chicago.

Class 74—Handsome silver cup, Mike, Big Point K C, Chatham, Ont.

Class 75—1st, silver cup, Molly, J D Alcott, Chicago. 2d, silver cup, Jack, E C Sterling, St Louis.

Class 76—1st, Rubber suit complete; Boze, J L Beck, Chestertown, Md.

Class 77—Silver cup, Rosy, Charles Rowelt, Carlinville, Ill.

Class 78—Set of Frank Forrester's works, Tray and Sweetheart, Charles L Hunt, Normandy, St Louis county.

Class 79—$25, Billy, J D Olcott, Milwaukee.

Class 80—1st, Toby, W F Johnstone.

Class 81—1st, Nellie, black and tan, 1 yr.

Class 82—£10 sterling divided between Berkley, St Louis Kennel Club; Royal Duke, G B Classon, Milwaukee, and Floss, J H Whitman, Chicago.

Class 83—1st, Whitford, A G Fleischbein, Belleville, Ill.

Class 84—1st, Jack, E C Waller, Chicago.

Class 85—$10 silver vase, Gladstone, P H Bryson, Memphis.

Class 86—$50 silver cup, Rupert, Jesse Sherwood, Edina, Mo.

Class 87—Scott English double Express rifle, Major and Malo, J P Schulte, St Louis. 2d, Tray and Sweetheart, Chas L Hunt, Normandy. 3d, True Boy and Spot, E F Patterson, Florissant, Mo.

Class 88—Old game-piece, Berkley and Loo II, St Louis Kennel Club.

[☞ The V h c, very highly commended; H c, highly commended.]

SPORTSMEN'S GOODS.

Class 1—For the best breech-loading shot-gun, of any maker, convenience and strength of action and general workmanship considered, a handsome gold medal, suitably engraved, value, $25; Nichols & Lefevre, Syracuse, N Y.

Class 2—For the best breech-loading, double-barreled shot-gun of American make, same consideration as in Class 1, a handsome gold medal, suitably engraved, value, $25; Nichols & Lefevre, Syracuse, N Y.

Class 3—For the best breech-loading, double-barreled shot-gun of any maker, same consideration, not to cost more than $250 at retail, a handsome silver medal, suitably engraved, value, $20; H Folsom & Co, St Louis.

Class 4—For the best breech-loading, double-barreled shot-gun of any maker, same consideration, not to cost more than $150 at retail, a handsome silver medal, suitably engraved, value, $20; Brown & Hilder, St Louis.

Class 5—For the best breech-loading, double-barreled shot-gun, any maker, same consideration, not to cost more than $100 at retail, a handsome silver medal, suitably engraved, value, $20; W Read & Sons, Boston.

Class 6—For the best breech-loading, double-barreled shot-gun of any maker, same consideration, not to cost more than $50 at retail, a handsome silver medal, suitably engraved, value, $10; American Arms Company, Boston.

Class 7—For the best target rifle of any maker, same consideration, a handsome silver medal, suitably engraved, value, $20; Brown & Hilder, St Louis.

Class 8—For the best sporting rifle of any maker, same consideration, a handsome silver medal, suitably engraved, value, $20; Simmons' Hardware Company, St Louis.

Class 9—For the best sporting suit (coat, pants, vest and hat or cap), convenience and quality of goods considered, a handsome silver medal, suitably engraved, value, $10. Won by Brown & Hilder for G W Simmons & Sons, of Boston.

Class 10—For the best shooting suit, not to cost more than $25, a handsome silver medal, suitably engraved, value, $10. Won by W Holabird, Valparaiso, Ind.

Class 11—For the best hunting boat, convenience, strength and lightness considered, a handsome silver medal, suitably engraved, value, $10. Won by Brown & Hilder for Thomson & Son, New York.

Class 12—For the best fishing boat, convenience, strength and lightness considered, a handsome silver medal, suitably engraved, value, $10; N S Choulean, St Louis; Osgood & Chapin, Michigan, highly commended.

Class 13—None exhibited.

Class 14—For the best display of fishing tackle, a silver medal, suitably engraved, value, $10; Brown & Hilder.

Class 15—For the best fishing rod for general use, strength, lightness and workmanship considered, a handsome silver medal, suitably engraved, value, $10; Conroy, Bissett & Malleson, New York.

Class 16—For the best specimen of taxidermist's work, a silver medal, suitably engraved, value, $10; R A Turtle, Chicago.

Class 17—For the best display of taxidermist's work, birds and animals, a silver medal, suitably engraved, value, $10; Rudolph Borchardt, St Louis.

Class 18—For the best general display of firearms, including sportsmen's goods of all kinds, a gold medal, suitably engraved, value, $25; Brown & Hilder, St Louis.

Class 19—For the best general display of firearms a gold medal, suitably engraved, value, $25. Won by the Simmons Hardware Company.

EXHIBITION OF SPORTSMEN'S GOODS AT THE ST. LOUIS BENCH SHOW.—Our well-known friends, Messrs. Conroy, Bissett & Malleson, exhibited their rods, lines and various angling implements at St. Louis, and had a first award judged them.

G. W. SIMMONS & SON IN ST. LOUIS.—This firm, celebrated for their outfits for sportsmen, sent a choice selection of their goods to the St. Louis Bench Show, and have taken a first prize.

MASSACHUSETTS KENNEL CLUB.—ADDITIONAL PRIZES.—*Boston, Feb.* 25.—The following additional donations have been made to the special prize list for the Boston Bench Show:

Class R—For the best pair, dog and bitch, of Irish Setters, imported or native, to be owned by exhibitor; portrait heads of the winning pair, to be painted and presented by F. W. Rogers, Esq., Boston, Mass., value, $100.

Class S—For best English Setter, dog or bitch, either native or imported, that has the best and handsomest head; a portrait head of the winner, to be painted and presented by F. W. Rogers, Esq., Boston, Mass., value, $75.

Class T—For the best setter of any breed, dog or bitch, in the show, a silver cup, presented and manufactured by Messrs. Shreve, Crump & Low, Boston, value, $225.

Class U—For the best field spaniel, dog or bitch, either clumber or cocker; Baird's History of North American Birds, by S. F. Baird, T. M. Brewer and R. Ridgeway, illustrated by sixty-four beautifully colored plates and 593 woodcuts, 3 vols., presented by Messrs. Little, Brown & Co., Boston, Mass., value $45.

Class V—For the best brace of beagles in the show; a handsomely mounted stag's head, presented by Arthur J Colburn, Esq., Boston, Mass., value, $25.

Messrs. Parker Bros., Meriden, Conn., have written that they will send, as a special prize, a fine gun of their manufacture, valued at $300. Class not yet decided upon.

JOHN FOTTLER, JR., Sec'y Exhibition Com.

THE NEW YORK DOG SHOW.—Breeders of dogs are already beginning to foreseat for the coming bench show next May. We are pleased to learn from Mr. S. B. Dilley, of Lake City, Minnesota, that he intends to be there. A great many fanciers will be delighted to inspect his ranger-pointer stock.

GORDONS NOT TRUE TO COLOR.

BOSTON, Feb. 15, 1878.

EDITOR FOREST AND STREAM:

The following quotation from Idstone may be of interest to your correspondent G., of this ilk, who in your issue of Feb. 14th asked with regard to red as a color for a Gordon:

"The breed was originated by the Gordon family fifty years ago or more, and it is time some fresh blood were infused into the race. It must be setter blood, of course; and, I fancy, the Duke of Gordon saw the necessity of a cross, and used it. I believe that he adopted the Irish setter cross; for, in almost every litter, provided it descends from his kennel, there are a brace or more of red setters. These have the peculiarity of being almost white until they moult their setter coat, when they take the brilliant mahogany red, and follow the form, and have the panther-like, noiseless gallop of the Irish setter."

This fact was strikingly illustrated to a litter out of a bitch of my own, who I had served by a very fine Gordon of the true Kent Ruby, etc., stock. Two of the bitch pups were, at the time of birth, not perhaps "almost white," but of a bright buff color, and I was much astonished on seeing them after they had been in the trainer's hands, and full grown, of a fine rich red. They both, by the way, are said by their respective breakers to be as good dogs as they ever handled. One has latterly had a litter of ten, by Copeland's "Shot," (late Jerome's) every one of which is a perfectly marked black and tan. I also know of another case in which a black and tan bitch, bought from "Idstone" himself, threw one, if not two, red pups. There is one point, however, with regard to this color, and that is, although they may be, and are, just as good in the field as any, on the bench they would be shut out from the black and tan classes, and have to be entered in the open English or native class. DOCTOR.

A USEFUL AND INGENIOUS TOOL.—Our friend S. B. Dilly Esq., of Lake City, Minnesota, well known as the breeder of the Ranger stock of pointers, has had the kindness to send us a very pretty combination pocket instrument, which we are delighted to possess. He calls it a "Do-funny," and has applied for a patent. In general appearance it resembles a metal dog-whistle with ring attached, three inches in length; but on examination of its mechanism discloses a shell-extractor, a screw-driver, a wrench and a cork-screw, all useful implements to a sportsman on a gunning excursion. It is so compact and simple that anybody who sees it will desire to possess one. We do not know whether they are yet on the market s if not, they ought to be. It seems to us that there's money in it for the patentee.

AN ANCIENT AND HONORABLE STRAIN.—Wm. G. Buell, Esq., of East Hampton, Conn., informs us that after having shot over one strain of dogs for the last thirty years, he had the misfortune recently to lose the last of the race, a fine pointer bitch, which died on the 30th Jan. Such a record is rare.

WHO OWNS THIS DOG?—*La Porte City, Iowa, Feb.* 23.—Yesterday, while in conversation with a friend, he told me of a fine slut which some of the "boys" stole at the Hampton field trials last September. As I would be grateful for any information as to the whereabouts of my dog, and thinking to aid brother sportsmen, I send this to you, that, if possible, the owner may come into possession of his own.

WAT. E. DANIEL.

—An enterprising Adrian youth went out rabbit hunting with a ferret and a dog. At the first burrow he came to the ferret ran in and killed the rabbit, the dog dug in and killed the ferret, and the boy dug in and killed the dog, then started home, satisfied in his mind that rabbit hunting with a ferret and dog is one of the craziest delusions of the age.—*Western Exchange.*

PURCHASE.—A few days ago I received from Thomas Erwin, Esq., of Ballymena, Ireland, the Irish setter bitch "Quail II." She is by "Blenheim" out of "Quail," and is own sister to Skidmore's Champion "Grouse." Her dam, "Quail," is sister to Dr. Stone's celebrated "Dash," winner of fourteen silver cups, besides other prizes. "Quail II." was sired by Mr. Erwin's grand young dog "Red Gauntlet," and has whelped a splendid litter of eight pupies, all deep red. "Red Gauntlet" is by Champion "Basto," out of "Ruby," and is brother to "Redmore," winner of first Belfast, 1877, first and extra first at Newtownards, 1877, and second at Alexandra Palace, Dec. 14, 1877, his sire, "Basto," being third at same time and place. Mr. Erwin considers "Red Gauntlet" superior to both of these. EDWARD LOHMAN.

PURCHASED.—Mr. Miller Ketchum, of Westport, Conn., has purchased of Messrs. Fisher & Bickerton (Empire State Kennel, Brooklyn, N. Y.,) the red Irish setter dog Royal Duke, out of their Belle by Hamilton Thompson's Champion Duke.

TENNESSEE.—*Columbia County, Feb.* 20—Mr. E. Irwin's pointer bitch, Kate, died on the 15th inst. after whelping five dogs and five bitches. She was quite old, and at one time champion pointer bitch of the State.

—Mr. Chaffin's imported Scotch terrier bitch, Patsey, died on the 17th inst. with lung fever. Mr. Chaffin was fortunate enough to secure two of her progeny.

NAMES CLAIMED.—I claim the name of "Zip" for my liver and white cocker spaniel pup out of Mr. M. P. McKoon's "Bess" and "Capt." I take great pleasure in expressing my appreciation of Mr. McKoon's entire kennel.

Dr. IRA WILCOX.

Mr. Peleg S. Hacket, of the Kendrick House, Wareham, Mass., claims the name Cora for a pure white slut ten months old, and Jason for a white dog pup four months old, both out of his thoroughbred white English setter slut Gip, by his white English thoroughbred dog Sam.

—I claim the name of Mickey Free for my Gildersleeve setter pup, by Horace Smith's Dash, out of De Russy's Fanny.

J. W. HOWELL.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
March 1	10	09	6	39	5	55
March 2	10	50	7	21	6	33
March 3	11	28	7	59	7	09
March 4	M		8	34	7	41
March 5	0	19	9	08	8	20
March 6	0	51	9	43	8	51
March 7	1	24	10	18	9	23

BOAT AND YACHT BUILDING.—11th Paper.

BY NAUTICUS.

ELEMENTS OF YACHTS.

[By one of those blunders which occasionally occur in well regulated newspaper offices, as on the best commanded yachts, this paper appears out of its place. It should have preceeded the article published Jan. 31st, which is a continuation of the same subject.—ED.]

In designing a yacht, many things have to be taken into consideration, such as length, breadth, depth, form of midship section, service required, etc. We will first examine the proportions of length, breadth and depth, and their relation to one another; these terms now, and in the following remarks—unless the contrary is specified—relating to the dimensions of the load water-line. Compared with English practice, the American builder gives great breadth of beam and light draught to his yachts. The English builder depends for stability on much ballast, placed low down; the American, more on the form of vessel. Which is the best practice is an open question. As regards speed, there is little to choose between the two systems. The advantages of great breadth of beam are, superior stability from form, requiring less ballast, small draught of water, large deck room, smaller inclination with wind abeam, and ease and lightness at sea; among the disadvantages are increased rolling, increased direct resistance, blunter water-lines, and a large amount of immersed surface resistance. The chief advantages of the narrow, deep yacht, is the ability to sail nearer the wind and to run further in stays.

A fair average proportion of width to length is, for sloops, one-third; for schooners, one-fourth. The vertical depth from the load-line to keel depends on the form and area of the midship section, which leads to its consideration. The form of the midship section governs the shape of all the other sections, more or less. The stability of the vessel, direct resistance, resistance due to immersed area, and lateral resistance, are all largely dependent on the form and area of the midship section. In the best English yachts the area of the midship section varies but little from the average of one-tenth of the area of the load water-line, and the average ratio of the area of the midship section to its circumscribing parallelogram, is six-tenths. The greatest breadth of beam may be at the load water-line, or it may be above it; if above the load water-line, it adds to the stability of the vessel when inclined; if at the load water-line, the immersed water-line, when the vessel is at an inclination, will be nearer the form of the load-line. Another consideration is width of floor. If the mid section is too fine at the keel, the floor will necessarily be very narrow; otherwise a fine section at the keel is desirable.

Another consideration, and a very important one, is the area of the immersed surface of the vessel; this is dependent on the shape of the midship section. From Beaufoy's experiments it has been ascertained that the friction on the immersed surface of a vessel increases nearly as the square of the velocity, and that for a velocity of four miles per hour, the friction is twelve one hundredths of a pound per square foot of immersed surface; at seven miles per hour the friction would be thirty-three one hundredths of a pound per square foot. It will readily be seen that the shortest line possible, enclosing the required area, so placed as to give the greatest stability, will give the minimum amount of surface for friction. The greatest stability due to form is found in a flat floor, and the greatest lateral resistance in deep narrow vessels. It will be seen that some elements are directly opposed to others, and the problem before the yacht designer is to reconcile one to another, so as to obtain the maximum of good and the minimum of evil. The midship section is placed at from one-half to three-fifths of the length of the load water-line, measuring from the stem. The stem may be upright or "rake," according to the designer's fancy; it makes but little difference, unless the rake is "excessive," in which case the "pitching" is increased. It is customary to round off the "foot" of the stem, as it enables the vessel to "stay" quicker; it also reduces the area of lateral resistance; this, however, can be made up by an extra depth of keel. The stern post should be upright, or nearly so, the excessive rake formerly given answering no good purpose, except to give a small keel measurement.

The principal objections to excessive rake of stern post is the large reduction of the area of lateral resistance and the position of the center of lateral resistance, which is brought too far forward. The draught of water forward and aft is, or should be, regulated by the position of the center of gravity of the displacement. Make the center of lateral resistance to coincide, or nearly so, with the center of gravity of the displacement. In modern vessels this is more or less abaft the middle of the load water-line, giving an excess of draught at the stern, called the "drag." The area of the vertical longitudinal section immersed, or, in other words, of the lateral resistance, varies greatly; in some yachts it is equal to the area of the load water-line, in others, half that amount, or even less; the maximum amount is found in narrow, deep yachts; the minimum in those of great breadth of beam; the average is about seven-tenths of the area of the load-water line. The keel may be straight or curved on its lower edge, technically called a rocker keel. Rocker keels will obey the helm as promptly as centre-

board boats. If a centre-board is used care must be taken that its centre of lateral resistance coincides with the centre of lateral resistance of the vessel. A simple method of finding these centres is given in the paper on modeling, etc. The height of deck above the load line at midships should be such that when the vessel is inclined at an angle of fifteen degrees the water will not come on deck. This for a minimum height; the maximum is reached with an inclination of twenty degrees. If the deck is made higher than this the top side will be too heavy. Sheer is largely a matter of fancy with the old bluff-bowed yachts. A large amount of sheer forward was necessary to prevent water washing over on deck; but with the fine bows used at the present time sheer might be dispensed with entirely. Still, a handsome sheer is one of the main features in the fine appearance of a yacht. A moderate amount of sheer at the stern is valuable, as it allows a better shape to be given to the inclined water line.

The area of the load-water line, in proportion to its circumscribing parallelogram, is, in the best known examples, about seven-tenths. The best shape for the load-water line is a problem that has given rise to theories and experiments innumerable. Thirty or more years ago the entry was made short and the run long; at the present time the entry is made long and the run short, giving a full after body. I will not presume to give any definite rule for form, but advise the amateur to follow successful precedents. The problem seems to be to enclose the required area with the shortest possible line that will give a good entry and run to the vessel. The entry of most yachts is very good, the greatest trouble generally being with the run, especially if the stern is wide and low. Great care must be taken to avoid a full round water-line at the stern, otherwise a large amount of water will be continually dragging along on the lee quarter, ruinous to speed and detrimental to the helm. The inclined water line is the water line formed when the vessel inclines from the vertical. It is of the greatest importance that special care should be taken to give it a good form, as the inclined water line is practically the real load-water line, the vessel never standing upright unless there is no wind. The form of the inclined water line should be as near as possible like that of the load-line. Two points especially demand attention. First, to so form the inclined water line at the bow of the vessel that the wave that forms on the lee bow, when working to windward, will be brought as far back as possible, thus lessening its detrimental effect on progressive motion, and its tendency to turn the bow of the vessel to windward; secondly, to so shape the sections at the stern of the boat that the inclined water line will be, as near as possible, formed like the load-water line, the only way to do which is to narrow the deck at the stern, and give as much sheer at the stern as possible, without making the top side clumsy and ungainly. The effect of an inclined water line, too full and round at the stern, is to drag a large wave on the lee quarter, destroying the helm, which must be put far over to counteract the effect of the following wave, which has a tendency to make the vessel fall off from the wind—in other words, a "lee helm." In more pronounced cases of "dropsical" inclined water lines, the deformity is positively dangerous, as, if hard pressed by a sudden "squall," the vessel refuses to obey the helm at all, and if the wind is only strong enough a capsize is certain. The bad working and slowness of many yachts is traceable to this fault alone. The centre of gravity of the displacement; that is, the centre of gravity of the mass of water displaced by the vessel, should be at or near the midship section. The centre of gravity of the whole vessel, including spars, ballast, etc., is found in the same vertical as the centre of gravity of the displacement; that is, when the vessel is upright. When the vessel inclines, the centre of gravity changes with every degree of inclination. Calculations of the stability of a vessel are complex, and not of any practical value, as it is an impossibility to calculate the centre of gravity. The designer must be careful that his vessel has sufficient stability from form and ballast, which is best done by comparison with successful yachts. Sheathing the immersed part of the hull, apart from its value as a protection from worms and foulness, has some influence on the speed, the friction being three-tenths less than smooth-painted wood. The size of rudder is very variable, cat rig boats requiring larger ones than others.

BOSTON YACHT CLUB.—The Boston Yacht Club will probably adopt a programme for the coming season, which will include two fixed regattas—one in June and the other in Aug. or Sept. The source of pleasure for the benefit of the non-yachtsmen will be a sail down the harbor in the afternoon on board the large yachts, and a sociable or hop in the evening at the club house. This is to be repeated once a month during the season. As most of the owners heard from place their vessels at the hands of the committee, quite a carnival is in store for them that do not have the opportunity to get a sniff of the blue.

NEW YORK YACHT CLUB.—This club held their annual dinner at Delmonico's last Tuesday evening.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

AMATEUR, Hebron, Wis.—Can you tell me how I can color canvas goods, that known as "dead grass" shade? Ans. Use a decoction of shucks of butternut or black walnut, and set with alum.

M. P., Almonte, Can.—We respectfully decline answering.

VAL, Columbia, Tenn.—We should be pleased to have the description if genuine.

W. V.—I have $75 to put into a gun, what kind of a gun would you buy? Answer respectfully declined.

PRESIDENT, Paris Game Club, Ontario.—We take great pleasure in sending you the forms you require.

E. M., Westfield, Kings Co., N. B.—Have sent book and entry for Massachusetts Kennel Bench Show as requested.

HONTER, G. R. B.—Your communication is suited to our columns, but we cannot use it without your full name and address.

L. P. C., Des Moines.—How does the —— compare with the guns of the same price made in England? Ans. Most favorably.

W. M., Danbury, Conn.—There is a law in Connecticut prohibiting the use of ferrets in hunting. Their employment is certainly unsportsmanlike.

A. J. J., N. Y.—Which is the better dog, for shooting in the mountains—a setter or pointer? Ans. Probably the setter, on account of heavier coat.

A. Stamford.—I use for shooting glass balls with a 12-bore, 7 lb. Parker gun, 3¼ drs. powder and 1⅛ oz. No. 8 shot. Is it enough? Ans. Just a proper charge.

J. P. B., West Boylston, Mass.—Is there much or any danger to setters in Western Virginia and East Tenn. from venomous snakes? Ans. Less than in most places.

G. H. A., Albany.—The guns made by —— —— compare most favorably with those of the best makers. At the price you mention, $100, you would get an excellent gun.

A. D. K., Newton, Kansas.—We could give no special book. Read "The Dog," by Dinks, Hutchinson & Mayhew, Stonehenge, Youatt, Idstone, Hallock's "Gazetteer."

W. E. F., Cambridge.—What will prevent my pointer from shedding his hair? He has plenty of exercise. Ans. Grooming and exercise are the best methods of cure.

G. P., Norwalk, Conn.—Will quail breed in confinement? Ans. We have never heard of any successful breedings of quail in confinement. See an article on wintering quail in this issue.

M. M. B.—Want a Creedmoor rifle, what kind shall I use? 2. What kinds of rifles were used at the long-range match? Ans. 1. Toss up between a Sharps and a Remington. 2. Both kinds.

W. H.—At what age is it possible for a dog to produce issue? Ans. The age must vary in individual dogs, just as it does in every other species. The average age is probably about one year.

C. E., N. Y.—Is there any swan or goose shooting to be had on Cobb's Island, Chesapeake Bay, and is this the season? Ans. Depends upon the weather entirely. If cold and stormy there will be shooting.

A. A. J., N. Y.—1. Do you know a maker of hair-trigger rifles by the name of Atkinson? 2. Which are the better for mountain sporting, pointers or setters? Ans. 1. Do not know of such a maker. 2. Prefer setters.

W. R. R., Boston.—Will this mild winter have any effect on the spring duck shooting, and will I get any duck shooting about Hyannis about April 15th? Ans. Yes, it will spoil the shooting. Rough weather will bring the birds.

O. T., Paris, Ont.—Do not know the name of the maker. The target you send is a remarkably good one as to pattern, but it is impossible for us to judge of penetration from the kind of paper used. Would be glad to hear from your club.

W. B. E., Brooklyn.—Please inform me where I can purchase a paper for covering a boat to be used for Florida waters, and also if it is serviceable? Ans. Probably from Waters & Sons, Troy, New York. They make paper boats. Paper boats are very serviceable.

G. B. N., from Latrobe, Pa., can find one cock California quail at Thomas', bird fancier, Liberty st., above Fayette, Baltimore, Md., for sale. He had a pair; hen died after laying 5 eggs last year, fine specimen, in good health.—*R. E. McClenahan, Fort Deposit, Md.*

C. E. L., St Paul, Minn.—At how low a price could I get a good, reliable breech-loading shot-gun? Ans. All the way from $35 to $60. Mr. Squires will sell you a new English top-lever, rebounding locks, muzzle-loader, Damascus barrels, patent forehead, pistol grip, for $60.

T. E., Hoboken.—Have a dachshund three years old. Two years ago she had a litter of five. The last time she was in heat was in July, but she was not visited. I want to breed from her again, but she will not come in heat. Ans. Keep her in the company of a dog of the opposite sex.

WING SHOT, Jeffersonville.—1. How much choke is required to do the best or closest shooting? 2. How far does a choke-bore begin from the muzzle? 3. Does the bore decrease at the muzzle, and is it a cylinder for a certain distance? Ans. 1. A full choke. 2. About four inches. 3. It is.

MEMOIR, Medford, Mass.—What is a good, substantial material to pitch a birch-bark canoe for Massachusetts waters? Ans. The Indians use common spruce gum, which they apply with a burning brand. A mixture of gum and rosin is best; but ordinary pitch is excellent, but more apt to crack and spill off.

J. M., Meriden, Conn.—1. Will you give me Livingston Stone's address? 2. Where can I get trout eggs taken from the Adirondack lakes? 3. Where can I get eggs of the land-locked salmon? Ans. 1. Mr. Livingston Stone's address is Charlestown, N. H. 2. & 3. Address B. Freeburg, Ludlow, McKean Co., Pa.

H. H. D., Ronnfont, N. Y.—Can a wolf run faster on slippery ice than the fastest skater can skate in a straightaway course for a distance of five miles? Ans. The best testimony we can give is the oft-told story which we read thirty years ago, of a skater who was chased for miles, and only eluded his pursuers by sharp turns, thus gaining time.

SUBSCRIBER, Montreal.—Would you oblige me with the address of some reliable dog fancier from whom I can obtain a pure-bred water spaniel pup? Ans. We do not care to make ourselves responsible by vouching for any one, but can safely recommend Mr. S. J. Bestor, of Hartford, Conn. M. P. McKoon, of Franklin, Delaware county, N. Y., has also a good reputation.

W. H., New York.—My pup, 3 to 4 mos. old, has fits. They seem to cause him great pain. Spasm lasts ten to twenty minutes. Dog being fed on meat and refuses any other feed. What shall I do? Ans. You never should feed so young a dog on meat entirely. Stop the meat feeding in toto for a while and he will probably have no fits. A little starving will bring him to his senses and a mixed diet.

JACK, Williamsport, Pa.—Could you give me a good recipe for waterproofing canvas and other goods? Ans. Dissolve one-half pound sugar of lead and one-half pound powdered alum in a bucket of rain water; pour off into another vessel, and steep your canvas in it, letting it soak thoroughly. If the quantity is not sufficient, increase in same proportion. Hang the article up to dry, but do not wring it.

S. D., Boston.—My setter dog is two years old. Has an irritation of the skin on the flanks. Is constantly licking his hind legs with his tongue, until the hair is coming off. Good appetite, cool nose, and is fed on meat and meal mixed. Have been using carbolic soap. What must I do? Ans. The dog has mange, probably from feeding too much meat. Try application of kerosene twice a day for a week, and feed no meat.

C.—A is shooting at glass balls. Every ball that is not broken is looked at by the judges. They discover one ball with a very small hole broken in it. They did not observe any glass flying in the air at the time the shot was fired. Might not this have been broken by falling on some hard substance, or, in fact, been broken when placed in trap? How would you score such a ball? Ans. Would give it as a hit ball, in favor of the shooter.

C. A. D., Melrose, Mass.—Have a split nose pointer with a wart on his left ear. How can I get it off? Has a bad mark on his tail. It is getting crooked at the tip. What ails him? What shall I do? Ans. Use caustic potash carefully for the wart. If the tail was originally good the crook may arise from inflammation, the result of whipping in the brush, in which case rest will cure it. If originally crooked amputation is the best cure.

W. P. H., Green Bay, Wis.—1. Can you send me the first 17 numbers of Volume 8, and for how much? 2. Do you keep binders for FOREST AND STREAM, if so how much? 3. Is the tan on a Gordon setter's throat and muzzle generally as bright as on legs and other parts? Ans. 1. We can, cost $1.36. 2. We do, cost $1.50. 3. A shade brighter; none, because it is not quite as heavy in texture, but the difference in a true, bred Gordon is but very slight.

J. J. M., Johnstown, Pa.—1. Please give me the name of a reliable house in New York which purchases green furs? 2. What is the best remedy for my Scotch terrier dog, which got badly bit to-day in the fore leg, neck and thigh by some other dog? He cannot stand up at present. Ans. 1. C. G. Gunther's Sons, 184 Fifth avenue. 2. Wash and bathe carefully; use dressing or a solution of weak carbolic acid and water, and bandage nicely. Feed moderately, and, of course, keep him quiet.

W. J. W., Red Bank, Clarion Co., Pa.—Have a setter bitch pup from fine Maryland stock. Pup has worms. He is six months old. Passed a worm yesterday twelve inches long; vomits considerably; nose dry. How shall I administer the areca nut, and where can I get it? Ans. Send for areca nut powder, 60 grains, and direct to be divided into two doses, each dose to be followed by a dose of castor oil, five or six hours after. Give on successive days. Write to W. Holberton & Co., 117 Fulton street, and they can furnish you.

E. L., Cambridge.—Whom shall I address to get the best information about the "Laramie Plains" as a grazing country? Also, do you think that as good or better than some other parts of the West? Would it not be much better for a young man to work for a while with some old hand in the business first? Ans. Laramie Plains is a fine grazing region. If you feel disposed, you may address Editor *Daily News*, Denver, Colorado. There are equally good grazing districts in Colorado, New Mexico and Texas. By all means serve an apprenticeship if possible. See editorial column this week.

J. P. M., Philadelphia.—1. How is same money to be divided under the Bogardus rules? The two highest shot off for first money, and the defeated one claimed second money. Have a B. L. gun, 10 gauge; barrels are stamped with a winged bullet; the locks are marked ——. What do you know of the maker, and whose make is it? Ans. 1. The men who tied on the highest score should shoot for first money only. Second money goes to the man who made the next best score. The defeated one in the shoot off receives nothing but honor. 2. The trade mark is the well-known one of Webley. The name on the lock we do not know.

T. H. W., St. Johns, Newfoundland.—1. Has there ever been anything about the game of Newfoundland written in your paper? If so, could I obtain the number it is in? 2. Have a young setter bitch with pups. Have been told that pups of first litter will not make good hunting dogs, is it so? 3. Would like to get a few hints on dog breaking, where could I obtain them? Ans. 1. The information which has been printed in FOREST AND STREAM on the game of Newfoundland is quite voluminous, and it is contained in a dozen numbers of our paper, which we can furnish. 2. First litter is as good as any, provided the parents are mature. 3. Hallock's "Sportsman's Gazetteer," price $3.

W. A. F., Washington, D. C.—1. Is Humboldt Bay, California, healthy and suitable for one consumptively inclined? 2. Are the seasons regular, and can farming be successfully engaged in? 3. Are the winters severe, and is there much snow? 4. About what would it cost to reach Eureka, starting say from New York? 5. Is that section subject to cold, chilly fogs? Ans. We can say, generally on testimony of the most reliable kind, that all the conditions of climate, scenery, flora and fauna, timber, etc., are the most favorable imaginable. Steamers run very frequently from San Francisco to Eureka, which is 300 miles north; and mails are regular. No fogs, no snows, no mosquitoes; game and fish in greatest variety.

N. P. D., Montreal.—1. A friend of mine in Manitoba has some buffalo cows in calf by common bulls. Will it be possible to further cross their offspring? If so, which would be best—to cross the half-breed female with the common male, or half-breed male with female of common stock? 2. What time do gold fish spawn? How shall we preserve the spawn, as the fish eat it? Ans. 1. Col. Dodge, in his "Plains of the Great West," says: "The buffalo and domestic cattle will cross successfully only when the buffalo cow is the mother of the male. The domestic cow will receive the attentions of the buffalo bull, but invariably dies, being unable to bring forth the calf." 2. Gold fish spawn from middle of May to June. Feed them sufficiently with worms, meat fish, or wafer, so that they will not be hungry enough to eat the spawn.

B. W., San Francisco.—1. How many grains of lead should be used with 70 grains of powder in a Ballard Pacific Sporting Rifle, .41 cal.? 2. What would be the best material to make a good lubricator with? 3. If a rifle should be shot straight up into the air, would the bullet come down as fast as it went up, or faster? 4. Have a young dog, a cross between a setter and a Newfoundland. He has an enlargement of the knees in his front legs. What is the disease, and how shall I cure it? Ans. 1. A ball of 333 grains. 2. Clear tallow, 4 parts; beeswax, 1 part; melt them together. 3. Will answer this later with fuller details, as it is an interesting question. 4. Hard to tell from your brief description whether it is an enlargement or a swelling at the joint. A cross between a setter and a Newfoundland must be N. G. Rub the joint with any good liniment.

INEXPERIENCE, Newark.—Your description is most lucid, and not a bit too long. We have no doubt but that it is a W. & C. Scott gun. Questions. 1. With a 10 bore W. & C. Scott gun what charge should I use? 2. What would be heaviest limit of charge? 3. Why must I use two pink wads, and why pink wads? 4. Do you know anything about the guns —— sells at auction? Does he sell good, reliable guns? Could I get a reliable gun at their private sale? If my gun is a Scott gun, by sending them the number could I get a certificate of the test trial? Ans. 1. 4 drs. 2. 5 drs. is about a limit of necessity, but the gun would stand more—uselessly, however. 3. Because one wad would blow out. Pink wads are lubricants. 4. Do not think —— sells good guns at auction; at private sale, perhaps, yes. General advice is, Don't. 5. The makers would send you the whole history of the gun.

DISTEMPER, Butler Co.—Have a fine bitch, ten months old, dying with distemper. It commenced with an attack of the lungs. Gave her nitrate of potash and she was at first relieved. Have tried hyposulphate of soda. This, with beef tea for food, somewhat brought her around at first. Gave her quinine, when she seemed to get stiff in the loins. She has continued to develop paralysis. Now her hind quarters are so paralyzed that she cannot stand. She eats still, and shows some sensibility when touched in her hind quarters. Eyes set and glassy. What shall I do? Ans. Your early treatment was fairly judicious. Such cases are not unusual, nor are they always fatal, though your case seems to be a bad one. Give at once a dose of castor oil, as the bowels may be clogged. If the medicine works, feed a little, and give the dog quinine and nux vomica—of the former two grains twice a day for three days; of the nux vomica not over ¼ of a grain. Nux vomica requires watching. Should you see nervous disturbances, diminish the nux ¼. Give tor a week. Write us again.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, FEBRUARY 28, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous contributions will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

☞ Trade supplied by American News Company.

CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

DER WAIDMANN AND DER JAGDZEITUNG.—In our last issue we inadvertently stated that Fr. Von Ivernois was editor of *Der Waidmann*, of Prussia. We should have said of *Der Jagdzeitung*. Formerly he was the editor of *Der Waidmann*, but that popular journal is now in charge of Schmedeberg.

A RARE BIT OF FUN.—The chiefs, lieutenants, and understrappers of the FOREST AND STREAM were somewhat disconcerted last Saturday by the arrival of a large box at the office. It was late in the afternoon and the weather warm, and as the box had a sort of musty odor, as if it had come from foreign parts and been a good while from home, it was determined to open it before it got dark. It was a dry-goods box, and as the top was pried off, a board at a time, the odor became stronger and more defined, suggestive of a furrier's garret in summer time. In fact it had a sort of Injin smell; kind of like a bale of buffalo robes. Presently something of a dirty gray color came in sight—and at once it became obvious that the box contained gray rabbits, or, more properly speaking, hares, the *Lepus canadensis*. Nay, more, it was filled with them. The boys lifted them out by the hind legs, two at a time, until they lifted out 90—ninety rabbits! They piled them up on the floor, and they made a stack higher than the table. It was something like the stack of black oats we read of, only the color was different. Well, they were a fair lot, in fair condition; just ripe for being jugged (our English readers know what jugged hare is). So many gray rabbits we never saw before—not in our office. A little perplexity arose in the case. We remembered having received a postal card advising us to look out for hares—"about this time"—although it was not quite March yet. (You've all heard of March hares?) As we often receive little presents of game—a brace of ducks, or a dozen of quail or the like of that—it did not surprise us that rabbits should have been sent by way of a change; but we hardly expected so large a consignment. The problem was, the *intention of the donor*. Did he gauge his gift by our supposed appetites, by our capacity, or by the number of employees in the office? There was little time for conjecture or consideration. The weather was warm, and the next day was Sunday. Something had to be done at once—active measures must be taken. We counted noses all around, and allotted a pair of rabbits (hares) to each person. This disposed of twelve. Seventy-eight remained. Then we summoned the printers, and they reduced the pile to sixty-two. Fourteen men began to pile out of the office with fourteen pairs of hares. Pedestrians in the street stopped and stared in wonderment at the long procession. They observed that it was *fur* to the end of it. Some of them intimated that there was a sort of distribution for the poor going on, and proposed to take a hand in. Meanwhile a note was dispatched in haste to the Astor House, tendering the balance of the lot to proprietor Dam, but he didn't accept worth a Dam; that is, he declined it. Then a tender was made to the driver of the Astor House coaches. There were ten drivers. They took. A cab was at once driven down to the office, and loaded with twenty more pairs, and yet the pile which remained seemed little reduced. What was only a quandary at first, became a dilemma. As a last resort, a messenger was hurried off to Knapp & Van Nostrand, of Washington Market, who were persuaded to take the balance of the lot.

In conclusion, if any more of our correspondents wish to inquire where to find good rabbit hunting, we will inform them that these came from Maine, where we presume there are a few more left of the same sort.

THE GRASSHOPPER NO LONGER A BURDEN.

While the advent of the grasshopper is regarded with dread in almost all parts of the West, there is one section and people in that land which await the coming of the predacious hosts with eagerness, based upon the hope of existence. To the farmers and ranchmen a grasshopper season means starvation; to the people we speak of it brings plenitude and abundant stores of food. In Northwestern Idaho, and along the eastern boundary of Washington Territory, upon the Lewis Fork of the Columbia River, roam the Nez Perces Indians; not Chief Joseph's band, but another branch of the same great nation, who differ from their warlike brothers who have lately given Uncle Sam so much trouble in several important points, and in none more conspicuously than in that of hunting. The particular tribe of Nez Perces who occupy the region referred to seem to be cut off from all other Indians by their peculiar and almost disgusting method of obtaining food, from which they have derived their distinguishing name of Diggers.

In certain parts of South America, in Brazil and Patagonia, there are races of men known as Diggers, so called because they live upon roots and wild herbs which they dig from the earth; but the name, as applied to the Indians of the Northwest, arises from an entirely different custom.

These Nez Perces of the Lewis Fork country live upon grasshoppers. Grasshoppers raw, stewed and fried in summer; grasshoppers dried and made into soup in the autumn; grasshoppers ground and baked into bread or cakes in the winter; and too often, from a lack of provisions, grasshopper memories in the spring, until the warming sun brings again their winged game to save them from starvation.

But it is not their habit of eating the grasshopper, but their mode of capture, which has given them their name. Early in June, the Indians select some open prairie well covered with grass, and dig a trench, half a mile in length, some six feet wide and three deep. Along one side of this they collect great heaps of dry grass, mesquite and sage bush branches, and having arranged their trap, they await the coming of their victims. As soon as the insects arrive, covering the entire country in countless swarms, the Indians, with their horses, post themselves upon the prairie some thirty rods apart, parallel with, but upon the opposite side of the ditch from the dried brush, and a mile or more distant therefrom. Then tying lariats or long hide ropes between their ponies, one end to one and the other end to another, and allowing the slack to trail along the ground between them, they slowly ride toward the trench.

The grasshoppers, slowly and with short flights, are driven before them, until, as they advance, the air becomes black with the flying cloud, and the long ditch is reached. Millions of the insects spring into it, millions more follow—the hole is full; then up rush the squaws of the band, who have been waiting near; they seize the brush and dry wood and throw it upon the struggling mass, preventing escape; at either end fire is set, and as the hot flames run crackling to meet each other the grasshoppers are roasted to death.

The Indians then empty the ditch, eat such portion of their strange food as they desire, grind other portions of it between great stones, and pack it as meal or flour in buckskin bags for winter use; and, waiting a day or two, until the prairie is again covered with the insect army, repeat the operation. This goes on through all the summer season until the chill blasts of autumn drive the Indians to the mountains and kill the grasshopper host; and it is from such a strange custom that this tribe of Nez Perces are to-day known as Diggers.

F. E. HAMILTON.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

[FROM OUR SPECIAL TEXAS CORRESPONDENT.]

ON THE BUFFALO RUN IN TEXAS.

THIRD LETTER.

FORT GRIFFIN, Texas, Oct. 3, 1877.

I have adhered closely to the projected line of the Texas and Pacific Railway for the past 130 miles, and I have followed it out for forty beyond here.

Mr. B. M. Collyns, of Tiverton, England, one of the largest and most successful sheepmen in Australia during times gone by, was one of my companions, and he tells me that in the United States there is nothing nearly equal for sheep raising purposes to this portion of the country. When it is so well known that even an Australian fool understands more about sheep than does any wise man east or west of the most flourishing and go-ahead British Colony, the statement of an Anglo-Australian capitalist like Mr. Collyns on this subject, carries to my mind more conviction that would that of any number of, perhaps, other than South African experts on the matter; so I shall not give any reasons why Northwest Texas must become the home of the sheep. Why it has not become so is perhaps more worth studying. A land that will carry its flocks all the year round without artificial food or shelter, where grass is good, water fairly abundant, Indians, so far as Fort Griffin, *non est*, and where water frontages can be purchased at from $1 to $3 per acre, and these forever must command enormous ranges behind, I cannot understand why the broad road to fortune, so difficult to find, and which appears open here, is not availed of more extensively.

There are sheep—and very healthy, happy-looking ones—about here, but they are in small flocks, and have risen to their present numbers—averaging one to two thousand in flocks—from almost literally nothing perhaps twenty sheep, perhaps a hundred. When the Texas-Pacific reaches here it will be a good deal too late to begin on sheep, especially if a few men—as Mr. B. M. Collyns told me he thought of doing—put $100,000 into this business, which sum here would start, on the present free ranges, nearly a quarter of a million of Mexican ewes, which though they would probably only shear one pound on an average each the first year, would, and do, transmit to their descendants, sired by pure Merinos, the capability to average at least four pounds of wool afterwards. I will act as private secretary, gratuitously, for twelve months to any one who proves my statements, as above, impractical, impracticable, or in any way visionary.

But at present I want to bring my readers with me on a regular outing, a range over the wide, unoccupied plains of Western Texas. I want to introduce western garrison life and Indians and buffalo and antelopes to the readers of FOREST AND STREAM as I saw them; so I shall pass along the Texas and Pacific Road that is to be, having given the strongest hint I can as to what is best to do at present along it, and enter the little town of Fort Griffin, whither the fame of this paper had somehow preceded me; for in no other manner can I account for an invitation which was at once sent to my hotel—The Southern—to the effect that Captain Lee, 10th Cavalry, and Dr. Caldwell, U. S. A., were waiting dinner for me at the post. I went there, and, save to hunt game or statistics, have never since left it.

Three Englishmen, with introductions from Gen. Ord, had been given an unoccupied house. Indian Jim, their scout, was there also. We had five U. S. A. officers in barracks, and the breezy height on which is situate Fort Griffin, resounded with many a tale of flood and field from the English headquarters, whither we nightly repaired *en masse*. The nearly-tamed Tonkawas—friendly Indians—first attracted us. Many of the braves—enlisted (scout) soldiers—had a camp here; and a gallant British officer, one of our party, not very fairly fleeced by the squaws, who sold him the most amazingly worthless Indian works of art (?) at the most amazingly fabulous prices; but we could not stop him, and only trust that the British army appropriations will prove equal to the strain thus put on them.

The Tonkawas wear their old embroidered blankets, but in addition the braves affect an old military jacket, or at least a necklace of military buttons; and one dusky belle we saw wearing a dress made out of an old stars and stripes—a regular comic picture type of Columbia.

"Now we must get on to the buffalo," we one night remarked to Captain Lee, who commands the post.

"Oh," he said, "my men have to be scouting all the time westward, so I will give you an escort."

And he did. Eight well set up men, a better set-up Sergeant, by name Valentine—name that so pleasantly recalls cupid and kisses and February 14. Besides these, we had a Tonkawa, christened Johnson, and his squaw, not christened, whom we called Mrs. Johnson; a mighty big wagon drawn by six mules, made up our cavalcade, which Mr. B. M. Collyns said "looked rather too much like a Lord Mayor's show to be business-like;" but Mr. Collyns was wrong, and he proved it by his deeds. On through partially broken country we advanced for two days, a country abounding with the soft and nutritious curly and running Mesquite—a sheep's paradise—and which only the buffalo hunter has traversed in the wake of a scouting party of soldiers, or of a Texas-Pacific surveying party. We near Flat Mountain—I, with very sore eyes, sticking to the wagon, Collyns and his party rang ng away to the south—when Sergeant Valentine cries "Halt," and points out to me eighty buffaloes on the trail ahead of us (we stuck all through to Col. McKinsey's trail). The buffaloes were fat and quiet, and only half a mile off. I am rather too heavy for continuous fast riding, so, borrowing the stoutest horse in the troop, I waited behind a knoll while two of the men rode off to head the herd. They did head them, but the wrong way, and when I next saw them they were three miles off. But now the Fates fought against the poor *Bison americanus*, for he rushed into the arms of the Britisher, Collyns cut off his retreat and headed him back, and the now terrified herd, in the words of Homer, which Pope renders thus:

"Pour along like a fire that sweeps the whole earth before it."

The galop away from me had partially tired the animals, and Collyns, a graceful rider and a mere feather-weight, rode them down rapidly, his Smith & Wesson dealing destruction right and left. He rarely killed right off, but his mortally wounded victim staggered, fell, and was polished off by the pursuing troopers who endeavored but in vain to head the plucky little Australian capitalist. Five monsters and a well-grown calf marked his victorious path. The tide of war did not roll my way, but from a commanding hill I, as your war correspondent, chronicled the fray. Two efforts, indeed, I made to urge my Pegasus to abandon his line of strict neutrality, but no! he hated the buffalo with a mortal aversion, and, for the moment, had the brute belonged to me instead of to the War Department, his days would have been numbered. The scattered bands have now departed form our sight, but visions of broiled hump, buffalo tongue—that delicious morsel—and buffalo heart, floated before our hungry eyes, so we asked Sergeant Valentine to march the men over the field of battle, and again, to quote Pope's Homer,

"—— They strip the smoking hide,
The beast they quarter and the joints divide."

Having eaten a late but delicious repast, we quaff in our military tent the juice of the Bourbon grape of Kentucky [that sounds quite classical, yet conveys my hidden meaning], and, later on, we dream that the Texas-Pacific train is running over us, which, so far as our camping ground is concerned, may soon come true. S. NUGENT TOWNSEND.

GAME PROTECTION.

NEW YORK MOOSE.—Every one knows that portions of this State once abounded in moose; and most people are aware that the last of the race disappeared many years ago from its limits. For this reason the introduction of a bill into the Legislature by Senator Wagstaff for the "protection and preservation of moose in the State of New York" has created some merriment. Now let us state here that Col. Wagstaff knows very well what he is about, and that there is little occasion for so much laughter around the board. Those who have examined our advertising columns within the past few weeks may have noticed a call for live moose. The demand has come from parties who are endeavoring to restock certain localities in the Adirondacks with this noble animal; and we take pleasure in informing the scoffers and the credulous that they have succeeded (through our own instrumentality, in great part,) in obtaining male and female stock, and that in a few weeks it cannot be asserted with truth that there are no moose in New York State. Now, without some law in regard to the killing of moose, nothing would stand in the way of their all being destroyed in a single season. Precautionary measures are necessary and most important, and Senator Wagstaff is not only to be commended for his foresight but is entitled to the *amende honorable* of every man who has made his proposition a subject of ridicule. From an initial stock of a half dozen pairs of moose we should have 20 animals the second year; 40 the third year; 80 the fourth year; 120 the fifth year; and 240 the sixth year. Moose produce one calf at a birth the first year, and afterward two. In the course of six or seven years, hunting might be permitted, with a limit to the number killed by each gun, as is now done in Nova Scotia, after a three years' total prohibition.

LONG LAKE GAME CLUB—*Long Lake, N. Y., Jan.* 19.—A club numbering forty-two members was organized here Jan. 19, for the protection of game and the prosecution of all offenders within the limit of the town. This embraces the region which has for a long time been considered the best hunting and fishing grounds in the Adirondacks. We congratulate the citizens of Long Lake on their action and wish for them success in this much needed movement. The officers of the club are: C. B. Hanmer, Pres.; R. Cary, Vice-Pres; C. W. Blanchard, Sec.; A. A. S. Hamner, Treas.; R. Shaw, Prosecuting Attorney.

SAGINAW (MICH.) GAME PROTECTION CLUB.—The following officers have been elected: Pres., A. H. Mershon; Vice-Pres., O. B. Headley; Sec. and Treas., J. B. Peter; Ex Com., A. H. Mershon, Joshua Tuthill and Wm. J. Loveland. Several honorary or corresponding members, elected in localities in Northern Michigan, where similar clubs do not exist, will cooperate with the Saginaw Club in requiring observance of the game laws. Our club has a membership of over fifty, including some of our most prominent citizens, and with a splendid set of working officers we are doing our level best for the perpetuation of game and fish and insectivorous birds. QUI VIVE.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship

And three team medals, which will be awarded to the teams making the first, second and third best scores. Other prizes will be offered also, to take place at Conlin's shooting gallery. Open to teams from any organized rifle club.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Offhand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. Entrance Fee—Five dollars to be paid at the office of the FOREST AND STREAM AND ROD AND GUN, No. 111 Fulton street, N. Y. All teams desiring to compete must be entered ten days before the time the match is announced to take place. The match to be governed by the rules of the N. R. A. relating to teams. Captains of the competing teams shall meet one week before the commencement of the match, make all preliminary arrangements, choose referees, and decide in what order their respective teams shall shoot. The referees shall elect an umpire, whose decision in all cases shall be final.

The match will commence on Monday, March 11.

BALLARD RIFLE.—Messrs. Schoverling & Daly have presented as a prize for the FOREST AND STREAM AND ROD AND GUN match, to be shot at Conlin's Gallery on March 11, a very superior Ballard rifle. We are pleased to state that this contest is now assuming shape, and we believe that fully a dozen teams selected from our leading rifle clubs will participate in the match.

SCHUETZENFEST.

The FOREST AND STREAM AND ROD AND GUN takes great pleasure in announcing to its numerous German friends throughout the United States, that on the occasion of the

SCHUETZENFEST,

which will take place on June 24, 1878, we will present to a winning team, to consist of ten men, a handsome gold medal, which we are now having made especially for this occasion. The entrance fee will be $15 for each team. After deducting cost of markers, etc., the remaining money will be divided among the various competing teams. The entrance fees are to be paid on or before June 10th to Mr. F. Harenburg, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, New York. The match will take place at the Schuetzen Park, Union Hill. Any communication directed to the President of the Association, Captain George Acry, or to the Corresponding Secretary, J. H. Behrens, Esq., No. 37 Bowery, New York, in regard to the rifle contests to be shot at the schuetzenfest, will receive immediate attention.

It is to be hoped that American clubs will participate in this leading event, as it will demonstrate quite as thoroughly as any match we know of the proficiency of riflemen at 200 yards. We will shortly give full details in regard to the method of shooting in use by the German sharpshooters.

NICK ON THE CENTENNIAL TROPHY IN FRANCE.

SOME of our riflemen are seemingly very anxious to sustain the honor of our country in matters of marksmanship on foreign fields. They are anxious to rush off at even the intimation of a possible challenge, and above all they are not averse to the risks and the exertion of a pleasant foreign jaunt. To this there can be no objection. It is very proper that we should let the whole world know our desire and feel our ability to sustain for what seems an indefinite period the title we have won to the championship laurels in this as in other fields of exertion. But not only do these gentlemen propose to go abroad, but they intimate that it would be a proper and fitting occasion to send the Centennial Trophy about Europe begging for an owner. There have been complications, misunderstandings and misapprehensions enough about that blessed bauble without stirring up a fresh stock of explanatory correspondence by a flagrant violation of its condition in this manner proposed. After all the time and trouble, printers' ink and postage, which have been squandered in making the typical Britisher understand that an Irishman and a Scotchman might shoot as such without thereby threatening the stability of the British Empire, it does seem a tempting of fate to evoke a new incursion of hornets about our rifle managers' ears.

The language of the conditions is plain as can be, and says: "Such trophy to be shot for in each subsequent year, upon the same terms, in the country of the team holding it, at such time and place as said team or a majority thereof shall prescribe." The language of "each subsequent year" has been already subjected to an interpretation by the founders of the prize or their representatives, the Directors of the N. R. A; but, touching the question of place, it has been wisely thought to let well enough alone, and until something more potent in the way of reason shall be offered than the mere desire of a half dozen or less to enjoy a European trip, it is simply absurd to think of any change. Even if the conditions were not so unequivocal on that point, the action of the team the other day would seem to fix the matter beyond dispute; and with the programme of this year's shoot already out, with the words, "To be shot for in the United States of America in September, 1878," nothing further would seem to be called for in the way of comment; but once let the project of a French trip flit before our young rifleman's eyes and he forgets everything but the grasping of the present gratification.

Opinion is luckily not so unanimous on the point as to raise any immediate danger of a foolish step, as one member of the existing American team characteristically expressed himself: "I don't see why we should trail the tail of our coat all over Europe begging people to step on it. If anybody wants that brass eagle on a stick they know how they can come and get it, or at any rate come to try to get it; but I can't see any use in throwing it at them. We'll lose it soon enough, and then will be time enough to dust about and see to coaxing it home again; then, and not till then will we have anything to go to Europe for, if the trophy goes there, or anywhere else it may wander to. Of course, we all understand that it belongs here as a matter of course, and must remain here until won, and when anybody or bodies make up his or their mind to carry it off, why we have no objection, provided they show the better score." This looks like a bit of brag, but there is a spice of hold-fast in it, too; and it is a proper view of the subject to have, for one who, like a team man, is merely acting in the capacity of a trustee on behalf of American riflemen. Aside from all feelings of mere pride, there is a sensible matter-of-fact view to be taken of the case. Is it at all likely that any such favor would be shown an American team by any foreign power under similar circumstances? Recall the visit of the team of 1875 to Wimbledon, and the negotiations growing out of the proposition to have the American team shoot side by side with the other teams in the contest for the Elcho shield, not as a prize-taking team, but merely in the way of an exhibition, and for the purpose of comparison. As a matter of historical fact, our eight at that time and place were weak, very shaky in their tail-end men; but fearing that the prestige of their time-honored trophy might be dimmed, the offer of a place for our squad, first made from their side, was respectfully withdrawn. Is our centennial trophy such a mere insignificant affair that it should be hawked about in the manner suggested by a contemporary journal? Compared with the Elcho shield, the one is a local badge of supremacy, the other an emblem of international superiority. In upholding our claim to the possession of the Palma, we have whipped and routed the very cream of the Elcho Shield champions. The scores bear no comparison, so far superior are our figures. In fact, the more it is considered, the more ridiculous appears the proposition to lug the trophy to France or anywhere else in search of an owner. A dignified respect for the rules of the match, which on this point do not appear to be at all unreasonable, will retain for us that respect which our previous victories have impressed upon the foreign mind, and to abate one jot or tittle can only open the door in the future to unforeseen blunders and complications.

And yet, not for a moment would I be understood as discouraging the sending of an American team to Paris, provided such a representation can be sent without detriment to our home interests. There is much to be gained by an exhibit of our proficiency in rifle practice in connection with the Paris Exposition; but business before pleasure holds here as elsewhere. Our first care should be to see to it that we are at home ready to receive any who may come to carry off the Centennial trophy. The call in connection with that contest has gone forth, and until the 1st of June, the limit of time for entries, the question of going to Paris or elsewhere must remain in abeyance. Further, something more official than contradictory and indefinite news dispatches per cable must be received before any action whatever can be taken. No information on which any action can be based has yet been received by the N. R. A of America, or by the riflemen of this country; and, until such documents arrive, it would be very unbusiness-like to take even the first step.

There is enough to be done at home to occupy all our time. Enough has been done at home and abroad to satisfy any reasonable craving our men may have for the sweet fruits of victory. Everything now is lovely and serene in the rifle horizon, and we of all can best afford to await what the fates have in store for us, without going abroad to stir up strife even of a friendly sort.

NICK.

FIRING SUBMERGED RIFLES.

SOME VERY NEW AND CURIOUS RESULTS.

General Uchatius, the well known Austrian Ordnance Officer, whose peculiar construction of cannon has attracted such marked attention, has been making some novel experiments with fire-arms. It became a question with the Austrian officer to study the effects of firing rifles under water, the whole arm being submerged. A brief account of these experiments were published by General Uchatius some time ago. We were fortunate enough to be present this week at some initial experiments, made by Lieutenant Count Kolowrat, of the Austrian army, and Dr. H. A. Mott, Jr. A large tank having been built, this receptacle was filled with water to a depth of some five feet. The arms used were the .58 cal. Springfield, the .50 U. S., and the .43 Spanish model rifles, furnished by the Messrs. Remington. The arm was held in a wooden rest, submerged some three feet, then loaded with the ordinary shell, and fired at a piece of pine board, some three feet long, six inches wide, by about one inch thick.

Now, if a person fairly versed in the science of projectiles were asked, "How far will a rifle, loaded with the usual charge of powder, send its ball under water?" the answer would probably be of the vaguest character. The resistance such a non-compressible medium as water presents to the flight of the ball is of the most remarkable character. It would hardly be believed that about four feet under water is pretty nearly a limit of penetration for a rifle ball; a difference of only a few inches more or less as to the target, whether it be moved nearer or further from the muzzle of the piece, affects the penetration. In General Uchatius' experiments the Austrian Werndl rifle did not throw the ball so as to penetrate at a distance of four feet nine inches when fired under water. The limit of penetration arrived at as to distance was 3.28 feet from the arm. In the experiments we witnessed in company with A. Alford, Esq., a ball from a .58 cal. Remington, capable of penetration at a mile, did not perforate the piece of pine board at four feet distance from the muzzle of the rifle, while with the .50 cal., at the same distance, the ball was embedded. The .43 cal. made but a slight impression. At five feet, with the heaviest charge, no effect was visible on the target. About three feet ten inches seemed to be, on an average, the absolute range for penetration from the arms used. Of course these experiments fully established those made by General Uchatius. The wonderful thing about all this is, that an inch makes a difference, in some cases, as to whether there is penetration or not. Now, it may be asked, "What is the use of experiments made by firing rifles under water?" The answer may be expressed as follows: "When the facts of firing submerged arms are studied, and the exact action a dense medium may have on the flight of projectiles is better understood, range and penetration may be arrived at with the greatest precision." It is the intention of Count Kolowrat, in conjunction with Dr. Mott, to make a series of the most careful experiments tending to this end. It is not impossible, then, to advance the idea as a result from these studies, that in the future, when an arm is to be tested, instead of firing it in the air it will be fired under water. Long-ranges for testing rifles will be supplanted by water tanks. Of course the density of the fluid, the barometrical pressures, and the temperature, and the depth at which the arm is placed will be carefully studied. We shall watch these experiments with submerged arms with great interest, trusting soon to give our readers the many novel facts likely to be eliminated.

PENETRATION BY AN EXPRESS RIFLE.

EDITOR FOREST AND STREAM:

I have read in your paper occasional communications in regard to the Express bullet, but very little about the Express rifle or its penetration. As I have a double Express rifle, 45 calibre, made by Alexander Henry, of Edinburgh, which I have used, and as the results vary from those which I read in F. AND S. in regard to penetration, I have made some experiments with shells that were loaded two years last October. These shells were not loaded for any trial, but for hunting. I made three shots, with the following results, at a pine block: The first went through a 14-inch block, struck another and glanced off; the second struck a knot and stopped after penetrating eight inches; the third went so near a knot that it turned its course and penetrated 11½ inches.

I send by express the block split, showing the bullet and the timber which it penetrated. I also send some bullets shot into a snowbank after going through a pasteboard target. Will some of our scientific men tell us why the Express bullet expands and flies to pieces when shot into a very soft substance, while it retains its form nearly as well as a solid bullet when shot into a hard substance? Sportsmen need not doubt the power of the Express rifle to break bones and tear the flesh into fragments. I have made respectable shooting at 500 yards, though not intended for that use.

Since making the above shots I have read a communication from "Viator," which I fully indorse as far as my experience

goes. Not having the pleasure of hunting large game, I will step back into the shade and say to "Viator," "You are on the right trail. You never need fear a grizzly if you do your duty as well as the little Express bullet will do its own part when backed by a good charge of powder."

Track of Express Bullet in Block of Pine Wood—Penetration, 11¼ ins.

The Express rifle, with which I made the shots into the block and snow-drift, is a combined arm which I ordered, intending to take a trip through the West, similar to the trip taken by the editor of the FOREST AND STREAM AND ROD AND GUN, only on a smaller scale. The arm is of the following weight and dimensions: Double rifle; weight, 10 lbs., 4 ozs.; .45 calibre; 28-inch Damascus barrels; charge, 110 grains Curtis & Harvey powder No. 6; weight of bullet, 350 grains. One set of sights is used for both barrels, and I can see no difference in their shooting at long or short distances, with no moving of sights except the elevation necessary for the distance you wish to shoot. Remove the rifle barrels and put into the same stock a pair of 28-in., 12-gauge Damascus shot-barrels, and you have a shot-gun weighing 7 lbs., 1½ ozs., which ought to please any gentleman that has an eye for a gun; all packs into a box fitted to receive each part and tool necessary for the care of the gun and ammunition. The distance from the block was fifty feet; distance when the bullets were shot into the snow, 40 yards. I sent you the block with the bullet in it that you might see that it was an Express bullet, as some might doubt my statement.

Yours, etc., A. G. MANN.

[Our correspondent's communication will be found quite interesting, especially as it indorses the views of many of our friends. The principles of the Express rifle and the plan of the projectile have been already fully discussed in our columns. The only questionable point of difference we find with those who speak of the merits of the Express rifle is in regard to its having a flatter trajectory than any other rifle. We are inclined to think that the back sights have an extra elevation. As to the force, penetration and destructive qualities of the bullet, there can be no possible doubts.

STRAIGHTENING OUT A GREAT DEAL OF CROOKEDNESS.

RECOIL AND UPSET OF BULLETS.

DUBLIN, Feb. 9, 1878.

EDITOR FOREST AND STREAM:

Some of your correspondents are much astray on these points. I will give Mr. Ferris, "Venator" and Mr. Knapp the following nuts to crack:

Why does a rifle bullet *not* leave the barrel in the same direction the axis of bore had when the trigger was pulled? That it does not is easily proved, and the true answer is, Because the barrel is displaced by the motion called "recoil" before the bullet escapes from the muzzle.

Why does a double-barrelled rifle, in which the barrels are put together with bores exactly parallel, not shoot its bullets in parallel lines? Ans.—Because the recoil moves each barrel before the bullet escapes from the muzzle, and, moreover, moves them into diverging lines, owing to the resistance of inertia and of the shoulder not acting in a line with either, but being directed to a point midway between them.

Mr. Ferris is right about upset of bullets, which takes place at the breech, and is almost wholly due to the resistance which the inertia of the bullet opposes to the impact of the explosion.

"Venator" is wrong about muzzle-loading long-range rifles. Their best performance is not attained with a tight bullet started into the grooves, but with one which slips down easily and is just sufficiently upset to follow the rifling when the charge is fired. JOHN RIGBY.

DR. CARVER'S WONDERFUL SHOOTING.

In response to certain inquiries put by us to Dr. W. F. Carver, the famous California shot, he has sent us the following reply. We have to thank Dr. Carver for a half dollar and a five-cent piece, shot through and through by a rifle ball as evidences of his skill. Silver will be more plentiful than ever after the passage of the Bland silver bill, and we may in the future expect many such favors, we suppose:

SAN FRANCISCO, Cal., Feb. 19, 1878.

EDITOR FOREST AND STREAM:

The last match I shot was in San Jose. I shot with a Winchester repeating rifle, calibre 44-100, model of 1873. The match was to break 225 glass balls out of 300. I broke 233 out of 281 shots, having nineteen balls to spare. The balls were thrown from twenty to fifty feet high, the pitcher standing fifteen yards distant.

At my match in Oakland I shot with a Ballard rifle; calibre, 22-100; weight, 9½ lbs; the balls thrown at eight yards distance, the pitcher throwing them from fifteen to fifty feet high. I broke 237 out of 300. I shoot with three guns of different manufacture. I can do the same shooting with any kind of a rifle, from a Hawkin's muzzle-loader to a Creedmoor target rifle; the rifle does not make any difference. I have made a match to shoot on the 22d of this month for five hundred dollars, to break 750 balls out of 1,000, I to shoot any distance I choose. I leave here for the East on the 15th of April next. Inclosed I send you a five-cent piece and a half-dollar, which were thrown in the air and shot with a Ballard, .22 cal. The five-cent piece is the only one I ever found. They are so light that the bullet drives them a long distance. WM. F. CARVER.

We are just in receipt of a letter from our special correspondent in San Francisco, who writes us: "I have just seen Dr. Carver shoot a match with a rifle. There is no humbug about his shooting. He can hit a ten-cent piece almost every time when it is thrown in the air." The latest feat of Dr. Carver was at Oakland, Feb. 22, when he, with a rifle, broke 885 glass balls out of 1,000, tossed from a point twenty feet distant. The time, including all stoppages, was three hours and three minutes.

SOME QUESTIONS TO VIATOR.—Would "Viator" kindly tell us more about the "Express Rifle," and particularly of its trajectory up to 200 yards—how much the ball falls from the axis of the bore or rifle barrel at different distances, say at 50, 100, 150 and 200 yards, when the charge of 136 grains of powder is used in the .45 cal. rifles; also, how to manage lubrication with such heavy charges? I find that with only 90 grains when fired in a dry atmosphere that a powder crust forms in front of the shell sufficient, from one discharge, to spoil all accuracy of succeeding shots if not cleaned from the barrel every time. J. N. B.

DRILL CONTEST—*Charleston, S. C., Feb.* 22.—Washington's Day was celebrated here with the greatest enthusiasm and *eclat;* all of our military and rifle clubs were out on parade, and were received by Gov. Hampton, Generals W. H. F. Lee, Bradly T. Johnson, J. R. Trimble, and many other distinguished guests. One of the chief features of the day was a "Prize Drill" between four of our crack clubs—the Palmetto Guards, Sumter Guards, Charleston Riflemen, and Montgomery Guards. Each company was represented by a squad of twelve men. The judges chosen were Lieuts. Adams, Hill and Galbraith, of the Fifth Artillery, U. S. A. Each squad was put through a list of exercises furnished by the judges. Each of the three judges made his individual estimate of the mark due each movement, the highest being three, and the descent being by tenths down to one-tenth. The drilling was not up to what was expected, but the four squads were so evenly matched that it made the contest intensely exciting. At the conclusion of the drill, the three judges compared their different estimates and marks, and announced the following result: Palmetto Guards, 115 8-10; Sumpter Guards, 114 2-10; Charleston Riflemen, 114; Montgomery Guards, 112 7-10. YENOTS.

BURLINGTON (VT.) RIFLE CLUB.—The following officers have been elected for the ensuing year: President, W. W. Henry; Vice-President, Chas. P. Frissell; Secretary, A. B. Witherell; Treasurer, M. E. Montgomery. Board of Directors—Gen. J. L. Barstow, M. L. Kelsey, H. G. Boardman, J. D. Wilkinson, W. E. Whitney, A. B. Witherell, D. Barnes. Range Committee—M. L. Kelsey, E. F. Downer, Jos. T. Beach. The club are shooting long-range matches on the ice this winter.

AMATEUR RIFLE CLUB.—At a meeting of this leading club, held on Saturday, plans for the matches in which the members were to be engaged were discussed. Mr. A. Alford, member of the Executive Committee, offered a $150 rifle as a prize to be shot for at 1,000, 1,100 and 1,200. The reason for including the additional 100 and 200 yards is either to get an increased range at Creedmoor, or to have the New Jersey Rifle Association to form their new range to include such additional distances. Some objections having been made to the 1,100 and 1,200-yard match, a committee was formed to prepare a plan for a series of short-range matches.

NEW CREEDMOOR RULES.—At a meeting of the Directors of the N. R. A., held on the 20th, the regulations of former years governing matches were generally adopted with some additions and modifications. In section 1, of article 3, "Ammunition furnished by the State," was eliminated. A new clause was inserted which reads as follows: "Any competitor who shall fire in a name other than his own, or who shall fire twice for the same prize, unless permitted by the conditions of the competition to do so; or who shall be guilty of any conduct considered by the Board of Directors or the Executive Committee as discreditable; or who shall, in National Guard matches, use any other ammunition than that issued to him on the ground, or in any way tamper with that so issued; or who shall be guilty of falsifying his score, or being accessory thereto, shall, upon the occurrence being proved to the satisfaction of the Board of Directors or the Executive Committee, forfeit all his entrance fees; be forever disqualified from competing at any time upon the range of the association, and shall not be entitled to have any prize won by him at the time of meeting awarded to him." Instead of allowing riflemen to "warm up" their guns by firing indiscriminately into the ground, they will shoot into "blowing-off" pits. "Any person firing on the wrong target will be fined $1 or debarred from further competition, or both, in the discretion of the executive officer. Any competitor who shall neglect to wear his badge conspicuously during any competition shall have his score disallowed." The committee then rose, and the board adopted the rules as a whole. The Messrs. D. Appleton & Co. have offered a copy of their Encyclopædia for competition at 200 and 300 yards; seven shots at each range; open to all comers, the trophy to be allotted to the competitor winning it twice. Messrs. Tiffany & Co. sent a communication requesting permission to exhibit the Centennial Trophy at the Paris Exposition. The communication was referred to the American team.

NEW YORK SCHUETZEN CORPS.—The annual complimentary calico hop of the New York Schuetzen Corps was held at Germania Assembly Rooms on Tuesday evening, 26th inst., and was one of the most pleasant occasions that we have attended in many years. The large hall was handsomely decorated with flags and banners, and over the orchestra a line of gas jets in a semi-circle, bearing the words, "N. Y. Schuetzen Corps," and "Capt. George Aery" in large gold letters underneath, and from the balcony at the other end of the hall were suspended the large silk flag of the Schuetzen Corps, with the American and English flags on either side. The hall was opened with music by Wannemachers's full band, ushering the following corps and invited guests into the hall: Reniocher Schutzenbund, Major Matt; Deutscher Landwehr Vercin, Capt. Wunder; Bohemian Schuetzen, Capt. F. J. Wokal; New York City Schuetzen Corps, Capt. John F. Gerdes; after which there was a general promenade and dancing begun in earnest.

TWENTY-THIRD REGIMENT.—The Drill of the Left Wing and the supplementary Hop took place at the Armory in Brooklyn on Tuesday night. Dress parade and inspection by Col. Rodney C. Ward, commanding the regiment. When we say that the military movements were executed with that excellence which invariably elicits applause, and that there was the usual crush of crinoline and aggregation of grace and beauty which attend these popular assemblies, we have expressed ourselves as fully and truthfully as the case admits of. There are to be two more socials this spring.

YORKVILLE RIFLE CLUB, Feb. 16.—The following scores were made at the sixth competition for the champion badge at 100 yards, at Washington Park, on Washington's Birthday, Feb. 22, 1878:

J R Grohman	4	4	3	4	5	4	4	5	4	4	4	5	5	3—61
J R Smith	5	3	5	3	4	5	4	4	4	4	4	4	3	4—60
Otto Kelz	4	5	4	3	4	4	4	3	4	3	4	4	4	3—57
W W Dodge	3	2	5	3	4	4	4	2	4	3	5	4	3	4—55
G See	4	4	0	3	4	4	3	4	4	4	4	5	5	4—51
J J Reilly	3	3	3	3	5	4	0	4	4	4	4	5	0	4—48
A S Brown	w													
J R Smith														

At the gallery, 1,581 Third avenue; competition for the FOREST AND STREAM AND ROD AND GUN team, 100 feet, .22 cal. rifle, Creedmoor target reduced, etc.; Feb. 19:

J R Grohman	5	4	5	5	5	5	5	5	5	5—4
Otto Kelz	Protested; not decided.									
G See	4	4	4	5	3	5	4	5	4	5—43
M Rattey	5	3	4	4	4	3	5	5	5	5—43
J R Smith	5	4	5	4	5	2	2	5	4	4—40
A Smart	5	5	3	3	3	5	0	4	3	2—33

Weekly shoot, Feb. 22; same conditions.

G See	5	4	5	4	5	4	5	4	5	4—45
G Kelz	4	4	4	4	5	4	4	5	5	5—43
M Rattey	4	4	3	4	4	4	3	5	4	5—43
J J Reilly	5	4	4	5	4	4	4	4	4	4—42
J R Grohman	4	5	4	5	4	4	4	4	4	4—42
J R Smith	5	5	4	4	4	4	4	4	4	4—42
F McMorrow	3	5	5	4	4	4	4	4	6	4—42
J O Hanft	4	4	4	4	4	4	4	4	4	3—39
A Smart	3	4	3	4	4	4	4	4	4	4—38
W W Dodge	4	4	4	4	3	4	3	4	4	4—38

Next Tuesday decides whether we will enter a team in the FOREST AND STREAM AND ROD AND GUN match; I think we will.

REMARKABLE SCORES.—*Waco, Feb.* 16, 1878.—Rifle shooting match which took place at Lane's Gallery on Feb. 13, 10 shots, possible 50 points. The following scores were made:

E Early	5	5	5	5	5	5	5	5	5	5—50
S Garland	4	5	5	5	5	5	5	5	5	5—49
W T Lane	5	5	5	5	5	5	5	5	5	4—49
C C McCulloch	5	4	5	5	5	5	4	5	5	5—48
C M Downs	5	5	5	5	4	5	4	5	5	5—48
J Pierce	5	4	5	5	4	5	5	5	4	5—48
W Brooks	5	5	5	4	5	5	5	4	5	5—48

These scores were made at 100 feet; bull's-eye, three-quarters of an inch in diameter. If any other seven men can beat this I would like to hear from them.

Yours truly, W. T. LANE.

TOLEDO RIFLE TEAM.—The Toledo team are making preparations for the coming season. We understand that $10,000 will be expended toward fitting up a range.

AN EXPRESS RIFLE.—Messrs. Schuyler, Hartley & Graham have just received an Express double rifle, made by E. M. Reilly & Co., of London, of heavy calibre. The rifle has twist barrels, hack-action locks, rebounding hammers, double grip, pistol grip, 12 bore, 26-inch barrels, and weighs 11 lbs. The charge is 3½ drachms of Curtis & Harvey's powder (No. 4 grain) for a conical ball weighing 2 ozs., and 4 drachms for spherical ball weighing 1¼ oz. It is an arm which would soon master the toughest grizzly. We suppose it is to be used for buffalo. This rifle was made to order for a gentleman in Brooklyn.

SPLIT BAMBOO RODS.

To our customers and the public:—In reply to the damaging reports which have been circulated respecting the quality of our split bamboo rods, by "dealers" who are unable to compete with us at our reduced prices, we have issued a circular which we shall be pleased to mail to any address, proving the falsity of their assertions.

CONROY, BISSETT & MALLESON,
Manufacturers, 65 Fulton Street, N. Y.

Game Bag and Gun.

GAME IN SEASON IN MARCH.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocet etc., coming under the group *Limicolæ*, or Shore Birds.

RETAIL PRICES, POULTRY AND GAME.—*Game*—Pinnated grouse, per pair, $1.75; canvas back ducks, $2.50 to $3; red head, $1.50 to $2; mallard ducks, $1; black do, 80 cts.; widgeon do, 70 cts.; broad bill do, 50 cts.; wild geese, per piece, 75 cts. to $1; wild turkeys, per pound, 15 to 18 cts.; rabbits, per pair, 40 cts.; squirrels, 15 cts; hares, 30 to 50 cts.; quail, per dozen, $3.50 to $4.00; wild pigeons, flights, $1.50; do stall fed, $2; Philadelphia squabs, $4.

Poultry.—Philadelphia and Bucks County dry picked chickens, per pound, 15 to 20 cts.; do fowls, 14 to 15 cts; do turkeys, 14 to 18 cts.; do ducks, 20 to 22 cts.; do geese, 15 to 18 cts.; State and Western chickens, 12 to 15 cts.; do turkeys, 12 to 15 cts.; do fowls, 16 to 13 cts.; do ducks, 15 to 18 cts.; geese, 10 to 13 cts.; capons, 24 to 28 cts., slips, 23 to 24 cts.; spring chickens, per pair, $1.50.

NEW YORK—*Canton, St. Lawrence Co., Feb.* 18.—Hiram Hutchins, a well-known hunter and guide, living in the town of Canton, about a week since, killed, near Jock Pond, in the township of Colton, a panther, measuring about 7 feet 6 inches from tip to tip. The cat had, a day or two before, killed a

deer, and after eating nearly all of it—not at one meal, of course—but before the track was found by Mr. Hutchins, who was in that vicinity on a fishing trip, the panther had retired to the large top of a fallen hemlock, from which he was started and treed by the dog after a sharp race of a quarter of a mile. A bullet through the brain settled him. This is the first one killed or seen in this vicinity for a number of years. LADOO.

Kingston, Feb. 20.—Hard times here now for the rabbits; the foxes and weasels are playing sad havoc with them along the base of the Shawangunk Mountains. A number of white weasels have been noticed. James Pine, the veteran fox hunter of Marbletown, shot a fine cross-barred fox on Monday, the 18th. Sam Penny, of Marlborough, while hunting one day last week, shot a silver-grey fox west of that village. A number of others have been captured by other parties. OUR HARRY.

BIG FOX.—A red fox was killed at Hornellsville, N. Y., last week, which measured 4 feet 8½ inches from tip of nose to end of tail.

NEW INLET AT SHINNECOCK BAY.—A Good Ground, L. I., correspondent writes that a new inlet to Shinnecock Bay was opened Feb. 19. This will lower the bay, which will then furnish fine red head and broad bill shooting. The prospects are for better duck shooting this year than for several previous seasons.

PENNSYLVANIA.—A correspondent writes from Gettysburg of the sport there:

"We generally have good quail shooting, and ruffed grouse are quite abundant within six or eight miles of town. A woodcock killed Dec. 27, 1877. Was that not unusually late?" C.

GREENVILLE SPORTSMAN'S CLUB.—The officers for the ensuing year are: Pres., Wm. McDowell; Vice-Pres., J. H. Phillips; Sec., M. Hargood Brooks; Treas., C. R. Beatty.

A LARGE EAGLE.—On the 24th ult., L. B. Cushman, editor of the North East (Pa.) *Sun*, shot a gray eagle on the beach of Lake Erie that measured seven feet six inches from tip to tip The bird is now in the hands of a taxidermist, and will soon grace the *Sun* sanctum. This is supposed to be one of the largest eagles ever shot in the United States.

TENNESSEE—*Columbia, Feb.* 20.—A long and delightful season of bird shooting came to an end on the 14th. Sportsmen are now amusing themselves and tapering off by knocking over rabbits and toppling out squirrels. A party of three gentlemen were out on the 19th, and bagged fifteen rabbits, which places them at the head of rabbit score. No good bags of squirrels taken yet. VAL.

Nashville, Feb. 21.—Game hereabouts, particularly of the smaller kinds, has been very plentiful this season. Quail (commonly called partridges throughout the South) have been very abundant, good bags having been made within sight of the city. A number of deer have been brought to market, but they came from a distance. A few wild turkeys are still to be found in some parts of the country. Rabbits have been so numerous that in some sections "battues" have been gotten up to rid the country of them.

SOUTH CAROLINA—*Charleston, Feb.* 23.—Very little hunting has been done the last ten days, and have heard of only a few small bags of partridges and five turkey brought on. Weather has been quite rainy and warm, driving the ducks, which were in large quantities a short time since, further North. YENOTS.

TEXAS—*Galveston, Feb.* 17.—Ducks are getting somewhat wild, but jacksnipe are found in great numbers on the mainland. A party of twenty killed over two hundred a few days since in a day's hunting. C. C.

ILLINOIS—*Lebanon, Feb.* 17.—Ducks and geese have begun their spring migration. Expect good shooting in a few days. A Wilson snipe straggler was killed here Jan. 26. Snipe, as a rule, never appear here before March 1. W. L. J.

WILD PIGEONS—*Lebanon, Ill., Feb.* 17.—Wild pigeons have, for the last few weeks, been quite abundant in the Kaskaskia River bottom, twenty miles south of this city. Are now plenty here, and have for two days been passing southward. W. L. J.

A PRAIRIE WOLF CHASE.—The farmers of Harris Prairie, Ind., have been much troubled for three years past by the depredations upon their flocks of a huge gray wolf. The wolf was often seen, but was so sly that hunters seldom got a shot at her. Twice her litters were captured, but she escaped, and her inroads on the flocks in that vicinity have aggregated a loss to the farmers of over $1,000. She has been known to kill six or eight sheep in one night, and had become such a terror in the neighborhood that some of the farmers sold their flocks. Two weeks ago a party started on the chase, agreeing to keep up the hunt until she was captured. The pursuit lasted six days, when she was tracked into a clump of woods, surrounded by the entire force, and finally brought down. She was found to be 3½ feet in height, and over 6 feet long.

IOWA—*Mason City, Feb.* 18.—The prospects are for a fine supply of pinnated grouse here during the coming season. A great quantity of birds here this winter. T.

NOTED HUNTERS OF MONTANA.—Our stated correspondent, Mr. L. F. Whitman, of Detroit, has kindly sent us the following characteristic letter from Charles Kimball, of that city, who is now in Montana. Kimball is one of the popular athletes and sportsmen of Detroit, a member of the senior six crew of the Excelsior Boat Club, and other organizations. His letter is written to his father, and is dated *Half-Creek Station, December*, 1877:

"* * * The ranchmen have all quit work and holed up for the winter, although it is the handsomest weather you ever saw. I am writing with the door open, like Mrs. Frazer, and if my window was not nailed in, I would have it open also. It consists of a single pane of glass stuck in a loop-hole. I have been out on a hunt for the last month with three of the oldest and best hunters in the Rocky Mountains. I will give you a description of them on the dime-novel scale.

"I will commence with Warren Craig, the champion shot of the Rocky Mountains. He stands six feet four in his moccasins, and I should judge about forty years of age. He carries a double-barrel rifle that weighs sixteen pounds, a hunting ax, and a knife and belt, besides ammunition. The whole lot would make a load for a pack-mule. He will climb the highest mountain, and never ceases walking from sunrise till sunset. He kills as much game as all the hunters put together in the Territory. He never stops hunting except to change camp. He thinks a heap of me, and has given me a Winchester rifle that shoots sixteen times without reloading; also a dog; and old Harvey, his partner, lets me have a horse as long as I want one, to ride and pack my game on. They want me to go north with them to the Cypress Mountains and run buffalo this winter, but everybody advises me not to. They tell me that the country is full of hostile Indians, and that Craig and Harvey have to fight their way in and out every time they go and come, and I have decided not to go, as I don't care to go bareheaded the rest of my life, and I am not particularly fond of them any way (they are too clean).

"But to continue my description. Next in rank comes Jno. Havey, *alias* Grisley, the greatest bear hunter in the world. He hunts nothing else, but shoots everything in shape of an animal that crosses his trail, not excluding Uncle Sam's pets, as he calls the Indians. He is a trifle less than six feet, almost as broad as he is long, and will tackle a wounded bear or panther with a knife as soon as I would a cat. He is sixty years of age, and as supple and spry as an athlete of twenty. He speaks the language of four different tribes. His name is a terror to every Indian, horse-thief and road-agent in the country. He says that if Uncle Sam will give him permission, he will pick twenty men in Montana and take a contract to rid the country of every Indian in it; but he says he won't except the Indian agents that are appointed by the Government, for he says they are the men who make the trouble. He not only told me that, but tried to persuade the Governor of the Territory to write Congress to that effect. He says that West Point graduates and men brought up in the States can't follow Indians in the brush. He is also a great lariat thrower, and has been known to catch a wolf on the run from a horse. He knows where all the best quartz beds are, and tells me when I make enough money to open one he will show it to me as rich as Montana affords. As for his part, that ain't what he is after. He says he has enough to keep him while he lives, and to take a trip to the States too, if he gets foolish enough to want to get sick and die in a hurry. He is all scars, from his head to his feet, and one shoulder pretty badly chewed up. I can't see that it hinders him from eating any, for he will eat as much meat as any hound pup you ever saw.

"I will conclude with Bill Thurston, or Montana Bill, as he is familiarly called—almost as tall as Craig, straight as an arrow, and full fifty years of age. He does not hunt a great deal now, because his eyes trouble him a little, but he says 'If they wait till I get through squinting and find the head I am sure death to them.' He generally amuses himself by packing in the game and hauling it to town, for which he receives half. They say he is one of the men that helped hang the road-agents that troubled the first settlers of Montana in '61, '62 and '63. These are the kind of men that I have been hunting and associating with for the last month. They have not only enabled me to get a winter's meat for myself and Ben., but with what I have sold have bought flour, bacon, sugar, tea, coffee, dried fruit, potatoes—winter's stock. You may judge for yourself the amount of game I have killed when venison and elk bring only two and a half cents per pound, and skins from two bits to a dollar and a half each. I think I told you in a letter prior to this that the boys have, with the exception of Ben. and Glover, gone in the sheep business together. They have rented a ranch about five miles from where I am now stopping. I have taken up my quarters on the Prickley Pear River, the next ranche to Ben's sheep ranche, and he is here the most of his time, and as you know he is a great hand to fish, I never want for trout, which abound here in great numbers. CHARLES KIMBALL."

CALIFORNIA.—As an indication of the importance of the sporting interest in the State, the San Francisco *Chronicle* notes that a single firm in that city have sold, the present season, 6,000 sacks of shot.

AMENDE HONORABLE.—The following letter, which we cheerfully publish, will sufficiently explain itself:

DANVILLE, P. Q., Canada, Feb. 25, 1878.

EDITOR FOREST AND STREAM:

I see by the last FOREST AND STREAM that you have got me down as violating our game laws. By referring to my last, you will see that I shot the caribou on Jan. 8th—not Feb. 8th. Please see to this, as I am one of the last persons that will be found violating our game laws. Our close season for deer and caribou is from Feb. 1 to Sept. 1.

Yours truly, J. C. STOCKWELL.

THE FOREST AND STREAM AND ROD AND GUN SPORTSMAN'S TRUNK.—Messrs. Holberton & Co., of this city, exhibited at the St. Louis Bench Show, among other sportsmen's goods, a very serviceable solid sole leather trunk and gun case combined, large enough to hold 200 shells with complete outfit, including the gun. We notice that some of the St. Louis papers speak of this as the *Turf, Field and Farm* gun case, but it was named the FOREST AND STREAM'S Sportsman's Trunk, and should be so called.

NEW APPARATUS FOR TESTING PATTERN AND PENETRATION OF SHOT GUNS.—Mr. H. C. Squires, of No. 1 Courtland st., has exhibited to us a capital invention, by the use of which a great deal of the trouble and expense in making gun trials can be overcome. Any one who has undertaken a gun trial is aware of the cost of paper targets, and the consequent time necessary to count the sheets of paper in order to get at the penetration. Mr. J. P. O'Neil's invention consists of a single sheet of paper target of the ordinary size, laid off in squares, so that the pattern can be readily counted. The bull's-eye has back of it a box some three feet long supported on legs. In the frame work of this box slats are cut, into which pieces of straw-board can be placed at intervals of about a half inch. The whole is supported on wooden legs. Now the method of determining the penetration is exceedingly simple. Each separate piece of card-board, 10x10 inches square, as it is traversed by the shot determines the penetration. At a glance the particular sheet of card-board which has been shot through can be seen. Instead of carrying into the field a lot of targets, a small package of these card-boards will enable the person experimenting to understand exactly what the penetration of his gun is. We consider Mr. O'Neil's invention an admirable one, as it does away with former cumbersome methods of getting at penetration. Persons desirous of seeing this new apparatus will do well to call on Mr. Squires. There are many gentlemen owning guns who are utterly ignorant of what charge of powder they should use. By the use of Mr. O'Neil's contrivance a few easy experiments can satisfy them fully as to the best method of loading in order to determine the power of their guns as to pattern and penetration.

THE EXACT MEASURES OF CALIBRES.—It may interest our readers to know what are the exact measurements of the various gauges of guns most in use. We give the measurements to the thousandth of an inch: Calibres, 8, .860 of an inch; do. 10, .793 do.; do. 12, .750 do.; do. 14, .715 do.; do. 16, .685 do.; do. 20, .627 do.

SPRING AND SUMMER SHOOTING.

HARTFORD, Conn., Feb. 14, 1878.

EDITOR FOREST AND STREAM:

I heartily approve of the suggestion of "Shot," made in a communication to your paper under date of Jan. 20th, upon the subject of Spring and Summer Shooting. He alludes to the great diminution of snipe and ducks perceptible in each returning winter. The cause of the diminution of the first named bird, we apprehend, is not what Shot attributes it to, though in all probability spring shooting is in a measure responsible for it. Recently an account was given in your paper of a gentlemen living near New Orleans who had killed in thirty hours' shooting, 1,900 snipe, more than twice as many, we apprehend, than have been killed in any spring for ten years in the whole State of Connecticut. It is this desire to make the largest "bag" in a given time that is playing havoc with the game birds North and South, in the East and in the West. The slaughter is not confined to snipe, but extends to woodcock, prairie chicken and ducks. In a recent number of your paper I saw an account of a boy near New Orleans who had killed 84 woodcock in a single day's shooting.

I am considered a good fair shot, and average ten days' shooting each fall. Have shot for the last ten years, and feel well paid for a day's tramp if I can bring to bag two brace of these birds. The fact is, the desire to make a great bag in those sections of country where our migratory birds are found in such numbers, is gradually, indeed I may say rapidly, making it almost impossible to make any bag at all in sections of the country less favored in this matter of game than some of the Southern States.

Prairie chickens in the Western States are becoming with each year less numerous. The cause is very evident: sportsmen vie with each other in bagging the greatest number in a given day. The character of the ground in which these birds are found—an open country—makes the bird an easy target, and it is no uncommon occurrence for a medium shot to kill fifty in a day. Surely what pleasure can there be in shooting where such results are so easily accomplished.

Again, I apprehend that when such large numbers of birds are killed they are too frequently wasted. A few years ago the writer saw in a freight car in the depot of the Dubuque and Sioux City road, at Dubuque, an immense stack of prairie chickens, which were being shipped in that form to Chicago. The weather was warm, it being the latter part of August, and it is quite probable that when the birds reached Chicago they were entirely spoiled.

Killing a very large number of birds in a given time must take away the real pleasure. What gives zest to shooting is not to kill the greatest number of birds in a given day, but to do the work skillfully. I sincerely hope that our sporting friends will be satisfied with smaller bags, and thereby let the birds multiply, so that years of sporting may be had by ourselves and those that come after us. SMALL BAG.

CHILLED SHOT—*Jacksonville, Ill., Feb.* 11.—*Editor Forest and Stream:* I notice in your issue of Feb. 7th, a communication from H. W. Knowlton, which, to my mind, is very sensible. I have not used the Tatham chilled shot, but I intend to, if its killing power is greater than the soft shot. I have used the English chilled shot in the field, and I came to the conclusion last season that its killing power was no greater than the soft, or, in other words, I could not do any better shooting with it or get more game than I could with the soft shot. The fact of chilled shot giving better penetration at a paper pad at forty yards, is no proof to me that its killing power is greater on game. There are sportsmen who contend that soft shot will give better penetration at a paper pad with common powder, it giving less velocity than the higher brands of powder. The shot, on striking the paper pad, is not flattened to that extent as to prevent its penetrating. But who will contend that common powder has greater killing power at forty yards than the best brands? My experience is, the better the powder I use the more game I get, killing it at longer distances. What I would like to see is a practical test of the killing powers of the chilled and soft shot on birds at various distances, all things being equal as far as possible. GEORGE HAYDEN.

CHILLED VS. SOFT SHOT.

NEW ROCHELLE, N. Y., Feb. 8, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I notice the recent experiments reported by you in your paper of Jan. 31, made with eight different shot-guns, for the purpose of testing soft and chilled shot in penetration, the targeting being only secondary. Each were No. 10's, owned by different gentlemen, and loaded with 4 drs. powder and 1¼ oz. shot by measure, not weight. Each gun fired but one round, and the one barrel of chilled and the other of common soft shot. In this trial preference is given to chilled over soft shot.

In carefully looking over the report, I am free to say there appears to be some advantage in the use of chilled over soft shot. Yet this gain appears to be much less than I could have hoped and anticipated. It will be seen that two of the eight guns gave a much better target with the soft than with the chilled shot, and one other nearly tied. That of the whole number of pellets thrown in the sixteen loads, 6,144, the aggregate gain in the targets of the chilled over the soft was but two per cent.—a gain, to be sure, but so small as to leave it possible that the results may be reversed hereafter. Yet I do not believe they will; still, I am not fully satisfied with this trial as to targeting, and I believe the public will be highly pleased to see these trials pushed to their end. The penetration seemed to be, so far as the experiments went, in favor of chilled shot, but I think several other trials should be made to set this subject at rest, and especially at two or more distances—say forty

and sixty yards—with the same charges, also with different sized shot. Experiments thus made may lead to opposite results. Indeed, I could point out why they should do so. But I pass this by.

We say to Mr. Tatham that all sportsmen desire to use the best shot manufactured, and that if he can positively improve his already most excellent shot, we will most heartily rejoice with him, but we first require to know beyond a doubt that he has improved upon them. Should he succeed in so doing, he will certainly win by it. We say in behalf of our sportsmen, please go on, Mr. Tatham, with your trials, and give us the best shot in the world. We watch your experiments with the deepest interest, and with an eagle eye.

As pertinent here, I beg to relate what a gentleman has recently written me in regard to targets. He says he had a very strong shooting gun, and engaged another to be made, but would receive it only in case it shot as strong as the one he owned. He received it, and, on trial, found it much wanting in penetration. He was about to return it to the maker as a failure, when, on thought, he recalled the fact that the shot he found in the target made by it were considerably more flattened than those of his favorite gun. He had used for a target an old pamphlet nailed compact to the board. He now thought to use the English mode of targeting—to hang the sheets of paper by one corner of the book in order that they should hang loosely together, but not compactly. He now tested his guns again, when the penetration was completely reversed, and his favorite gun beaten. The new gun, having the greatest power in fact, had mashed her shot in the first trial, and thus could not penetrate deeply, while the more round shot of the other went on. This experiment shows how opposite results may arise in practice, even from the kind of targets used.

You will see in your last issue what Mr. Knowlton has to say about the trial. If, as he says, the soft shot used were of different brands and mixed, then I think his point is well taken. Such a trial will not give full satisfaction. You will also observe he claims that more powder should have been used with the soft than with the chilled shot; and this for the reason that the loads of soft shot were twenty-seven grains heavier than the chilled. Here I would disagree with him. It is effect and utility in shot, alone, that we are here seeking for. That kind which, with equal means, gives the best results is certainly entitled to win. This great end obtained, we stick a pin here. We next pass to the powder, and then to the gun; and, by the same order of trials, find out which kinds of these give us with equal means the best results; then, and not till then, will our problem in shot-gun practice be solved. Persistent and impartial trials are conducive to this end. Again, I desire to present a point for reflection to Mr. Knowlton as well as to your numerous readers generally.

Question—Since penetration varies with the weight of the pellets into their velocities, may not Mr. K. be wrong in premising that the heavier soft pellets into their velocities should not give equal or more penetration than the lighter chilled pellets into their velocities? Just so. This is a deduction of mine. And further: hence the obvious necessity of trials at different distances with the same charges of powder and shot, and of varying the shot (in size, at least), also.*

MAJ. H. W. MERRILL.

* The size of the charge used was well selected and proportionate to the gauges of guns (see Hallock's "Gazetteer," page 553).

PIGEON MATCHES.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

CONNECTICUT—*Stamford.*—Clark's Hill Gun Club, Feb. 22.

A S Henderson	1	1	1	1	1	1	1	0	1	0—8
Dr. Parker Pepe	0	0	1	1	1	1	1	0	0	1—6

Second match:

Mr Norton	1	1	1	0	0	1	1	5	Harry Pitt	1 1 1 1 1 1 0—6

Next Day—Match on the grounds of the Clark Hill Gun Club between A. H. Smith and S. W. Smith:

A H Smith....25 yds	1	1	1	1	1	1	1	0	1	0—8
S W Smith....21 yds	0	0	1	1	1	1	1	0	0	1—6

Match between H. W. Pitt and F. K. Grair:

H W Pitt....19 yds	1	1	1	1	1	1	0—6
F K Grair....25	0	1	1	0	0	1	1—5

Riverton, Feb. 22.—Riverton Shooting Club; 21 yards, ground trap; score:

Ellison	0	1	0	1	1	1	1	0	1	1	1	1	1—10
R H Wells	1	0	1	0	1	1	1	1	0	0	0	0	1—6
Roberts	1	1	0	1	0	1	0	1	0	0	0	0	1—6
R Wells, Jr	0	1	0	1	1	0	0	1	0	0	1	1	0—6
Nellson	0	0	0	0	0	0	1	1	0	0	1	0	0—3
Reinhard	0	0	0	0	0	0	1	0	0	0	0	0	0—1

BAY RIDGE VS. NEW UTRECHT LANE.—*Bay Ridge, L. I., Feb.* 16. Score:

Bay Ridge.

Otto Heinigke	1	1	1	1	0	1	1	1	0	1—8
Simon Duryea	1	1	1	1	1	1	1	1	1	1—10
Walter E Hope	0	1	0	1	1	1	0	1	1	1—7
Frank W Kent	1	1	1	0	1	1	1	1	1	1—9
George H Hope	1	1	1	1	0	1	1	1	0	1—8
Peter S Bogart	1	1	1	1	1	1	1	1	0	1—9—51

New Utrecht Lane.

G P Cowenhoven	0	1	1	0	0	1	1	0	0	1—5
Johnson Skidmore	1	1	0	1	0	1	1	1	1	1—8
Jerry Lott	0	1	1	1	1	1	1	1	1	1—9
P Ravenhall	1	1	0	1	1	0	0	1	1	1—7
Peter Monfort	1	1	1	1	1	1	1	1	1	1—10
John Cowenhoven	1	1	1	1	1	0	1	0	1	0—8—47

Sweepstakes; three balls, miss and out:

Peter Monfort	1 1 1	3	S Duryea	1 1 1	3
P Ravenhall	1 0 0	1	Geo H Hope	1 1 1	3
Wm Van Horn	1 1 0	2	Otto Heinigke	1 1 1	3
P S Bogart	1 1 0	2	J Skidmore	1 0 1	2

In shoot off, Duryea and Hope broke 13 each and divided money.

MAMARONECK, N. Y.—Shooting by members of the Dear Gun Club and the Mamaroneck Gun Club, Feb. 22. Five birds each, $5 entries; $25 1st prize, $10 2d, $5 3d.

H D Polhemus	1 1 1 1	4	Alex Taylor, Jr	0 1 1 0	w
C J Osborn	1 1 1 0	4	Mr Schuyler	1 1 0 1	4
W Murphy	0 1 0 1	w	L Bright	1 0 1 0	w
Ben West	0 1 0 1	3	Edgar Murphy	1 1 0 0	w

H D Polhemus won 1st prize; C J Osborn shot off a tie with Mr Schuyler; Osborn won 2d money and Schuyler 3d.

The match between the Deal and Mamaroneck clubs for $300, was withdrawn. During the afternoon many sweeps on glass balls were shot, and both clubs very handsomely entertained by Mr. Taylor.

DETROIT—Match at Hamtramck Park, Feb. 18, between Dell Sheldon and James Minihan, of the Pacific Gun Club. Score:

Sheldon	1	0	1	1	1	1	1	1	1	1—9
Minihan	1	1	0	1	0	1	1	1	1	1—8

AUDUBON GUN CLUB.—*Buffalo, Feb.* 22—Score:

James Franklin, Jr	1	1	1	1	1	1	1	1	0	1—9
M Smith	0	0	1	1	1	1	1	1	1	0—6
T C Collins	1	0	1	1	1	1	1	1	1	0—8
G Fleischman	1	1	1	1	1	1	1	1	0	1—9
A W Eggert	1	1	1	1	1	1	0	0	1	0—7
F Emerson	1	0	1	0	0	1	1	1	0	1—6
S A Roberts	1	0	1	0	0	1	1	0	1	1—6
C Heinold	0	1	1	0	0	1	1	0	1	1—6
R Ward	1	1	1	1	0	1	1	1	1	1—9
J Beir, Jr	0	1	1	1	1	1	1	1	0	1—8
J A Diogens	0	0	0	1	1	1	1	1	1	1—7
Wm Christian	1	1	1	1	1	1	1	1	1	1—10
V W Ringueberg	1	1	0	1	1	1	1	1	1	1—9
James Rafferty	1	1	1	1	1	1	0	1	1	1—9
A Downs	0	0	0	0	0	1	1	1	1	1—5
C Suckow	1	1	1	0	0	0	0	0	0	0—3

LONG ISLAND—*Babylon, Feb.* 23.—The Southside Gun Club has been organized here. A sweepstakes match at Selah C. Smith Watson's House to-day resulted as follows:

Jones	25 yds	—1 1 1 1 0	25—1 1 0 0 1	25—1 0 1 1 1	24—0 1 1 0 1
	22	—1 0 1 * *	21—1 0 1 0 0	21—0 0 0—18.	
Mason	25	—0 1 1 1 1	25—0 0 1 0 0	25—1 0 1 * 0	23—1 1 1 1 1
	24	—1 1 1 0 1	24—1 1 1 1 1	25—1 1 1—24.	
Warner	25	—1 0 0 0 0	25—0 1 1 * 1	25—1 0 1 1 1	23—1 0 1 0 0
	22	—1 0 0 0 1	21—1 0 0 0 0	20—0 1 0—15.	
Pennock	25	—0 1 0 1 0	25—1 1 1 1 1	26—1 0 1 1 1	withdrew.
Clancy	25	—1 1 1 1 1	26—1 0 1 1 1	26—1 1 1 1 1	28—1 1 1 1 1
	30	—1 1 * 1 1	30—1 1 1—30.		
Foulke	25	—1 0 1 1 1	24—* 1 1 1 0	25—1 1 1 0 1	25—1 1 1 1 0
	25	—1 1 1—18.			

Deerfoot Park.—Match, Feb. 22, between N. King and C. Hunce; fifteen pairs of double birds each, 21 yards rise, 100 yards boundary; old Long Island rules; trap and handle for each other. The pigeons were an extraordinary lot of fine flyers:

Hunce	01	10	01	10	11	00	10	11	01	00	10	11	00	—18
King	11	11	11	10	01	00	11	00	01	10	01	11	11	11—14

JERSEY CITY, *Feb.* 14.—Match between a nine from Jersey City Heights and the Fairview Gun Club; glass balls; score:

Jersey City Nine.

W Hughes	0	1	1	1	1	1	1	1	1	1—9
Sanders	1	1	0	0	1	1	1	0	1	0—6
Dusenberry	1	1	1	0	1	1	0	0	1	1—7
Wycks	0	1	1	1	0	1	0	1	1	0—6
Pierce	1	1	1	1	1	1	1	1	1	1—10
C Sedore	1	0	1	0	1	1	0	1	1	0—6
Howell	0	1	1	0	1	0	1	1	1	1—7
Stevens	0	0	1	0	1	0	0	1	1	1—5
J Pearson	1	1	0	0	1	0	1	1	0	1—6—62

Fairview Gun Club.

J Carling	1	1	1	1	1	1	1	1	1	1—10
C Townsend	1	1	1	1	1	1	1	0	1	1—9
G Ricardo	0	1	1	1	1	0	1	1	1	0—7
Outwater	1	1	1	1	1	0	1	1	1	1—9
Blauvelt	1	1	1	0	1	0	0	0	0	1—6
Wheeler	1	1	0	0	1	1	1	1	1	1—7
J Day	1	0	0	1	1	1	1	1	1	1—8
A Sedore	0	0	1	1	0	0	1	1	1	0—5
J Dunn	1	0	0	0	0	0	0	1	1	0—3—64

MIDWAY SHOOTING CLUB—*Matawan, N. J., Feb.* 14.—Monthly shoot at Mount Pleasant; 10 birds each, 80 yards boundary, H and T traps, club rules; score:

J Von Brackle....23 yds	0	0	1	1	1	1	1	0	1	0—6
E Vonderveer....22	1	1	1	1	1	1	1	*	1	0—8
W I Conover....22	1	1	0	0	1	1	0	0	0	1—6
Mr McGee....21	0	1	0	0	0	1	0	1	1	1—5
J G Lions....21	0	0	0	1	1	1	*	1	0	1—5
P Dougherty....21	0	0	1	0	1	1	1	1	0	1—6
F E Beyer....22	0	1	1	1	1	1	1	1	1	1—9
R Worrell....21	1	0	1	1	0	1	*	0	1	1—6
J Lamberson....22	1	*	1	1	1	1	1	1	1	1—9
H Haight....23	1	*	1	1	1	0	1	1	1	1—8
H Ward....22	0	1	1	1	1	1	1	0	1	1—8
G Farrington....21	0	1	1	1	0	1	1	*	0	0—6
S Lamberson....22	1	1	1	1	1	1	1	1	1	1—10
G Watt....22	0	1	1	1	1	1	1	0	1	0—7
O Brown....21	0	0	1	0	1	1	1	1	1	1—7
J Anthony....21	1	1	1	0	1	1	1	0	1	1—8

K. H. W.

PHILADELPHIA, *Feb.* 19, 1878.—The following is the first of a series of matches shot between the members of the Semper Felix glass ball and rifle club. All are subscribers of your journal.

Dr M A Wood—0 0 0 1 0 0 1 0 1 1 0 0 1 1 1 1 1 0 0 1 0 1 0 1 1 0 1 1 1 1—17.

H A Wright—1 0 0 1 1 1 0 1 0 1 0 1 0 1 1 1 1 0 1 0 1 1 0 0 1 1 1 1 1 1—20.

R N Wallace—0 0 0 1 0 0 0 1 0 0 0 1 0 0 1 0 1 1 1 1 0 1 1 1 0 1 0 1 1 0—14.

Dr C T Smith, Capt—0 0 0 0 0 1 1 1 1 1 0 0 0 0 1 0 1 1 0 1 1 1 1 0 1 1 1 1 1 0 0—16.

The above was shot Bogardus' trap and rules.

GEO. H. SUMMERS, Sec.

PHILADELPHIA, *Feb.* 17.—Sweepstakes match; Bogardus rules, 18 yards rise, 15 balls each:

Peter Landschutz	0	1	0	1	0	1	0	1	1	0	1	1	1	—9
Col Frey	1	0	1	0	1	1	0	1	1	0	1	1	1	—10
Henry Spellman	0	0	0	1	0	1	1	1	0	1	1	1	1	—10
Thomas Myers	1	0	0	0	1	0	1	1	0	0	0	0	1	—6
Fred Miller	1	1	1	0	0	1	0	0	1	0	0	1	1	—7
John Miller	0	1	1	1	1	0	0	0	0	1	0	1	1	—8

Feb. 22.—30 glass balls; the rain came down in torrents; score:

H Wright—1 1 1 1 1 1 0 1 1 1 0 1 1 1 0 0 1 0 1 1 0 1 1 1 1 0 0 0 1—20.

Dr C T Smith—0 1 1 0 1 1 0 1 1 1 1 1 1 1 0 1 0 1 1 1 1 0 0 1 1 1 0 0 0 1—20.

R N Wallace—0 0 1 0 0 0 1 0 0 0 1 1 1 1 1 1 0 1 1 1 0 0 0 0 0 0 0 1 1—14.

No ammunition to shoot off ties.

FIRMAN ISLAND CLUB.—The Washington's Birthday match for the championship badge resulted in the following score:

Baker	9	Kellert	8
Gilmore	8	Webb Bonnington	11
Curtis	9	De Nyse	2
Ambruster	7	Morgan	5
J Bonnington	5	Trott	7
Evans	8	Carrick	8
Dierking	9		

ILLINOIS—*Kinsenton, Feb* 8.—Greene Smith vs. F. J. Abbey and T. Stagg; English rules; weather rough; wind, snow and rain; score:

Smith—1 0 0 1 0 1 1 1 1 0 1 1 0 0 0 1 0 1 0 1 0 1 1 1 1 0 1 1 1 1 0 1 0 1 0 0 1 0 0 1 1 1 1 1 1 1 1 1—32.

Abbey—0 0 0 1 0 0 1 0 1 1 0 0 1 1 0 1 1 1 1 1 1 1 1 1 0 1 0 0 1 1 1 1 0 1 1 0 1 1 0 1 1 0 0 1 1 1 1 0 1 1 1 0—31.

Smith—1 0 1 1 1 0 1 1 1 1 1 0 0 1 1 1 1 1 1 1 0 0 0 1 1 1 0 0 1 1 1 0 1 0 1 1 0 0 1 1 1 1 1 1 0 0—35.

Stagg—1 0 1 0 0 1 0 1 1 0 1 1 1 0 1 1 0 1 0 1 0 0 1 0 0 0 1 1 1 1 1 1 1 1 1 0 0 1 1 0 0 1 0 0 0 0 0 1 0—27.

Smith, 67; Abbey and Stagg, 58.

AUDUBON CLUB.—Match at Chicago for prize, Feb. 5. Score:

S H Turrill	1	1	1	1	1	1	1	1	0	1—9
Chas Kerns	1	0	1	0	0	1	0	1	0	1—6
T C Wilson	1	0	1	1	1	0	1	0	1	1—7
Chas Meara	0	0	1	1	1	1	0	1	0	1—6
W T Johnston	0	1	1	0	1	1	1	1	1	1—8
Chas Morris	1	1	1	1	1	1	1	1	1	1—10
Joe Saxton	0	0	0	1	1	1	1	0	1	1—6
Chas K Willard	1	1	1	1	1	0	1	0	1	0—7
A Cook	1	1	1	1	0	1	1	1	1	1—9
J J Gilspy	1	1	1	0	1	1	1	1	0	0—7
B B Organ	1	1	0	1	0	0	1	1	1	0—6
Abraham Prize	1	1	1	1	1	1	1	1	1	1—10
2 Chas Meers	0	0	1	1	1	1	0	1	0	1—6
2 Chas Kerns	1	1	1	1	1	1	0	1	1	1—9
T Stagg	1	1	1	0	0	1	1	0	1	1—7

Ties on ten—Morris bought prize out.

Ties on nine.

Turrill	0 1 1 1 1	4	Stagg	1 0 0	w
Cook	0 1 1 1 1	4	Wilson	1 0 0	w
Gilspy	1 0 1 1 1	4			

Second Tie.

Turrill	1 1 1 1 1	5	Cook	1 1 1 1 1—5

Third Tie.

Turrill	0 1 1 1 1	4	Cook	1 1 1 0 1—4

Fourth Tie.

Turrill	1 0 1 1 1	4	Cook	0 0 1 1 1—3

Sweepstakes:

Johnson	0 1 1 1	3	Klinmen	0 1 1 1—3
Kerns	1 0 1 1	3	Prize	0 1 1 1—3
Cleaver	0 1 1 1	3	Willard	1 0 0 1—2
Morris	0 0 1 1	2	Turrill	0 1 1 1—3
Saxton	1 0 1 1	3	Stagg	1 1 1 1—4
Misher	1 1 1 0	3	Brown	0 0 0 0—1

The birds gave out and money was divided.

CANADA—*Toronto, Feb.* 12.—Toronto Gun Club side shoot for a dinner; 21 yards rise, 80 yards boundary; H and T traps 15 yards apart; club rules. Score:

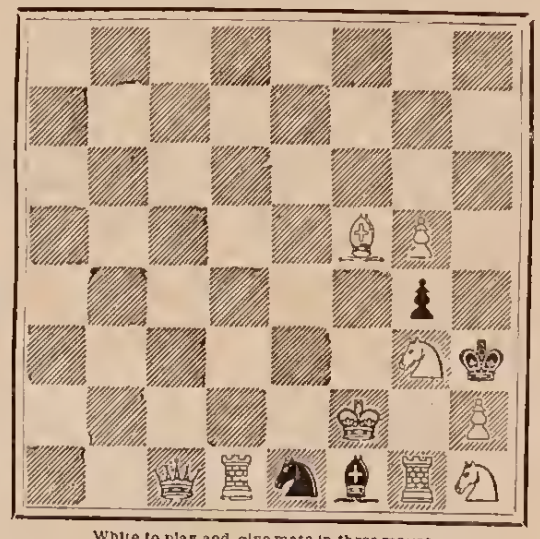
President B Moore	3	Vice-Pres E Perryman	4
J Kennedy	6	J Taylor	5
G Wright	5	J Fillers	5
R Wilson	4	A Macgregor	6
W Staneland	2	R Morrison	5
W Morley	5	W Loudon	2
W Kennedy	4	C C Small	5
R Ardagh	4	J Maughan	5
Dr Smith	5	T Windeat	6
M A Boswell	5	J Douglass	3
C Callegben	3	J Young	4
Total	46	Total	52

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 7.

Tourney set, No. 5. Motto—Success to Literature in Chess. Inscribed to John G. Belden.



White to play and give mate in three moves.

SOLUTIONS—PROBLEM NO. 5.

1—R-Q3 ch	1—Kt tks R	1—R-Q2 ch	1—Any
2—Mates		2—Mates	

The above is the only solution this problem admits of. The author's solution is impossible.

SOLVERS' SCORE.

In our next issue we shall publish a list of solutions up to and including problem No. 5.

The following games between the two celebrated German masters Anderssen and Zukertort were played at Breslau in January, 1865:

Game No. 15.—MUZIO GAMBIT.

White. Zukertort.	Black. Anderssen.	White. Zukertort.	Black. Anderssen.
1—P-K4	1—P-K4	11—Q Kt-Q5 !	11—P-K B3
2—P-K B4	2—P tks P	12—Q tks P !	12—P tks Kt
3—Kt-K B3	3—P-K Kt4	13—Q-K R5 ch	13—Q-K Kt3
4—B-Q B4	4—P-K Kt5	14—Q tks K P ch	14—Kt-K2
5—Castles	5—Q-K2 ?	15—R tks B ch	15—K tks R
6—Kt-Q B3 !	6—Q-Q B4 ch	16—Q tks Kt ch	16—K-Kt
7—P-Q4	7—Q tks B	17—Kt-K R6 ch	17—Q tks Kt
8—Kt-K5	8—Q-K3	18—Q tks Q	18—P-K R4
9—Kt-Q5	9—Kt-Q R3	19—B-K R6	19—Resigns
10—Q Kt tks K B P	10—Q-Q3		

In the following game the first five (5) moves are the same as in the above game.

Game No. 16.—MUZIO GAMBIT.

White. Zukertort.	Black. Anderssen.	White. Zukertort.	Black. Zukertort.
6—Kt-K B3	6—P tks Kt	12—B tks B	12—B-K R3
7—P-Q4	7—P-Q3	13—B tks P ch	13—K-B
8—Kt-Q5	8—Q-Q2	14—Q-K R4	14—B tks B
9—Q tks P	9—Kt-Q B3	15—Q R tks B	15—Kt-Q
10—Q tks P	10—B-K3	16—B R5 ch	16—K Kt2
11—Kt tks P ch	11—Q tks Kt	17—Q-Kt5 ch	17—Resigns

The first eight (8) moves in the game below are the same as in game No. 15:

Game No. 17.—MUZIO GAMBIT.

White. Zukertort.	Black. Anderssen.	White. Zukertort.	Black. Anderssen.
9—Kt-Q5	9—K-Q	18—K R	18—P-Q B3
10—Q Kt tks K B P	10—Q K	19—R tks Kt	19—P tks Kt
11—Kt-Q5	11—B-K B3	20—R tks R	20—K-Q2
12—K Kt tks Kt P	12—B-K Kt2	21—B-K Kt3 ch	21—P-Q3
13—K Kt tks B P	13—Kt tks Kt	22—B-K B2 !	22—Q Q B5
14—B-K B5	14—Q-K K3	23—R tks B ch !	23—K tks R
15—B-K R4	15—Q tks K P	24—Q K8 ch	24—K B2
16—Q-K R5	16—R-K B	25—R-K7 ch	25—Resigns
17—Q R-K	17—Q tks Q P		

The subjoined interesting game at the odds of Q Kt is kindly contributed by G. Reichelm who is undoubtedly one of the strongest odds-givers in America as well as a first-class player:

Game No. 18.—REMOVE WHITES Q Kt.

White, Reichelm.	Black, Dr. K——.
1—P-K4	1—P K4
2—Kt-K B3	2—Kt-Q B3
3—B-B4	3—B-B4
4—P-Q Kt4	4—B takes Kt P
5—P-Q B3	5—B R4
6—Castles	6—Kt-K B3
7—Kt-Kt5	7—Castles
8—P-K B4	8—P-Q3
9—P-Q4	9—B Kt3 (a)
10—K-R	10—Kt-K5
11—Kt tks B P!	11—R tks Kt
12—R tks R	12—K tks B
13—P tks P	13—K-Kt
14—Q-K B1!	14—Kt-K B3
15—P tks Kt	15—Q-K B
16—B K R6!! (b)	16—Q-K B4 (c)
17—Q-K B8	17—P tks Q
18—R tks P	18—B-K Kt3
19—R-K B and wins.	

NOTES.

(a) Upon B- White plays Kt-B7!.

(b) White now makes a move which forces the game off-hand, and is a fine study for amateurs.

(c) Upon Q-K B2, P tks P and on P tks B White mates in three moves. White menaces P-K B7 and B-K Kt7.

The subjoined game was played in the second round of the *Amateur's World's* (Eng.) third correspondence tourney:

Game No. 19.—QUEEN KNIGHTS OPENING.

White, Farrow.	Black, Jacobsen.
1—P-K4	1—P-K4
2—Kt-Q B3	2—P Q3
3—B K4	3—P-K B4
4—P-Q4	4—Kt K B3
5—P-K R3	5—B Kt
6—Kt-B3	6—Castles
7—Castles	7—Q-K
8—K-R2	8—Q Kt3
9—P tks P	9—B tks Kt
10—P-K Kt4	10—P-K R4
11—K R	11—P tks P
12—K R Kt	12—B-Q2
13—Kt tks P	13—Q checks
14—P-B3	14—Kt tks Kt
15—R tks Kt	15—Q-B4
16—Kt-Kt	16—K-R3
17—Kt-Kt5	17—B tks Kt
18—B tks B	18—R-R
19—Q-K B	19—Q tks R
20—Q Kt3	20—B tks Q ch
21—K-Kt	21—R-Kt6
22—P tks Q	22—R tks Q ch
23—K-B	23—Kt-Q4
24—B-Kt	24—R-K R
25—K-K	25—R-R3 ch
26—B-K B	26—R-B6
27—B-B2	27—K-B3
28—R-Q!	28—B tks R
29—K tks B	29—R tks Q B
Black mates next move.	

CURSORY JOTTINGS.

—Neill, of the *Danbury News*, is writing an interesting serial story for that paper entitled, "The Shadow of a Shame." Good for Neill, the brilliant chess player.

—Capt. MacKenzie is off on a trip to Auburn and Buffalo, and, as an amusement, is defeating all comers as far as heard from. Send him to Paris, eh?

—At chess, to play an useless move
Of hurtful consequence will prove;
A skill ful player without design
Shifts not a soldier from his line.
Your time is short—try to foresee
With speed what the event may be
Of every move; but first attend
Where you can best your king defend.
Place him in a well-guarded square,
The most remote from hostile snare;
And, above all, this rule make—
Be not in too much haste to take.
With heedful eye your men survey,
And with slow hand point out their way.
Your head suggests a scheme—look round,
Perhaps a better may be found.

—Owing to professional engagements, we are unable to answer the questions submitted us, but shall soon do so by mail or in our next issue.

NOTICE TO SPORTSMEN.—Having received so many communications asking us for information in regard to our six-section bamboo trout, black bass, grilse and salmon rods, we have prepared a circular on the subject, which we shall take pleasure in forwarding to any address. We keep on hand all grades, the prices of which range from $15 to $150. We put our stamp only on the best, in order to protect our customers and our reputation, for we are unwilling to sell a poor rod with a false enamel (made by burning and staining to imitate the genuine article) without letting our customers know just what they are getting.

P. O. Box 1,294.—[*Adv.* ABBEY & IMBRIE, 38 Maiden-Lane.

Sea and River Fishing.

FISH IN SEASON IN MARCH.

SOUTHERN WATERS.

Pompano *Trachynotu carolinus.*
Drum (two species). Family *Sciænidæ.*
Kingfish, *Menticirrus nebulosus.*
Sea Bass, *Sciænops ocellatus.*
Sheepshead, *Archosargus probatocephalus.*
Snapper, *Lutjanus caxus.*
Grouper, *Epinephelpus nigritus.*
Trout (black bass), *Centropristis atrarius.*
Striped Bass. or Rockfish, *Roccus lineatus.*
Tailorfish, *Pomatomus saltatrix.*
Black Bass, *Micropterus salmoides: M. nigricans.*

FISH IN MARKET—RETAIL PRICES.—Striped bass, 20 to 25 cents; smelts, 15; green do., 15; bluefish, 15; frozen salmon 35; mackerel, 15 to 25; Southern shad, 50 cents to $1; white perch, 15; Spanish mackerel, 35; green turtle, 18; terrapin, $18 per doz.; halibut, 15; haddock, 8; codfish, 8 to 10; blackfish, 15; flounders, 10; sea bass, 15; eels, 18; lobsters, 10; sheepsheads, 25; scallops, $1.50 per gallon; soft clams, 30 to 60 per 100; whitefish, 15; pickerel, 15; salmon trout, 18; black bass, 18; hard crabs, $2 50 per 100; frost fish, 6; Newfoundland herring, 6; turbot, 25; sun fish, 10; yellow perch, 10; yellow pike, 10; ciscoes, 10; American turbot, from Fortune Bay, N. S. (the nearest approach to the European turbot), 20.

THE TROUT LAW IN NEW YORK STATE.—Sec. 20. No person shall kill or expose for sale, or have in his or her possession, after the same has been killed, any speckled trout, save only from the first day of April to the first day of September, under a penalty not exceeding twenty-five dollars for each fish. (Amended Ch. 411, Laws of 1877.)

MASSACHUSETTS.—*New Bedford, Feb.* 20.—Pickerel fishing in the ponds is good Several fine dace were taken in Great Quiticus pond, the first I ever heard of being taken through the ice.

CONOHO.

MOVEMENTS OF THE FISHING FLEET.—The fishing arrivals for the week include nine from Fortune Bay, returning in ballast, and bringing the Newfoundland herring season practically to a close. The business has been a failure, owing to the combination of the Newfoundland fishermen to prevent fishing by American vessels, and the masters of the several vessels estimate their loss at five thousand dollars per schooner, for which sums a claim for indemnity will be made through the treasury authorities at Washington. The Bank fleets are making unusually long trips for the season, and the light call for fresh fish, and ample supply, keep prices below figures affording profitable returns. The number of arrivals the past week has been six, and the receipts 100,000 lbs. halibut. The fleet report very rough weather. The Georges and La Have fisheries are moderately successful; the number of arrivals for the week has been eight, and the receipts 275,000 lbs. codfish and 8,000 lbs. halibut.—*Cape Ann Advertiser, Feb.* 23.

A PLEASANT RESORT FOR ANGLERS IN CONNECTICUT.—At East Hampton, a half mile from the depot of the New York and Boston Air Line Railroad, and three miles from the Connecticut River, Mr. Wm. G. Buell, a gentleman sixty-three years of age, keeps a modest country hotel, which is much resorted to by anglers in summer. It stands on the border of a lake of 900 acres, which is well stocked with bass and other pond fish, and the State Fish Commissioners have placed 15,000 land-stocked salmon in the tributary streams within the past two years. Some of these have been captured which measured eight inches in length, so that there seems a fair probability that these fish will soon afford good sport to the angler. Sometimes fifty bass are taken in a day, varying in weight from ½ to 4½ pounds. A pretty island of ten acres, in the centre of the lake, affords a pleasant picnic ground.

PENNSYLVANIA—*Williamsport, Feb.* 19.—Last June our party spent two weeks fishing at Ralston, and took twenty-three dozen as fine trout as can be found in mountain waters. The average weight was two pounds and three quarters (2¾ lbs.), the small ones, of course, we returned to the water. The streams in the vicinity of Ralston, are all fine for fly-fishing. There are many grand pools at the foot of miniature cascades, just the places for evening fishing. Our third day out was a remarkably fine one. At one of these pools, about four rods from camp, at the first cast I landed a two-pounder. At the foot of the cascade I took one which weighed a fraction over three (3) pounds. The sport here and the scenery is truly grand. Should any of our sportsmen come here they will find fine accommodations at the Ralston House, kept by Mr. Myers. Fine sport can be had within half a mile of the hotel.

JACK.

TENNESSEE.—*Nashville, Feb.*—Anglers have to go to the streams in other parts of the State for their sport, the Cumberland river and its tributaries, within many miles of this city, being entirely monopolized by the pot fishermen who, with nets and set lines, have virtually destroyed the legitimate sport with the rod. They keep the market pretty well supplied with such fish as the buffalo, drum cat-fish, and an occasional sturgeon, but at the cost of the sportsman's amusement. Very little attention has as yet been paid to fish culture in this vicinity, although some few persons have commenced it.

Columbia Feb. 20.—Bad weather and high waters make trout (bass) fishing impossible. Buffalo and drum are caught out of the river, weighing from four to eight pounds each.

VAL.

GRAYLING GROUNDS IN MICHIGAN.—Dr. T. M. Furman, of Walton, Mich. (on the line of the Grand Rapids and Indiana Railroad), mentions what is known as the "Holy Land," on the Manistee River, as one of the best grayling grounds in the State. It is situated some thirty miles from Walton, and comprises about six miles of the river interspersed by islands and bars, with deep holes in the bed of the stream. These holes, he tells us, literally swarm with these attractive game fish. Last August the writer, in company with A. D. Leavenworth and C. M. Conant, three in a boat, took 453 fish on the first day's fishing, which weighed 300 pounds. The net result of two days' work was 600 pounds of grayling, not including a supply given away to a camp of twenty men. Not the least achievement of the party was the shooting of a bear while swimming the streams, which weighed 410 pounds, dressed. The Manistee is mainly a rapid, foaming river, interspersed with pools of still water.

CALIFORNIA.—The first four shad of the season brought $10 each in San Francisco.

AMERICAN OYSTERS FOR EUROPE.—Between October 22, 1877, and Feb. 15, 1878, there were shipped from New York to Europe 22,823 barrels. 722 boxes, and 4,016 cases of oysters at prices ranging from $5.50 to $7 per barrel.

BLACK BASS FISHING IN CANADA.

A Stratford correspondent, who visited the little town of Lorignal, which is sixty miles from Ottawa, on the south side of the Ottawa river, writes that he found there rare sport with the black bass:

The spot selected for the camp was what is known as the Flat Rock, one mile and a half up the range river. The point was reached by canoe, carriage being necessary at the rapids. The new railroad built upon the north shore of the river runs within a few yards of the fishing grounds. The river here has rocky banks, and is of no great width, but is so hemmed in that it runs more like a sluice than a river. There are no falls properly so-called, but the whole river is a continuation of tremendous rapids, which dash through the rock gullies, forming the bed of the river. The scenery along the river is grand, some of it majestic, and the best time to see it is in the spring or late in fall, when all the autumn tints are on the leaves. The river rises in the Laurentian mountains and flows for its whole distance through the gullies and canyons of these hills. It is deep, cold and clear, and the home of many species of the finny tribe, but more especially of the black bass. The sport is good at almost any time during the summer months. The bass bite well, and are most of them of large size. The sport is excellent, and the fish game to the last. As long as they keep in the pool of still water, they are not difficult to handle; but if, as frequently happens, they shoot out into the swift stream, it takes patience, perseverance and good caution to recover the fish, or even the tackle intact.

AU SAUBLE.

KENTUCKY NOTIONS ABOUT BASS FISHING.

THE MEEK REEL AND THE PROPER BASS ROD.

STAMFORD, Ky, Feb. 14, 1878.

EDITOR FOREST AND STREAM:

In your issue of the 7th inst. Mr. Geo. A. Shufeldt, in his article on "The Bass Rod," takes issue with Mr. Hallock in his commendation of the Kentucky, Frankfort, or Meek reel, in "Gazetteer," in casting for bass, and proclaims his abandonment of it, and returns to the double multiplier, because of the "exasperating confusion" of line which he encountered in casting with a Meek.

Now, after the treat of reading the "Gazetteer" we have little to criticise, least of all the recommendation of what we esteem in its class perfection—the Meek reel. Just here let us state that we have no "ax to grind" in recommendation and praise of that reel for the manufacturers are as absolute strangers to us as are the natives who accompanied Stanley in his late explorations. Aside from a natural State pride our acquaintance with and partiality to the Meek reel prompt a fraternal remonstrance against Mr. S.'s condemnation of it because of the prejudice it is likely to produce in minds of readers who have never seen the reel, and because of that duty every sportsman owes his brethren to promulge a "good thing discovered."

Every caption containing the word "bass" catches a Kentucky sportsman's eye, and the article is almost certainly first read, for the black bass is *the* game fish of Kentucky, and bass rods and reels are Kentucky anglers' specialties; nor have we yet met one who doesn't unhesitatingly declare himself as profusely grateful to Meek for the invention of his reel as was Sancho Panza to the man who invented sleep.

Brother Shufeldt pays a merited tribute to its "superiority of workmanship and finish," but condemns its rapidity of action because of the "exasperating confusion" in which he frequently found his line after casting for bass It will puzzle a stranger to conjecture the kind of reel-angling in which Bro. S. finds that "perfection" of the Meek reel which he announces, as casting is a necessary feature of the use of a reel and that "confusion" of line as sure to occur in casting for other varieties as for the bass. He certainly would not confine its use to trolling?

If we could find any objection to the Meek reel it would be that in reeling in a fish the rapidity of action is likely to tear the hook from a "slender tenure," or so enlarge the puncture—if in a lip—made by the hook, that a gamey fellow gaining an inch or two of line can easily fling himself loose. As Bro. S. commends the multiplication of a Meek in reeling in a fish we conclude him an expert in the manipulation of his game and are the more surprised that he is not equally skillful in casting.

We can sympathize with him in the confusion, or fouling of the line in a careless, or an awkward cast from a Meek reel, for we have spent more than one impatient half hour in the "reconstruction" of our line as the reward of an effort to put our minnow a little beyond the float of an accomplished companion; but a few such penalties stimulated us to that practice which generally insures control of our tackle and a delight in the possession of a Frankfort reel, which is comparable only with that of the boy with his first whistle. Since we discarded grass lines and adopted braided linen and silk it is rarely our misfortune to entangle the line, and if it occurs the fault is ours, not that of the reel.

We are by no means an expert in the use of a reel, but by practice have acquired that command of our Meeks which enables us to easily cast a minnow much further than we are inclined to strike unless satisfied that the game has gorged the bait and when the emergency arises to place the same minnow much beyond the point we can reach with an excellent New York balance reel, all things being equal. We feel assured that if Brother S. will practice with a Meek reel, with the click set and the rubber tempered, or control the spool with his thumb he will soon acquire a control of his tackle which will surprise him that he could ever have thought a balance reel "a thing of joy."

As to bass rods we of this section discard the joint rods and rig the Japanese and bamboo canes—usually nine, occasionally ten and twelve feet—and inconvenience ourselves to carry them far or near, if we find it inconvenient, which is rarely the case. When the travel is by rail we would not exchange our solid rod for the most exquisite split bamboo with which we could be tempted.

Bass fishing will soon "be ripe," and if Brother Shufeldt will skip over to Stanford from 1st to 10th of May we'll guarantee him a cordial welcome and entertainment, and, while affording him some black and green bass angling which "lays in the shade" the cream of lake angling, convince him of the superiority of a Meek reel to anything off which a line was ever cast to a bass in Kentucky waters.

KENTUCKIAN.

FISHING NOTES FROM EAST FLORIDA.

HALIFAX INLET, Feb 17, 1878.

The uncertainty which prevails, while fishing in these waters, whether your next fish will weigh one pound or forty, makes the sport interesting.

A few days ago, while fishing for sheepshead with crab bait (this species here averages about four pounds) a boy, about twelve years of age, who was with me, hooked a bass which weighed forty pounds, on a hand line. The fish was nearly as big as the boy, but, being a skillful fisherman, he played it till its strength was exhausted, and secured it. This is the heaviest bass as yet taken here this winter. The boy is a Pacetti, coming of a race of anglers.

Yesterday I went out for whiting, which are numerous in these waters, but of small size, say about eight ounces on an average. I took a light rod and fine line, such as I use at the North as bait tackle for brook trout, which the whiting much resembles in its way of biting and play when hooked. I had taken about a dozen, when a heavy fish struck me, and went off with irresistible force. After about fifteen minutes' play, it proved to be a drum, and too big for my landing net. Unfortunately, I had left my gaff on shore, so we had to row to the bank, towing the drum astern, and there we landed it on the shelving sand bank. It weighed eleven pounds, and emitted the hollow sound from which it takes its name, for some time after it was on shore.

The lowlands are flooded, and the black bass scatter all over the swamps and are not easily found. Some of the salt water species are driven out of the bays and sounds by the volume of fresh water, such as the black fish and groupers. The red bass, sheepshead, drum, salt water trout and whiting run up the river into water nearly or quite fresh, and there take bait as freely as in the salt water. The freshness of the water, or the coldness of it, keeps the sharks, sawfish and rays, outside; for these delicate monsters cannot bear the cold, and are frequently killed by the fall of a few degrees of temperature. Their absence is a boon to fishermen, for in warm weather they become a great nuisance, from their abundance and voracity. On the other hand the floods of fresh water kill the oysters and the long clams—the latter a very delicate and savory mollusk peculiar to these inlets, called by the Minorcean of St. Augustine, Laugeroul.

S. C. C.

THE HUBER TRAP.—This trap has certain peculiarities of make which call the attention of gentlemen who desire an excellent apparatus for throwing glass balls. The springs are of double-coiled steel-wire, and are not only light, but wonderfully powerful and enduring. The manufacturers guarantee any of their traps for six months. The range of the balls thrown from the Huber trap can be so arranged as to throw them at varying speeds and distances. A ball may be sent 140 feet, at an elevation of twenty-five or thirty feet, or a driving bird can be imitated with the ball, the rise not being over seven feet. The trap is well and solidly built on an oak frame, and thoroughly secured and bolted. It can be easily turned in any direction, and may be packed for shipment in a small compass. The growing popularity of this trap is the best criterion of its merits.—[*Adv.*

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—[*Ad*

A LAY SERMON FOR STUDENTS.—This is from an Oxford lecture recently given by John Ruskin. They are words of truth not only for the English University men, but for students the world over:

"First cultivate all your personal powers, not competitively, but patiently and usefully. You have no business to read in the long vacation. Come here to make scholars of yourselves, and go to the mountains or the sea to make men of yourselves. Give at least a month in each year to rough sailor's work and sea fishing. Don't lounge and flirt on the beach, but make yourselves good seamen. Then, on the mountains, go and help the shepherd at his work, the woodmen at theirs, and learn to know the hills by night and day. If you are staying in level country, learn to plow, and whatever else you can that is useful. Then, here in Oxford, read to the utmost of your power, and practice singing, fencing, wrestling and riding. No rifle practice, and no racing—boat or other. Leave the river quiet for the naturalist, the angler, and the weary student like me. You may think all these matters of no consequence to your studies of art and divinity; and that I am merely crotchety and absurd. Well, that is the way the devil deceives you. It is not the sins which we feel sinful by which he catches us; but apparently healthy ones—those which nevertheless waste the time, harden the heart, concentrate the passions on mean objects, and prevent the course of gentle and fruitful thoughts."

SNAKES AND SENTIMENT.—The New York *World* recalls an amusing incident in the life of Agassiz. It has just the least flavor of a "snake story" about it, but we give it as we find it:

Mr. Agassiz, it will be remembered, married a second time after he established himself in this country. The honeymoon had hardly expired when some enthusiastic correspondent in Florida sent him a box containing six rare and dangerous snakes of a variety he had long desired to see and study. Enchanted with his prize, and mindful of the difference of temperature between the Gulf of Mexico and Massachusetts Bay, Mr. Agassiz carefully took the box up to his bed-chamber and put it comfortably away in a closet. The next morning, when Mrs. Agassiz arose and hastily put one of her feet into a slipper by the bedside she was horrified to find it in contact with something of a deathly coldness and dampness. She instantly withdrew her foot and nearly fell into spasms on seeing it followed out of the slipper by an odious little green snake, which curled and coiled and hissed in the most satanic style. "Agassiz! Agassiz!" she screamed. The professor sprang up in the bed startled, and rubbing his eyes. "Agassiz," she continued, "get up! here is a snake in my slipper!" "*A* snake in your slipper! *A* snake in your slipper!" exclaimed her affectionate consort in unfeigned dismay; "only *a* snake in your slipper? Where under heaven are the other five?"

Tiffany & Co., Silversmiths, Jewellers, and Importers, have always a large stock of silver articles for prizes for shooting, yachting, racing and other sports, and on request they prepare special designs for similar purposes. Their TIMING WATCHES are guaranteed for accuracy, and are now very generally used for sporting and scientific requirements. TIFFANY & CO. are also the agents in America for Messrs. PATEK, PHILIPPE & CO., of Geneva, of whose celebrated watches they have a full line. Their stock of Diamonds and other Precious Stones, General Jewelry, Artistic Bronzes and Pottery, Electro-Plate and Sterling Silverware for Household use, fine Stationery and Bric-a-brac, is the largest in the world, and the public are invited to visit their establishment without feeling the slightest obligation to purchase.

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THE QUEEN OF TABLE WATERS.

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DR. J. MILNER FOTHERGILL, London.—"The Exquisite Apollinaris; a delicious beverage."

PROF. J. A. WANKLYN, St. George's Hospital, London.—"Highly effervescent, wholesome, and absolutely pure; superior to all others.

DR. R. OGDEN DOREMUS.—"Absolutely pure and wholesome; superior to all for daily use; free from all the objections urged against Croton and artificially-aerated waters.

DR. PETER HOOD, President of the Herts. Medical Society, etc.—"Superior to Vichy and Vals."

PETER SQUIRE, F. L. S., Chemist to the Queen.—Tenth edition of *Companion to the British Pharmacopœia.* "Exhilarating; good for sickness, dyspepsia, and loss of appetite."

MACNAMARA, F. R. C. S., C. S. I., Surgeon to Westminster Hospital, London.—"More wholesome and refreshing than soda or seltzer water."

HERMAN WEBER, M. D., F. R. C. P., Physician to the German Hosp., London. "Of great value in lithic acid diathesis, in catarrh of the bladder and of the respiratory organs; agreeable and useful."

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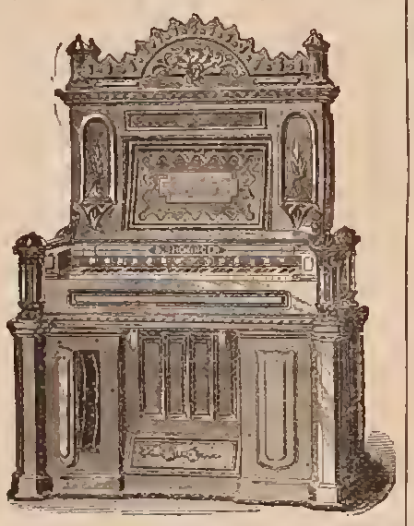

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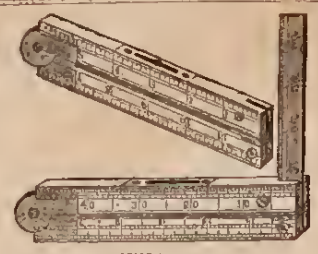

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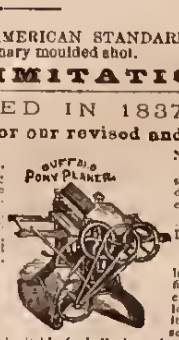

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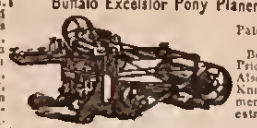

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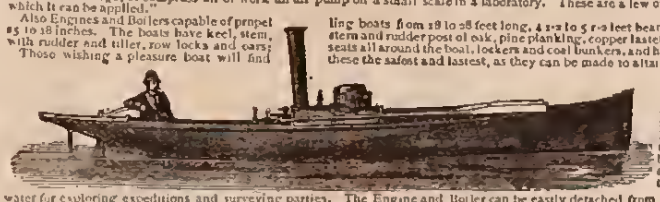

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ONLY ONE QUALITY MADE AND THAT IS THE VERY BEST.

Each article—coat, trowsers, vest and hat—have the name and manufacturer's address stamped upon it, and no suit is genuine without it bears this imprint.

The suit can be sent, securely packed, by mail to any part of the United States or Canada on receipt of $1.25 above the price of the suit.

We make no discount except to the trade. We make but one quality, and that is the VERY BEST. The price of the suit complete is $13.

The suit consists of coat, trousers, vest, and choice of either cap with havelock, or hat.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are riveted, and nothing is neglected to make the whole suit complete in every way.

OUR PATENT DECOYS

have entirely superseded the old-fashioned cumbersome, wooden decoys. The birds are hollow, and six of them occupy about the space of one wooden decoy. The Duck Decoys of all kinds are $12 per dozen; geese, $3 each; yellow leg, $4.25 per dozen; black breast plover, $3.75 per dozen; red breast plover, $3.75 per dozen; golden plover, $3.75 per dozen; turnstone, chicken plover, etc., $3.75 per dozen; sandpipers, $3.50 per dozen. We are now making standing geese for field shooting.

THE HUNTER'S TENT

is made of tan-colored duck; light, easily transported. Size, 7 ft. by 8 ft. Price, $10 complete, made on the umbrella principle, folding into a neat roll 3 feet long.

In the judges' report at Philadelphia they were commended for excellence in every part. Very novel and practicable; adapted to all out-of-door purposes where lawn, beach, hunters and camp tents are used; quick folding; all sides strongly fortified; enables them to stand against wind and rain. Rev. F. B. Savage, of Albany, N. Y., who camps out in Florida in winter, and the Adirondacks in summer, writes this about the tents:

ALBANY, July 31, 1877.

SIRS—I have just returned from a three-weeks' camping expedition in the Adirondacks, and have had the three tents bought of you put to the severest tests of exposure both as to wind and storm, and I do most unhesitatingly say they are the most complete thing of the kind I ever used.

1st. They are easily put up or taken down.

2d. They are perfectly waterproof.

3d. They are a good height and all the room is available.

Our party asked for no better. They were admired by all who saw them, and one party insisted on buying one of ours that was to spare. Rev. Dr. Duryea, of Brooklyn, and the Rev. Dr. Irwin, of Troy, both indorse what I say about your tent. With kind regards, yours truly, F. B. SAVAGE.

Tan-Colored Leather Pliable Waterproof Suits.

Shooting Coats, Jackets, Breeches, Vests and Hats at following prices: Coats, $22; Breeches $15; Jackets, $18; Vests, $12. These form the most elegant shooting equipment known. They are indestructible.

A recent notice in the FOREST AND STREAM, from a correspondent, says:

Whenever a sportsman, or even one who does not claim the distinction, finds a really good and useful article, it is no more than fair that he should let others have the benefit of his knowledge. For this reason we would call attention to the Tan-colored Leather Shooting or Fishing Suits, made by G. W SIMMONS & SON, of Boston, Mass., the manufacturers of the famous "Boston Shooting Suit."

I saw these goods advertised in your paper, and wrote to the parties for samples. I found the material as soft and pliable as a piece of kid. I tested it by soaking in water twelve hours, and found it as nearly waterproof as one could desire, and after drying was happily surprised to find it had not stiffened in the least. I have since then received a full suit—coat, vest and breeches—ordered by letter from measure taken by myself.

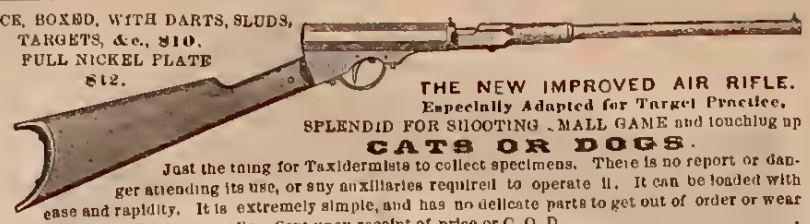
The goods are splendidly made, well lined with flannel; in fact I do not see how they can be improved.

My friends are unanimous in their verdict that G. W. Simmons & Son's leather goods cannot be excelled in quality or beaten in price.

For every kind of sportsmen's goods address

G. W. SIMMONS & SON,
Oak Hall, Boston, Mass

PRICE, BOXED, WITH DARTS, SLUGS, TARGETS, &c., $10.
FULL NICKEL PLATE $12.



THE NEW IMPROVED AIR RIFLE.

Especially Adapted for Target Practice,

SPLENDID FOR SHOOTING SMALL GAME and touching up

CATS OR DOGS.

Just the thing for Taxidermists to collect specimens. There is no report or danger attending its use, or any auxiliaries required to operate it. It can be loaded with ease and rapidity. It is extremely simple, and has no delicate parts to get out of order or wear out. For sale by the Trade generally. Sent upon receipt of price or C. O. D.

SEND FOR CIRCULAR. H. M. QUACKENBUSH, Patentee and M'f'r, Herkimer, N. Y.

Hart's Sportsman's Favorite Metallic Shells.
FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2⅛ to 3¼ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

W. W. Greener's Patent Wedge Fast, Hammerless Breech-Loader.

THE GUN OF THE FUTURE.

It has already made its mark in Great Britain. The self cocking is effected by the rising of the breech ends of the barrels for loading, and works smoothly and without requiring much force to open the gun and cock the locks. There is a safety bolt at the side which answers for half cock. The mechanism of this action is exceedingly strong and simple, and is better suited for hard work than any other gun in use.

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These guns are warranted to kill game at 100 yards. Read W. W. GREENER'S book on Choke-Bore Guns and How to Load, published by Messrs. Cassell, Petter & Dalpin, New York.

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SHARPS' RIFLES---MODEL 1878.

ORDERS FOR THE NEW MILITARY AND LONG-RANGE RIFLE ARE NOW BEING FILLED.

SEND FOR ILLUSTRATED PRICE LIST.

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NEW YORK WAREROOMS, 177 BROADWAY.

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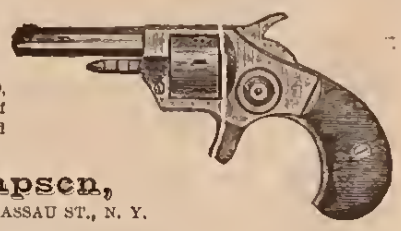

Great reduction in the price of the New Model; 22, 30, 32, 38 and 41 calibres. Send for new reduced price list of Revolvers, Boxing Gloves, Air Guns, Novelties and Sportsmen's Goods.

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CHEAPER than the CHEAPEST.

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'Smoker's Companion'

CIGAR LIGHTER.

This Lighter has just been introduced, and is pronounced by all who have seen it to be the most convenient, simplest and most complete novelty ever offered to the public.

It is handsomely nickel-plated; is no way complicated, and the adjoining cut is a fac-simile in dimension, rendering it all that could be desired for a pocket article.

There is no possibility of the "Smoker's Companion" getting out of order and its ignition is never-failing.

Descriptive Circular, with directions, accompanies every Lighter. Sample, with **100** extra lights, sent prepaid, on receipt of 40 cents (postage stamps taken).

STENT & CO., Manufacturers' Agents,

P. O. Box 2,997. **132 Nassau St., New York.**

Duncklee's Patent Camping Stove.

Four sizes, weighing from 15 to 70 lbs. Just the thing for any one camping out. Address TAUNTON IRON WORKS CO., 87 Blackston street, Boston, Mass. Dec27 6m

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Send for Size and Price List to

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A MONTHLY JOURNAL DEVOTED EXCLUSIVELY TO BIRDS AND BIRDS' EGGS.

This magazine, the favorite of amateur ornithologists, is now in its third volume. It is up to date with all that is new or recent in Ornithology and Oology, and publishes important papers on the rarer of our birds and eggs. It is just the periodical for those making collections of birds and eggs for scientific examination, as its columns are constantly furnishing descriptions of the eggs of new and rare species.

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Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

Shooting season expires December 15. For information as to routes, ratio and best points for the various kinds of game, etc. Apply to

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Nov22 tf

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NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING NOVEMBER 26, 1877.

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:40, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:36, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 5:30, 12 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination

Sept13 1y D. P. BALDWIN, Gen. Pass. Agent

"The Bermudas."

NOW A FAVORITE AND DELIGHTFUL WINTER RESORT, is reached in seventy hours from New York, and being surrounded by the warm waters of the Gulf Stream enjoys an equable temperature of about 70 deg.

The elegant British Steamships "Bermuda," and "Caroline," 1,030 tons, fitted expressly for the passenger travel, are dispatched from New York for Bermuda fortnightly, making connection at Bermuda with steamers for St. Thomas and West Indies. For full information apply to A. E. OUTERBRIDGE, Agent, 29 Broadway, N. Y. Dec 21 1y.

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The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

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By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM N. LANE, Good Ground, L. I. Nov8 tf

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For Fernandina, Fla., Port Royal, S. C., and Brunswick, Ga.

Sailing every FRIDAY from Pier 20, E. R., at 3 P. M.

Close connection made at each port with all railroads for the interior, and at Fernandina with the steamer Carrie (which has been refurnished), for Jacksonville and the St. John's River.

For through rates of freight and passage to all points in the South and Southwest, apply to

G. H. MALLORY & CO., Agents, 153 Maiden Lane,
Nov29 4m NEW YORK.

GREAT SOUTHERN

Freight & Pass'ngerLine,

VIA

Charleston S. C.

The South and the Southwest

AND THE

FLORIDA PORTS,

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At 3 o'clock P. M. From Pier 27, N. R.

CITY OF ATLANTA, Capt. M. S. Woodhull. CHARLESTON, Capt. R. W. Lockwood.
SANTIAGO DE CUBA, Capt. S. Crowell. G. W. CLYDE, Capt. Ingraham.

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Close Connections at Charleston with the favorite and well-known Florida packets, DICTATOR, Capt. Vogel; CITY POINT, Capt. Scott, for FERNANDINA, JACKSONVILLE, ST. AUGUSTINE, PALATKA, ENTERPRISE, MELONVILLE and all points in Florida.

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VIA THE
Fall River Line

To Boston and Return, $5.

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From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

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Dec14-1y

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

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Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

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Freight only, steamers leave Pier 35, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

L. W. FILKINS, G. P. Agent, D. S. BABCOCK, Pres.

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THE PENNSYLVANIA R.R. CO.

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Superior Facilities

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Outfits for yachting. The camp or field specialty. Olives by the case, gallon or bottle.

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H. L. LEONARD,

Manufacturer of every variety of

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Split Bamboo Rods a Specialty

Every Rod bearing my name is six strands from butt to extreme tip, and mounted with my "patent waterproof ferrule," and warranted against imperfections in material and workmanship.

Any style of finish, hexagonal or round, as may be desired. Rods of Greenheart, Ash, or Lancewood, MADE TO ORDER.

I was awarded a MEDAL and DIPLOMA at the Centennial for my Split Bamboo Rods.

MANUFACTORY, BANGOR, MAINE.

A variety of my rods may be found

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Beatty's popular plan, viz: A $650 Piano for $175; $310 Cabinet Parlor Organ for only $95, &c., &c. WARRANTED FOR SIX YEARS and sent on 15 DAYS' TEST trial. Address,

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MANUFACTURERS OF ALL KINDS OF
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BRANDS—DIAMOND GRAIN,
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WESTERN SPORTING,
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Guns, Rifles, Etc.

Second-Hand Guns

AND

SPORTING GOODS,

WHICH CAN BE BOUGHT CHEAP AT

J. F. MARSTERS,

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One Scott Premier 10-gauge choke-bore, weight 9 lbs., in first-class order, with case, price $225
One Remington Sporting Rifle, made to order, pistol grip, rubber heel to prevent recoil, .44-calibre 50
One Hollis' 10-bore, 9 lb., pistol-grip, rebounding locks 70
One Remington Military Rifle, 1,000-yard range. 15
One French Double Gun, pin-fire, 16 gauge..... 25
One More & Harris Muzzle-Loader, 10-gauge, 8¾ lbs., double gun 35
One Hollis' Ducking double gun, 8 gauge, 14 lb. 25
One Scott Muzzle-Loader, 12 lb., 9-gauge, 34-in.. 25
One Ballard Rifle, .44-cal., 10 lbs 20
One Colt's Revolving Rifle, 6 shot 18
One Maynard Rifle, little the worse for wear.... 8
One Single Muzzle-Loader, 10-gauge, cost $45.. 15
One Single Breech-Loader, Stephen's make..... 10
One Skeleton Stock Stephen's Rifle, .22-calibre, in case 12
One General Fishing Rod, will make up five different rods, German silver-mounted, cost $40.. 20
One large German silver trolling reel, holds 600 feet line 10

J. F. MARSTERS, 125 Nassau st., N. Y.

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Cheap!

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RIGBY—Highest quality; 12-bore, 7 lbs.; elegant Damascus barrels, in solid leather case; cost $525; price 275
E. M. REILLY—This gun was made to order without engraving; 12-bore, 7½ lbs., Damascus barrels; in good condition, in best English case, with complete set of finest implements; cost $275; price 140
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SCOTT—10-bore, 10 lbs, double-grip action, pistol grip; splendid shooter; cost $125; price 65
J. HOLLIS & SONS—12-bore, side lever, pistol grip, 9 lbs. weight; good as new; in case with shells; cost $85; price 55
WEBLEY—12-bore, 7 lbs.; laminated barrels; scroll fence breech; good as new, and a bargain 48
REMINGTON—10-bore, 8 lbs. weight, $45 grade; last one for 30
SINGLE BREECH-LOADER—Damascus barrels, 10-bore, 8½ lbs. weight, pistol grip; made by Nichols & Lefever, and cost $85; present price 50
Also a very fine Hollis muzzle-loader; 30-inch, 8½ lbs., nearly new; cost $55; price 25
Also a Wm. Moore breech-loader, back-action locks, twist barrels, for 28

The above guns are nearly all the property of gentlemen who have no further use for them, and are sold at a great sacrifice. Each gun is exactly as represented, and will be sent for examination on satisfactory reference, or receipt of sufficent money to pay express charges. List of second-hand rifles next week.

HENRY C. SQUIRES,

No. 1 Cortlandt St., New York.

Mortimer & Kirkwood,

GUNMAKERS,

24 Elm Street, Boston.

Feb14 6m

SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 11 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

J. H. BEHRENS, Cor. Sec., 37 Bowery, New York.

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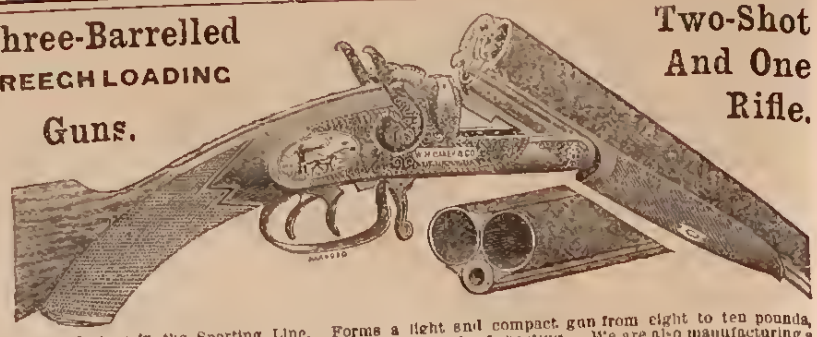

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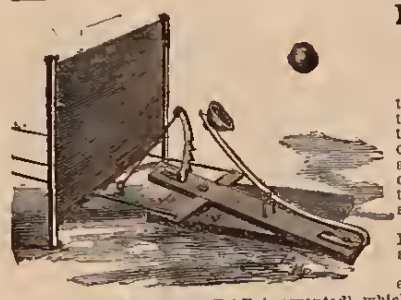

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THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MARCH 7, 1878.

Volume 10.—No. 5. No. 111 Fulton St., N.Y.

TO CANADA.*

Selected.

I LOVE the land that gave me birth,
Tho' cold her north wind blows;
I love her ice-bound winter lakes;
I claim a kinship to the flakes
That form her virgin snows.

I've roved in many a southern clime
Where orange blossoms wave;
Where broad bananas fan the air;
Where flourishes the citron fair,
Beside the azure wave.

I've lain within the myrtle's shade;
Beneath the waving palm;
Amid the oleander groves,
Where summer perfume ever roves,
With many a fragrant balm.

I've pulled the luscious, fragrant pine,
And culled pomegranates fair—
The sugar apple of the South,—
And dates—those conquerors of the drouth,—
And cherimoyas rare.

I've seen beneath the crystal wave,
The coral insect's home,
Bright flowers that with the rainbow vie,
And beauteous shells that scattered lie
Beneath the ocean's foam.

I've watched the molten tropic's sun
Go down beneath the sea—
Where Chimborazo cleaves the sky,
Ablaze with many a sunset dye
Reflected—on our tea.

I've watched the ponderous sport of whales,
In southern seas at play;
I've watched the Chilian condor's flight
To towering crag, where first the light
Proclaims the dawning day.

I've seen the lightning flash from eyes
Where midnight shadows lie;
When Spain's proud daughters met my view
With locks that mock the raven's hue,
Whose pinions cleave the sky.

Bermuda's daughters, too, I've seen,
Whose beauties Moore has sung;
And Friendship's warm right hand I've met—
I feel the tingling pulses yet—
From strangers roved among.

But ever turns my heart to thee,
My bright Canadian home;
And dearer grow thy broad blue lakes,
Thy silvery streams, thy woodland brakes,
With every step I roam.

The proud magnolia's bloom I love;
The myrtle's perfumed shades;
But, oh! how dear above them all,
A single crimson leaf let fall
By Huron's maple glades.

By Huron's sounding shores I've left
My dearest friends on earth;
May God's own mantle from above
Enfold them and the land I love,
The land that gave me birth.

R. S.

* This poem was written nine years ago and published in a Bermudian paper by a young lawyer of Goderich, who was compelled by ill health to leave his native land for the more genial climate of those islands. We know not if he recovered his strength and yet lives; but, if not, surely these simple yet touching lines will prove a sufficient memorial to his departed genius.

For Forest and Stream and Rod and Gun.

The Richardson Lakes in Winter.

OUR party consisted of Messrs. P. Adams Ames, one of the proprietors of Camp Whitney, H. P. De Graf, of New York, and myself. One Thursday morning early in December we left Andover for the lakes. Our team consisted of three horses and a bob-sled, driven by Charlie Cushman, who was bound to see us on our way. Milton Cutting, one of the oldest and most experienced of the Andover guides, had been sent ahead to find out the condition of the ice. The lake road was in fair condition, and we reached the Arm about noon. Here we met Milton, who reported that he had been up the lake a mile, and that there was ice as far as he could see. We congratulated ourselves on our good luck, and after lunch drove out on the ice. It cracked considerably when the horses began to trot, it being not over four or five inches thick. But, proceeding carefully, Charlie drove up about a mile and a quarter, just beyond Bailey's Point, and there left us. A little way beyond the ice was thinner, and although safe for foot travel, was dangerous for a team. We had a couple of hand-sleds, and upon these we loaded out traps and pushed valiantly forward, two men to a sled, while the guide went before, ax in hand, trying the ice. Reaching the foot of Spirit Island, we found that beyond it the lake was open from shore to shore, and that there was no farther progress without a boat, unless we made a *cache* of our things and took to the woods where we would have the roughest kind of traveling. It was determined to return to the Arm and stop over night in the camp there, a small frame shanty, but vastly superior to a brush camp. We left the things we did not need on the shore of the lake, and, in a blinding storm, made our way back to the camp. Luckily for us the store of wood that I kept for the steamer was piled up within a few rods of the camp, and we had the guide bring us in a generous supply.

A true sportsman is always a philosopher, and we made the best of the situation. The most that troubled us was the rapidly fading daylight, for the prospect was that we would eat our supper in the dark. But even this little difficulty was removed; for Ames suddenly started to his feet with the air of a man who means business, and commenced exploring the hidden recesses of his traveling-bag. Now, that bag was a peculiar one—almost equal to Aladdin's lamp, and its supplies were apparently inexhaustible. After turning over the few thousand things it contained, he at last produced a wax taper about four inches long. He told us that he had bought the candle some fifteen years before in Europe. It had been in his bag ever since, and had traveled thousands of miles with him. A dozen times he had been tempted to throw it away, but some good genius had prevented. And now the time had come for its use. After traveling half around the world, it was doomed to be burned in a little hut in the wilds of Maine, to furnish light for our first supper in the woods, proving beyond a doubt how much better it is to save a useful article than consign it to wanton destruction.

The candle gave up the ghost early in the evening, a gentle hint for us to retire, and each one of us crawled into a bunk, and lay, not upon a bed of down, but down upon a bed of limbs about the size of average cord wood. We covered ourselves with our overcoats, and told Milton his life was forfeit if the fire went out during the night.

The wind had now blown a hurricane, and found its way into camp through numerous cracks and crevices, chilling us through and through. With the earliest dawn we sent Milton to Andover to have Cushman bring on more supplies and blankets. After he had gone we divided what was left of the provisions into four equal parts, each one taking his share. We had really come down to an allowance.

The wind storm continued all day, and it was so rough that we stopped in camp and kept warm. It was quarter of seven before we heard the welcome sound of the sleigh-bells, and it being dark as a pocket in camp, the first article we called for was candles! and several were lit at once. Then followed oysters, beefsteak, bread, coffee, tea, milk, sugar, etc., and we soon sat down to supper. In the morning, everything being ready for a fresh start, we rode down and found that the lake, which was open the day before, was now frozen over. We packed upon the two hand-sleds all they could carry, and sent two men ahead to try the ice, while the others followed behind with the sleds. I offered to draw one and Milton took the other, while Whitney and Ames went ahead with the ax, sounding the ice. In this order we left Spirit Island, keeping near the eastern shore of the lake, and creeping carefully along on our moccasins, as the ice was very thin.

It was a beautiful morning, clear, frosty, sparkling, and was perfectly calm, with the thermometer only two degrees below zero. The scene before us was magnificent; the glassy surface of the lake, the snow-covered mountains, the dark firs on the hill-side, the gnarled and twisted cedars by the shore, and even the huge boulders on the points, all combining to make the picture. As we neared Hard Scrabble we found the ice growing thinner and thinner, but it was wonderfully tough and elastic, bearing us up, although it cracked in every direction as we passed along, sometimes buckling an inch more under us, and I expected every moment to go through. It was as clear as crystal, and being only three quarters of an inch thick we could look through it as one would a window-pane, and see every grain of sand, every pebble, and every weed with the utmost distinctness.

Reaching the point we found the ice broken up a little near the shore, and we had to take to the rocks. We fastened long lines to the sleds, and then with poles pushed them farther out on the lake, where the ice still remained whole. Crawling along the ice-covered rocks that formed the line of the shore, I dragged the sleds, while the guide kept them out with the pole. It was slow work, but we stuck to it and made about half a mile above Hard Scrabble, where we took to the ice again. We went on for half a mile further, and then were brought to a standstill by a ripping, crashing and cracking that sounded like salvos of artillery.

Looking in the direction of the sound we beheld a singular sight. The ice at the eastern shore had commenced bulging up, and arose to the height of a foot or more above the water, forming a reef that in a few moments had extended entirely across the lake. We stood and watched it as it was hove up, snapping, cracking and breaking, rumbling and thundering, until at last it settled back to the level of the field ice, leaving an open channel from shore to shore some twenty feet in width. A half a mile above we noticed a second open channel, also extending the entire distance across the lake, and beyond that another that reached about half-way across. Between the lower and upper channels, a distance of about a mile, the ice had also broken away from the shore, leaving an open passage all the way some twenty feet in width.

Here was a dilemma, the firm ice being too far from the shore to drag the sleds upon, even with the aid of our lines and poles, while the shore for the next mile above us was lined with huge boulders, fallen trees, and a *debris* of broken ice and driftwood. To drag the sleds loaded over such obstructions was simply impossible, while if we unloaded and carried the things along the shore to the firm ice, a mile or more beyond, there would not be the slightest possibility of reaching camp that night, as we should be obliged to make several trips if we undertook a portage. I thought best, therefore, to *cache* the traps where we were, and after doing this in the best manner possible we took lunch, had a smoke, and proceeded on our way.

About three-quarters of a mile below the Narrows we reached old ice, several inches in thickness, and across this we pursued our way with increased speed. The snow on the ice was soft, and had drifted to a depth of nearly a foot in some places, making the walking very hard. When we reached Metalic Point I was surprised to find the upper lake frozen over, with the exception of a little strip extending from the mouth of the river to the half-way point, and reaching into the lake about a mile.

The exercise in the morning of putting the sleds around rocky points and broken ice, combined with the long tramp, had begun to tell upon me, and I walked considerably slower than I had in the early part of the day. I longed earnestly for a sight of the camp, and finally I saw its hospitable roof looming up before us, the smoke curling gracefully from the chimney.

In a few moments more I was welcomed by my fellow voyagers, and was soon resting before the large open fire-place in the sitting-room exchanging our adventures. They had both broken through the ice, and had reached camp in a soaked condition. About six o'clock we sat down to one of Captain Cole's excellent dinners, and after dinner, around the huge fire-place in which mammoth four-feet logs were merrily blazing, sending out snapping embers on the hearth, we enjoyed our cigars and pipes, recounted the incidents of the day, and laid our plans for the future.

Camp Whitney, which I consider a model camp in every sense of the word, occupies a lovely site on the eastern shore of Lake Molechunkamunk, near the mouth of Mosquito Brook, in the immediate vicinity of excellent fishing grounds. It fronts the lake and sits about eight rods from the shore. The whole upper part of the lake is visible, with its winding and irregular shores.

The house overlooks Observatory and Aziscohos, two mountains of remarkably symmetry at the head of the lake, forming a barrier between it and the Magalloway River. Observatory is a sugar-loaf peak, rising to a height of some 4,000 feet above the sea, and is heavily wooded to the top. On the northeast it sweeps down to the Upper Richardson Pond. Aziscohos, which is several hundred feet higher than its neighbor, lies a little southwest of it, and has two peaks about a mile apart, with quite a depression between them. It is a grand old landmark, visible from almost any part of the lake region, and overlooking the whole of this section of the country. Several persons who have made the ascent of both mountains, declare that it commands a finer view than Mount Washington. Eastward it descends toward the lake, while on the west its base is washed by the wild and turbulent Magalloway. Through and beyond the valley, between Aziscohos and Observatory, several smaller mountains appear, Bennett and Emery's Misery attaining the most prominence.

Opposite the camp, on the western shore, a range of wooded hills, of no mean pretentions as to height, sweep away to the south. Southwest the view is enhanced by two little islets—Ship Island, so called from three old pines that grow upon it, suggesting the masts of a vessel, and Half-Moon Island, crescent shape in form. South one can scan the lake to the Narrows, where the silvery waters disappear, lost in the emerald green of the forest. Beyond the foot hills the greater part of the White Mountain range appears walled against the sky; Washington, Jefferson, and Adams being easily distinguished from the other peaks—sharp, clear, and well defined. From our piazza with an ordinary glass the buildings upon the summit of Mount Washington may be distinctly seen, and in some of the extraordinary clear days of last June they were visible to the naked eye, although forty miles distant, an indication of the wonderful rarity of the atmosphere.

Camp Whitney is thirty by fifty feet on the ground, two stories and a half in height, and covered with a pitch roof. An eight-feet wide piazza, with its sloping roof, extends the

entire distance in front, and furnishes a delightful place for lounging.

Indoors, on the lower floor, in front, is the sitting and dining room combined, a generous apartment over twenty-eight feet square. A space of five feet wide, directly back of the sitting-room, is divided into a closet, a pantry, and stairway leading to the chambers on the second floor, all of which are accessible from the sitting-room. The kitchen takes up the balance of the ground floor. There is an excellent cellar. On the north side of the sitting-room is an enormous brick fireplace that will take in at one mouthful a good half cord of wood. The room is filled with comfortable, and what in some cases might be termed luxurious furniture for a camp in the back woods; one of its chiefest charms in my eyes being a well filled library, containing, besides works of fiction, travel and adventure, all of the best known books on sporting matters. Over the fireplace is a rack made of deer's feet, elegantly mounted, on which in the fishing season the rods are hung when not in use, and the walls are decorated with pictures and sets of mounted deer and cariboo horns. The whole camp is plastered and is painted inside and out. A well-filled ice-house and a large boat-house, containing half a dozen boats of various descriptions, are near the camp. A trail through the woods leads to Trout Cove, on Lake Moosehemaguntic, a mile and a third distant from camp. At the cove Mr. Whitney has another boat-house, containing four fishing boats. A second trail, running through the woods in a different direction, leads to the upper dam, two miles north of the camp.

The camp was christened Camp Whitney, in honor of J. Parker Whitney, Esq., formerly of Boston, but now a resident of San Francisco. Mr. Whitney visits the camp every season, and has only missed one year out of the last twenty-two. He is one of the oldest habitues of these lakes, and the present is his forty-fifth trip. He has fished some forty other lakes in Maine, as well as the waters of Colorado and the Pacific coast, and has taken many a basket from the streams of England and the lochs of Scotland. He has bagged game in all these places and shot twenty-three deer as well as other large animals. He has an inexhaustible fund of interesting anecdotes at his tongue's end. Associated with him in the ownership of the camp are George T. Rice, Esq., of Worcester, Mass., who has visited the lakes for several years, and T. Adams Ames, Esq., of San Francisco, formerly of Boston. The present is Mr. Ames' twelfth trip to the camp. Capt. Benjamin Cole, of Byron, Maine, the present superintendent, is an excellent fisherman, a fine cook, and capital fellow. He is one of the oldest and best guides in the lake region, and has been here about nine years.

Sunday we passed comfortably in camp During the day we were witness to one of those sudden exhibitions of elemental strife peculiar to this latitude. The sun, shining with unwonted brilliancy, quickly disappeared from view beneath a mass of dull, leaden clouds that came floating from the Northwest. The leaden pallor of the air increased until nearly the darkness of night prevailed. The wind moaned and shrieked. Then an immense white sheet of feathery snow flakes, that drove and tossed before the whirlwind, completely enwrapped everything in its blinding mantle. The storm passed on as quickly as it came, and in half an hour we had sunshine again.

Speaking of the weather here, a native with whom I was talking one day about the remarkable atmospheric change, remarked, "Wall, yas, we have lots er weather here in winter." A fact I can endorse, for in the few days since our arrival we have had all sorts, while the thermometer has ranged from ten degrees below to forty above.

Friday Mr. Whitney and one of the guides took their rifles and started off. A mile west of the lake they came upon tracks of cariboo. Near it were the remains of a rabbit that had lately been killed and eaten by a wild cat. It had been literally torn to pieces, and the bits of the skin, bones, and hair, all bloody and scarcely cold, were scattered over the rock. A mile beyond they came to a smooth stream where the game had taken to the ice, and it was some time before they found where the animal had left the brook. After an hour's valuable time lost in searching for the tracks they found them, and again started in pursuit.

After following the trail for several hours they approached the Cranberry Bog, and proceeding with the utmost caution they caught sight of the animals. The wind was in their favor; sinking down on the snow they crept carefully toward the game, and finally worked themselves within five hundred yards of the animals, who were contentedly feeding on moss. Being afraid to approach nearer, they agreed to both shoot at the bull, who had a fine set of horns. It was a long shot, but they took careful aim, and then the guide whispered, "Fire!" Two rifles cracked simultaneously, and the cariboo started off across the pond in the middle of the bog. The bull soon dropped, while his mate disappeared beneath the shelter of the forest. When the hunters reached the bull he was dead, having received both bullets. They took off his head and skin as trophies and returned to camp. The guides were sent with a hand-sled to bring back the meat. As near as we could judge he would weigh a little over three hundred pounds.

Saturday forenoon, between coffee and breakfast, we devoted to skating, the ice on some parts of the lake being in first-rate condition. After breakfast we all went on a scout, returning to camp a little before five. Whitney and myself came in empty-handed. Half an hour afterward Ames made his appearance, staggering under the weight of a young doe that he had shot on Black Point, scarcely half a mile from the house. He told us that, while making his way back to camp, feeling rather tired he sat down on a rock at the end of the point to rest. After a few minutes' stop, he arose to go on, when he heard a snapping behind him. Cautiously turning, and at the same time cocking his rifle, he caught sight of some animal in the woods, about three hundred yards distant. Without stopping to make any investigations, he banged away and then rushed to the game, which proved to be a young doe. Its death had been almost instantaneous. The doe weighed seventy five pounds and was put away in the ice house with the cariboo.

Sunday, Whitney, not being satisfied with a cold sponge bath indoors, had Captain Cole go down to the lake and cut a hole in the ice about twelve feet square, a request that caused the worthy captain to roll his eyes in astonishment. As soon as the hole was cleared of ice, Whitney went down to the lake, and throwing off his shirt, drawers and slippers, took a header into the lake. Ugh! it makes me shiver to think of it now. Climbing out, he tumbled into his things, and rushing up to camp, rubbed himself vigorously with coarse towels and experienced no ill effects from his swim.

Monday morning, Whitney, Ames and myself took our rifles and went on a scout for game. Result—five partridges, one rabbit, and an eight miles tramp. The weather and country here now were very unfavorable for hunting. We are having what the natives call an open winter; about six inches of snow in the woods on an average, and we have had no occasion thus far to use snow shoes, our thick boots and moccasins answering every purpose. First it thaws and then it freezes, precluding chances for deer or cariboo.

Christmas Day came, and we sat down to a royal repast. Every dish was prepared by Mr. Whitney, and all the cooking was done under his immediate superintendence. By the side of each plate was a Christmas card and a copy of the bill of fare, written in pencil on some novel French dinner cards, suitable for the most nobby occasions:

"CHRISTMAS, 1877—MENU.

"Black bean soup; sherry and sercial Madeira; cariboo *a la* chasseur; chablis; poulet *a la* Molechunkamunk; macon fleury; roast turkey; roast chicken; oyster sauce; champagne and muscatel; currant jelly; roast onions; baked potatoes; plum pudding; au rhum and cold sauce; fromage de neufchatel; spiced peaches; crab apples; cafe noir; curacoa; cigarettes *a la* russe."

I fancy that there are not many camps in the backwoods where you could get a Christmas dinner that would excel ours. We passed three hours very pleasantly at table, indulging in toasts, songs and speeches, which were sandwiched in between the courses. I never passed a jollier or pleasanter Christmas evening in my life, and that was the opinion of all present. I doubt if any of us ever forget it.

The following Wednesday morning we arose early, packed our things and took our seats on the sled, which had come to convey us back. It was a lovely morning, just cool enough to be agreeable. The horses were in good spirits, and they trotted away at a lively pace. At the lower end of the Narrows we find a large piece of open water, but by hugging the eastern shore, passed by it without trouble. After reaching the lower lake we found the ice very smooth. The air was very clear, and we had a fine view of the White Mountains and could easily distinguish the buildings on the summit of Mount Washington.

Here I must chronicle the death of old Banney, the horse who had drawn the baggage across the Middle Dam Carry for a number of years, and who was well known to all the frequenters of the Angler's Retreat. He was coming up the river from Lake Umbagog a short time ago and broke through the ice. Although not a very valuable animal, he was very intelligent, and there are many who will remember his pranks. Among his eccentricities was a decided relish for trout, which he would eat raw or cooked. Another habit was that of stealing pies from the kitchen window. He would devour them with all the gusto of a hungry school-boy.

Before reaching Andover the sleighing gave place to bare roads. A friendly hackboard bore us, not without mishaps, the rest of the way, and, arriving at Andover, the party who had together spent the Christmas holidays in the woods of Maine separated to their homes. C. A. J. F.

Boston, Jan., 1877.

COAST SKETCHES.

BY G. BROWN GOODE.

I.

PROVINCETOWN IN SUMMER—NETTING BLUEFISH AND BONITOES.

IT was about the middle of August. Provincetown was looking uncommonly dull. Since my last visit the Cape Cod Railroad had added another link to its weary length, and the train, gliding over sandy ridges, between sandy dunes and across sandy valleys, ceased its career in the very middle of the sandy old village. A sandy old village it still was, despite the fear that railroads and overland commerce would destroy its quaint, old-fashioned attractiveness. Our fears might have been spared. There was no change in the plank walk, two miles long, the backbone of the town. On the sea side it was still flanked by sandy roadway, shops, wharves, codfish flakes and sea. On the land side was the double or triple row of shingle-sided cottages, overhung by hills stretching away, dell after dune and dune after dell, until they subsided into the broad beach of wave-pounded sand, which continues for a dreary unbroken forty miles to the heel of the Cape. The grim old town hall stood on the crest of the old town hill, a beacon for vessels west, north and east. The town hill, thatched over its white slopes with blueberries, blackberries and candleberries, was a reminder of the days, two hundred and fifty-six years before, when the passengers of the Mayflower stood upon it and first saw their future home on the other side of the bay.

But to be a railway terminus, was not, for Provincetown, to become commercially great. Even the Boston steamer was discontinued; the hotels showed blank register pages; the long street was almost deserted. A few women were to be seen, but men were phenomena, except in the shops. Once in a while one might see a lonely Portuguese with a blueberry basket, or a superannuated sea-captain sitting in his front doorway, marine-glass in hand, searching the horizon for sails.

"But where are all the vessels and the men?" I asked. I remembered one September, five years before, when the harbor was full of shipping. Two or three hundred fishing schooners would run in at dusk, dropping their sails with a brisk rattle and their anchors with a merry splash. At night the rigging lanterns made the harbor look like a great constellation, little boats were plying everywhere, and the street was thronged.

I soon learned where the vessels were.* There were 84 in the cod fleet—48 of these were fishing on the Grand Banks of Newfoundland; each of these carries about 12 men, making an aggregate of 576; 18 bankers used hand lines and 30 trawls or long lines. 17 were fishing with hand lines in the Gulf of St. Lawrence, chiefly about the Magdalen Islands, and on Bank Bradley and Bank Orphan; these carry crews of 10 men—in all about 170. Besides there were 19 in the shore cod fleet, fishing with trawls about Block Island, Nantucket and the coast of Maine; these carry 9 men—in all about 171.† The bankers went out in May and had not yet returned.

Then there were 30 vessels in the mackerel fleet. In August these are on the coast of Maine, but in the fall they seine in Massachusetts Bay. They carry in all about 420 men. Then there were the 18 whalers and several vessels engaged in miscellaneous fishing. Here then were over 130 vessels and at least 1,200 men belonging in Provincetown, and at one time absent at sea. No wonder that the streets seemed deserted. Even a railway cannot revolutionize an aquatic town.

Nothing was to be seen now except the gill-net fishing. My friend Mr. Blake, whom I fortunately discovered, rowed me out in his dory to the "Forest Queen," Captain Sparrow, a little schooner of 20 tons which lay off the Long Wharf taking in a cargo of blue fish. While we were on board five or six small boats came along side with their morning's catch. The most successful brought in 40 fish, another 35, others having in five or six bluefish and as many bonitoes. The fish are counted as they are thrown over the side, and a credit of them made. They are then cleaned carefully and packed in broken ice. When a cargo is made up they are taken to Boston and sold to the wholesale fish-mongers. The carriers receive one-fourth of the returns as a commission fee. The fish at that time were selling at wholesale for 6 cents a pound. Their average weight was 6 or 7 pounds.

We staid on board more than an hour watching the fishermen as they returned from their morning excursion. Each man has his own boat, from which he has hauled and reset his twelve or fifteen nets since daybreak. The boats are dories of the improved model, fifteen feet long, with centre-board, wash-boards and a light shearing at the bow to prevent splashing when sailed close to the wind. The nets used are exclusively gill nets. These are usually from fifty to sixty yards long and six wide, with a mesh of five or six inches, and are anchored in twelve or fifteen fathoms of water, two to four miles outside the extremity of the cape. There is another kind of gill net, lately introduced, which is spread around a shoal of fish, completely encircling them; the heavily weighted lead line draws it quickly to the bottom, where it hangs like a high fence, meshing the frightened fish as they dart to and fro. I learned that there were about thirty or forty dories employed in this fishing, and four larger boats, carrying two men and a double gang of nets, employed in this fishing. This would make about 550 or 600 nets.† Bluefish come in about the middle of June and remain until the middle or last of September.

I was much interested in observing the manner in which the fish had become entangled in the meshes of the gill net. It very rarely occurred that they had been meshed by the gills, nor does this seem to be the intention of the fishermen. In fact, a mesh large enough to gill the fish of average size would permit most of the smaller ones to pass through. The fish had usually become fastened before they had passed more than half through the mesh. This was clearly shown by deep furrows made by the twine just behind the eyes. A fish never retreats when in trouble, but as soon as it feels the twine swims with redoubled vigor. Thus the cords are pressed deeply into the not very yielding flesh of the head. So it is evident that gill-nets woven from fine twine are much more effective than the old heavy ones. The fish would much sooner entangle themselves in the lighter net, while its yielding renders it quite impossible for them to snap the elastic threads.

Many bonitoes were taken also in these nets—great, plump, juicy fellows, their sides like burnished steel, each fin fitting in its sheath like a sabre in its scabbard, each snout truly conical and smooth as a Minie bullet. The bonito is the Mercury of the sea. He has no wings on his sandals, it is true, for he has no sandals, but just in front of the tail, above and below, is a row of little flag-like fins (finlets), shaped like the winglets of the fabled messenger of the gods. I have noticed the movement of these finlets and I find that every one is in function a miniature rudder. When the bonito wishes to change his course to the starboard, "hard a-starboard" goes every little rudder, and the screw-propeller—the tail—gives a sweep and away goes the fish like a meteor. I wonder why the rate of a fish's velocity cannot be calculated. A duck flies at the rate of ninety miles an hour, or around the world in eleven days. A swift swimming fish can surely do as much. From the deck of an ocean steamer, making twelve knots an hour, I have seen a dolphin swimming around and around the vessel, not exerting itself more than if the vessel had been at anchor. Might we not put a bonito in a tank one hundred feet in length, and have the rate of motion calculated by electricity, like the initial velocity of a rifle ball?

The bonito seems to be in better favor in Boston than in New York. It sells at the same price with the bluefish.

I observed that both bluefish and bonito were far from the spawning season (August 19), there being no trace of activity in the reproductive organs.

U. S. National Museum, Washington, Jan. 23, 1878.

* These statistics, as to the number of vessels, are for the year 1877, and were furnished to the U. S. Commissioner of Fisheries by the veteran fisherman and ichthyologist, Capt. N. E. Atwood, of Provincetown.

† Capt. Atwood makes this estimate:

1875.....	72	men	engaged,	who	sold	their	catch	for $5,400
1876.....	84	"	"	"	"	"	"	8,900
1877.....	69	"	"	"	"	"	"	6,883

Fish Culture.

MEETING OF THE AMERICAN FISH CULTURAL ASSOCIATION.

SYNOPSIS OF PROCEEDINGS.

The meeting took place at the rooms of the Fulton Market Fish Mongers' Association, foot of Beekman street, on the 27th and 28th of last month. The attendance numbered over two hundred persons for each days' session. Among those present were Professor Spencer F. Baird, U. S. Commissioner of Fish and Fisheries; Seth Green, Superintendent of Fisheries State of New York; R. J. Dodge, American Institute of Agriculture; Prof. Youmans, Prof. G. Brown Goode, Assistant Curator Smithsonian Institution; Hon. Prof. James W. Milner, H. J. Reeder and B. L. Hewit, Fish Commissioners of Pa.; J. C. Willets, Skaneateles, A. A. Anderson, Bloomsburg; R. H. Kilby, Montreal; J. Carson Brevoort, Astor Library; Prof. Weat, Brooklyn; Dr. Green, T. J. Hall, Sec. Adirondack Club; and from the Fulton Market Fish Mongers' Association, S. B. Miller, Pres., Benjamin West, Sec., Geo. Lamphear, Treas., Dudley Haley, Albert Haley, J. N. Harris, A. L. Rogers, Israel Woods and W. H. Middleton. The Honorable Robert B. Roosevelt, the President, having called the meeting to order, the Secretary read the minutes of the last meeting, which were accepted. The Secretary then read an obituary on the late Benjamin F. Bowles, of Springfield, written by Livingston Stone, the late Mr. Bowles having been one of the founders of the Association, and for a long time one of its leading officers. The Presi-

dent announced that the subjects intended to be considered would be taken up under four heads, as follows: Section 1, Methods in Fish-Culture, etc., Mr. S. Green, Mr. B. B. Porter, Mr. S. Wilmot. Section 2, Fishery Laws and Fish-Ways, Mr. C. B. Evarts, Mr. L. Stone, Mr. T. B. Ferguson. Section 3, Natural History, etc., Mr. J. W. Milner, Mr. F. Mather, Mr. C. Hallock. Section 4, Fisheries, Mr. E. G. Blackford, Mr. B. Phillips, Mr. M. C. Edmunds. In the absence of Mr. B. B. Porter, who was in California, the Secretary read a paper on trout culture, written by Mr. Porter. This paper led to a lively discussion, Mr. Seth Green stating that the average of fish raised by new and improved processes was much larger than the result of Mr. Porter's experience gave. "How to Pack Salmon Eggs," by Livingston Stone, was then read. A recess having been taken, some discussion took place as to the method known as the "Russian Method of Impregnation," and priority of discovery was claimed for Mr. Seth Green. Mr. F. Mather then explained, in response to Mr. Livingston Stone's paper, the difficulties encountered by him in transplanting salmon eggs to Europe. Telegrams were received during the afternoon accounting for the absence of Messrs. Whitcher and Wilmot, the Canadian Fish Commissioners, there being a heavy freshet on the rivers of the Dominion, which threatened to carry away the hatching establishments. Prof. G. Brown Goode read a paper on the migration of fish in opposition to certain theories advanced by Mr. Hinde. Mr. H.'s views have been presented to the Halifax Fishery Commission, and have perhaps somewhat influenced the decision adverse to American interests. Mr. F. Mather followed with an interesting paper on feeding fish in confinement. Prof. Spencer F. Baird then addressed the convention at length on the necessity of perfecting some plan for arriving at the quantity of sea and fresh water fish, more especially the former, caught on our shores. The U. S. Commissioner declared that this country was at a disadvantage because such a classification had not been made. And at the late fishery convention held in the Provinces, that as the Canadians had such tables of the catch of fish, and the U. S. had not any, we had been placed very much in disadvantage. The Commissioner urged that the Association should use their best efforts to have at least the fish trade of New York correctly estimated. The President, Mr. Roosevelt, in a spirited speech invited the co-operation of the wholesale fish dealers in New York to this end. Mr. Coup, of the Aquarium, where the meeting had been held last year, tendered an invitation to the members of the Association, which was accepted with thanks. A nomination committee having been formed the meeting adjourned to assemble next next day at 10½ o'clock.

SECOND DAY—(Meeting of Feb. 28).

With a larger attendance than the day before, at 11 o'clock the President opened the meeting. The Secretary proposed the following changes in the constitution: That the title of the Association be changed from Fish Culturists to Fish Cultural, and that seven members be made an executive committee in lieu of three. These amendments were adopted. On the report of the nominating committee the following officers were elected for the ensuing year: Robert B. Roosevelt, President; George Shepherd Page, Vice-President; Barnet Phillips, Secretary; Eugene G. Blackford, Treasurer; Executive Committee—H. J. Reeder, F. Mather, J. W. Milner, W. F. Whitcher, Seth Green and H. D. McGovern. These officers are the same as last year, with the additions made to the executive committee. The same gentlemen for the four sections who were chosen for 1878 were selected to report at the ensuing meeting in 1879. Mr. Eugene G. Blackford, the Treasurer of the Association, read an exceeding interesting and practical paper entitled "The Peculiar Features of the Fish Market," treating of shad, trout and salmon. Mr. Blackford strongly advocated the passage of a law to give the shad and other fish a chance of escape for only a single day in the week during the open season. Mr. Campbell, Mr. Green and many others advocated this as a legislative measure. Prof. Milner read a paper on shad hatching, bringing before the meeting the new method of shad hatching invented by Mr. T. B. Ferguson. This brought forward a discussion, in which Mr. Seth Green advocated the hatching box named after him as having a priority of mention. Mr. Roosevelt, the President, then presented a paper on eels, which was followed by statistical memoranda giving the number of pounds of fish of various kinds caught in the United States, prepared by Profs. Goode. Two thousand one hundred and eighty-eight vessels, with a tonnage of 80,000 tons, are employed in the United States. A resolution was offered and carried thanking Profs. Milner and Goode for the valuable character of the papers offered by them, and also a resolution expressing the thanks of the Association to the Fishmongers Association for the use of their rooms, and "that in the absence of authoritative provision for the purpose, the Fishmonger's Association be earnestly requested to take such steps as may assist in the publication of an annual report of such fish or marine products used for food as may pass through their hands." The meeting then adjourned until the regular day in Feb., 1879.

A REQUEST FROM THE UNITED STATES COMMISSIONER OF FISH AND FISHERIES.—It frequently happens that this journal has reports sent to it, or gleans from the press, notices of fish, such as shad and salmon, purporting to have been caught in waters of the United States, where such fish had never been found before. We have always paid great attention to such announcements, trusting to be able to be among the first to determine what the fish were, and to make more widely known the labors and successes of our Fish Commissioners. Lately, to take a case in point, a paragraph, taken from a Western paper, contained the statement that salmon had been captured in quantity in the Mississippi River. We immediately telegraphed and wrote to Memphis in regard to this salmon, but have not as yet been in receipt of any reliable information. It is exactly for just such cases of well-known fish found in out of the way places, that the Honorable Spencer F. Baird, the U. S. Commissioner of Fish and Fisheries, has sent to us a communication, which we trust will be widely read.

The country at large derives so much advantage from the labors of the Smithsonian Institution, that we have no reason to suppose that the general public will not make a hearty response to Professor Baird's request;

EDITOR FOREST AND STREAM AND ROD AND GUN:

I have seen several notices in the Western and Southern papers during the present spring, of the capture of adult fish, such as the shad and salmon among others—shad at Vicksburg and salmon at Memphis—presumed to have been those planted by the United States Fish Commission in previous years.

I take this occasion to invoke the assistance of your widely distributed journal, in requesting information on this subject from all who may have it at their command, as it is very desirable to follow up the history of the fish that we have introduced, and to know exactly the dates and places of their occurrence, the size to which they have attained, etc. It is especially desirable to know the period during which the fish are taken at any one station, how they were captured—in what number and of what weight. I shall be especially thankful, also, for a good average specimen from each locality where observed, to be transmitted by express, either packed in ice or preserved in alcohol, and addressed to the Smithsonian Institution, Washington.

For shipment in ice each fish should be wrapped in cotton cloth and packed in a box, with ice of about the size of the fist, and about an equal quantity of sawdust.

SPENCER F. BAIRD, Commissioner.

Washington, March 4, 1878.

WOODWARD'S AQUARIUM AND FISH CULTURE IN CALIFORNIA.—A correspondent, who was a fish culturist, describes a model aquarium in San Francisco, which will not be regarded with less interest because it has already been mentioned in our columns:

SAN FRANCISCO, Cal., Feb. 5, 1878.

Of course every one who visits San Francisco goes to see Woodward's Gardens, an establishment that cannot have an equal in the U. S., except on this coast. The aquarium amused me more than any other department. It is not as large as the New York aquarium, but is a perfect gem as far as it goes, and produces a feeling as you pass the cave-like entrance of going beneath the waters of the deep to admire the inhabitants thereof in their own home. It is this impression, caused by the manner in which the aquarium is constructed, that makes it more enjoyable to visitors than it could possibly be if it were in an ordinary building. There was one tank of very fine specimens of the vegetable-eating carp, which on one or two occasions have brought as high as one dollar per pound in market. Six dollars was offered for a shad of four pounds weight a day or two since, I think the first ever offered in market on this coast. That shad would never have brought as much had he been kept at home. The other day I visited the State hatching-house of California with Fish Commissioner H. G. Parker and wife, of Carson, Nevada, which at present is located about three miles from San Leandro, Alameda Co. I believe this is not intended as a permanent location. Probably no State has taken more interest in the propagation of fish for stocking its waters than California, when commissioners are the right men in the right place. At the present time they have in their hatching-house about thirty thousand whitefish. All these were saved of a shipment of 300,000 from Michigan—200,000 for California and 100,000 for the State of Nevada. They have fifty thousand land-locked salmon from Maine, and 125,000 brook trout eggs and fish from the Eastern States. There were three or four thousand McCloud River trout five months old that would measure from two to eight inches long, all from the same lot of eggs. There were a few carp, six months old, that would weigh a pound apiece, and some not so large; they vary in size, but not so much as the trout do. The Sportsman's Club of California have 200,000 McCloud River salmon, three months old, for the purpose of stocking Lake Merced. Prof. J. G. Woodbury, Superintendent of the State hatching-house, has charge of them, assisted by Mr. Fitzpatrick, who informed me that the rats were fishing them out rather lively, which, by the way, puts me in mind of a rat that once infested my hatching-house, and by careful watching I learned his method. He sat upon his haunches on the edge of a receiving box full of fry about an inch long; by reaching down with one paw he would stir the water and the fish would collect at the spot there, then by a dexterous movement with both paws he would catch one and quietly eat him, then go through the same operation again. A trap placed at his fishing-post soon relieved me of this poacher. Yours truly, B. B. PORTER.

Natural History.

HERPETOLOGY OF DAKOTA AND MONTANA.—We have received, through the courtesy of Dr. H. C. Yarrow, a valuable paper, entitled "Notes on the Herpetology of Dakota and Montana," by Drs. Elliott Coues and H. C. Yarrow. These notes are extracted from the bulletin of Dr. Hayden's geological and geographical survey of the Territories, Vol. IV., No. 1, and are of special interest, as treating of a region from which few collections in this department of science have yet been brought.

The material upon which the present article is based consists of the collections secured by Dr. Coues in 1873-'4, while serving as naturalist of the U. S. Northern Boundary Commission. The list includes five Chelonians, sixteen Ophidians, three Lacertilians and five Amphibians. A new snake—*Eutænia radix twiningi*—Coues and Yarrow, dedicated to Major Twining of the engineers, is described.

The paper to which we refer is one of no little importance, and as it is by no means purely technical essay, will interest a large class of non-scientific readers. Considerable matter of popular interest has been introduced, and this matter is, much of it, entirely new. Besides the paper already mentioned, the pamphlet contains two short articles by Dr. Coues; one of them on Consolidation in the Hoofs of the Virginia Deer, and the other on a Breed of Solid-Hoofed Hogs, apparently established in Texas.

THE MOLLUSCA OF NOVA SCOTIA.—Through the kindness of its author, Mr. J. Matthew Jones, F. L. S., we have been favored with a copy of his List of the Mollusca of Nova Scotia (*Cephalopoda* and *Tunicata* not included). This list, which is corrected to 1877, represents the present state of our knowledge on this subject, and is thus of great value to the working conchologist. The FOREST AND STREAM has often been indebted to Mr. Jones for interesting information relating to marine shells, and we have just received from him, at Halifax, N. S., the following note, for which he has our thanks. Mr. Jones writes:

"Having received the contents of the craw of a Rocky Mountain golden-eye (*Bucephala islandica*, Bd.) for identification, from Dr. Bernard Gilpin, President of the Nova Scotian Institute of Natural Sciences, and thinking that the result may interest some of your readers, I beg to state that the whole consisted of littoral mollusks, as follows: *Littorina palliata*, Gd., 221 specimens, adult and young; *L. tenebrosa*, Gd., 2 specimens, young; *Purpuralapillus*, Linn., 3 specimens, young; *Lacuna vincta*, Gd., 1 specimen.

IN A DUCK'S GIZZARD.—We have received from a correspondent in Ohio something which, at first sight, looks like a piece of abraded crystal, but on examination by a lapidary, it has been found to be a bit of glass. Its weight is 3 3-16 carats. All the sharp corners of the glass had been rounded off. It is a question whether this attrition is due to the sand in which the piece of glass might have been found or to the action of the duck's gizzard. The gizzard of a bird is endowed with wonderful muscular power, and the gastric juices may have worked on the silicate. It is quite a well known fact that spurious antiques are manufactured by taking a newly-made carnelian, having figures engraved on it, and then making a turkey swallow it. In this way that peculiar look of age—that fine minute point polish, which early incised Greek gems possess, is produced. As to the presence of the glass where the wild ducks are found, that is easy enough to be understood. There was some thirsty sportsman in that neighborhood, who, when his flask was empty, broke it. Hence the glass in the duck's gizzard. We are really sorry that it is only glass, and wish, for our correspondent's sake, that it had been a diamond, or an aquamarine. We produce the letter of our correspondent:

ATTICA, Ohio, Feb. 28, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Find enclosed a curious little stone which was taken from the gizzard of a red-head duck one year ago. The duck was shot on the New Haven marsh in Huron County, Ohio, by myself. Please inform me what sort of stone it is.

BIRDS OF THE GARDEN AND ORCHARD.—At a meeting of the Middletown (Conn.) Scientific Association, held Feb. 12, 1878, Mr. John H. Sage read a very interesting paper under the above title. Mr. Sage confined himself altogether to the consideration of those species which he had observed in his own orchard and garden, a small plot of ground in the most thickly settled part of Portland, Conn. Even in this limited area, however, the careful observer has been enabled to note no less than seventy-two species, or nearly one-third of those birds known to inhabit the State.

Mr. Sage is well-known to the ornithologists of Connecticut as one of the most reliable observers of that State, and he has contributed, in connection with one other gentleman, very considerable additions to our knowledge of the habits of New England birds.

BIRDS HATCHED IN FEBRUARY.—The Burlington (Vt.) *Free Press*, 11th ult., says: "As workmen were cutting logs for E. N. Colton, on the 6th of February, on a flat piece of timber land on the top of the mountain that divides the head waters of the so-called mill-brook and Lee River, they felled a spruce tree, and three young birds, with pin feathers just starting, probably about eight or ten days old, fell from their nest, some thirty or forty feet from the ground. They were taken and cared for, but their fall proved too much for them. The parent birds were nearly as large as the common blue-birds; the female was of a grayish color, and the male bird had a reddish breast, with dark wings. The question arises, have we migratory birds that visit us and breed and rear their young in winter."

They were crossbills (*Loxia curvirostra*) of course, and the occurrence of their nests in winter is nothing very surprising. Mr. Boardman has found them breeding in winter in the vicinity of Eastport, Me.

WHAT ARE PURE BRED ELK.—*Joggins Mines, N. S., Jan.* 15.—*Editor Forest and Stream and Rod and Gun:* In answer to your correspondent's query as to what I meant by "nearly pure bred elk," I should say that here in Cumberland county, and I presume in other counties where moose resort, we have two different kinds of moose—the highland moose, or elk, and the swamp moose, or true moose; names given them by the hunters, who have little or no knowledge of natural history. They may be merely local; I simply use the name as they do here. The distinction I have noticed here between the two kinds is: the former is short legged, dark skin (nearly black), short, fine-shaped head, and the *long black bell or dew lap*, from twelve to sixteen inches long; the horns have more prongs, rough and round, and very little *palm*. The latter long legged, light gray (nearly brindle), long, coarse shaped head, large mouffle, while *the bell, if any, is not over three inches long;* the antlers with few prongs and very broad in the

palm. Many will say that the color of skin, shape of head, horns, and the preponderance or absence of the bell or dew-lap, is due to age. This I know is not correct. As to color of skin, or the bell, it may be; it is certainly regarding size of antlers. As I write, I have four specimens of the family to judge from of my own shooting, and the points I give are correct. Three, the "long legs," without bell, only three inches, and one "short leg" (Elk), with the bell fifteen inches long from throat. ELK.

[It is safe to say that the different names referred to by our correspondent are merely local, and that there is but one species of moose found in this country. We should have been disposed to attribute the differences which he mentions to age. We would refer "Elk" to early files of the FOREST AND STREAM for a discussion of these points. Vol. II., p. 117.—ED.]

—The Mount Holly *Mirror* relates that "a citizen of Belvidere, N.J., picked up a dead woodpecker in the street a few days since, and to its bill was fastened a small strip of wood, which, upon examination, was found to have caused the death. The bird had evidently struck the wood with considerable force, thereby embedding its bill to quite a depth, or in other words suffocated."

THE BIG BUCK—*Warrensburgh, N. Y., Feb. 5.—Editor Forest and Stream*:I noticed in the FOREST AND STREAM of Jan. 31 an article from "Leather Stocking" where he speaks of the largest red deer on record, weighing only 250 lbs. before dressing. I killed two deer last November that were guessed to weigh 400 lbs. on the hoof, but actually weighed when dressed, and after hanging in the woods five or six days, 250 and 300 pounds respectively. The buck that weighed 300 pounds, and also the other, had splendid antlers, the large buck having five pikes on each horn, the distance across the horns between the pikes being 23½ inches. I gave them to a friend, who has had them mounted, and they may be seen any time by calling on J. L. Russell, Troy, N. Y. This deer was said to be the largest ever killed in the Adirondacks. One man who was with me and had hunted for forty years in the North Woods, said he shot several that dressed 250 to 260 pounds each. If "Leather Stocking" wants to have sworn statements in regard to the above I can give him the names of several persons in this place who saw the deer weighed. As every one was anxious to see the "big" deer and to see him weighed, I have plenty of witnesses. I have hunted for years and always called a buck that would weigh when dressed 180 to 200 pounds a large one, and a doe a good one when she would turn the scale at 115 to 125 pounds. I have also had deer domesticated, and have one buck at present. Last year had four. A. H. THOMAS.

[The weight of these two bucks far exceeds anything that we have ever heard of in the deer line. Can any of our correspondents match it?—ED.]

WHAT ANIMAL KILLS AND EATS A FOX?—*Clinton, Conn., Feb.* 21.—While hunting this morning with a party, one of our number found a dead she fox with its head and fore-leg eaten off, and although quite a search was made, no trace of the missing members were found. Upon skinning the remainder it appeared healthy and free from old wounds. When found we judged it had not been dead more than twelve hours. Now, as none of our old fox-hunters ever heard of the like before, any information on the subject would be gladly received by the CLINTON FOX-HUNTERS.

[Or course, we can only suggest possibilities, but under the circumstances we should be disposed to attribute the deed to a hungry wild cat (*Lynx rufus*) a species which, though not common at present, is sometimes killed in Connecticut. We can think of no other wild animal large enough to master a ox.—ED.]

THE EUROPEAN STARLING.

QUEBEC, Canada, Feb. 1, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

With reference to the query of "N.A.T.," from Houston, Tex., relative to starlings, any person from the North of Europe can answer all his questions satisfactorily. The European starling breeds in stony places, such as quarries, houses, and may be considered an inhabitant of a city. His principal food is worms, and when the ground is frozen hard, he lives in marshy places or frequents the banks of rivers. He will not come to food such as grain or bread, though he will eat the seed of rushes. He is a digger, as you may notice from the form of his bill. I imported, a few years ago, about twenty starlings in the spring of the year, and turned them loose (in the month of May). They flew up in the air, and I have not seen them since. In England starlings are very numerous and are always considered the friend of the farmer. They are easily caught with bird-lime, but, as they generally go in dense flocks, they are difficult to approach.

Your correspondent, however, need not be afraid of the English sparrow. The reputation of driving away other birds is not his character in Europe. In Canada the northern shrike or butcher bird destroys the poor sparrow mercilessly. The sparrow-hawk also does so in Europe. I imagine a sparrow fights a sparrow, and that he will get the worst of it if he attacks a bigger bird. At any rate, an English sparrow will keep a garden clear of all butterflies and their worms. The mocking bird is a thrush, and so strongly resembles the Northern shrike that any cute, well educated New York sparrow would give him a wide berth. The house sparrow, however, is now an American bird, migrating rapidly from town to town, and probably receiving more hospitality and better treatment at the hands of man than any other bird on this continent; and as he is sure to visit Houston, "N. A. T." may as well have his services at once as wait a few years and then see the sparrow immigrant come uninvited.

The starling breeds twice a year, and had better be imported in the spring. I would order two or three hundred birds, to be shipped in lots of twenty-five birds per package, and have them turned out on arrival. A starling fights, bites, screams, and is a very pugnacious bird when handled. He is also tough and hard to shoot, and can carry a deal of shot. As the meat is bitter he is not considered good eating—about as good as crow. Yours. W. RHODES,

Dominion Council of Agriculture.

—St. Louis has a pair of bush kangaroos from Australia. There is also a little baby kangaroo which is occasionally seen peeping from its cradle—the marsupial sac in which it lies—and where it will remain until old enough to care for itself.

SPRING MIGRATION OF BIRDS.

Record (more or less full) of the Spring Arrival of Twenty of the More Common Species in Framingham, Middlesex County, Mass. (Twenty Miles West of Boston) for the last Twenty-five Years.

BY F. C. BROWNE.

[Although the accompanying table explains itself and needs no comment, we cannot refrain from calling attention to its value. It gives, as will be seen, a record of the dates of arrivals in spring of twenty of our most common birds, and the observations extend over no less than twenty-five years. If all observers had given as much careful and painstaking attention to the habits of our birds as Mr. Browne has done, our knowledge of many doubtful points would to-day be far greater than it is. We commend this list and its author's example to all our readers.—ED.]

NAME.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.
Bluebird	M'ch 16	M'ch 9	M'ch 21	....	Feb. 24	M'ch 16	M'ch 7	Feb. 27	Feb. 26	M'ch 25	M'ch 27	M'ch 8	M'ch 15
Blackbird	M'ch 21	M'ch 12	M'ch 21	M'ch 29	M'ch 21	M'ch 19	M'ch 7	M'ch 2	M'ch 3	M'ch 23	M'ch 27	M'ch 14	M'ch 10
Robin	M'ch 20	M'ch 13	Ap'l 3	....	Feb. 25	....	M'ch 11	Feb. 20	M'ch 6	M'ch 25	M'ch 15	M'ch 20	M'ch 21
Song sparrow	M'ch 21	M'ch 13	....	....	Feb. 24	....	M'ch 11	M'ch 2	M'ch 2	M'ch 19	M'ch 27	M'ch 12	M'ch 15
Meadow lark	M'ch 21	M'ch 13	Ap'l 7	Ap'l 7	Ap'l 5	M'ch 20	M'ch 5	M'ch 12	M'ch 4	M'ch 29	....	M'ch 12	M'ch 21
Golden-winged woodpecker	M'ch 23	....	Ap'l 9	Ap'l 10	Ap'l 20	....	Ap'l 20	....	Ap'l 10	....	Ap'l 16	....	M'ch 20
White-bellied swallow	Ap'l 7	Ap'l 6	Ap'l 11	....	M'ch 31	....	Ap'l 25	....	Ap'l 10	....	Ap'l 22	....	Ap'l 17
Barn swallow	....	Ap'l 29	Ap'l 16	....	....	....	....	....	May 1	....	Ap'l 27	....	Ap'l 28
Kingfisher	May 1	May 6	Ap'l 17	....	Ap'l 29	....	Ap'l 20	Ap'l 6	....	....	Ap'l 12	....	M'ch 29
Bobolink	....	....	....	....	May 17	May 13	....	....	May 17	....	....	....	May 12
Baltimore oriole	....	May 2	....	....	....	....	....	....	May 12	....	....	....	May 8
Martin	....	May 19	Ap'l 16	....	....	....	....	....	....	....	....	....	Ap'l 22
Purple finch	....	....	....	....	....	....	....	....	May 11	....	Ap'l 18	....	....
Night Hawk	....	....	....	....	....	....	....	....	May 16	....	Ap'l 30	....	....
Catbird	....	....	....	....	....	....	....	....	....	....	....	....	....
Yellowbird	....	....	....	....	....	....	....	....	....	....	....	....	....
Cuckoo	....	....	....	....	....	....	....	....	....	....	....	....	....
Kingbird	....	....	....	....	....	....	....	....	....	....	....	....	....
Hummingbird	....	....	....	....	....	....	....	....	May 17	....	....	....	....
Wild goose	....	Ap'l 15	....	....	Feb. 19	....	Ap'l 20	Ap'l 4	M'ch 30	....	M'ch 27	M'ch 23	Ap'l 4

NAME.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Bluebird	M'ch 10	M'ch 2	M'ch 10	M'ch 14	M'ch 28	M'ch 2	M'ch 28	M'ch 16	M'ch 3	M'ch 27	M'ch 7	Feb. 22
Blackbird	M'ch 3	....	M'ch 13	M'ch 27	M'ch 30	M'ch 3	M'ch 29	M'ch 19	M'ch 8	M'ch 29	M'ch 8	M'ch 10
Robin	M'ch 3	M'ch 30	M'ch 19	M'ch 27	Ap'l 7	M'ch 19	M'ch 29	Feb. 16	M'ch 2	M'ch 30	M'ch 30	Feb. 21
Song sparrow	....	M'ch 20	M'ch 16	M'ch 26	M'ch 29	M'ch 11	M'ch 29	M'ch 23	M'ch 19	M'ch 30	M'ch 27	M'ch 8
Meadow lark	....	Ap'l 14	Ap'l 15	M'ch 27	Ap'l 10	M'ch 8	Ap'l 4	Ap'l 5	M'ch 15	....	M'ch 8	M'ch 17
Golden-winged woodpecker	....	Ap'l 22	Ap'l 19	Ap'l 8	Ap'l 14	Ap'l 6	Ap'l 15	Ap'l 8	M'ch 13	Ap'l 17	....	Ap'l 11
White-bellied swallow	Ap'l 10	May 2	Ap'l 23	Ap'l 20	....	Ap'l 14	Ap'l 26	Ap'l 11	Ap'l 11	Ap'l 24	Ap'l 26	Ap'l 11
Barn swallow	May 1	May 8	May 3	May 1	May 6	May 14	Ap'l 26	May 10	May 5	May 3	May 16	May 7
Kingfisher	M'ch 24	....	Ap'l 4	Ap'l 8	Ap'l 17	M'ch 28	Ap'l 3	....	....	....	....	Ap'l 9
Bobolink	....	May 13	May 17	May 16	May 18	May 19	May 16	May 17	....	May 17	May 14	May 15
Baltimore oriole	May 9	May 17	May 14	May 13	May 12	May 9	May 10	May 15	May 14	May 12	May 9	May 13
Martin	....	....	Ap'l 26	Ap'l 24	....	May 1	....	....	....	May 15	....	....
Purple finch	....	....	Ap'l 19	....	....	May 6	Ap'l 15	....	May 5	....	....	....
Night Hawk	....	May 28	May 25	May 27	May 23	May 24	May 12	....	....	....	May 22	....
Catbird	....	May 13	May 15	May 13	May 12	....	....	....	May 16	May 12	May 9	May 6
Yellowbird	....	....	May 15	May 12	....	May 6	May 15	....	May 12	May 8	....	....
Cuckoo	....	June 1	....	May 28	May 24	May 22	May 12	....	May 26	....	May 19	May 19
Kingbird	....	May 23	May 6	May 29	May 15	....	May 16	May 20	May 30	May 13	May 13	May 15
Hummingbird	....	May 19	....	....	May 18	May 20	May 12	May 15	....	....	....	....
Wild goose	M'ch 24	....	Ap'l 3	Ap'l 19	Ap'l 7	M'ch 19	Ap'l 3	Ap'l 4	Ap'l 4	Ap'l 8	M'ch 30	M'ch 31

HABITS OF THE RUFFED GROUSE.

WHITE COUNTY, Jan., 1878.

THE prairie chicken (*Cupidonia cupido*), when he has concluded to commence business in the spring, opens his shop on a prairie knoll, and advertises it by blowing his horn that those who wish his wares may know where to find him. When he has a customer he does his best to please, sets every feather on end, droops his wings, inflates his pouch, spreads his tail, draws down his head, and struts around, as much as to say, "This is just the place, and I am the fellow you are looking for."

When *Bonasa umbellus* has made up his mind for business, he does about the same, as near as his surroundings will admit. As his field is limited, he mounts any object that is raised from the ground, and otherwise suitably located—most frequently a fallen tree—then he lets his customers know that he is ready, by beating his drum. This manner of letting the hens know where to find them each kind of grouse keeps up all through the breeding season.

I have seen the hen prairie fowl fly quite a mile, and drop down in the midst of half a dozen cocks who were waiting, when each cock would turn himself into a "king" prairie chicken. I have seen the female ruffed grouse come to the drumming of the cock as sly as a fox, and only advance during the noise, then stop as still as a stump. Between the drummings the cock would stretch up his neck and wonder if she was ever coming, though he did not yet know she was there. As soon as the cock saw her he would almost tumble off the log, and instantly turn himself into a "king" partridge, just as "Penobscot" described. The cock would strut around the hen with his wings down, exactly like the pinnated grouse, make dives at her, run against her; and, if she didn't care so awful much about him just at that time, he would drum once or twice for her, and, between the drummings, he would ask her what she thought about it.

The cock pheasant your correspondent "Zadoc" saw through the roots of the fallen tree, undoubtedly was looking as much for some of his kind as for an enemy. The sac your other correspondent speaks of under the wing, I think he must be mistaken about.

The ruffed grouse do not pair. The very nature of the noise they make during the breeding time explains their domestic relations. Pinnated and ruffed grouse are alike in their habits of choice and number of wives, all the works on ornithology to the contrary notwithstanding. If there is any difference between them I think the latter denizen of the woods has not as good morals as he of the prairie. *Bonasa* does not have command enough of himself, and would like to begin his love-making at wrong seasons, which drives the hens off to themselves during the warm days of our Indian summer, as I have often found them.

Several persons through your columns say that they have shot female birds in the act of drumming, which is the most remarkable thing I ever heard about this much misunderstood bird. It is possible that they killed a hen who had come to the trysting place while the cock had just stepped down to visit some other hen who was there, but I doubt if a hen grouse ever attempted to drum. MONON.

SHAKOPEE, Minnesota, Jan. 24, 1878.

MR. EDITOR: Slow at first, but faster and faster did those little wings strike the air—not the old rotten log he was sitting on—until the noise sounded exactly the same as that of a bird of the same species just taking wing. Has it ever occured to you that a drumming pheasant keeps a firm hold of the log he is drumming on—have never seen a pheasant drum on a rock—and that the sound produced by a bird "taking wing," and the last evolution of a "drumming one" are one and the same? In the one instance he clings to the log, thereby preventing an upward mot'on of the body; in the other he springs in the air, and the same motion of his wings gives the first velocity to his body, after which an occasional flap of the wing keeps him in the air, and the whirring sound so deafening in a deep ravine or heavy timber ceases.

I'll wager, that upon recalling your pheasant hunt at Blakely on the line of the St. and P. and S. C. R. R. last fall, only a couple of miles from my first domicile in this State, you will coincide with my view as to what produces the sound of a drumming pheasant. Many a night when happening to be awake I have heard the pheasants drum near my cabin, and presently the rooster would crow, heralding the coming of the morn; also on rainy days I have noticed the drumming and crowing, or crowing and drumming. Now, is there any one prepared to dispute that the motive for drumming or crowing are alike in the two birds?

Has any one ever listened to one drumming pheasant challenging another drummer? Closer and closer they come, louder and louder seems the noise, and finally the leaves and feathers alike fly in profusion and give evidence of the mortal combat; and in this state they are entirely oblivious to all surroundings, and will not take wing unless a dog becomes the third party to the combat. When not interfered with until the battle waxes hot, the observer can pick them up, the same as a pair of fighting cocks on a dunghill. This is an actual fact, and I have done it! I have been a close observer of the habits of this bird since my settlement in the Big Woods, then as now the very paradise and home of the bird in question; have watched them in all seasons and stages of their age, have tried in vain to domesticate them, when with the prairie chicken I was entirely successful, and am therefore entirely confident in giving my views.

Neither the pheasant nor wild duck will thrive or live long in confinement, no matter whether hatched from the egg by domestic fowl or caught while young; and on the other hand, the prairie chicken and wild goose will live and thrive in the barnyard any way you raise them. B.

NEW YORK, January 21, 1878.

EDITOR FOREST AND STREAM:

Your correspondent, "R. T. M," says that Connecticut ruffed grouse seldom alight on a tree at the end of their flight. This is entirely contrary to my observation of the habit of the bird in this respect. I have never hunted them except in Connecticut, and have found that in heavily timbered localities where hemlock trees abound, the bird when flushed is almost certain to take to the hemlocks for refuge; and it certainly could not adopt a surer means of securing itself from further disturbance by hunter or dog, though occasionally a dog will "wind" a treed bird and show by his actions a comprehension of the situation. I have never, however, been able to discover the bird under these circumstances until it took itself off with the usual loud advertisement of departure.

Have seen ruffed grouse when flushed by the dog only, and apparently unaware of the sportsman's presence, bounce up into the trees directly overhead; and when hunting with a companion have on a number of occasions observed birds flushed by him come over my way and settle among hemlock branches within killing range of my position. Being one of the number who believes in "killing 'em when you can," I generally shoot at the spot where I saw them go in, or if standing at an angle with their line of flight, make a guess at their probable position near the stem of the tree, and blaze away. In the section where I do my shooting we have been congratulating ourselves on the large quantity of hen birds left over to raise chickens for next fall's sport. But if it is a fact that plumage really goes for nothing in determining sex among ruffed grouse we shall be obliged to modify our anticipations in that respect, and look deeper for the "true inwardness" of the specimens which the next season offers us. YANKEE.

OLEAN, N. Y., Jan., 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

In regard to its drumming, I have seen the performance many times, and it appears to me that the bird strikes nothing with its wings, except that they may strike together on the backs. But I do not think it absolutely necessary for them to strike anything to produce the sound, unless it is to suddenly arrest the motion, for the noise is not much, if any, louder than he makes when he is flushed, and the wings strike nothing but air; and is very similar, except in its gradual increasing rapidity in the case of drumming.

I agree with other correspondents in the rapidity of its flight, and in its tenacity of life, as the following incident will show: A few years since, while still hunting deer, I saw a ruffed grouse sitting on a log about fifteen rods away, and drew up and fired at him, when he immediately flew beyond the range of my vision. On examining the spot where he stood I found a quantity of feathers, and taking the direction of his flight found him at a distance of thirty or forty rods from where I shot him, stretched out upon the snow, dead. The ball (from a Smith & Wesson breech-loader, cal. 44) had passed directly through his body, a little back and below the wings.

I think, however, that your correspondent, S. E. Burnham, who says that after shooting one in the neck, so that his head lopped down upon his breast, puts it on rather thick when he says that the bird ran nearly twenty rods after being shot, if he means that the bird's neck was dislocated. I have practiced shooting ruffed grouse for several years with a rifle, and have, during that time, killed probably from one to two hundred by shooting the head or neck, and I never saw but one so killed that did anything more than "fly about like a hen with her head cut off." The exception which I make was in the case of one that was standing upon a log, at some ten or twelve rods distance from me. After firing at him the second time, he deliberately walked along the log a short distance and disappeared on the opposite side. I carefully approached to get another shot, and when near the log heard him in the leaves a short distance off, and after a careful examination found him spread out on the leaves, dead. An examination showed that the ball had just touched his neck, removing a piece of skin about as large as a wheat kernel, and opening the artery a little below the head, and he had bled to death without apparently knowing he was hurt.

Your correspondent, "R. T. M.," of New Haven, Conn., wishes to know if the ruffed grouse in Western New York commonly alights on trees when flushed. I can assure him that they very seldom do so in this vicinity, unless put up by a dog, and then they are as likely to alight on the ground as on a tree. At least that is according to my experience, and I have had considerable, having hunted a good deal for the last twelve years, and all of that time with a rifle, without dog until the last season, from Sept. 1 to Dec. 31, 1877, when I hunted over a cocker spaniel, with shot-gun, killing fifty. M. A. B.

POUGHKEEPSIE, January 25, 1878.

EDITOR FOREST AND STREAM:

In answer to the question propounded in your paper of 24th, by "R. T. N.," as to the partridge of Western New York alighting on a tree at the end of its flight, while the Connecticut bird seldom does so, I remark that many years' practice in shooting those birds in both States has brought the fact often to my notice, but I have never heard it accounted for. PHILIP C. ROOKS.

LOSS OF LIFE IN INDIA CAUSED BY WILD ANIMALS.—Sir J. Fayrer asserts that in 1875 no less than 20,805 human beings and 46,805 head of cattle were killed in India by elephants, tigers, alligators, buffaloes, boars and snakes. Snakes alone caused the death of 17,070 persons. It is proposed to establish a sort of department, having a responsible chief and subordinate officers, the duty of which shall be confined to abating the loss of life by wild animals. It seems that the Hindoos have a religious prejudice against killing snakes.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

ROSES.

AS the spring advances the thoughtful amateur looks up those notes on the best roses he saw last season, and, taking the various rose catalogues, he looks carefully over them to see from whom, and at what price, his selected sorts can be procured. In doing so he is bewildered with the number of sorts offered in one catalogue that are not mentioned in another, and not being able to get the varieties he requires from one or even two growers, he is apt to give up the whole business in disgust. There are many, also, of such a restless disposition, that, not content with adding to their collection from time to time such varieties as have been tried and found valuable, they rush into an auction sale and buy anything with a high-sounding title, or glowing description of its colors and merits, more especially if it have "*Une grand noveaute*," or "*forme des plus parfaites*" attached, only to be once more disappointed, and swear in their wrath they will never do so again. A few hints on what we have found the best of the new varieties of Roses of the last few years may be acceptable. First of all, the border or bed roses in which the roses are to be planted should, if possible, be of a good fresh loam, with plenty of well decayed manure thoroughly incorporated with it. The colors should be arranged so as to harmonize when in blossom, the general effect taking the lead of individual preference. A good plan is to plant at intervals over the bed, some of the stronger varieties to grow as pillar roses, thus breaking up the uniformity and adding much to the beauty of the whole when in bloom. Among the new roses of late years great gain has been made both in size, color and fragrance, La France, delicate silvery rose color and Louis Van Houtte, dark crimson, being the most fragrant, and Paul Neron, pink, the largest varieties known. Baroness Rothschild is a beautiful light pink cupped variety, something in the way of the splendid old summer rose Coupe de Hebe. Capt. Christy is a fine delicate flesh color with deeper shaded centre. Comptesse de Serenye, pale rose, with carmine centre, and Marquise de Castellane, a rich pink, very large and fine. Louis Van Houtte, independent of its rich fragrance, is one of the best dark crimson roses grown, though it is closely followed by Annie Wood, an English seedling of fine color and a free grower. Mad. Lacharme, a seedling from Jules Margottin and Mad. Noman are good additions to the list of whites, being both of fine shape and free growth. Mad. Alfred de Rougemont is also a good white rose, blooming all summer, and Marquis de Mortemort, white shaded rose in the style of Caroline de Sansal, or Souvenir de Malmaison is the best in its class. All these are quite distinct from the older sorts, and give a pleasing variety in color and texture. In addition to the above we would mention a few of the very best of the older varieties, selected not only for shape, color and fragrance, but for freeness of growth and good habit and constitution.

Pink and Rose Color: Emelie Hausburg, Mlle. Bonnaire, Elie Morel, Mad. Therese Levet, Jules Margottin and Countess of Oxford. Red and Crimson: Vicompte Vigeur, Devienne L'Amy, Pierre Notting, Sir W. Gull, Horace Vernet, Charles Lawson, Prince Humbert, Camille Bernardin, Xavier Olibo and General Jacqueminot. In white colors we know of nothing better than those already named. The well known pure white summer variety, Mad. Plantier, should be grown in every garden, and for pillars some of the older strong growing varieties, such as Baron Prevost, Mad. Trotter, Mrs. Elliott, Caroline de Sansal, John Hopper, Louis Odier, Gen. Jacqueminot, George the Fourth, etc., can be selected; while for a really beautiful moss rose nothing can surpass the old English moss and its lovely mate the Crested Provence.

JAPAN LILIES.

On fertilizing Japan lilies, O. M. Hovey, of Boston, gives his experience in an English periodical. It seems to differ in some points from Mr. Parker's and Mr. Hanson's experience (page 37), and will doubtless be of much interest to many of our readers, as all the information we can get together on this interesting subject will afford some guide to those who may desire to extend and increase the variety of these beautiful plants.

"My first experiments of any extent were commenced in 1846, when I had some two dozen fine plants in pots, grown for that purpose, many of them being seven feet high. I then fertilized speciosum with superbum, candidum, s. album, and chalcedonicum; punctatum with speciosum, aurantiacum, superbum, and chalcedonicum; album with speciosum, and some others. Three years is the usual time for the seedlings to bloom; and, as they rarely make their appearance until the second year, it was in 1850 that they produced flowers. By this time (three years) many of the labels, without corresponding with the above crosses, had rotted off, and were unfortunately lost. However, suffice it to say, that to us, who watched them with a florist's eye, every one appeared to differ. In some, the petals were much reflexed; in others, they were narrow; some were rosy, others very deeply covered; some of the spots or papillæ were small, others large; some of the spots crimson, others almost black. The worst among them were better than the old speciosum; but I found my list too long, and the distinctions too fine, except to those who could—like the true tulip fancier—readily distinguish minute differences; and, after cultivating them for three or four years, I selected the best nine, and named them as follows: Melpomene, Terpsichore, Erato, Urania, Polyhymnia, Clio, Thalia, Calliope, and Euterpe—names under which they were subsequently distributed throughout the United States. I soon ascertained that there was a vast difference in the character of the bulbs; some of the latter were increased with great difficulty, and when in later years I had hundreds of bulbs of Melpomene, I only had a dozen or so of Euterpe. They would not make offsets, either above or around the old root; but, from want of time, I did not find the opportunity of ascertaining and recording which crosses were affected in this way. I continued my experiments in succeeding years, in the way of cross-breeding, but kept no record of them. I only know that some crossed with longiflorum and others, completely ruined the shape of many of the flowers. Among all my seedlings there is not a pure white, although album was fertilized with speciosum, and, as is generally supposed, the female parent has a prevailing influence on the progeny. There was not even a pink spotted one like punctatum, as one would have supposed there would have been. Some years subsequently, I raised several whites, and one long, large flower, quite distinct, but it accidentally got thrown out of the pot when in a dormant state. I also raised a very distinct variety, with flowers about half-way in size between those of chalcedonicum and speciosum, with stems more densely clothed with leaves, and the petals blush-white, with pale lilac-rose spots. This I named "Eva." It increases slowly, and is still rare in collections, but it is a beautiful variety. As regards improvement, I do not expect much from the yellow and red kinds crossed with each other. If, however, a handsome lemon, or buff, or buff-spotted could be produced, it would be an acquisition. The red and yellow are strong; but it is only the clear and delicate white grounds that are desirable. All may be crossed with speciosum and auratum, by which the size may be increased.

THE VARIEGATION OF LEAVES.—The variegation of leaves occurs so commonly that we do not often inquire into the cause of it. To the physiologist, however, the question of the origin of variegation is of considerable importance, and it certainly is not less so to the horticulturist, whether pleasure or profit be the main end of his endeavors. The normal coloring of leaves, whatever it may be, does not come directly into the consideration. A plant may produce red, purple, bronze, or blue leaves, and they may be as proper to it—that is to say, as natural and necessary—as any of the tints of green that more commonly prevail in leaf coloring. By "variegation" must always be understood abnormal coloring, the most common forms of it being bands, blotches, edgings, and splashes of creamy white, or olive grey, or yellow, of several shades more or less intermixed with the normal green common to the plant when it is not variegated. The variations of variegations are endless, but there appears to be a common cause for them all, that cause, whatever it may be, operating in a variety of ways, so that in one case it results in white, gray, or creamy colored variegation; and in another case in amber, gold, yellow, or even deep orange colored variegation; the selfsame species of plant being, perhaps, the subject of its diverse operations. The ivies, hollies, and Japanese euonymus afford examples familiar to all, and are admirably adapted as material for the study of the subject. A vague application of the term "disease" is commonly accepted as explaining the cause of variegation. Notions that pass current in the world are more often sound than otherwise, and there is very much to be said in behalf of the explanation. Still it remains to determine the nature of the disease, and, if possible, give it a name. In one view of the case we may be disposed to regard it as a kind of chlorosis, and in another as unmistakable etiolation. Usually it causes, or is accompanied, or is followed by a diminution of the vigor of the plant, but some variegated plants grow as freely as others of the same species that are not variegated, and, generally speaking, the vigor diminishes in proportion to the degree of etiolation, so that a growth purely white cannot be propagated, and soon passes away. That the variegated portion of a leaf has less vigor than the green part is suggested by the often wrinkled appearance of it, the result of a more rapid growth of the green centre than the variegated margin. This suggests that the defective assimilation, the result of debility, is the primary cause of variegation, a view of the case largely supported by the experience of cultivators, who have often produced variegation by starving a plant, and effaced variegation by liberally feeding it.—*The Gardener's Magazine.*

A BEAUTIFUL HOUSEHOLD PLANT.—The Calla Lily, roots of which may be procured of any florist, is one of our finest plants for house growing when properly treated. The best method we have tried is to procure an earthen jar—suitably decorated on the outside, if desired, by painting or pasting on of frieze or flower pictures, or by a paper open-work covering. In this place rich mould some five or six inches deep, and in this set the calla plant. Now put on the top of this mould a layer of clean, coarse sand about two inches deep, and on top of this some small pebbles. Then fill the jar with water, and replace as evaporated, so as to always have the water several inches deep above the pebbles. Place in a warm and sunny window, and the plant will throw up large, luxuriant leaves, to be followed by the magnificent bloom. What is still better, the flower stalks will be sent up in a succession so as to afford a nearly continuous series of flowers. A few minnows introduced into the water will usually thrive without further care, and afford a pleasing study.—*Scientific Farmer.*

GONE TO NO LIKEWISE IN SHEEP.—Rabelais tells a story about Panurge's sheep; how one sheep in the flock led the whole of them. The *Boston Commercial Bulletin* tells a story how a leading merchant of Boston was dissatisfied with his son because he had G. T. T. to raise sheep. "I shall send my secretary after him to bring him back." But after waiting a six months the secretary never returned at all. The fact leaked out that the secretary, a most trusty and far-sighted man, had become so fully satisfied with the business of sheep-raising that he remained in Texas, joining his patron's son in the management of a sheep and cattle ranch.

—To kill worms in soil containing house plants, slice potatoes thinly, and lay on the soil. In a few hours the worms will accumulate on the slices on the side next the soil, when they may be carefully removed and plunged in boiling water and the process repeated.

POISON FOR VERMIN.—A California State university professor has been poisoning the troublesome squirrels, which are a great pest there, with bisulphide of carbon. This fluid is obtained by burning charcoal in vapor of sulphur; and when poured out evaporates rapidly and forms a vapor heavier than the air, and which consequently is forced down into the ground. When poured into the mouth of a hole it is forced down, thus strangling everything which inhales it. The roots of plants may be destroyed in the same way.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7 Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, as of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb, Secretary.

For Forest and Stream and Rod and Gun.

ACROSS COUNTRY AFTER THE HOUNDS.

SATURDAY morning, March 17, 1877, was the most beautiful for the chase that huntsman ever witnessed. Its temperature was mild; the dew full and heavy; the sky cloudless; the sun bright; the atmosphere still and spring-like. We were up and ready for the sport by early dawn, and had scarcely breakfasted before up rode a couple of fair Dianas, splendidly equipped, and splendidly mounted: one rode an imported Warminster, the other an Exchequer—two finer animals never before engaged in such sport. A brunette and blonde, just emerging from sweet sixteen, were the graceful and faultless riders, taking more delight in sporting over the hills than ever Darian maid. Their escort was superbly mounted on a lineal descendant of imported Fly-by-Night, and the famed hunter, Lord Elgin, gracefully pranced in advance. Just as the sun arose we moved off and made for the grounds most even and best adapted to the sport for female enjoyment. We rode several miles before we struck, when at last Brodnax and Lance gave mouth. The trail was cold, too cold to be followed by united efforts, and each dog breasted wide in earnest search for it. We patiently followed the hounds, and after a while the trail improved, leading us to the Roanoke, four miles from Gaston, and the whole pack closing in, after a mile's beautiful working, off they burst with an electric vim, extending to our fair riders. I stood still for a moment to witness the leaping of a fence close by. It was approached in advance by the graceful brunette, and cleared by her horse without hitch or pause; closely followed her blonde companion, whose horse had partaken too freely of the excitement, had become rather hard to manage, leaped at an adjoining panel in fine style, slightly disconcerting the rider. She soon, however, recovered, and dashed up to her fair companion, taking position by her, and vying with her through an open field of half mile breadth. This space was between

the two thickets, in which the fox alternately sought safety. When he was closely pressed in his efforts to run a stretch, he would return to one or other of these thickets, and stealthily creep out. The chase was continued for ten minutes, with repeated doublings, in a circumference of half a mile, when the fox at last made a desperate effort to run a stretch. He took the public road, in full view of the pack, and held on well for some distance. The pack had, however, taken the heels and bottom of the fox, and he fell a sacrifice to his own self-reliance upon both. Our fair companions unluckily followed my suggestion at this juncture, and remained on the opposite side of the swamp, taking position to witness the fox repeats his runs across the open field to the other thicket. They were, however, soon up, and with cheeks reddened by the sport and tongues loosened by its excitement, they, in huntsman-like style, each described the chase, and related every personal incident. While thus merrily recounting them, one of the party rode up to us and informed us that five dogs had gone down the road after another fox. We soon discovered that the peerless Vanity was of the number of five of our best runners. We would have gone in search of them but for our convictions that as it was a gray the sport had ended. Our conjectures were right, for they soon caught up with us, giving evidence of a successful result, which we afterward learned was the case.

I presume that Col. Skinner examined the kennel of Gen. W. H. Jackson, at Bellemead, Tenn., when there last fall. If so, he had a good opportunity of seeing in it several Byron hounds, sent to the General from this section. Velocipede, Gen. Starke sent him; and I, Leader, full brother of the peerless Vanity. Though fine and well trained fox hounds, they were not the speediest of our packs. T. G. S.

Gaston, N. C.

RED AS A USEFUL COLOR FOR SETTERS.

THE courteous criticism by Mr. Justus von Lengerke, of my letter to the FOREST AND STREAM, on the "Colors of Setters and Pointers," leads me to express my views a little more fully in regard to the reasons why red is a practically useful color for setters, and in some instances highly preferable to any other. In considering the manner in which color contributes to or militates against the usefulness of dogs in the field, it appears evident that no one color is superior to all the others in all respects. One's taste for any particular color is very apt to be influenced by the attachment he has or may have had for a dog of that color. I own to an especial penchant for orange and white, the colors of old "Cora," a setter that has been my companion and helpmate in many a day's sport during the last dozen years.

And when shooting over a thoroughbred Gordon setter I have thought that no colors could be more beautiful than the rich black trimmed with tan, with the chest white. In fact, having had so much sport shooting over dogs of various colors, I like them all.

Leaving aside the matter of taste, let us confine ourselves to the subject of usefulness. As a general rule, it may be true that "no good dog is of a bad color," but there are many exceptions to this rule. As, for instance, white would be a bad color for a duck retriever, no matter how good the dog might be in other respects.

Red has been disparaged as less useful than other colors, because not so showy in the field, and little has been said as a refutation of the charge, although the high favor in which the color is held is a silent one. All those owning dogs of this color have probably learned by experience that they are not sacrificing any of their sport by the gratification of their taste in this respect. The special instances of this color lacking some of the advantages of others are more than counterbalanced by the many instances where it excels in usefulness by contributing more to the day's sport, if the dogs are used as the majority of setters in this country are for all sorts of work incidental to shooting different varieties of game. I appreciate the advantages of a solid white color in cover; yet, when cock-shooting here in Maine, I would put a bell on a dog of any color, for the covers are, as a rule, very dense, and even a white dog could not be seen far away. For snipe shooting, white would be for me the worst color, for the very reason that it is so showy, and could indeed be seen a half mile away in a snipe meadow, not only by the sportsman, but by all the birds in the vicinity, whether snipe, ducks, plovers, curlews, hawks or herons.

Mr. Von Lengerke says that for a snipe dog he prefers one that "is not afraid to range off half a mile under certain circumstances," and asks "How would you see a dog at such a distance on meadows, full with yellowish brown reeds, etc.?" I trust that I never shall see a dog of mine hunting "such a distance" from me when on the meadows. Most dogs are not afraid to range off a great deal further than their masters desire. Under ordinary conditions, two hundred yards each side of my route is as far as I should wish the dogs to range; and if this extent of ground is hunted over at all thoroughly, I can leisurely keep up with the fastest of them. In open shooting, I seldom have any difficulty in seeing a dog of any color as far away as I care to have him hunt, and yet I do not think that my method of working dogs in the open could be called "close hunting."

There are exceptional occasions for allowing a dog to range beyond the limits specified, particularly when "chicken" shooting, but I should never wish the limit extended to a half mile, most especially when following the dogs afoot on a snipe meadow. Now, let us see in what way the red dog may be preferable when snipe shooting.

For this purpose I consider the color an eminently practical one, for the same reason that Mr. Von Lengerke considers it the worst of all. And that is, because less showy. I have no difficulty in seeing dogs of this color, although I might were they a half mile away; but I never intentionally allow them to range off so far when on the meadows. Easily seen by the sportsman at any reasonable distance, instead of being a showily contrasting color, it is one that, in a measure, assimilates with that of the surrounding landscape and gives less alarm to any observant game. And even when noticed by game, a red dog seems to give less alarm than one of any other color, which I believe to be in a great measure owing to its resemblance to the colors of wild animals, and notably the red foxes.

A red dog seems a positive attraction to waterfowl, and, impelled by curiosity or some peculiar fascination, they will swim toward the dog, if no man or other suspicious object is to be seen. In some localities I have found sportsmen who would not care to kill plovers or any such inferior game when snipe-shooting, nor even exert themselves for a shot at ducks. But from Maine to Maryland, along the coast, game is nowhere to be found in such great abundance as to cause a sportsman, when snipe-shooting, to be indifferent to the opportunity for a shot at ducks, "bay snipe," plovers, etc., whereby he may add much to the sport and bag of the day. This fact is especially appreciated by those who shoot over the much frequented grounds near any city, where a thorough knowledge of the locality, good dogs and straight powder are needed to insure good sport. At such places the birds are generally too much hunted to become fat and lazy, and to obtain much shooting one must needs devote attention to every sort of game met with. As an illustration, I will give the result of a day's shooting over a brace of red setters on such grounds.

The birds were wild, and all killed were at long range. The few snipe found were on closely cut marsh, where the cover was sparse and they would hardly lie to the dogs. Well, besides the eight snipe bagged, there were twelve "grass-birds" (pectoral sandpipers), which were flushed and shot singly, affording quite as difficult shots as the snipe, and they are nearly equal to the latter delicious birds when served at the table. Several marsh-hawks, so destructive to our game birds, were hunting over the same grounds, and seeing one skimming over the marsh toward me, I dropped the dogs by signal and concealed myself in a ditch. The hawk did not notice the dogs until passing close over one of them, when it rose abruptly in the air, but kept on its course, and immediately after fell to my shot. After this I had a shot at some ducks, whose presence was betrayed to me by one of the dogs. I was walking parallel to a stream and a hundred yards from it, when one of the dogs came to a full stop on its bank. The attitude and waving stern told me that something of especial interest had been found. I immediately dropped the other dog, and walking to the stream, flushed five dusky ducks, near enough to drop one with No. 9 shot, the dog having been standing in full view of them while I was approaching. I do not doubt that the first sight of a dog of another color, even at a greater distance, would have instantly put the ducks to flight. Then there were bagged seven sora rails, three bitterns and a woodcock.

The soras do not appear to be much alarmed by a dog of any color, nor even by man. In fact, one of these rails was taken alive and is now living in an aviary. I had just killed a brace of snipe, and made one of the dogs remain where he dropped to allow the other, a young bitch, to retrieve the birds, this being her first season in the field. One bird was brought in, and while searching where the other fell, she seemed greatly excited over what I supposed to be the crippled snipe running. Encouraging her to fetch, she soon brought to me a live sora, held tenderly by the wing, and entirely uninjured. Had I hunted with white dogs on that day I believe that I should not have obtained more than one-fourth the number of shots that I did. The cock was shot in an alder cover thick enough to render even a white dog invisible at twenty yards distance, and it mattered little then what color the dogs were. In such a place I depend more upon my ears than my eyes to inform me of the presence of the sought-for game. This day was one of many spent on similar grounds, where the sport to be obtained does not depend entirely, although it may chiefly, upon such game as the dogs will point. Even when going to the shores or marshes, especially for "bay-snipe" or plover shooting, I like to be accompanied by one of my dogs, which often proves very useful in retrieving birds from the water or inaccessible places, if in no other way.

Yet many a sportsman will not take his dog on such an excursion, lest the game be frightened by the conspicuous color of the animal. On many occasions, besides, when shooting over dogs, have I had occasion to be glad that I had a red one to take with me as a useful companion, when a black or white one would have been left at home. Of course, setters are not generally considered as retrievers, although in this country retrieving is considered an indispensable part of their education; and when collecting I have used one of my setters to retrieve all sorts of birds, from ducks and gulls to the puffins and little "sea-pigeons" or black guillemots, although I would not make a practice of sending a setter from surf-beaten ledges into icy northern waters. And the same dog will retrieve a warbler from a swamp or a partridge from a briar-grown ditch equally well. All the arguments in advocacy of the idea that retrieving injures a dog's nose, I regard as purely theoretical. Of course, this last-mentioned instance of the advantage of having a dog of a color that is not too showy is a special case, for few sportsmen devote any time to the study of ornithology, and few ornithologists use dogs when collecting, and I state it merely as an additional practical purpose for which the red color is preferable to me. At one time my constant companion in field and forest was a pointer whose predominant color was white, but I find that all birds seem less alarmed by a red dog than by one that is mostly white, whether game birds or other sorts.

In speaking of shooting in cover, Mr. Von Lengerke says that a white dog "would need no bell to tell his whereabouts." This would depend upon the nature of the cover, the good and bad qualities of the dog, and his training. The remark would apply to an open cover and a well-broken dog that could always be kept under control and made to hunt as closely as desired. It is only for special work, such as shooting in cover, that I should ever consider white a color desirable for its usefulness. And the advantages of the color in one respect are greatly overbalanced by its disadvantages in various respects. While the white may be useful in color, I believe the red is more so for all sorts of shooting, and preferable to all others on the marshes. Perhaps I ought to whitewash this statement, or the dogs, for those sportsmen whose power of vision is imperfect. As I keep dogs for use and not for ornament, I would never suffer any sacrifice of field qualities in breeding for any desired color, nor is this necessary in obtaining that most desirable combination—usefulness and beauty. At least I have not found it so. An animal whose beauty is owing to high breeding, and by beauty I mean not only color, but also form, texture of coat, etc., will, if well-bred, prove to be the one that will afford the most pleasure to its master. EVERETT SMITH.

BLUE SETTERS.—Mr. Ethan Allin takes me to task for stating that blue is a color unknown to either setters or pointers, except in name, and asserts, if I understand him aright, that he can show me "a blue, white and tan setter," which is "not a black roan, but indigo blue." If any of this dog's progeny are of a lighter shade I should like to obtain a brace that are sky-blue. I am perfectly familiar with the bluish reflections to be seen on the black coat of a Gordon setter, but does Mr. Allin seriously mean to say that he has a setter, the natural color of whose coat is actually blue? EVERETT SMITH.

COLOR OF DOG AND SIZE OF GUN.—Backed by thirty years' experience with dog and gun, I offer my opinion on two points discussed in your journal. The color of setters and pointers is very much more than a matter of taste. I have too often been afflicted by walking around a field, searching for a lost dog of one of those dingy colors, standing motionless and invisible on his point alongside of some bunch of weeds the same color as himself, not to look at the matter of color from a utilitarian point of view. A black dog is the easiest of all to see; a clean black and white next. An entire white at a distance, in some light, is difficult to see when motionless. Those grizzled fellows called "heltons" are the worst of all.

On the question of the best size and weight of a gun for general shooting, there appears to me to be no great difference between 10 and 12-bores. Either, to be most effective, should shoot, with safety and without recoil, 4½ drs. of powder; and it will be difficult to make it do this lighter than 8 lbs. Some years ago I had a gun made by Clarke & Sneider, of Baltimore, for general utility, and which I believe to be unsurpassed for such shooting. I gave the following order: Barrels, of very best English twist (the best material ever yet used); gauge, 10 bore; length of barrels, 30 inches; weight, 8½ pounds. Here is the kind of shooting I sometimes get: A day in December last—First shot, a mallard, killed dead 50 yds.; second, a ruffed grouse with each barrel at 45 and 60 yds.; third, a wild turkey at 70 yds.; fourth, a blue wing at from 95 to 100 yds. (and killed dead). Charge, 4½ drs. powder, 1¼ oz. No. 4 shot. Then changing to 3 drs. of powder and 1¼ oz. No. 6 shot, killed eight quail, and on my return, a ruffed grouse; missed four shots. I think a 6 lb. 16-bore can't be made to do that sort of work. M. G. E.

Blacksburg, Va., Feb. 22, 1878.

Discussions as to colors of dogs, we think, depend very much on the idiosyncracies of people's tastes. Color in a dog may, however, mean a good deal as to breed. Still the question of colors can never be decided. We do not suppose that a black dog or a white one would suit all the eyes of sportsmen any more than would a red one. It is strange to know how many people are affected with what is called Daltonism. To certain eyes a red dog is not red, and even some people, as may be seen in this journal, never have seen a cerulean colored dog, otherwise called a Blue Belton.

EIGHT LONELY LITTLE DOGS.—One might try long and not write a more pathetic paragraph than the one which appeared in last week's *Sun*, which was as follows: "There was a little strip of a mourning band over the cage of the eight performing dogs in the Museum at 23 Bowery. A card said that the dogs would not perform because their mistress, Mme. Benjamin, is dead. The dogs whined and were restless. Mme. Benjamin was once a celebrated danseuse. While performing, her dress took fire, and she was disfigured for life. Being unable to obtain employment, she, with wonderful patience, trained her dogs. Mme. Benjamin was buried by the employees in the Museum."

A PUNCTUAL DOG.—There is a dog in this city which appears to be gifted with sufficient intelligence or reasoning power to enable him to tell the time of day and night, but how he does it is something that is past finding out. The dog is the property of a saloon keeper on one of our principal streets, and is a very common looking animal, being a pretty fair specimen of the typical "yaller dog." He loafs about the saloon from the time his master goes on watch (5 P. M.) until 8 o'clock, when he invariably pushes open the door and goes home. This I have seen him do a number of times, yet I have never thought to notice whether he looks at the clock or not. What is remarkable about it is the fact that he never misses going precisely at 8 o'clock—not two minutes before or after the hand touches the exact spot. This he does regularly, night after night, and it matters not what may be engaging his attention at the time, this "yaller dog" is never seduced into staying beyond his regular time. Persons who frequent the saloon positively assert that the dog does look at the clock, and that his departure is governed entirely by the position of the hands of that instrument.

Perhaps some one who has studied the natures of these intelligent brutes will rise and explain by what probable method that dog learns when the hour of eight has arrived. I might add that the clock does not strike. AMIGO.

Sacramento, Cal., Feb 9.

PASSENGERS AND DOGS FOR BOSTON BY THE FALL RIVER LINE.—For the benefit of those of your readers who may wish to attend the coming Bench Show in Boston this month, I beg to say that this line will sell tickets to Boston and return at $5 for the round trip. No charge will be made for dogs to be exhibited. GEO. L. CONNOR, Gen. Passenger Agent.

FINE DOGS FOR BOSTON.—Mr. P. H. Morris will exhibit at the Boston Bench Show the flower of his kennel. Lark, the champion; the field trial Czar, by Champion Lester, out of Champion Petro; Sultana, by Champion Lester, out of the pure Laverack Peeress, and Ida, by Champion Rob Roy, out of Mr. Whittman's Mell.

BALTIMORE BENCH SHOW.—Premium list of the Bench Show to be held at the Masonic Temple, April 23, 24, 25, 26, under the auspices of the Baltimore Kennel Club:

DIVISION I—SPORTING DOGS, CHAMPION CLASS.

Class 1—English Setters—Imported and Native—For the best dog, $50; for best bitch, $50.

Class 2—Irish Setters—Imported and Native—For best dog, $50; for best bitch, $50.

Class 3—Gordon Setters—Imported and Native—For best dog, $50; for best bitch, $50.

Class 4—Pointers—Imported and Native—For best dog, $50; for best bitch, $50.

OPEN CLASSES.

No dog or bitch is qualified to compete in classes 5, 6, 7, 8, 9, 10 and 11 that has ever won a first prize at Chicago, Baltimore, New York, St Louis or Boston Shows.

Class 5—English Setters—Imported, or their progeny—For best dog, $30; for second best dog, $20; for best bitch, $30; for

second best bitch, $20; for best dog puppy under 12 months of age, $15; for best bitch puppy under 12 months of age, $15.

Class 6—English Setters—Native—For best dog, $30; for second best dog, $20; for best bitch, $30; for second best bitch, $20; for best dog puppy under 12 months of age, $15; for best bitch puppy under 12 months of age, $15.

Class 7—Irish Setters—Imported or their progeny—For best dog, $30; for second best dog, $20; for best bitch, $30; for second best bitch, $20; for best dog puppy under 12 months of age, $15; for best bitch puppy under 12 months of age, $15.

Class 8—Irish Setters—Native—For best dog, $30; for second best dog, $20; for best bitch, $30; for second best bitch, $20; for best dog puppy under 12 months of age, $15, for best bitch puppy under 12 months of age, $15.

Class 9—Gordon Setters, black and tan or black, white and tan—Imported and Native—For best dog, 30; for second best dog, $20; for best bitch, $30; for second best bitch, $20; for best dog puppy under 12 months of age, $15; for best bitch puppy under 12 months of age, $15.

Class 10—Pointers, large—Imported and Native—Dogs 55 lbs. and upward, bitches 50 lbs. and upward—For best dog, $30; for second best dog, $20; for best bitch, $30; for second best bitch, $20.

Class 11—Pointers, small—Imported and Native—Dogs under 55 lbs., bitches under 50 lbs.—For best dog, $30; for second best dog, $20; for best bitch, $30; for second best bitch, $20.

Class 12—Pointer Puppies—For best dog puppy under 12 months of age, $15; for best bitch puppy under 12 months of age, $15.

Class 13—Chesapeake Bay Dogs—For the best dog, $25; for second best dog, $15; for best bitch, $25; for second best bitch, $15; for best dog puppy under 12 months of age, $10; for best bitch puppy under 12 months of age, $10

Class 14—Irish Water Spaniels—For best dog or bitch, $20; for second best, $10.

Class 15—Retrieving Spaniels, other than pure Irish—For best dog or bitch, $20; for second best, $10.

Class 16—Clumber Spaniels—For best dog or bitch, $20; for second best, $10.

Class 17—Cocker Spaniels—For best dog or bitch, $20; for second best, $10.

Class 18—Fox Hounds—For best couple, dogs or bitches, $25; for second best couple, $20; for third best couple, $15.

Class 19—Harriers—For best dog or bitch, $10; for second best, $5.

Class 20—Beagles—For best dog or bitch, $10; for second best, $5.

Class 21—Dachshunds—For best dog or bitch, $20; for second best, $10.

Class 22—Greyhounds—For best dog or bitch, $10; for second best, $5.

Class 23—Fox Terriers—For best dog or bitch, $20; for second best, $10.

DIVISION II—NON-SPORTING DOGS.

Class 24—Mastiffs—For best dog or bitch, $20; for second best, $10.

Class 25—St. Bernard's—For best dog or bitch, $20; for second best, $10.

Class 26—Newfoundlands—For best dog or bitch, $20; for second best, $10.

Class 27—Shepherd or Colley Dogs, Rough—For best dog or bitch, $20; for second best, $10.

Class 28—Shepherd or Colley Dogs, Smooth—For best dog or bitch, $20; for second best, $10.

Class 29—Dalmatians or Coach Dogs—For best dog or bitch, $10; for second best, $5.

Class 30—Bulldogs—For best dog or bitch, $10; for second best, $5.

Class 31—Bull Terriers—For best dog or bitch, $10; for second best, $5.

Class 32—Black and Tan Terriers, Exceeding 11 lbs.—For best dog or bitch, $10; for second best, $5.

Class 33—Black and Tan Terriers, not Exceeding 11 lbs—For best dog or bitch, $10; for second best, $5.

Class 34—Skye Terriers—For best dog or bitch, $10; for second best, $5.

Class 35—Yorkshire Terriers—For best dog or bitch, $10; for second best, $5.

Class 36—Dandie Dinmont Terriers—For best dog or bitch, $10; for second best, $5.

Class 37—Scotch Terriers—For best dog or bitch, $10; for second best, $5.

Class 38—Toy Terriers—For best dog or bitch, $10; for second best, $5.

Class 39—Pugs—For best dog or bitch, $10; for second best, $5

Class 40—Italian Greyhounds—For best dog or bitch, $10; for second best, $5.

Class 41—Miscellaneous—For best dog or bitch, $10; for second best, $5.

No dog belonging to the club will be entered for competition.

Chas Lincoln, Supt.; L. R. Cassard, Sec'y. P. O. Box 767.

VISTF—*St. Louis.*—Jno. W. Munson's lemon and white pointer bitch Queen, to E. O. Sterling's Sleaford, February 4. Queen won second in class 11—large pointer bitches—at St. Louis show, beating Mr. Thomas' Pride (the winner of seventy prizes in England), Mr. Orgill's Romp and Mr. Waddell's Fan.

WHELPS—*St. Louis, Feb.* 16.—Jno. W. Munson's red Irish bitch Kate, imported by C. H. Turner, thirteen whelps; to St. Louis Kennel Club's Sting II., little brother to Champion Loo, II.

Pittsburg, Pa., Feb. 23.—Setter Nellie, five dogs and one bitch; all doing well and very promising.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
March 8	1	58	10	66	10	02
March 9	2	31	11	33	10	44
March 10	3	10	0	01	11	32
March 11	3	54	0	46	M	
March 12	4	48	1	33	0	59
March 13	5	52	2	29	2	09
March 14	7	02	3	37	3	23

A CANOE CRUISE THROUGH LONG ISLAND SOUND.

[The writer would be pleased to correspond with any canoeists, and to answer any inquiries from any one interested in canoeing. Letters may be addressed to "Jersey Blue," at this office.]

One pleasant morning in last August we launched our boat on one of the rivers running into Staten Island Sound, for a cruise through Long Island Sound. Our craft was of the Nautilus model of canoe, 14 feet long, 28 inches wide, and 9½ inches deep amidships, carrying mainsail, foresail and jib, and weighing, all loaded, 139 lbs., divided as follows: Boat and rigging, 86 lbs.; camp outfit, 15; provisions, 25; clothes, 13. In the bow we carried a frying-pan, coffee-pot, kettle, etc., aft of which was a tin box containing sugar, coffee, rice, etc., on top of which lay a woolen blanket. On the sides of the well were strapped a rubber blanket and apron, an oil-skin coat and a rubber cap, and aft of these were hung two tin pockets, one holding lunch for the day, and the other guide book, tide tables, yacht signals, postal cards, cord wire, white lead tacks, knife, etc. Aft of the well were stowed a canvas bag of clothes, a bag of ship-bread and other articles, while a tin tray, hung under the after deck, kept our hooks secure and dry. A bottle of ink, a pen and tooth-brush, completed our outfit. Thus equipped we started off, and, after stopping a little further down for a final good-bye, the Captain waved his hat to the man at the wheel, fixed both feet against the foot-board, and the crew with a cheer settled down to a slow, steady sweep, which soon left our friends behind, and we were fairly started on our voyage, alone in (to us) unknown waters. Paddling on through the Kills and past Staten Island, then across the upper Bay, we reached Governor's Island at 3:30 P. M., where we stopped to take in all sail, in order to have a clear view through the crowded East River; then pulling into the Buttermilk Channel we felt the full force of the ebb tide. Paddling on with difficulty we passed under the bridge without striking top-masts, and after two hours were only at the Navy Yard. Here we stopped alongside the Monongahela, talking with the officers and men who were all idling at the vessel's side, the day's work being just over. At slack water we started on, and soon the stars came out, and it was very quiet on the river. Off Tenth street we hailed a canoe, which proved to be the "Bessy," of the N. Y. Canoe Club, with the Commodore on board. After comparing notes we separated, and, continuing our way leisurely, enjoying the summer twilight, reached Hallett's Point at 8:30, where we waited for flood tide until 9:30, when, the moon being up, we started on through Hell Gate. The passage was most beautiful and exciting; all alone in our light boat, not a vessel in sight, under the bright moonlight, and the water boiling and seething like an immense caldron as we shot through on the top of the flood tide. Then came a hunt for a camping ground. Landing on Riker's and Berrian's islands, both proved so muddy we could not get the boat ashore, and not until 11 o'clock did we find a safe harbor at Bowery Bay. Securing the boat and spreading our blankets near—too tired to get supper—we were soon asleep, in spite of many mosquitoes, the only time they troubled us on the cruise. Rising before daylight we took a hasty breakfast, and pulling on, passing the Sound steamers just coming in, made Whitestone, where we stopped to report our *yacht*, and to get news of the race of yesterday between Courtney and Riley; then taking in fresh water we ran under main and fore before a light breeze, keeping near the north shore; now running in some harbor, then among islands, then off to hail some yacht, or stopping to chat with a fisher, until about five o'clock, when a thunder storm came up suddenly, making us seek shelter on Long Neck Point, the handsome residence of Mr. Collender. Landing near his boat-house we soon had all snug under hatches, and the storm being soon over but the Sound rough, we obtained permission to stay over night in the boat-house. Moving in we went to housekeeping, and spread our supper on a bench; then, after posting our log, we sat for some time watching the rainbow, reaching from shore to shore, and the Sound still covered with white caps, until at dark we turned in on the floor. After a good sleep we had a swim before breakfast, then off at seven we found the wind ahead. Paddling on we stopped at Cedar Point and took dinner with a picnic party we met there; then we ran into Blackrock Harbor, past Bridgeport and on to Stratford Light, where we sighted the first porpoises we had seen (very near the boat); then on across the mouth of the Housatonic, until at dusk we struck a rocky shore, along which we groped for two hours before finding a landing at Merwin's Point. Next morning we pulled on past Savin Rock, and at 11 o'clock we reached Yale's boat-house. To describe the house and navy would take too long, but both deserve mention. While here a Yale man came in in an Adirondack boat, who left New York shortly after us, just returning from a trip to the Adirondacks. We compared notes and examined each other's boats; then, after a bath and some repairs to our toilet, our crew started for a cruise ashore for several days. Returning to New Haven Monday morning we found a stiff breeze off shore and a chop sea. Running out of the harbor under foresail, with peak lowered, we raised mainsail off Five mile Point, and ran all day before a stiff breeze and high sea, until at night we landed on Cornfield Point, at a deserted fishing camp. Next morning it was blowing hard, with rough water. An hour's sail brought us to Sayhrook Light, where a breakwater of rip-rap runs out for some distance. Not knowing the locality we kept close in shore, expecting to find a passage back of the Light, but finding none we had to beat out around the breakwater. A little way out we felt the full force of wind and tide; the waves ran higher than the mast-head, and the situation soon became critical. We could make no headway against the wind, and were drifting on the rocks. Once we were in the trough, beam on, but letting fly both sheets we seized the paddle and got her head on just as two large waves broke over her. Rolling down on us they struck the crew full in the breast, drenching them and nearly swamping the boat, while the foresail, flapping in the wind, tied the sheet in knots, which cut the face and eyes like a whip, nearly blinding us for the time. We were now near the end of the breakwater, and there were openings among the rocks at intervals. Making for one of these, about as long as the boat, but with one rock a foot above water in the centre, we hoped to jump out and lift the boat over before she was stove; but before we could land a wave struck us underneath, lifting us over all obstacles and dropping us gently in still water to leeward. It all passed so quickly that the danger was over before we fairly realized it; but looking at where we had passed we felt how near our boat had been to destruction. Pulling rapidly ashore we were met by the keeper and some persons on the beach who had been watching us, and after bailing out the boat and securing her we were soon seated near the light-house fire, drying out and enjoying our second breakfast. The wind continued to rise, and the breakers rolled in over the bar in a most inviting manner, but we had had enough of the perils of the deep for that day.

After a stroll through Saybrook, we spent the afternoon in putting things in order and in washing our wardrobe. We spent the evening reading Tom Sawyer in the light-house parlor, and slept there all night. During the night the wind subsided, and in the morning it was clear, with light wind and smooth water. Paddling and sailing alternately, we passed New London and Stonington and made Watch Hill at 5 P. M. We made our first landing in the surf here, and though it was very light we shipped some water, and after getting ashore found we could have landed on the west side in still water, at the very door of the boat-house. The light-keeper, Captain Crandall (an old Arctic whaler, and looking like Neptune himself, with his long gray beard), was soon on hand, attended by his six blooming daughters, and he helped us to carry our boat to the life-saving station erected by the Seamen's Aid Society, and there, surrounded by relics of the ill-fated Metis, we heard from Captain Jored the story of her loss in a summer storm five years before on this spot. Going up among the hotels we procured a file of New York papers and settled down to read and listen to a band playing our old college songs. After spending the evening with some friends we spread our blankets under the lee of a surf-boat on the beach, and with the wind northeast and the promise of a rainy day, we went to sleep to dream of the Metis. The next morning we were awakened by a lobster fisher coming down to his boat. Taking an early leave of Captain Jored (who gave us a life-preserver from the Metis, which made an excellent seat) we hoped to make the thirty-two miles to Newport by night; but though the day was fine and the Atlantic smooth, with only a gentle roll, we had wind and tide dead against us. Three hours' paddling brought us only nine miles; and, finding the wind rising, we put into a small creek connecting a pond inland with the ocean, thinking to rest awhile. Here is a small settlement called Inonochoutaug, consisting of about twenty frame cottages, called "camps," occupied in the summer by people from the surrounding country who come to enjoy the bathing, which is very good. We landed near a "camp" occupied by three fishers, expecting to start on soon; but, the wind rising, the owner of the "camp," Captain Peckham, told us we were in for a "norther," and would have to stay some days. Then, seeing we were a stranger there, he kindly offered us a room in the camp, and with his help, placing the boat in safety, we moved our traps and provisions, and were soon established by the fire helping to get dinner. Soon it began to rain, and being short of reading matter, and knowing no one, we were very lonely, but every one was very kind and hospitable, and soon we were completely at home. When the storm was over and we were reconciled to what at first seemed like imprisonment, we began to appreciate the beauties of Inonochoutaug. It being time for the equinoctial, we decided to go no further east, and it was not without regret that after five days we turned our back on Inonochoutaug and started west again. The day was perfect, no wind, the ocean smooth as a mill-pond, and just cloudy enough to break the heat of the sun. Starting at 6:50 A. M. at slack water, we paddled back past Watch Hill and Stonington, making the twenty-five miles to New London by 12:30. Putting our craft aboard a propeller, we went for a stroll around the quaint old town, returning on board about 4 o'clock. About 6 we left the dock, passing a number of yachts coming in as we went out. After playing cribbage for a while, we sat up until late in the pilot-house, turning in on the messroom floor until 5 When we rose we were off the Stepping Stones and two hours' run brought us through the gate and up to Pier 36 East River, where we launched at 7:30 on the last of the ebb. Our provisions were nearly gone, but we had enough for breakfast and lunch, and hoped to make home early in the afternoon, so we did not wait for fresh supplies, but pulled around to Jersey City where we hailed some friends on a passing ferryboat, and then started for the Kills against wind and tide. Looking for our breakfast we found it spoiled by salt water, accidentally, and had to go without until (after three hours' hard work against a chop sea, the pest of canoeists) we made New Brighton at 12, completely exhausted. A rest and a visit to a baker's soon revived us, and we pursued our way, with the tide against us at every turn, until after a hard and tiresome day's work we made port at 6:30 P. M., and, housing the boat, we reached home soon after, in the concluding words of our log, "dirty, dead broke, tired, and mess-chest empty, but happy." Wherever we went our boat excited curiosity, and we never stopped long before a number of people came to "see the little boat from beyond York," Jersey being a *terra incognita* to many. No matter how small, old, and battered a boat a man might be in, he would invariably caution us to keep "*very* close in shore in that thar." The first inquiry on landing was, "Whar be yer come from in that thar?" and when told, the answer often was an incredulous "Naw yer didn't;" but we met with a kind reception everywhere, and polite answer to our questions, the only rudeness shown us being by Brooklyn boys, who stoned us from a dock where we took shelter. We have learned several precautions from experience, each being impressed on our mind through some discomfort caused by neglect of it, and we give them for the benefit of other canoeists. Never start for even a day's paddle without provisions, fresh water, blankets and reading matter, for with them you can pass the time almost anywhere, and you may be caught in a storm and have to take shelter where you can obtain neither. Always keep the arms and feet protected from the sun when wet with salt water, as the combined effect of the two is very painful. If possible, find a camping place before sunset, or you may have to grope your way for miles in the dark, when tired, along some rocky shore or mudflat. Always carry your paddle where you can use it instantly in case of accident, and have sheets and halyards coiled down out of the way, and the apron so secured that you can free yourself from the boat instantly. Always look out for the tide when camping, or you may be high and dry in the morning, or driven from your bed at night. We had to travel all day without a backboard, on a previous cruise, the tide rising and carrying it off at night. A good map is necessary, but clumsy and expensive. We trace ours in portions a foot square on tracing cloth, and carry them in easy reach, while the original map is wrapped in oilcloth and stowed forward to be consulted on shore. We also carried a table of distances written out from the map, which was very convenient. If our log should add but one to the number of canoeists we shall be well repaid, and we hope all our readers who try it may enjoy it as much as we do, and, if stormbound, may find as safe a haven and as pleasant friends as we did at Inonochoutaug.

JERSEY BLUE.

CHICAGO BARGE CLUB.—The officers for the ensuing year are: Pres., Wm. A. Angell; Vice Pres., T. S. Fauntleroy; Treas., F. L. Stevens; Sec., Leonard E. Reihold; Capt., L. D. Powers; Coun., Wm. W. Young; Lieut. Com., Chas. S. Gardner; Ensign, Fred. Swift; Board of Managers: Chas. S. Gardner, E. F. Cragin F. B. Hamilton, Henry Tift, L. D. Powers.

—The Electric Boat and Athletic Club, of New York, at their annual meeting, elected the following officers: Pres., Jos. C. Vetter (re-elected;) Vice Pres., Magnus Winter; Treas., P. R. Eppelsheimer; Rec. Sec., John W. Lewerth; Fin. Sec., Louis Siebert; Trustees, Rudolph Bollman, John Findel; Superintendent, George Hartwig.

CALIFORNIA.—*San Francisco, Feb.* 12, 1878.—A match for four-oared boats has been arranged between the Ariel and California Theatre boat clubs, of this city, to take place at 1 P. M. on the 24th inst. The crews selected are as follows: Ariel.—A. Rodgers (stroke), L. Stevenson (bow), K. Flanders and F. Smith. California.—Tom Grossman (stroke), J. Harrington (bow), J. Roman and J. Winters.

—*Bell's Life* says that probably neither Higgins nor Trickett will visit America this summer.

—The Boston Y. M. C. A. gymnasium has a rowing crew of six.

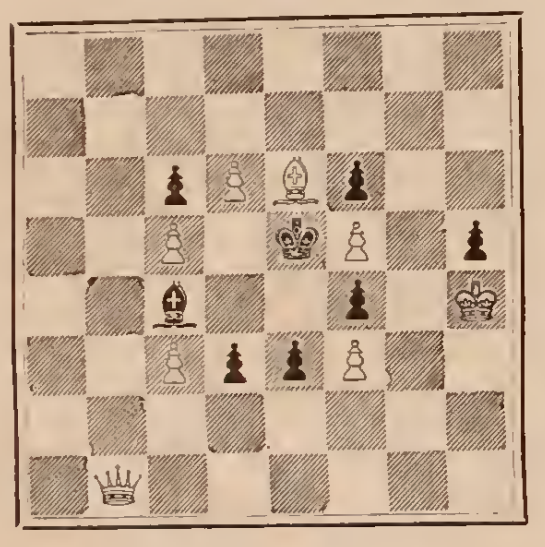
—Mr. Eugene Smart, of Dover, N. H., is building a new steam propeller yacht, 52 feet long and 14 feet beam, which will accommodate one hundred persons in the cabin. It is to take the place of the yacht sold last year by him to Messrs. O. & C. Laighton, of the Appledore and Oceanic Houses at the Shoals, and is expected to be ready to be launched about the middle of March. She is to be finely appointed in all respects, and will be a first-class boat in every way. Mr. J. H. Dyer, of Portland, Me., is the builder.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 8.

Tourney set, No. 6. Molto—S—tr Q—uickly U—nderstand, A—nd R—emember E—ver C—hess I—s R—oyal. C—hess L—ives E—ternally.



White to play and give mate in three moves.

CHESS IN AUSTRALIA.

Game No. 20.—KING'S BISHOP'S GAMBIT.

A capitally-contested gambit, fought in Adelaide, August 24, 1875:

White. Mr. H. Charlick	Black. Mr. T. G. Randell (of Maunum)	White. Mr. H. Charlick	Black. Mr. T. G. Randell (of Maunum)
1—P-K4	1—P-K4	29—Q-Kt2 (f)	29—K-B2 (g)
2—P-K B4	2—P tks P	30—Q-K5	30—Kt-B3
3—B-B4	3—P-K R4 (a)	31—B tks Kt	31—K tks B
4—P-Q4	4—P-Q3	32—Q-K4 ch	32—K-B2
5—Q B tks P	5—Q-B3	33—Q-R4	33—P-Kt4 (h)
6—Kt-K2	6—Kt-Q2	34—Q-B3	34—P-Kt5
7—Castles	7—P-K Kt3 (b)	35—Q-Q Kt3	35—K-Kt
8—B-K5	8—P tks B (best)	36—K-Kt	36—B-R4
9—K tks Q	9—K Kt tks R	37—Q-Kt5 (i)	37—P-Kt3
10—P tks P	10—B-E4 ch (best)	38—Q-Kt8	38—P-R5
11—K-R	11—Kt-Q2 tks P	39—R-K B	39—K B2
12—Kt-Q4 (c)	12—Kt tks K P	40—Q-K3	40—Q R-Q5
13—Q-K2	13—P-B4	41—Q K5 ch	41—Q R-Q3
14—P-B3	14—B-Q2	42—Q-R4	42—P-K16
15—Kt-Q2	15—Castles'	43—P tks P	43—P tks P
16—Kt tks Kt	16—P tks Kt	44—Q tks P	44—K-B3
17—Kt-K6	17—B tks Kt	45—Q-B3 ch	45—K-B2
18—B tks B ch	18—K-Kt	46—Q-B4	46—K-Kt2
19—P-Q Kt4	19—B Kt3	47—Q-K4 ch	47—K-B2
20—P-Q R4	20—P-R4 (best)	48—Q-K5	48—K-Kt2
21—P tks P	21—B tks P	49—R-B3	49—K-R2
22—Q-Kt5 (d)	22—Kt-B3 (best)	50—Q-K4	50—R-Kt2 best (j)
23—R-Q Kt	23—B-Kt3 (best)	51—Q-K3	51—R-Q8 ch
24—B-Q5	24—R Q3	52—K-B2	52—R-Q7 ch
25—B tks P	25—K R-Q	53—K-K3	53—K-Kt3 (k)
26—B-B3	26—Kt-R4	54—Q-R8 ch	54—R-R2
27—P-B4	27—P-B4	55—Q-B8 ch	55—R-Kt2
28—B-Q5	28—K R-Q2 (e)	56—K-B7 and Black resigns.	

NOTES.

(a) A *bizarre* defence, which has nothing but novelty to recommend it.

(b) Black's eccentricities end here. They cost him his Q for a R and B, and he now sets to work most skillfully to retrieve himself. His play is remarkably good and careful. His defence is a model of its kind.

(c) Although having the superior force, White has a very difficult game. If Kt-Q2 or B-Q3, Black can effectively reply with Kt-Kt5. The text move is the result of careful calculation, and is a fortunate resource, for if Black takes B White plays Kt-Q Kt5 menacing Kt tks P ch, or Q-K Battacking both Kts. The play on both sides now becomes animated and interesting.

(d) If 22— ——, 22—B tks P; 23—R-Q Kt, 23—P-Q Kt3; 24—P-Q R5, and wins.

(e) Mr. Randell has beautifully deployed his forces for defence. Every point is guarded.

(f) White being unable to make an impression, performs the perilous military manœuvre of a change of front in presence of the enemy.

(g) If K tks P White retakes covering with B-K B if R then checks.

(h) Good. If Q tks P Black mates in two moves

(i) Enticing Black to force an exchange of R's by R-Q Kt3, because after Q had taken Kt-Q7, White's position would be improved. If 38—Q tks B, Black would turn the tables by R-Q8 ch. Black's reply is ingenious, but it leaves one vulnerable point, which White now step by step proceeds to assail. The end game is most instructive, especially as the defence is best under the circumstances.

(j) If R-Q. White R tks R and then plays Q-K7 ch, winning off-hand.

(k) If 53— ——, 53—P-Kt4; 54—Q-R8 ch, 54—K-Kt3; 55—R-B5 ch, 55—K-B2; 56—Q tks B ch, and wins.

Time, two and a half hours.

CHESS IN MICHIGAN.

Game No. 21.—SICILIAN OPENING.

Played by telegraph between the Ann Arbor and Jackson, Mich., Chess Clubs:

White. Ann Arbor.	Black. Jackson.	White. Ann Arbor.	Black. Jackson.
1—P-K4	1—P-Q B1	16—Q tks Q †	16—K tks Q
2—P-Q4	2—P tks P	17—Castles (e)	17—S-K B3
3—S-K B3	3—P-K4	18—S-B5	18—S-B5
4—K-B B4	4—P-K R3 (a)	19—S-B1	19—P-Q S4
5—P-B3	5—Q-B2	20—P-K R3	20—S tks B
6—Q-S3	6—P-Q3	21—S tks S	21—B-Q B4
7—P tks P	7—S-Q B3	22—S-Q5	22—K-K8
8—B-K3 (b)	8—S-R4	23—Q-R Q1	23—R-Q B3
9—B-S5 †	9—B-Q2	24—P-Q R4	24—P tks P
10—B tks B †	10—Q tks B	25—P tks P	25—K-R Q B1 (l)
11—Q-B3 (c)	11—P-Q S3	26—PP-Q R5	26—R-Q S1
12—P tks P	12—R-B1 (d)	27—Q-R Q S1	27—R tks R
13—Q Q3	13—S-B5	28—R tks R	28—R Q5
14—P-Q S3	14—S tks K P	29—R-S7	29—B-B4
15—S tks S	15—P tks S	Drawn game.	

NOTES.

(a) An unusual move, but a good one, we think.

(b) Much preferable is 8—P-Q5, blocking up the Black King's side for a long time. His replying by 8—Kt-R4 would have been harmless: 8—P-Q5, 8—Kt-R4; 9—B-Kt5, 9—B-Q2; 10—Q-B3, with the better game.

(c) Why not 11—Q-Q5?

(d) Well played. Black now gets the advantage and ought to keep it.

(e) A mistake. The King will be wanted as a fighting-piece, and should have gone at once to K2.

(f) Better have played P-K B3.

(l) Up to this stage the game was played by telegraph; the conclusion is by postal card.

SPLIT BAMBOO RODS.

To our customers and the public:—In reply to the damaging reports which have been circulated respecting the quality of our split bamboo rods, by "dealers" who are unable to compete with us at our reduced prices, we have issued a circular which we shall be pleased to mail to any address, proving the falsity of their assertions.

CONROY, BISSETT & MALLESON,
Manufacturers, 65 Fulton Street, N. Y.

Sea and River Fishing.

FISH IN SEASON IN MARCH.

SOUTHERN WATERS.

Pompano, *Trachynotu carolinus.*
Drum (two species). Family *Sciænidæ.*
Kingfish, *Menticirrus nebulosus.*
Sea Bass, *Seænops ocellatus.*
Sheepshead, *Archosargus probatocephalus.*
Snapper, *Lutjanus caxus.*
Grouper, *Epinephelpus nigritus.*
Trout (black bass), *Centropristis atrarius.*
Striped Bass, or Rockfish, *Roccus linnatus.*
Tailorfish, *Pomatomus saltatrix.*
Black Bass, *Micropterus salmoides; M. nigricans.*

FISH IN MARKET—RETAIL PRICES.—Owing to the stormy weather fish are scarce and prices naturally advanced. Striped bass, 18 to 25 cents; smelts, 18; bluefish, 15; frozen salmon 35; green do., $1.50; mackerel, 25; Southern shad, 50 to 90 cents; white perch, 15; Spanish mackerel, 35; green turtle, 18; terrapin, $24 per doz.; halibut, 18; haddock, 8; codfish, 6 to 8; blackfish, 15; flounders, 6 to 8; sea bass, 15; eels, 18; lobsters, 10; sheepsheads, 25; scallops, $1.50 per gallon; soft clams, 30 to 00 per 100; whitefish, 18; pickerel, 15; salmon trout, 15; frost fish, 6; Newfoundland herring, 6; turbot, 20; red snapper, 18.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals the past week has been 14. The Bank arrivals numbered 4. The number of Georges arrivals for the past week has been 5, bringing about 225,000 lbs. round codfish and 5,000 lbs. halibut. The arrivals will soon be more numerous, and good fares may be expected to be the rule for a few weeks to come. The receipts of herring for the past week have been 3 cargoes pickled and 2 cargoes frozen from Grand Menan. One of the latter vessels belonged to the Newfoundland fleet, and failing to secure a cargo at Fortune Bay, proceeded to the Bay of Fundy, where the catch has been unusually large.—*Cape Ann Advertiser, March* 1.

MENHADEN VS. WHALE.—As Professor G. Brown Goode showed to the members of the American Fishcultural Association that it was the menhaden which supplied the oil used in large quantities in the United States in lieu of the whale, some statistics taken from New Bedford may be of interest. With sperm oil at $1.03, and right oil at 50 or 60 cents, any margin of profit is impossible. If it was not for the whalebone the business would be entirely abandoned. The tendency seems to be at present to keep vessels nearer home, thus reducing the cost of expeditions, and securing more rapid sales. Therefore the Arctic fishing has been much diminished. In 1856 some 196 whalers sought the Western Pacific and Sooloo Sea; to-day not more than 20 vessels chase the whale in Arctic zones. It looks as if, considering the immense losses met at the Northern and Southern Poles, whaling in the ice will be, before long, virtually abandoned. If, then, the small menhaden takes the place of the huge whale, why should we complain? Possibly we shall make an artificial whalebone some of these fine days. We are pretty near it now.

NEW YORK—*Dansville, Feb.* 25.—Pickerel fishing through the ice at Honeoye Lake is now the pastime, and fishermen for miles around are flocking thither. This lake is in Ontario county, about twenty miles from Dansville. No less than one hundred and fifty men have been on the ice fishing every day for the last month. The catch has been enormous, a ton a day being a light estimate, and yet there seems to be no diminution in the quantity and appetite of the fish. In fact it has developed into quite an industry, and sleigh loads are being sold out here and in neighboring towns at eight cents a pound. There are some doubts as to the legality of taking pickerel at this season of the year from Honeoye. But fishermen have taken the benefit of the doubt, and are turning it to good account. There is no fear of molestation from people living in the vicinity of the lake, even though it be proven against the law to fish there, for, owing to the shallowness and warmth of the water, the pickerel breed in such vast quantities that, it is claimed, the lake becomes overstocked, and during the summer, unless thinned out by catching, thousands of fish die, are washed upon the beach, decay and emit an intolerable stench perceptible miles away. That the fish die in great numbers oftentimes I know from personal observation. But whether it is owing to the causes claimed by the inhabitants, I am not enough of an ichthyologist to determine. H. W. DE L.

TENNESSEE—*Columbia, March* 2.—River in fine condition for fishing; mullets and suckers being taken in quantities. Trout (bass) are wary, and few caught. Some fine Reelfoot Lake trout in market. VAL.

MICHIGAN—*Belding, March* 1.—Asa Fuller, of Belding, Ionia county, returned from Crooked Lake last week, with twenty-two of the finny tribe, ten of which averaged 10 pounds apiece; and one weighed 17 pounds.

OHIO.—A Youngstown correspondent writes of a pleasant fishing excursion on the Mahoning River, where the pike trolling affords plenty of amusement for the angler. A fish measuring three feet in length fell to his lot, while his companion, after a stubborn combat, safely landed one of twenty-six and a half pounds weight. Two more, equally plucky, completed the string for the day.

THE ORVIS ROD BY MAIL.—According to the decision of the Acting Assistant Postmaster General, packages of first or third class matter, of four pounds, are to be considered as mailable matter, irrespective of the shape of mail bags. Mr. Charles F. Orvis' rods come under this provision. Postage, then, on the Orvis rods is 35 cents for his Nos. 1, 2, 5, 6 and 7 rod; 40 cents for his No. 3, and 55 cents for the No. 4. Mr. Orvis is then prepared to send his rods in wood cases through the mails.

MR. KILBOURNE'S PICTURES.—The walls of the room where the fish cultural meeting was held were graced by pictures of fish painted by Mr. S. A. Kilbourne. A striped bass and a land-locked salmon were exceedingly well executed, not only truthful in a scientific way, but painted with great strength and power of coloring. Mr. Kilbourne is the special artist in fish, devoting his time and talent to these special subjects.

ANGLING IN MASSACHUSETTS.

TAUNTON, Feb. 6, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

During the past three months I have carefully noted what your correspondent "Splasher" and others have said about bass fishing. Perhaps you would like the account of my experience. The method invented by "O'Verlens" is practiced about here with success and also in New Hampshire.

In Bristol and Plymouth counties, Mass., there are a vast number of little trout streams and small ponds almost unknown to metropolitan anglers which, with a little perseverance, wou'd yield immense numbers of fish. Natives of the latter county assure me that it contains 365 fish-producing ponds. About eleven miles east of this city are situated the Middleboro ponds, the largest group of fresh-water lakelets in this State. They are connected by brooks, the three principal being Assawampsett, Quittacus and Long, which eventually empty into the Taunton River. They were early stocked with white perch and with black bass in 1865 or 1866 in consequence of an accident to a shipment intended for some other waters.

One morning last summer I received an invitation to go a fishing, and at four A. M. was awakened, and in half an hour three of us were on the road eastward for our fishing ground.

The view approaching the pond is charming. As you pass over the brow of a hill you look down upon a little lake about three miles long and half as wide with densely wooded shores in part, and here and there a high bluff. Along the shores are neat, comfortable farm houses and country residences. We set sail with an easterly breeze and made our way to the southeasterly end of the pond to a brook where bait was sure to be found. A better habitation for black bass I never beheld; well wooded banks, rocky shore and bottom and good clean water. We landed on a sandy beach where we stripped and drew the mosquito net seine for young herrings. On our left was a long point on which was a little cabin and a skillfully-constructed blind, where the owner of the boat told us he had great sport in winter shooting wild fowl. Last season he bagged seven wild geese in one morning.

The sun came out very hot and the wind died away and left us in a dead calm for the rest of the day. We had poor luck with the fish, and I will not state how few we brought home, but the purpose of my visit was accomplished. I became convinced that there were plenty of bass and perch in the grounds, and resolved to return to the places which our reconnoissance showed us to be good on a favorable day.

Accordingly, at about two P. M., a few days later, we started again for a somewhat nearer pond and were gladened by success. We carried as bait the common garden worms and added a lot of small minnows on arrival at the outlet. I had fished this pond before and taken twenty-one bass in an afternoon and felt sure of the supply, but was to learn a lesson about white perch that was as amusing as instructive.

The gentlemen with me all carried rods about twelve feet long, with about the same length of line, and a stout perch hook with sinker and bob. No reels. I had the best of bass rods, with reel and flies and artificial minnows and spoons, in short the best Bradford Anthony's tackle. While the rest walked off along the shore I volunteered with a companion to hunt up a row boat about a mile off. I trolled with small artificial minnows and two flies, getting only only one strike. As we neared the shore where our companions' rods were seen busily casting I noticed great splashes in the water in front of them. On closer approach I found them alternately casting out their hooks and throwing large stones into the water. I supposed, naturally, that bites were wanting and that they were plaguing each other. My astonishment was simply indescribable, when our bow grated on the shore beside them to find that they were as serious as deacons and were pulling out white perch by the dozen. On asking the reason of this extraordinary performance I was answered, "It's to make perch bite." I thought they were trying to make a fool of me. I noticed that besides "rocking" the perch they would splash and agitate the water violently with the points of their rods. Pretty soon one of them landed a fine bass and another a second one.

I began to believe. Taking a row of an hour in the boat, trolling without much success—owing to the boat, not the want of fish—I returned to the same ground whence the others had departed and carefully tested the "rocking" theory by practice. As I had never read or heard of anything of the kind before you may imagine my amazement at finding that it worked well. Almost every time a large stone splashed into the water our hooks were immediately fast to a white perch. Only one red perch was taken and no sunfish, though the water is full of them.

We returned at dark with exactly one hundred fish, the most delicious of the perch family, as I had proved to me the next morning at breakfast.

I am curious to know if this practice of throwing stones at fish to make them bite is new to your readers, or whether I am merely an ignoramus. The gentlemen here say it is a usage handed down from their forefathers and only prevails in this neighborhood. They surmise that the white perch being originally a native of salt water is used to heavy surf and mistakes the splashing for a shoal of small bait-fish breaking water. Is this so? I think I shall try a Gatling gun and a band of music next summer.

Another fact which may be of interest to trout breeders I will also give. A gentleman of this vicinity who has a fine pond full of noble trout was surprised to find that they were disappearing rapidly. As he had a high picket fence more than a rod from the stone embankment of the water he was at a loss to account for the success of the poachers until he detected one of the thieves shooting his baited line in among the trout with a bow and arrow from between the pickets—almost every shot being rewarded by the capture of a goodly fish valued at $1 per pound.

What next shall we hear of as a victim to the insatiate archers?

H. D. J.

BASS, AND BASS.

GLENS FALLS, N. Y., Feb. 24, 1878.

EDITOR FOREST AND STREAM:

In your issue of Feb. 14 "Greysteel" describes both the black and Oswego bass, in markings and game qualities, and had it not been for the letter which follows I should have thought in the dark gamy fish he caught black bass, and in the light colored fish that soon tired he caught Oswego bass.

In the letter of "T. W.," while the characteristics are the same, the form of the Oswego bass is given to the dusky game fish, and the form of the black bass to the lighter colored fish. Difference in water or food cannot make the change, for both fish are caught in the same stream, and I fear that upon investigation both sexes will be represented in the same colored fish, at least I have found it so. I have remarked, too, that the young of the black bass are lighter colored than when they attain a pound weight, or near that. I hope during the coming season that "Greysteel" and "T. W." in pursuing their investigations will look in the eyes of the fish, of both kinds, when first caught, for a small red dot, and if either give out a musky odor; if so, which? and if the curve at the end of the lateral line where the tail joins is double or single, and in which fish is the greatest change in coloring after death. I have never seen an Oswego bass with a red dot in his eye, nor with a double curve at the end of the lateral line, nor known him to give out the musky odor of the black bass, or show the dark bars of the black bass, or change in color after death like the black bass, or fight like the black bass. He will grow larger than the black bass, but he is a non-combatant compared to his dusky relative. No sooner does the bass question seem all right than it is found to be all wrong. Will not Uncle Seth step forward? Why does not Mr. Wood advertise his new bass fly, if they are for sale?

GLENS FALLS.

THE SINKS OF FLORIDA.

GAINSVILLE, Florida, Feb. 21, 1878.

EDITOR FOREST AND STREAM:

Here in Florida we are having warm, growing weather, although the season is a little backward. Garden produce is growing finely, with early peas on the table. The colored people report deer and turkey very plenty, four or five miles either side from railroad in this region (Spanish Grant).

Yesterday I visited "The Sinks," about a mile and a half from town. There are twenty or more of them, from twenty-five to one hundred and twenty-five feet deep, and from fifty to one hundred and fifty feet across at the top. They are very regular in shape; in fact look like large bowls sunk in the earth. The wild orange grows in great profusion here, and in one of the sinks I noticed a tree loaded with fruit. The sinks are nearly all dry, one or two having nice clear water, fit for drinking, which would make a splendid tank for keeping fish alive. These are on the border of a large lake six miles wide by twelve miles long, abounding in fish. Black bass, pike, two or three kinds of perch, roach, etc. Also countless numbers of ducks and blue peters, and some geese and crane. Twenty years ago the ground, now covered by this water, was all under cultivation, cotton and corn, the water being confined to a small stream, having an underground outlet which was by some means choked up, thereby forming the new lake. It is a natural curiosity and a great resort for the visitors at this place. The land around and in the sinks is owned by two enterprising citizens of this place who have laid out the lands and intend to put up a large hotel, and on account of its rare boating, fishing and hunting facilities I predict for it a liberal patronage.

CHAS. O. GRADWIN.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

C. R., El Paso, Ill.—Can you recommend a ——— breech-loader for $45 Ans. Yes, a very good gun.

G. C. B., Turner's Falls, Mass.—Did Bogardus in his match use the A, B or C Dittmar powder? Ans. The C.

HUNTER, Glen Centre.—Your communication wants your name in full. We never publish otherwise.

J. B.—For an 8 pound breech-loading gun, for glass ball shooting, use 3½ drs. powder, 1¼ oz. shot.

B. H. M., Franklin, Mass.—Where can I get a good stag hound? Ans. Of Dr. Charles Digges, Chestnut St., St. Louis.

W. L. M., Philadelphia.—Give me load for a 12 gauge 8 pound B. L. Remington? Ans. 3½ drs. powder, 1⅛ oz. shot.

BLUNDERBUSS, Denver, Colorado.—1. What is the weight of the iron Creedmoor targets? 2. Who makes them? Ans. 1. 40 lbs. to the foot. 2. Dimond, 209 W 33d st., N. Y.

W. D. H., Elgin, Ill.—The .22 cal. is a very close shooting arm. See the targets made as reported every week in the paper. A .32 would tear game. The .22 ought to make, in good hands, 35 or 40 out of 50. Use then the .22.

R. B. S., Boonoville, Miss.—Have a Dexter Smith single barrel. I want to buy shells for the gun. 1. Is the gun still manufactured? 2. What shells shall I use? Ans. 1. Makers are no longer in business. 2. Use extra paper shell 14 A, or a metallic shell 12 B.

F. L. C., Cleveland, Ohio.—Precisely the same kind of double shell was tried fully some three years ago, and did not produce any marked results. You are likely to spend time and money uselessly. Would say, Don't. There is no reason why it should present any advantages

E. F. Y., Boston.—A ball such as you describe—a bolt with spherical, or conical head and base, point and butt alike—would turn on itself and go in all directions. That similie so many people use, of a ball and a boat, is absurd. A boat goes through two mediums, a ball through one Next.

C. R. H., Newcastle.—My pointer dog received a scratch on the flank which has left a scar. Now, what can I do to make the hair grow so as to cover up the defect? Ans. It is not probable that the hair will grow again; friction with any simple stimulating lotion may promote growth to a limited extent.

A. C. T., Ashtabula.—Have a ——— and ——— gun, 10 gauge, muzzle-loading gun. At a thirty inch circle with 1¼ oz. shot and 4 drs. powder I put 374 shot with R. B. and 354 with L. B. at 40 yards. How does this compare with breech-loaders? Ans. Most favorably. You have made very good shooting.

J. VON L., New York.—Will this gentleman kindly inform us, when the paragraph in regard to the Dachshunde is found in the paper? We are afraid some typographical error has been made. We simply advocate two classes for these dogs. If a mistake has been made, we shall be glad to correct it.

D. and J., St. Louis.—1. Two dogs were imported. One year after importations the bitch has pups. Are these pups native or imported? 2. Where can the Complete American Trapper be had? Ans. 1. The puppies are native. 2. Published by J. Miller, 647 Broadway, N. Y. We can furnish the book.

BUTKO, Painted Post, N. Y.—My cocker spaniel has symptoms of chorea. First noticed it six weeks ago; have been giving nitro of silver without apparent relief; otherwise he is in good condition. Age ten months. Ans. History is insufficient. Probably ½ grain nux vomica three times a day might do good. Write us again more freely.

W., Cincinnati, Ohio.—Where is the nearest good fishing water to this city, and what fish are to be looked for? Ans. Excellent sport on trolling for black bass at Newport. Good bass and red eye fishing in the Licking River at Falmouth, and other points along the line of the K. C. R., in Pendleton county. Good bass fishing at Stamford, Lincoln Co.

SANKEY, Summit, Troy.—My red Irish setter dog pup, eight months old, is afflicted with reddened eyes, moist and slight discharge; also discharge at the nose. Good appetite, etc. The dog has plenty of exercise. Is this epizootic (if dogs ever have it), or is it distemper, first stages? Ans. Your dog probably has distemper. Dogs are subject to the epizootic.

HENRY H. THORP, Concord, N. H.—Where can I get, and what is the name of a book, giving pictures and descriptions of the foot-prints of animals; also, what will be the price? Ans. Hitchcock's "Ichnology" was published by the State of Massachusetts. It is now out of print, but can, perhaps, be obtained. Write to Leggatt Bros., 5 Beekman st., and let them hunt you a copy.

A. R. D., Washington.—Have a muzzle-loading gun, weight 16 pounds, barrels 9¾ pounds. Length of barrels thirty-six inches, diameter of barrel 13-16 of an inch. I use six drachms of powder and two ozs. of shot. 1. Would it be safe to shoot a solid round ball? 2. What would the ball weigh? Ans. 1. The gun would stand the ball perfectly. 2. About ten balls to the pound.

G. H. E., New York.—1. The hair around the eyes of my cocker spaniel has fallen off and her coat also; eyes do not seem to be sore. Tell me what would make her hair grow again. 2. Which do you think is the best for general work, cocker spaniels or setters? Ans. 1. Keep her in good health and the hair will grow all right again. 2. Could not answer unless we were further informed what want the dogs for.

H. C. L., Allentown.—1. Where is the land agent's office of the N. P. R. R., and what is his name? 2. Where are the places of business of Henry, of Edinburgh, and of Rigby? 3. Where is the place of business of Rogers & Son? Ans. 1. J. B. Power, St. Paul, Minn. 2. A letter addressed to Rigby, Dublin, or to Henry, Edinburgh, rifle manufacturers, would reach them without fail. 3. Rogers & Son is No. 6 Norfolk st., Sheffield.

A. B. V., Maine.—1. Please inform me the shortest string on record at 100 yards off-hand? 2. Does a round rifle barrel shoot more accurate than an octagon or half octagon? 3. What is the size of the bull's eye at the 100 yd. range at 200 Broadway? 4. Is the Sharps mid-range rifle as accurate as their long-range up to 600 yds.? Ans. 1. In match Mr. Joy made at Creedmoor funnel 48. 2. No difference. 3. Four inches. 4. Yes.

A. W. O., Boston.—Am going to Texas. Tell me which of the two guns to get for the shooting there—a breech-loading shot-gun, or a repeating rifle? 2. Is the composition called Babbit good for making bullets, and if too hard or soft, what shall I put with it to make it right? Ans. 1. If you have but one gun, take a good weight of 10 bore. 2. Babbit's metal is too hard. Use, if you want a hardened ball, ⅞ lead ⅛ tin. Would not advise Babbit's metal.

A. H. F., Contesville, Pa.—1. Can I get Dittmar powder in Philadelphia? 2. If not, where? 3. Price per pound? 4. Would it be safe to mix 2½ drs. Dittmar and ¾ dr. black powder for charge of 7¾ lb., No. 7, breech-loading gun? Gun was made by P. Webley & Son, England. Ans. 1. No agency in Philadelphia as yet, but will be shortly. 2. Nearest agency, Henry C. Squires, No. 1 Courtlandt st., New York. 3. Price per single canister $1, in larger quantities at lower figures. 4. It is perfectly safe to mix 2½ drs. Dittmar with ¾ dr. black powder.

NOVICE, Pottsville, Pa.—1. Have a 10 gauge gun, 32 inch, 8¾ pounds, muzzle-loader. The barrels weigh 5¾ pounds, heavy across the breech and are, I believe, what is called wire twist. I have killed a deer with it as far as 60 yards with buckshot, and pheasant as far as 80 yards with small shot. How shall I load it? 2. Yesterday one of our sportsmen shot a female fox, and in taking off the skin they found she was in whelp. Is he entitled to any premium for the four unborn whelps? Ans. 3½ drs. powder, 1¼ oz. shot. 2. Foxes in utero would not count.

H. P. S., New Brunswick.—My Newfoundland bitch pup, four months old, fed on table scraps, milk, bread and soup bones, cries in her sleep and jerks her legs. Thought she had worms. Gave her areca nut, but passed no worms. Has a large bolt on her left shoulder. Have poulticed it for three days, but it does not improve. Mouth looks purple. Has had sores on her lip. Bad appetite. Have given her oil. Never been lively. What shall I do? Ans. She is probably constitutionally unhealthy. Feed on milk and mush only and give two grains quinine three times a day.

WILLIS J. POWERS, Tomah, Wis.—1. Can you tell me where I can get a book instructing how to train or tame hawks? 2. In what manner can I catch old hawks alive without hurting them? Ans. 1. G. L. Freeman's "Falconry; Its Claims, History and Practice," and the authorities referred to therein, will give you fullest information on this subject. The work was published in London in 1859. 2. A steel trap, with the jaws covered with cloth, and set on top of a post in an open field, would perhaps do, but we would advise you to get young birds from the nest and rear them.

YOUNGSTER, Barren Hill.—1. What is termed a full choke-bore? What is a modified bore? What is a taper choke? 2. What would you call a good pattern at forty yards with a 17 gauge gun, two drs. of powder and ¾ oz. shot No. 8? Would 150 pages of the FOREST AND STREAM be equal to the pads shot at the trial of chilled shot? Ans. 1. Full choke is a rapid closing of the muzzle, a modified one is a gradual closing at some inches from the muzzle, and a taper cylinder is exactly what the words imply. 2. We can give no comparison between the sheets of this paper and regular target.

NEW SUBSCRIBER, Georgetown, D. C.—1. Is driving No. 3 or 4 shot with a No. 11 muzzle-loader, 3 drs. powder, 1¼ oz. shot, through ½ in. pine at 75 yards, good penetration? 2. What is the number of shot in an oz. of the different Nos. of shot? 3. Can you give me Holler & Sons' address, and what is their reputation? 4. Where can I purchase W. W. Greener's book on choke-borrs, and price? Ans. 1. Very excellent penetration. 2. To give this in *extenso* would take half a page of close figures. We trust to give it soon. 3. The address is Wesman st., Birmingham. 4. Mr. Squires, No. 1 Courtland st., New York.

J. C. C., Pottsville, Pa.—1. What is the extreme vertical height and horizontal distance that the Bogardus trap throws a glass ball? I mean approximately, and, of course, when the trap is new or in good working order. 2. Does Captain Bogardus use soft or chilled shot for ball shooting? 3. Should the ball be hit as it rises, or is it fair to hit it any time before it reaches the ground? Ans. 1. About 25 to 66 feet, as the spring is regulated. 2. Soft shot, but only because in shooting before an audience chilled shot might rebound from the screen, if they struck a knot or any hard substance. 3. Depends on the skill of the shooter. The ball may be broken any time before it grounds.

BEADER, Brooklyn.—1. Would it pay to go into the orange business in Florida, either by raising the fruit and selling it, or by buying and selling the fruit? If profitable in the former business where would be the best place to go to and where could I procure a book on orange culture? 2. Would near sightedness be an impediment to becoming a good shot? Ans. 1. We consider orange culture a good paying business. The northern and centrals parts of the State are the best. Should select some part of the St. Johns River or other locality which has a good outlet. You can obtain books from *Florida New Yorker*, 34 Park Row, New York City. 2. Not at all. We have seen an excellent shot who used glasses.

G. A. S., Westfield.—I know a gentleman who has a gun 22¼ barrel, 12 bore, 7 pounds, which outshoots all our guns. Has good penetration and pattern at 45 yards. 1. Are guns of this length reliable? 2. What is the shortest gun you would advise for general shooting? 3. My pointer pup has worms. Passed some ¾ inch long. Have given him sulphur. Would you advise areca nut, as per "Gazetteer?" Ans. 1. and 2. 22¼ for a barrel is too short. It is generally allowed by all practical people that 21 inches is as short a barrel as will burn all the powder. Would not advise using a gun shorter than this. Thirty inches is an approved length. It will burn powder of a heavy charge, is a balance to the gun and facilitates the aim. 3. Give the areca nut and follow the "Gazetteer."

J. D. M., San Francisco, Cal.—At what range is artillery effective? At about what distance does rifle practice begin in an actual battle? How close did the old musket fire? Ans. Your term "practice" is hardly admissible in speaking of actual warfare. Light artillery is now effective up to 2,500 yards, and even up to 3,000. Rifle fire may begin at 400 yards, although the picked men would commence at 1,000. As to effectiveness as far as to the killing and maiming of the men, it is doubtful whether the old Napoleonic artillery did not affect heavy masses more than does our modern rifled guns. The ordinary fighting range of the rifle is quite equal, however, to the artillery of thirty years ago. We think the deviation allowed in the old musket at 100 yds., was 3 ft. to the right or left when fired from a fixed rest.

B. B., Washington, D. C.—1. Have a dog twenty months old. Head stopped up with matter which gathers in his eyes. Been this way ever since distemper when was fourteen months old. 2. What is the difference between an English and an Irish setter? Ans. 1. The dog needs plenty of fresh air and exercise. If appetite is not good give two grains quinine three times a day for two or three weeks. The condition described is a frequent result of distemper. 2. Stonehenge tells us that for standing rough work the Irish is better than the English setter. In points there is some similarity and divergences in others. Irish are more leggy. Color is an important point. Irish should be red, though there are good blacks and some with white. Irish are perhaps harder to break, and forget sooner, but make up for it by dash, courage and endurance. It is difficult in the short space of questions and answers to give all details.

W. H. FULTON, New Haven, Conn.—I see in your paper of Jan. 17 an account of a Bezoar stone, and having a stone that answers the description—with the exception that it came from a horse instead of a deer—I write to inquire why it is called a Persian medicine stone, and any other information you can give in regard to it. The stone I have answers as to the size and color of the one spoken of in your paper. I have had it cut into, and find in the centre a coarse pebble about the size of a hazel nut, with the coating formed regularly, as the rings show. Ans. The Bezoar stone was formerly much prized for its supposed medicinal virtues, and as an antidote to poisons. That of the antelope was especially valued. It is scarcely necessary to state that it is quite worthless as a medicine. The Bezoar is simply a concretion—some foreign substance, as a stone or piece of tooth, is taken into the stomach, and about this as a nucleus, some salts of lime crystallize in concentric layers. [This question has been mislaid for several weeks, for which our correspondent will please accept our apologies.]

GASPE.—To sportsmen, invalids, tourists and artists the beautiful, healthy and popular summer resort, Gaspe Basin, offers unsurpassed facilities for fishing, shooting, boating, bathing and driving. There is no spot in the Gulf of St. Lawrence or on the British American coast where the scenery is so beautiful, and so much can be found for a small cost. We hear with pleasure that Mr. E. G. Straker—so long and favorably known to the traveling public as the popular and experienced steward and purser of the Gulf Port Steamer "Secret"—has leased the "Gulf House" at Gaspe Basin, which he has refurnished and renovated, and made a comfortable home for his friends and patrons; and we have no doubt that, with his known courtesy and moderate charges, he will draw a full house. During the summer the steamers leave Montreal and Quebec weekly, and there is constant telegraphic and postal communication with all points, and more frequent modes of arrival and departure by Intercolonial Railroad.—See advertisement.

—The new recoil check, made of very flexible rubber, can be put on and taken off a gun in a moment. Price $2. Send for circular.

C. L. RITZMANN, 943 B'way.—[Adv.

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—[Ad

—The Bible College, located at Binghamton, N. Y., which affords a free university course to the daughters of disabled or deceased ministers, without regard to sect, is full to overflowing.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MARCH 7, 1878.

To Correspondents.

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We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brie notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

MARDI GRAS.—While regretting our inability to have been present at the court of that jolly monarch, who reigned supreme over the Knights of Momus at Galveston, Tex., last Tuesday, we trust that this recognition of his summons may prove our loyalty as dutiful subjects. May the clemency of his kindly old heart preserve us from the vengeance of those fearful ministers of wrath whose dragon images embellished his royal missive.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT.—At the request of numerous clubs, who have not yet been able to prepare teams for the tournament, we have been induced to open the lists for another week. The match will open, then, on the 18th of March. Mr. Conlin requests that captains of teams will meet at his gallery on Tuesday, the 12th, o arrange preliminaries for the match. The following clubs have entered teams: The N. Y. Rifle Club, the Centennial Rifle Club, the Scottish-American Rifle Club, the Seppenfeldt Club, and the Zettler Club. There are five prizes offered so far. More prizes and entries are expected.

'FRED BEVERLY'S" EXPLORATIONS IN THE WEST INDIES.

THE MYSTERIOUS SOUFFRIERE BIRD.

OCCASIONALLY we receive a few lines of intelligence from Mr. Fred A. Ober, as he wanders from island to island of the Caribbean Sea, pursuing his solitary labors in behalf of science and the Smithsonian Institution, camping in caves and huts, sleeping on volcanoes, and spreading his blanket among the venomous creeping and crawling things of a tropical climate. He has been gone more than a year already, and it is likely that his researches will be much longer nd further extended, as he says that the Smithsonian has allotted to him more islands than he at first intended to visit. He has already explored Antigua, Martinique, Dominica, St. Vincent, Barbadoes, Barbuda, and some others; will go next to Guadalouupe and then to Grenada. Notwithstanding a hardy constitution and wiry physique, he has suffered much from local fevers, and was laid up for six weeks at one time. Rains have interfered with his labors, and sometimes kept him housed for days in a miserable hovel in the wilderness, where nothing could be done except to sit with folded hands and wait for the rain to cease. The hardships of a naturalist are perhaps as arduous as can be imagined. To push on in spite of obstacles of every description requires pluck of no ordinary character. It is not strange that, weakened by sickness and longing for some familiar face, he should occasionally become despondent. In a letter dated at St. Vincent, Jan. 23, he says in his quaint way: "On Dec. 19, I lay in bed two weeks with fever. Lost all my meat—living skeleton. As soon as I was able to walk a kind friend took me down the coast to his estate, a lovely valley filled with sugar cane, a river flowing through it, with palms, bread fruit, etc. Yesterday I took my first long ride, and got soaked in a heavy rain coming back. A strong application of towels and rum toddies, I hope, prevented a relapse. It seems impossible for me to regain my health, but if I do I must press my work."

We have already printed three letters from him, which afford some insight into the nature of his work, and are promised another soon. In a personal letter to the editor of this paper he mentions incidentally the capture of some specimens of an exceedingly rare bird. We quote:

"I have explored the crest of the Souffriere, the crater of the great volcano, where I camped five days and nights in a cave, hunting for the mystical 'Souffriere Bird,' a bird always heard on that mountain top—nowhere else. From the stunted trees covering and hiding the deep gorges that seam the lip of the crater, come strains of most delicious melody, yet strangely wild and melancholy. No one ever saw the bird, much less had any one captured it. It possessed a fascination for the listener that the notes of few birds could command. The blacks, and even the whites, say that the first one of a party who hears it will soon die. I was the first of my party, as I was, as usual, alone; but that has not exercised a depressing effect upon me during my illness. I found a hollow in a bank which protected me from the trade wind, and there I swung my hammock and camped for five days and nights, 3,000 feet above sea level, with mist or rain always descending. I captured that mysterious bird—five of him—and carried to town the first ever seen there. My 'Camp in a Cave,' with all its attendant discomforts, will some day be fully written out. I think I found another bird near there—can't tell. After that I lived two weeks with the Caribs, collecting such words and traditions as I could, with a few pictures. There are few birds here. The most beautiful is the island parrot, a bird of rare beauty, which I have got, but whose habits I've not sufficiently observed; and if I am ever strong enough to camp again, I shall do so among the mountains for that purpose."

We think we shall be doing our duty as promoters of scientific explorations in stating that Mr. Ober's operations are much retarded from want of money, notwithstanding advances made by the Smithsonian Institution and two or three sympathetic friends. Should any of our patrons feel sufficiently interested to contribute something toward a small fund we will thankfully acknowledge their donations through our columns, and forward the same to him at the first opportunity.

SEVENTH ANNUAL MEETING OF THE AMERICAN FISH CULTURAL ASSOCIATION.

IT is not without a certain amount of just pride that the members of the American Fish Cultural Association regard their seventh annual meeting, which event took place at the rooms of the Fulton Market Fishmongers' Association, of New York, on the 27th and 28th of February. In point of number of persons present, for the intrinsic value of the papers read by the various sections, and for the interesting character of the debates, this meeting may be cited as among the leading scientific and practical conventions of the present year.

In changing somewhat the name of the association from Fish Culturists to Fish Cultural, an increased scope and tendency is plainly shown. From a simple gathering of fish culturists, who had assembled together to discuss what some few years ago was an unknown science, the results of which were as uncertain as the methods were undefined, at every meeting the association gained new strength and knowledge, until to-day this organization contains within itself not only the leading fish culturists, but the most distinguished ichthyologists in the United States and in Canada. It is certainly flattering to think that before the association last week questions in regard to the disputes between the United States and the Dominion were ably discussed, and it is not saying too much that perhaps from among its members may be found those whose information on these vexed subjects may be of material service in adjusting the dispute.

A most important event, and one which members may congratulate themselves about, is the fusion of a new commercial spirit which has joined their forces. We allude directly to the aid the association will acquire from the leading members of the Fulton Market Fishmongers' Association. This new element has just that thorough commercial and practical acquaintance with fish which the association requires. These new members, who are all more conversant than any one else with the supply of fish food, such as is wanted in a large metropolis for its own consumption and for distribution, are fully cognizant that the aim of the Fish Cultural Association is not only to produce fish by the most approved methods of culture, but to preserve them. Cheap fish, fish in plenty, means more business for them and food for the masses. Such wise legislation, then, as the association may advise in the future, will owe its weight to the combined influences, not alone of scientific men, but to those who gain their living by the disposal of fish.

In commenting on the general character of the meeting, one is struck by the practical value of the papers read, and how admirably the method of having sections ready to present their contributions prevented desultory and worthless talk. It is to be regretted, perhaps, that the Fish Commissioners from all the States were not present. There is scarcely a good reason to be alleged why we should have to note any absences. As a medium of interchange of thought, such a convention presents advantages to officers connected with State fisheries, which would be of incalculable benefit to all. It is, in fact, difficult to ask any question in regard to fish culture, of practical use, which would not have found a ready and satisfactory answer.

The progress made in fish culture (which science, of course, must be the basis on which the association stands) has made notable progress during the last year. Gradually awakening to a sense of its importance, other States are becoming cognizant of the advantages of stocking their barren waters. With new wants, new inventions, due to ingenious fish culturists, have been presented. Certainly among the first will stand Mr. T. B. Ferguson's plan for hatching shad by means of a mechanical power, a full description of which may be found in our last issue. This invention, due to the energetic Fish Commissioner of Maryland, in the opinion of the U. S. Commissioner, Professor Baird, marks a new epoch in fish culture. It will enable us to utilize the waste eggs of many valuable sea fish, such as the mackerel and cod. The eggs of both these fish, cast loose on the waters, may be obtained in countless millions, and may be hatched by the Ferguson process. A most able paper on the statistics of fisheries, furnished by Professor G. Brown Goode for the first time, acquainted the public with the immense value of the fishing products of the country, while Professor Milner's paper on shad hatching gave some idea of the scope and magnitude of the work. Mr. Eugene G. Blackford gave a most practical idea of the staple fish furnished to the New York markets, as did F. Mather, Esq., on food for fishes raised in aquaria. In another portion of this journal will be found a synopsis of the meeting, and we shall reproduce, as soon as possible, some of the most important papers. The printed report of the transactions of the association, which we understand will shortly be published, will be of exceeding value.

What praise, then, we freely give to the association, is mainly due for the common-sense method it employs, and the desire it has evinced to instruct the public, not only in scientific, but practical fish culture.

CONFUSION IN THE NAMES OF SOME OF THE AMERICAN FISHES OF THE HERRING FAMILY.

THE representatives of the herring family most abundant in the waters of Great Britain are three—the shad (*Alosa fulta*), the alewife (*Alosa vulgaris*), and the herring (*Clupea harengus*). Their names were at an early date appropriated for representatives of the same family on our own coast. The name of "shad" is, from Maine to Florida, yielded, by common consent, to our *Alosa sapidissima*, which, in many particulars, resembles its namesake, though they "be bigger than the English shaddes and fatter," as an early writer declares ("New England's Prospect," by William Wood, London, 1634).

In the Southern States this fish is sometimes called "white shad," to distinguish it from the *Dorosoma cepedianum*, there known as the "mud-shad" or "gizzard shad." On the coast of New England the mattowocca, or tailor-herring (*Pomolobus mediocris*) is sometimes called the "hickory-shad" and also the "sea-shad," under which name it is often confounded with the true shad, which is known from recent investigations to be frequently taken far out at sea in company with mackerel, alewives and menhaden. In the Bermudas, there being no large clupeoid fish, the same name has been for centuries applied to two species which somewhat resemble it externally—*Eucinostomus gula* and *Eucinostomus Lefroyi*.

The "herring," or "English herring," of New England, north of Cape Cod, is identical with that of Great Britain, but at certain points in Southern New England—such as New Bedford—the name of herring is transferred to *Pomolobus pseudo-harengus*, and on the Hudson River this usage is general, though this species is occasionally called the alewife. South of the Hudson the name of "herring" is universally used in connection with this species of *Pomolobus* and the allied *Pomolobus mediocris*, or "mattowacca," which is known as the "tailor-herring," or sometimes, as in the St. Johns River and about Cape Cod, as the "hickory-shad." In the Great Lakes the name "herring" is also represented, being applied to one of the whitefish family—the lake herring, *Argyrosomus clupeiformis*. To *Pomolobus pseudo-harengus*, the name of "alewife" is commonly applied in New England and even occasionally, as mentioned above, in New York. South of New York it is used for the menhaden (*Brevortia tyrannus*) only. The name is corrupted into "old wife" and "eel wife" and "wife."

On the Connecticut River the same name appears under the guise of "ell-whop." At Maurice River the Brevortia is called the "old wife chebog," chebog being probably of Indian origin. Thomas Morton, writing in 1632 of the fishes of Virginia, gives the names "shadd" and "al

among the colonists at that time. [New English Canaan, or New Canaan, containing an abstract of New England. " Forces Hist. Tracts," vol. II., tract 5.]

The original derivation of the word alewife is somewhat obscure, though it may probably have originated in *Alansa*, the name applied by Ansonius, a Latin poet of the fourth century to the European shads in his celebrated poem on the Moselle River :

"Quis non—— novit,
Stridentesque focis opsonia plebis alansas."

The transition through the French "*alose*," the English "allis," "allice," or "alize," is not difficult, and when we find these names, together with "alewife," applied indiscriminately to the same fish, it is, to say the least, suggestive. Such an etymology is, at least, more satisfactory than that of Josselyn so often quoted: "The alewife is like a Herrin, but has a bigger bellie, therefore called an Alewife" [An account of two voyages to New England ; a Description of the country, natives and creatures. By John Josselyn, Gent., 1675, Coll Mass. Hist. Soc., third series, III., 1833;] or that of Mitchell: "Called *alewife*, probably from the French *alevin*, the young fish rejected as being under size ;" or Dr. Smith's etymology, which has been so often quoted, has been adopted by our standard lexicographers, and which Professor Trumbull so thoroughly explodes in the Report of the Commissioner of the Fish and Fisheries for 1871-2, p, 166.*

THE RECENT FISHERY TROUBLE.

WE credit the *Toronto Globe* with giving us what we have no doubt is the gist of the late trouble between our fishermen and those of the Provinces. It seems that our fishermen employed for the herring catch very large seines, some 250 fathoms long by 350 in depth. With these seines "inbarring" the herring was attempted; that is, one end of the net being fixed near the shore, a complete sweep was made around the arc of a circle. This, the *Toronto Globe* says, is illegal, according to the Newfoundland regulations. It is also affirmed that the fishing took place on Sunday, which is also in contravention of the law. The fishermen from the States being requested to desist, did so, with the exception of the crew of one vessel. These people having refused to abide by the laws, the Newfoundlanders were stupid enough to destroy the American nets, thus taking the law into their own hands. We think our Canadian contemporary is quite in error as to the absence of fish on our coast. Special fish, it is true, are to be had on the Newfoundland coast, but we by no means admit that the destructive process has rendered fishing on the New England coast impossible. We may state that the cod never have been so plenty as this year on American waters, from Maine down to the capes of the Delaware, while they have been very rare on the Newfoundland coast. Possibly, as was remarked at the meeting of the American Fishcultural Association, the cod, disgusted with the decision of the Halifax Fishery Commission, have left the waters of the Dominion for more enlightened shores. We regret, though, exceedingly, any lawlessness on the part of American fishermen, and we would be the last to uphold any measures in dereliction of the laws. Such contests we are afraid are, however, likely to continue, rather excited by personal feelings than otherwise. If we are not misinformed, in former years herring were caught by the Newfoundlanders and sold to the vessels coming from the States. To-day the fishermen from Gloucester make the catch for themselves. Better vessels, more fully equipped and with the improved apparatus used by us, will in time deprive the Newfoundland fishermen of a portion of their hardly acquired gains. We do not say this with any idea of triumph or spread-eagleism. It is sure to happen in the course of time. In the Halifax dispute the question was not for us as to the plentifulness of fish in the waters about the coasts of the Dominion or of the Provinces, but whether the fishermen from the Provinces had the means or ways to catch a proportionate quantity of fish in our own littoral. If A and B, each for their own separate and divided account, have agreed to get all the fruit which may grow in the C and D orchards, and A, because he has longer ladders and more baskets, can pick twice as many fruit in the C and D orchards than can B, it is B's misfortune, not A's fault.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2 ; three months, $1. To clubs of two or more, $3 per annum.

* I forget whether or not I made a note for you on the alleged derivation of "alewife" from "*aloof*." Dr. J. V. C. Smith, in his "Natural History of the Fishes of Massachusetts, 1833," was perhaps the first to record the suggestion that *alewife* is derived from the Indian word, *aloof*, signifying a *bony fish*." Dr. Bartlett's Dictionary of Americanisms, Webster's, and I believe, Worcester's Dictionaries accept this etymology, and Professor Schele De Vere, in his recently published volume of "Americanisms," is misled into recognizing in "alewife" a most ludicrous corruption of the Narragansett term "*aloof*," though he appears to have been struck by the objection that neither "*l*" nor "*f*" can have a place in a Narragansett word, and he suggests that the original name may have been *ainoop*.

The Narragansett and Massachusetts name of the alewife and herring (common to several species) was *Aumsu-og* (plur), as noted by Roger Williams, and, with slight dialectic variation, by President Stiles, as you have seen. The only authority for "aloof" is a letter of (the second) John Winthrop, printed in the "Philosophical Transactions for 1678" (No. 142), in which he mentions the use of "the fishes called *aloofes*" for manuring corn fields. If we could refer to Winthrop's manuscript, I am confident we should find that a copyist or printer had substituted "aloofes" for "*aloofes*," *i.e.*, *aloses* or *alizes*.

GAME PROTECTION.

POUND NETS ON STATEN ISLAND.—The reign of the pound-net fishermen in Staten Island waters has been glorious, but transient. The nets were introduced two or three years ago, and took into their capacious meshes all the varieties of fish which of yore there rewarded the angler's patience. Now, before the final depletion of these fishing grounds, the Walton and Excelsior Clubs have, after much patient labor in agitating the subject, secured the passage of a bill which forbids the use of seine, purse or pound nets at any time under severe penalties, and forbids the use of fyke, drift or other nets between June 1 and Sept. 1. The owners or occupants of water frontage, and any person who has been an actual resident of the county for two years, are permitted to use fyke nets extending out not over 110 feet from low-water mark. Other persons may obtain a license to use such nets from Sept. 1 to June 1, though no person can obtain a license for more than a single net.

OUR THANKS.—We are much obliged to the Secretaries of the following clubs—the Yonkers Game and Fish Protective Society, the Black Hawk Club of Wisconsin and the Farmington Sportsmen's Association—for copies of their Constitution and By-Laws. Will other clubs kindly follow suit?

MICHIGAN.—Residents along the banks of the Kalamazoo complain because the dam owners do not put up fish chutes as required by law. Fish Commissioner Hon. Eli Miller is determined the law shall be observed, and he has completed the drawings and specifications of such shutes as are needed, and the engravers are now at work printing such cuts and explanations as will leave the supervisors no option but to enforce the law.

PRACTICAL INSTRUCTIONS FOR WINTER PRESERVATION OF QUAIL.—In reply to numerous inquiries elicited by a communication in our issue of Jan. 31, our correspondent gives the following very valuable suggestions for the winter preservation of quail:

WATERTOWN, Wis., Feb. 22.

A park may be constructed very cheaply with a few bundles of laths, having first put up a frame by setting posts in the ground, and nailing on scantling two by four. The inclosure should be sixteen or twenty feet square and eight feet high, which will take two laths in length for the height of walls. The top may be covered with laths also, by having some girts or poles for them to rest on A part of the top should be covered with boards so that it will not leak in a rain-storm, and the north and west sides boarded tight to keep off the cold winds, and under the close part of the roof. Set in a shock of corn stalks well spread out at the bottom for the birds to run under; this they will use for their sleeping apartments. Some brush or a small tree-top might be put in one end of the park for them to perch upon. There should also be a bushel or two of sand and fine gravel thrown in. Make your door so you can go in and out yourself, and be sure and have a lock on it and carry the key yourself, for there are some two-legged sneaks that will catch quail out of season. Now, put in your quail (this house will accommodate a hundred or more), and feed them every day with fine wheat, screenings, or any kind of grain, and watch them and see how they enjoy it. They will soon look for your coming to feed them, and you will yourself enjoy it and consider yourself well paid for your trouble.

In fine weather my friend, Mr. Hoyt, lets his quail out, and they go about over the farm where they please, but they always come back of their own accord. A few days ago he let them go, and on their return the next day they brought another flock of about two dozen more home with them to share the hospitality of their friend and protector, and Mr. Hoyt now has over fifty of these little boarders that receive their daily food from his hands.

S. M. EATON.

AN EXCELLENT IDEA.

CIRCULAR FROM THE WEST JERSEY GAME PROTECTIVE SOCIETY, OF CAMDEN, N. J.

We are in receipt of a circular, issued by the West Jersey Game Protective Association, which is admirable of its kind. Long ago we urged on fish commissioners the necessity of informing the general public what were the shapes and colors of fish placed by them in streams, and insisted that the only sensible method of instruction was the pictorial one. "How," we asked, "could an ignorant person tell whether he was catching a smolt or a fresh-water herring?" Acting on this idea, the circular we have before us is headed with a neatly colored lithograph of a California salmon one year old, the size of life. The printed matter reads as follows:

OFFICE OF THE WEST JERSEY GAME PROTECTIVE SOC'Y, Camden, New Jersey.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Dear Sir—Above you have a representation taken from life of a California salmon, one year old.

As the West Jersey Game Protective Society, during the last two years, has placed in the streams of Southern New Jersey a large number of these fish, as per the following statement:

Great Egg Harbor River, 19,500; Mullica River, 10,000; Maurice River, 18,500; Tuckahoe River, 6,000; Cohansey Creek, 9,500; Alloways Creek, 8,000; Mantua Creek, 6,500; Timber Creek, 3,500; Oldman's Creek, 3,500; Salem Creek, 3,000; Dennis Creek, 2,500; Raccoon Creek, 1,000; Woodbury Creek, 500.

With the view of introducing them in the waters of that part of the State, the committee having the matter in charge have thought it advisable to take this means of informing the people in the vicinity of the above-mentioned streams in order that they may be protected and if caught, returned to the streams again.

Your assistance in protecting these fish and aiding the society in its efforts is earnestly requested.

GEORGE EMLEN,
RICHARD T. MILLER,
BENJAMIN W. RICHARDS,
Committee.

NOTICE TO SPORTSMEN.—Having received so many communications asking us for information in regard to our six-section bamboo trout, black bass, grilse and salmon rods, we have prepared a circular on the subject, which we shall take pleasure in forwarding to any address. We keep on hand all grades, the prices of which range from $15 to $150. We put our stamp only on the best, in order to protect our customers and our reputation, for we are unwilling to sell a poor rod with a false enamel (made by burning and staining to imitate the genuine article) without letting our customers know just what they are getting.

P. O. Box 1,294.—[*Adv.* ABBEY & IMBRIE, 38 Maiden-Lane.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship

And three team medals, which will be awarded to the teams making the first, second and third best scores. Other prizes will be offered also, to take place at Conlin's shooting gallery. Open to teams from any organized rifle club.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Off-hand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. Entrance Fee—Five dollars to be paid at the office of the FOREST AND STREAM AND ROD AND GUN, No. 111 Fulton street, N. Y. All teams desiring to compete must be entered ten days before the time the match is announced to take place. The match to be governed by the rules of the N. R. A. relating to teams. Captains of the competing teams shall meet one week before the commencement of the match, make all preliminary arrangements, choose referees, and decide in what order their respective teams shall shoot. The referees shall elect an umpire, whose decision in all cases shall be final.

The match will commence on Monday, March 18, and not on the 11th as was before published.

Clubs can enter up to the 12th of March.

PRIZE OFFERED.—The U. M. C. Co., of Bridgeport, Conn., through their superintendent, W. A. Hobbs, Esq., will present to the FOREST AND STREAM AND ROD AND GUN Tournament, an elegant gold medal. We are now having the medal made, which will be of the handsomest character.

"NICK" ON THE RIGBY-SHARPS CHALLENGE.

THE question of the relative superiority of breech and muzzle loading rifles will never be decided by the series of international matches on which we have entered with the Centennial Trophy as our bone of contention. Popularly a conclusion may be reached, and this may be the correct one or it may not, as minor and irrelevant circumstances may decide. The riflemen understand this, though they may not be ready at all times to acknowledge it. There are a thousand and one little omissions which may help to defeat what is really the better team, and on the reverse, accidents and bits of luck may come in to give the nominal victory to the squad of inferior ability. Many pretend to despise the tests laid down and carried out by technical boards of examiners, on the ground that not infrequently their conclusions give favor to an arm which subsequent trial in the hands of soldiers or marksmen shows to be an inferior one. They omit certain elements and important factors which go to reach the final result of comparative superiority, while, on the other hand, in a popular match, the test is not by any means so thorough in certain directions as an ordnance board would make it.

To combine the two lines of examination is what is most urgently needed, and none can make this inquiry more severe than those having a pecuniary interest in the result. Hence I look with some interest to the proposed Sharps-Rigby match, if not too much hedged about with restrictions, as likely to show some interesting, and, to the present, conclusive results. It is to be in general a combined test of time and results. Mr. Rigby has all along asserted that one of the strongest reasons put forward in advocating the breech-loader is entirely lost sight of in the great matches, and that instead of being an arm "of precision and rapidity," it becomes a slowly-handled weapon of great accuracy only.

The time schedule of the last match would hardly bear out Mr. Rigby in this, as at every range, on each day the American squad had concluded their rounds long in advance of their antagonists and enjoyed a brief season of rest before proceeding. But as I before remarked, this popular style of demonstration is not conclusive, and now Mr. R. proposes a distinct match, two men per side, at 1,000 yards, shooting for a fixed length of time (1 hour); the one squad using muzzle-loaders and the other American breech-loaders, cleaning at discretion, the prize going to the pair making the best score in the allotted time. It is directed mainly at the point of the excessive and disproportioned cleaning which Mr. Rigby claims is necessary to get reasonably fair work from an American breech-loading arm.

Of course such a direct challenge did not long go unanswered. The Sharps Rifle Company snapped it up forthwith; the men, as they proposed, were to be armed respectively with Rigby and Sharps rifles, to shoot under the N. R. A. rules; but they proposed matches on separate ranges, each squad to shoot in its own country and to secure equality as to weather conditions, three days' shooting to be done, three hours on each day, and the grand aggregate to count. These conditions were specified to avoid the trouble and expense of a personal meeting, and yet secure as nearly similar conditions as such an encounter would give.

Under date of Feb. 12th Mr. Rigby begins to "hedge." His first challenge proposed a match "between two men shooting with muzzle-loaders and two men with American breech-loaders," and yet when he finds so ready an acceptance he says: "I did not propose to enter into a contest of muzzle-loaders against breech-loaders in general, but against Creedmore [Creedmoor—Nick] rifles, loaded and treated in the special manner which was found at the Centennial Matches to gain the best results." In other words, Mr. Rigby keeps himself well posted on rifle progress here, and knows that the Centennial breech-loaders are to-day defunct arms, that they have been superseded by improved weapons, and that when the next match shall be fought, although the muzzle-loading teams may use their old and trusted weapons, the American team will come into the field with a different and better weapon than any yet seen in public.

Of course the American squad will use their latest pinks of perfection in the small-arms line; and if we are to be restricted to breech-loaders that we once used, it might as well be proposed to hold us back to the original Colt revolving rifle,

No, sir, Mr. Rigby; the test, if test there is to be, must be of the best against the best, without any restrictions to the rifles of the past. Let us bring our best weapons to the front, and do you the same, and when rapidity of firing is a *sine qua non* it is simply absurd to object to the use "of any special apparatus to abridge the time required for cleaning from the breech." Of what use is it to fire over again the Centennial match in such a disjointed way as is here proposed. If it is to be a match against time—that is, the greatest score in the least time—make it so in every respect—place no obstacles in the way. Methods of manipulation, which might be very appropriate in the leisurely conduct of an all-day match, would be entirely out of place here. Then the marksmen could get up from the firing mat, sit comfortably down and swab out with care and deliberation. Does Mr. Rigby suppose that we would not bring every appliance to bear in the saving of time? There is a very much quicker way of cleaning a rifle than that followed in the Centennial match, and Mr. Rigby would have an opportunity of witnessing it if this proposed match be carried out as it should be; and to insist further that the men should use one and the same target, falling back after firing, is placing an unnecessary clog in the way of those wishing to make the most of their time.

On the point of firing the match on different ranges, which the Sharps people propose, Mr. Rigby makes very proper objections. If Mr. Rigby can secure time and opportunity for the match at Wimbledon, it would seem to be an excellent stroke of policy to fight the matter out there in July next. A match shot on ranges where the climatic conditions and weather surroundings are so dissimilar as Creedmoor and Wimbledon, would be decisive of nothing at all, and Mr. Rigby is justified in objecting to such a cheap farce; but if he is really desirous of "demonstrating that the American breech-loading match-rifle does not possess the advantages of rapid and simple manipulation, which properly belongs to breech-loaders, and that it is in this respect inferior to our muzzle-loader," let him make a match or agree to one in which each arm shall be handled by experts bound to get the very best results out of it, each weapon to be the best of its class, and let no circumstance be tacked on or condition imposed which shall hamper in the slightest degree any of the contestants. Mr. Rigby's letter of February 12 proposes many such impediments which cannot be justified. I know that the view I am advocating was that taken by everybody in the N. R. A. office when the challenge first appeared, and these restrictions do not strike us as in consonance with the first broad gauge of battle. NICK.

THE WINCHESTER RIFLE IN THE ROCKY MOUNTAINS.

SAN LUIS PARK, Colorado, Feb. 14, 1878.

EDITOR FOREST AND STREAM:

Your correspondent, "Viator," in your issue of Feb. 7, asks your readers, who have used the new .45-calibre, 75-grain Winchester rifle, to say what they think of it for deer shooting. I was enabled through the kindness of Wm. Read & Sons, Boston, to procure one of the rifles from the manufacturers early in the fall, made to order, pistol grip, short magazine, nickel trimmings, and with sling; in all other respects the rifle is the same as those now in market. I wanted it for use in the Rocky Mountains for deer and mountain sheep, and where, I am glad to say, it has given me great satisfaction. I have used it on at least twenty hard days' mountain tramps, giving it as severe usage as any rifle should ever be subjected to, using it fairly as a staff in climbing, and I can now say that the rifle seems to have improved by this hard treatment. Our mountain hunting here is perhaps as hard and difficult as can be found anywhere, and often demands from the hunter a free use of his rifle to assist him in climbing to the altitude necessary to reach to find the mountain sheep. For this the Winchester is admirably suited. If "Viator" is a mountain hunter, and remembers his mountain climbings, he will appreciate the Winchester's rather short stock and rifle butt plate, with its long toe or beak, unusually well adapted to give a firm hold upon the rocks. I find the rifle to give but little recoil, and to be an accurate shooter up to 300 yards. I have not tested it carefully for the longer ranges. The shape of the butt plate makes it a pleasant rifle to use for off-hand shooting, and especially as a magazine gun, where rapidity of fire with a correct aim is required. One needs but to raise the elbow as high as the shoulder, and the rifle will rest naturally at a level if held firmly against the arm at the shoulder. I was unused to it at first and did not like it; I now like it very much for off-hand shooting. But a short time since I fired with it three shots per day for three days, 300 yards off-hand, Creedmoor target, making 39 out of a possible 45. I have never done better under the same conditions with any rifle.

"Viator" writes of using the English double express rifle. I have one, but it lies now unused in its case; in almost all respects I prefer the new Winchester. I can get in two shots a little quicker with the double rifle, but with the Winchester I can get in six in rapid succession, and one often wants more than two shots. Last December, while out for mountain sheep, I came upon a band of five black-tail deer; they were 150 yards off at first shot, but before they got out of range I had four of them down and had wounded the fifth.

I found the nickel trimmings too bright, and the metal where one grasps the rifle in carrying it still-hunting very cold to my hand, and to remove these objections I covered these parts with buckskin, which answers the purpose admirably. My Winchester shows service, and I find it can be relied upon, and I like it for deer hunting better than any other rifle I have ever used. The only drawback I find in the most satisfactory use of the rifle is in the cartridges furnished for use with it by the Winchester Company. The materials, powder, lead, etc., are all right, but the shells are so tightly closed down upon the bullets that many of them, after carrying in the magazine but a short time, riding or climbing, become shortened an eighth to a quarter of an inch, caused by the bullet being forced into the shell, and they cannot be loaded from the magazine (not an agreeable condition of things), and they must be taken out of the magazine from the side before the rifle can be made to work, and if they are used must be loaded from the top. I am very careful and often examine to see that I have no shortened cartridges in the magazine. I am surprised that the Winchester Company does not remedy this defect in their cartridges. Certainly, it can be done and it should be done, and so thoroughly done, too, as to render any objectionable shortening of the cartridges impossible. I sent for their reloading tools and used them, employing the best skill I was master of, but the result has been very unsatisfactory. If the Winchester Company will remedy this defect in their cartridges, and could be induced to send me a few to assure me that they are what they should be, I should be made very happy. Has "Viator" tried the new Evans' magazine rifle model of 1877 for deer-hunting? I have not had the opportunity as yet. There can be no such trouble with the cartridges in the Evans. G. S.

SOME RECOIL NOTIONS EXPLODED.

MONMOUTH, Ill., Feb. 5, 1878.

EDITOR FOREST AND STREAM:

In looking over your very interesting paper, I have, from time to time, seen I know not how many long-winded articles on the cause of recoil of guns. One would naturally suppose when the truth lies upon the surface plain and palpable, as it does in this case, that he who goes digging and delving at the bottom of a well for it, should at least be left to enjoy the pastime as best he may in silence and alone, and not trouble others with his far-fetched folly.

The theory advanced is that when the ball is driven from the chamber of the gun, there is a vacuum created in the barrel into which air rushes, striking the bottom of the chamber with force enough to cause the recoil: a most stupid proposition, and one without a single fact to support it. A good article of gunpowder will produce, on combustion, about fifteen hundred times its volume of gas. This gas is nearly, if not quite, as heavy as atmospheric air. The most of it, of course, escapes immediately after the escape of the bullet, but the chamber remains full of it. There is no vacuum. Look through the barrel of your breech-loader immediately after it is discharged, and you will see a practical refutation of this theory. The barrel is found full of gas, mixed with a quantity of free carbon, in the form of smoke. Is it not plain that if the air had entered, as stated, that the gas and smoke would have been driven out? The gas evolved by the combustion of gunpowder is a positive power, instantaneously created, acting with equal force in all directions. The bullet is driven out because it is the only wall of the house weak enough to yield to its power. And there is a shock equal to the weight of the ball added to the friction communicated in the opposite direction upon the breech of the gun. The explosion tends to drive the two bodies apart in opposite directions, as it were, and if the gun were no heavier than the ball, it would be driven just as far backward as the bullet would be forward. That the lighter the gun, and the heavier the ball, with any given charge of powder, the greater the recoil, is a truth in the experience of any one who has used guns very much.

Mr. Editor, do you not remember in the old muzzle-loader days of glorious memory, when you, in your excitement, chanced to put too loads of shot in the same barrel, and at night, while you were rubbing the discolored swelling on your shoulder with arnica or whisky, did you, in your mighty wisdom, conclude that the double charge of shot had nothing to do with it? I guess not! No, sir; the expanding gas forces the bullet in one direction, and jams the breech of the gun in the opposite, and that is all there is of it.

Mr. Ferris says he has never been able to detect recoil until after the ball has left the muzzle. In answer, I would just say that if Mr. F. has the senses of sight and hearing good enough to verify his statement, he sees and hears most acutely. I undertake to say that the time between explosion and exit is inappreciable to the senses of common mortals. His experiment with the rifle rested on an incline proves nothing, as the recoil is directly backward, and would give no lateral displacement to the barrel, and would not, therefore, disturb the accuracy of the shot. Mr. Editor, I am not surprised to see such a fallacy advocated by a single individual (for some men are very full of notions), but I am amazed to see so many others falling in with it, and commending it through the columns of your paper. In this, as in most other cases, truth is on the surface, and does not need a metaphysical deduction for its discovery. VENATOR.

In your issue of the 24th Jan. there appeared two articles upon the subjects of recoil and upset of bullets. In one of these—from the pen of Mr. George H. Ferris—I was much interested, especially as it corroborated and gave emphasis to my own views upon the same subjects. From my own experiments, I am positive that recoil never takes place until after the exit of the charge. Furthermore, it appears to me that the frictional force of the projectile along the bore of a gun is sufficient to carry the gun slightly forward in the direct line of fire prior to the exit of the ball. This would seem to be the case, since the most perfectly fitting false muzzles have at times been shot away, through negligence, particularly those that are not provided with a safety knob, which obstructs the view beyond the muzzle sight. Mr. Ferris attributes the upsetting of projectiles mainly to the "great blow" given by the explosion, in opposition to such theories as attribute it in a great measure to air pressure. The resistance of the air column within the bore of no rifle is of sufficient moment to figure as a factor of prime importance in investigating the *upsetting* of projectiles. This is a fact which will eventually become equivalent to an axiom, and it is already recognized as such by many who have had any experience with *explosive shells*. These missiles, when proper care is bestowed in their preparation, are so sensitive that contact with the merest twig which opposes their line of flight will too often explode and scatter them. If driven at sufficient velocity they may be made to explode upon the surface of a suspended playing card. Now it is clear that these shells would be exploded in the bore of the rifle the instant the explosion behind them overcame their own inertia, were it true that the resistance of the air opposed even a fair proportion of that *crushing* force exerted to upset a projectile.

The second communication, to which I referred at the outset, was from your correspondent "Venator" of Monmouth, Warren county, Ill., who opposes Mr. Ferris, to no purpose, however, as his objections are overruled by facts, adduced from many carefully annoted experiments. "Venator" accuses Mr. Ferris of misapprehending both the long-range breech and long-range muzzle-loaders, and I am at a great loss to discover that he (Mr. Ferris) misapprehends either. "Venator," however, shows himself at fault in more ways than one. He asserts, to quote his own words, "the base of the ball is either perfectly flat or slightly oval, and cannot be influenced in that way (*i. e.* swaged into the grooves) by the force of the discharge behind." Now let it be granted that the projectile in being pushed home in a muzzle-loader takes the grooves upon a bearing surface of, say one-sixteenth of an inch. If this bolt be fired into a snow bank with a reasonable charge of powder, it will, when found, bear the impress of the grooves upon two-sixteenths of an inch, or more, of its length, according to its ratio of hardening alloy. Again "Venator" is wrong in his conception of the projectiles used upon the occasion of the international match by the respective teams, and Mr. Ferris is right in asserting that these projectiles were swaged into the grooves of the American and foreign rifles alike by the "spreading" (*i. e.* upsetting of the ball). Although there is a perceptible difference in the calibres of some Remington Creedmoors, I have never as yet seen or handled one of them of a calibre sufficiently small to prevent its being loaded from the muzzle with either the old style forty-four, or the new Hepburn forty-four bolt. The "Hepburn" is a rather close fit, more so than the old "style" (both being paper patched), and yet it is solely on account of the patching that they accommodate themselves to the rifling when loaded from the muzzle. I will conclude by saying that I used my Remington Creedmoor invariably as a muzzle loader, and of all the hundreds of bolts of *four* varieties fired from it, not one has taken the grooves until upset by the powder discharged. GILBERT T. SMITH,

Sandy Spring, Montgomery Co., Maryland, Jan. 30, 1878.

"RECOIL" AND "UPSET."—*Editor Forest and Stream:* I have read the numerous letters upon the above subject from "Straight-Bore," "Venator," "Ferriss," and others, until all my previous theories are upset, and I recoil from presenting them. In the language of the poet—I have forgotten his name who wrote—I have also forgotten the language, but, stated in prose, I had not supposed so much could be written upon the subject. According to one the "recoil does not take place until the bullet leaves the muzzle." Now, if you get a posterior kick from a mule, the recoil takes place about the same time that the foot commences to start on its return voyage, and the recoil and upset are simultaneous. According to my notion, it is the same with firearms. If the recoil only takes place after the bullet leaves the muzzle, then there should be just as much recoil without a bullet, or with a light bullet as a heavy one, which is decidedly not the case. The explosion of the powder generates a force in the shell equal to from fifty to seventy-five tons to the square inch. It is a culminating force, and with proper powder should reach its greatest about the time the bullet leaves the muzzle. When the force is generated, the bullet, offering the least resistance, is moved, and that instant the recoil commences. In proportion to the resistance offered by the bullet will be the recoil at the same instant the upset commences. It undoubtedly fills the grooves at once, otherwise gas would escape, but it continues to be upset and shortened till it leaves the barrel. In proof of this, I cite an experiment. I shot a Sharps 550 grain bullet in a 2 6-10th chambered rifle, but fired a 2 1-10th shell, thus bringing about one-half the bullet into the chamber. I caught the bullet in sawdust, and found about one-third the distance from the heel a plainly marked ring around it, showing what part had been caught in the chamber by the blow; but behind this ring the marks of the rifling showed as plainly as in front of it, and must necessarily have been made after the force that formed the ring. If "Ferriss" will try the experiment of resting the muzzle loosely in a given position, and fire a few shots, and then fasten it in the same position, so it cannot move, and shoot again, he will discover that "the world moves." The barrel, in my opinion, unquestionably moves before the bullet leaves it; but with uniform ammunition and uniform holding, it will move alike each time, and therefore give uniform results. It is the lack of uniformity in these respects that makes poor shooting.

Yours, truly, F. HYDE.

UPSET OF BULLETS.—*Utica, Feb. 4.—Editor Forest and Stream:* In your issue of January 24 I noticed an article from "Venator," who takes me to account for my statements "that those foreign muzzle-loading rifles and American breech-loaders (used in the national match) were made on the same principle." I dislike to take space in your valuable paper to argue a question that is so well understood by riflemen and riflemakers; but I feel it my duty to reply. I do not wonder that my statements were so unaccountable to "Venator." It is evident that he does not understand the principle on which those long-range rifles are made. His idea that a bullet cannot be upset by force of powder (unless it has a cavity, or a taper plug in the base) is many years behind the time. The old style, cone-shaped bullets, used in muzzle-loaders, would not shoot well unless they upset and formed a bearing three times longer than the imprint made on the bullet in loading. It is true that the old style bullets for breech-loaders were too large (if made of hard metal) to load at the muzzle; but those of recent make for long-range shooting are made to just fill the bore with a patch, and depend mostly on the force of powder to expand them to the grooves in the gun. The foreign muzzle-loaders have bullets fitted in the same manner, and both guns used in the national match were much on the same principle as I stated. In the national match of 1874, Lieut. Henry Fulton loaded his Remington breech-loader at the muzzle (and it did not make him sweat much either). He thought it an advantage to do so to insure a perfect expansion near the base of the bullet. His theory was that a bullet expanded only at the moment of explosion, and the portion near the base that fitted into the shell did not take the grooves at that point. His theory was correct as far as my observation goes. I have noticed that bullets that fit tight in the shells do not take the grooves near the base, because there is no room for expansion. Those that fit loose in the shells take the grooves near the base. I tried solid base cylindrical bullets in a Government carbine some twenty years ago. The bullet just fitted the base with a patch, and depended on the force of powder to expand them to the grooves. They shot much better than the old style bullets with a cavity at the base. If Col. Minnie had known the force of powder upon a solid base bullet of suitable length, he would have found it unnecessary to make a cavity in them to make them take the grooves. If "Venator" will consult some one who is posted on rifles, he will get more light on the subject, and find that he was much further from the mark than he supposed me to be. Let me here say a word to "Straight-bore" and "J. H. K.," to show that a bullet is not upset after it starts by compressed air, or friction. Before a bullet can upset after it gets under motion there must be resistance in front equal to the force behind. In that case the part near the base gets a shock to expand it as much as it would in front; and why does it not expand that thin portion that fits tight in the shells? It would certainly do it if a bullet gets an additional upset by compressed air. The concentrated force of the powder at the moment the bullet leaves the shell is greater than at any other point while within the barrel, and it does not expand that thin portion near the base that failed to take the grooves on the start, which is conclusive proof that no upset takes place after the bullet starts. Friction causes less upset at centre of gravity than when the bullet is free to react, but would upset more close to the base. If a long bar of lead was held at one end in a vise that weighed one ton, it could not be upset with a sledge hammer only on the end where the blow was given. The heavy, dead weight of the

vise and friction would prevent any reaction of the bar. This shows the importance of having a bullet properly fitted to the gun, and using a charge of powder suitable to upset it just enough, according to the weight and hardness of the bullet used. GEO. H. FERRISS.

THE NATIONAL RIFLE ASSOCIATION.—A meeting of the board was held on Tuesday. Propositions to build a refreshment stand at Creedmoor were entertained. A communication was received from the Massachusetts Rifle Association, offering suggestions as to election of men to shoot in the International match for the Centennial trophy, next September. A record of 87 per cent. was deemed by the committee as sufficiently low to enable a man to compete. Col. Wingate offered a gold badge for competition at Creedmoor, open to all members of the National Guard, in uniform, and the National Rifle Association; distances, 200 and 500 yards for infantry, and 200 and 300 yards for cavalrymen; five shots at each distance; the trophy to be finally awarded to the marksman who shall have won it the greatest number of times at the close of the season of 1878. On motion of Major Fulton, the Chairman was requested to appoint a committee of three to prepare a programme for the selection of a team to represent the United States in the International Match for the Centennial Trophy. The Chairman appointed Major Henry Fulton, Gen. D. D. Wylie, and Col. E. H. Sanford. An adjournment was then taken.

AN INTERCHANGE OF COMPLIMENTS.—From the annual report of the N. R. A. of England, published March 1, the telegraph sends the following:

"The Council gladly take this opportunity of expressing their warmest thanks to the council and members of the National Rifle Association of the United States, on behalf of the riflemen of the United Kingdom, for the friendly welcome and hospitalities accorded to their representatives, for the facilities given to them for practice at the range, and for the scrupulous impartiality with which everything connected with the match down to the minutest detail was carried out. The reception from first to last in the United States was such as to make every member of the British team feel that the spirit of friendly rivalry in which the challenge had been received was fully understood and reciprocated by the American nation. The report also contains details of the match at Creedmoor."

MASSACHUSETTS RIFLE ASSOCIATION.—The annual report of this association for the year shows the amount received from all sources to have been $2,067.45, and the amount expended $2,062.63; balance of cash on hand, $4.82. The association during the year has offered prizes to the amount of $1,519, besides the bronze medal of the National Rifle Association. In shooting for special prizes forty-two days have been occupied, and all but three of the matches have been concluded, prizes to the value of $974 being awarded therein. The sum of $1,015.75 was received for entry fees, bull's-eye practice and fines. The association has participated in five "club" matches during the year and won three. The list of members of the association has been augmented during the year, so that there are now on the books the names of eighteen life members and 137 annual members.

SEPPENFELDT RIFLE CLUB—*March* 1.—One hundred and seventy-five feet, off-hand. Bull's-eye, 2½ in.; Creedmoor target; possible 50. Score:

Wm Guttenberg	49	Max Kern	44
T Garrison	48	Ed McCay	44
A H Anderson	47	M Morrissey	44
N W Bock	46	Al Kapny	44
Wm Seppenfeldt	46	Chas Laing	43
Ed Story, Jr	46	Jas Dwyer	43
Aug Gruensberg	45	Geo Strassner	40
John McCay	45	Henry Rothenberg	40
D Sullivan	44	E Mandor	38
Er Holtzmann	44	O Decker	36

AMATEUR RIFLE CLUB—*Newark, Wayne County, N. Y.*—Regular competition for the Marksman's Badge March 1; distance 200 yards; off-hand.

Nullen	4	4	4	5	4	4	5	5	4	4—43
Nicholby	4	4	4	4	4	3	4	4	4	5—40
Wilcox	4	3	5	4	4	3	3	4	4	4—38
Humeston	2	3	3	4	4	4	4	4	5	4—37
Elliott	4	4	4	4	4	5	4	0	3	3—.5

YORKVILLE RIFLE CLUB.—Sixth competition; Paulding match; Washington Park, March 2. Score:

P McMorrow	4	5	3	4	4	4	5	4	5	3	4	4	4	4—61
J J Reilly	4	4	4	4	4	3	4	4	5	4	4	4	4	4—60
J R Smith	3	4	2	3	4	5	5	3	4	4	4	5	4	4—58
W W Dodge	5	3	4	4	4	3	4	3	4	3	2	4	5	5—57
J L Paulding	0	2	3	3	4	5	4	4	4	5	4	3	2	4—51

At the gallery (Grohman's), 1,581 Third avenue; second special competition for a FOREST AND STREAM team, Tuesday, Feb. 26; 100 feet Creedmoor targets:

O Kelz	4	4	5	4	5	3	5	5	4	4—43
G See	4	4	4	5	4	4	4	5	4	4—42
J L Paulding	5	4	4	4	4	4	5	4	4	4—42
J R Grohman	5	4	3	4	5	4	4	3	5	5—42
W J T Duff	4	4	2	5	4	4	4	5	5	5—43
M Rattey	5	4	3	4	3	4	4	5	5	4—41
A Smart	4	4	3	3	3	3	4	3	4	4—35

A CHALLENGE.—Having noticed the remarkable scores which were made at Mr. Lane's gallery of February 16, I take great pleasure to inform him that I will match seven gentlemen to shoot the same seven mentioned by Mr. Lane, for the sum of fifty dollars. The match to take place between now and May, 1878, at Mr. Zettler's Gallery, 207 Bowery, New York. Distance of range, 100 feet. J. LEVY.

New York, 207 *Bowery*, *March* 2.

A COLLECTION OF MILITARY ARMS.—We call particular attention to a remarkable collection of military arms offered for sale, details of which may be found in our advertising columns. This collection illustrates quite fully the progress of military arms in the United States from 1811 to 1869. Here may be found the original breech-loading flint-lock, due to Hall, the patent dating from 1811. This arm is an historic one, for to Hall belongs the credit of having originated the first modern breech-loaders. All the arms invented by Colt, Jencks, Greene, Maynard, Sharps, Perry, Spencer, Josslyn, Burnside, Gibbs, Smith, Merrill, Star, Warner, Gallagher, Ballard, Wesson, Peabody—all those tentative efforts, from crude inventions to perfect arms—may be seen in the collection. Many a disputed case of priority of invention as to mechanism or character of cartridge might be settled by an examination of these arms. We should suppose that an armory would like to become the purchaser of these guns, and make it an addition to their military museum. To the private collector this assemblage of arms would be invaluable.

THE NEW JERSEY RIFLE ASSOCIATION.—A meeting of the New Jersey State Rifle Association was held on Saturday—Col. E. H. Wright, the president, in the chair. A communication was received from the National Rifle Association inviting affiliation. The invitation was accepted. Mr. C. A. S. Man reported that the certificate of incorporation would be filed on Monday, some members being desirous that a range should be secured at once, others preferring that the locality should be left open for some short time to come. A discussion took place in reference to the location of the range. Major Fulton stated that the President had arranged a conference between several members of the board and the Military Committee of the Legislature, to meet at Trenton next Wednesday. The meeting adjourned until Friday.

DESERET RIFLE CLUB—*Salt Lake City, Feb.* 22.—Off-hand match, at 200 yards, for medal:

James Sharp	4	4	4	5	4	4	4	5	4	5—43
John Groesbeck	4	5	4	5	4	5	5	4	3	4—43
A Young	4	4	4	3	5	4	5	4	5	4—42
M Barrett	3	3	4	5	4	3	4	5	5	5—41
M Anderson	4	4	4	4	4	4	4	4	4	4—40
B Roberts	4	4	4	4	3	4	4	4	5	4—40
John Sharp	4	3	4	4	3	4	5	4	4	5—40
H Duke	3	4	4	4	5	3	4	5	3	4—39
E McLaughlin	3	4	4	4	3	4	3	4	3	3—35
G Heusser	4	4	0	4	4	4	3	4	3	4—34
W K Conrad	3	4	4	2	4	3	5	2	4	2—33

P., JR.

DR. CARVER'S SHOOTING.—In the late match to break 750 glass balls in 1,000 with a rifle, the attendant tossed up the balls from a point some 20 feet in front of where Dr. Carver stood. The match was commenced at 1 P. M., and the first 100 the gun fell behind, the rate being 71 broken to 29 misses. In the second 100, the score stood 79 to 21. The third 100 was 89 hits to 11 misses. The fourth 100 was 92 to 8. In this thirty-three consecutive balls were broken, and in the fifth 90 to 10 was the tally. The sixth was 89 to 11, and the seventh 90 to 10. In the latter part of this 100 and the commencement of the eighth, 54 balls in succession were hit, and the best score was made in the eighth, only 7 being missed. In the ninth hundred the seventh ball was missed, and from that to the eightieth there was a clear succession of hits, and only two more escaped, so that 97 to 3 was the announcement. In the last hundred, 95 to 5, and the match was won with 135 to spare.

After the match was over Dr. Carver gave a further exhibition of his great skill by hitting dimes, quarters and half dollars, also thrown into the air, with the Winchester as well as the small Ballard gun used in the match.

In our last issue we noticed the receipt of a fifty-cent piece, and of a ten-cent piece, perforated by a bullet, and sent us by Dr. Carver.

DOMINION RIFLE ASSOCIATION—*Ottawa, Feb.* 27.—The annual report of the Dominion Rifle Association recommends a more practical method of selection, as well as additional training for Canadian teams. The team for 1878 will be selected as follows: One from Ontario, five from Quebec, twelve from New Brunswick, and two from Nova Scotia. The president expressed the opinion that this year, for the first time, Canada would be able to compete for the Queen's Cup, and, if not, that two Canadians should be admitted to the British team for the international match.

BADGES, PRIZES AND INSIGNIA.—We have every reason to be satisfied with the high character of the work and the excellence of design of the various Badges and Prizes made for us by Mr. M. M. Shephard of No. 154 Fulton street, New York. Simple weight of gold employed is one thing, but elegance and taste in the conception of all trophies which are to be presented to rifle teams, boat crews, or to athletes, in our discriminating age, is what is more desirable. Mr. Shephard will make the badge to be presented by the U. M. C. Co., to one of the winning teams at the FOREST AND STREAM AND ROD AND GUN TOURNAMENT. All work made by Mr. Shephard can be relied upon as being of the most superior kind as to value and elegance.

Game Bag and Gun.

GAME IN SEASON IN MARCH.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocet, etc., coming under the group *Limicolæ*, or Shore Birds.

RETAIL PRICES, POULTRY AND GAME.—*Game*—Canvas back ducks, $2.50 per pair; red head, $1.50; brant geese, $1.25; mallard ducks, 50 to 75 cts.; black do, 50 to 75 cts.; widgeon do, 40 cts.; broad bill do, 50 cts.; teal, 50 cts.; wild geese, per piece, $1; wild turkeys, per pound, 15 cts.; Wilson snipe, $7.50.

Poultry.—Philadelphia and Bucks County dry picked chickens, per pound, 16 to 20 cts.; do fowls, 13 to 15 cts; do turkeys, 15 to 18 cts.; do ducks, 20 to 22 cts.; do geese, 15; State and Western chickens, 10 to 13 cts.; do turkeys, 12 to 14 cts; do fowls, 10; do ducks, 16 to 20 cts.; geese, 10 to 12 cts.; capons, 25; slips, 22; spring chickens, per pair, $1.50.

MASSACHUSETTS—*Taunton, Feb.* 28.—I noticed quite a large flight of ducks northward early this A. M. J.

Salem, Feb. 10.—Shooting matters are about as quiet as they can be. Our friend Thomas J. Peabody makes things lively for the foxes. Some quail are left over. Eider ducks, usually common all winter off Grand Mevan, are very scarce since beginning of the winter. Owls are also scarcer than usual in vicinity of Montreal, so I am told. TEAL.

CONNECTICUT—*Stamford, March* 1.—Woodcock were seen here on Feb. 10. Our shore is lined with duckers every Saturday, but very few ducks are captured. SILVER STRAIN.

THE NEW YORK STATE ASSOCIATION.—This prominent association will hold its annual convention in Buffalo, either at the close of May or early in June. It is the Forester's Club which will arrange the details for the famous match, which draws together the leading sportsmen of the country. The Dean Richmond cup, which was won forever by the Forester Club, is to be revived, and a "new (Dean) Richmond is now in the field." This new cup, so we understand, manufactured by Mr. T. B. Starr, of New York, is to be two feet high, and will cost $1,500. There will be a diamond badge, presented by Dr. R. V. Pierce, and a Livingston County Cup. It is believed that the meeting of the N. Y. State Association will be largely attended by delegates from the leading clubs in the State.

WHERE THE WILD PIGEONS ARE.—A letter dated at Sharon, Pa., Feb. 25, says: "Wild pigeons by the million are roosting in Bloomfield Swamp, and feeding in the vicinity of Burghill, along the line of the A. & G. R. R. Shack is very plenty in that vicinity, and if let be will rest there, but, in spite of the Sheriff, the "pots" steal in at night and slay them by the hundred, which will drive them to other parts. ELMER."

Erie, Pa., Feb. 28.—Wild pigeons are appearing in considerable numbers a few miles south of here. W. W. D.

BIG EAGLE—*Sharon, Pa., Feb.* 25.—A son of Mr. John Welsh shot, and brought to this place, on the 23d inst., a bald or white-headed eagle, which measured seven feet two inches from tip to tip of wings, and weighed 13 lbs. This is the first specimen ever seen or captured in this vicinity. ELMER.

—The Philadelphia Sportsman's Club has removed from its old quarters, at 141 South Eighth street, to the northeast corner of Thirteenth and Chestnut—a much more desirable location.

TENNESSEE—*Columbia, March* 2.—Col. J. M. Mayes and party returned from a week's deer hunting in the barrens last Monday. They experienced very bad weather, and did not hunt but one or two days. Bagged one deer and several squirrels. Another party starts in a few days for a three weeks' deer hunt in the barrens. VAL.

OHIO—*Youngstown, Feb.* 28—Being descendants of the Son of Cush, or of some of his contemporaries, that we may not disgrace our ancient ancestor, have organized ourselves into a club, to be known as the "Youngstown Forest and Stream Sporting Club." Our officers for 1878 are: F. L. LeRoy, President; Dr. F. S. Whitslar, Vice-President; Ide Brownlee, Secretary; Dan. Moyer, Treasurer; D. B. Stambaugh, Chas. Bowers and Joe Williams, Directors. We have here ruffed grouse, quail, rabbit and squirrel sporting and occasionally fox hunting, with fair fishing in the Mahoning River.

We gladly stand godfather to the new club, and wish its members all possible success.

Cleveland, Feb. 25.—The game offered for sale by the hucksters in this market is for the season superb, and we might call this selling of game as now exposed here a most superb defiance of the varied State game laws as they now stand on their various statute books.

Feb. 25.—Game for sale on this market as follows: 300 brace of wild ducks, killed last week and shipped from Chicago. Among them were mallards, pin-tails, red heads and canvas-backs. Of the latter there were fifteen brace sold here for $1.50 a pair, poor and out of season, on their way North to reproduce their species. I might say here for the benefit of those who take the hucksters' word and price on canvas-backs, that within the last week you have paid good prices for red heads and female mallards, and have been as well satisfied with your supposed meal of canvas-back as though you had dined off the real bird. "Where ignorance is bliss 'tis folly to be wise." And this is not all I have to say about the game market of this city, for I must give you to understand that we can furnish you with fish, fowl, and four-legged game of all kinds the year round. We have in the market to-day 370 brace of quail, some shot, but the most of them trapped; also, 140 brace of ruffed grouse. These last birds are from Northern Michigan, Wisconsin, or Minnesota. I judge so from the fact that the tail feathers were all of the ash-gray color. In case we have an early spring I shall expect to see spring woodcock on the market by the middle of March. DR. E. STERLING.

[The color of tail feathers in the ruffed grouse varies too much to give any safe indication of the locality from which the bird comes.—ED.]

ILLINOIS—*Lacon, Marshall Co., Feb.* 27.—Grand duck shooting here now. WEIR.

IOWA—*Pomeroy, March* 1.—Geese, ducks, etc., coming in rapidly. Made their appearance about three weeks ago; since then have increased rapidly. They are very wild, and few have been killed. Just the kind of weather to bring the wild fowl, and good shooting. The country is full of grouse, and their "boomings" on a bright sunny morning attest the fact that they are already on the matrimonial warpath. An unfavorable season is all that will prevent us from having the best shooting on grouse for years. They are so thick that one can hardly go a quarter of a mile in any direction without flushing one or more large packs. This is the tangible result of our non-shipment act. ABE DACOTAH.

THOSE PUZZLES.—We wrought our woe with our own hands. Wisdom should have taken a warning from the dire result of our first venture, and so have averted this avalanche of manuscript and card-board; these square yards of note paper and foolscap; these numberless pasteboard triangles, squares and parallelograms. First to the John Bull and Uncle Sam difficulty, for the settlement of which numerous readers have resolved themselves into a Genova Board of Arbitration. The damages for that gentleman were just $4.22, which sum he cheerfully paid, with the remark that a day passed in such pleasant companionship was worth all that it cost, and more too. The square and parallogram puzzle—which, we learn since its publication, has before appeared in the *American Agriculturalist*—has engaged the attention of scores of mathematically inclined readers. The solution of how sixty-four square inches become sixty-five is very simple. They do it by not doing it. The fallacy is that the angles of the four parts cut up out of the square to make the second figure are not equal, and though the out-

side lines and measurements are correct, the divergence of the inside lines produce an area of space equal to the extra inch. If the angles are made square the diagonals will not coincide, but there will be a triangle, whose area will make just the square inch to be accounted for. A Lakeville, Conn. correspondent, who is a civil engineer, thus sets it forth:

"If proof in another way is desired, square up a 5x13 parallelogram, put in its diagonal and measure the perpendicular height to the diagonal from the 8th inch, and it will be seen to be the 3 1-14 inch and not just the 3 inches. The length of the diagonal is 13.92838839 inches. The difference on an 8-inch base from a perpendicular side of just 3 inches and one of 3.07692312, represents such an angle as will require a perpendicular width of .07179 inches at its opening; and inasmuch as there is a space on each side of such a parallelogram's diagonal, its area, though of a long and slim nature, is ascertained by the multiplication of the diagonal length by that 1-13 to 1-14 of an inch space 13.93x.07779 equals 1 inch."

With the answers have come numerous other puzzles of an equally puzzling nature, which we must decline publishing, simply from prudential motives. One query of a New York correspondent we give, but wish it distinctly understood that we do not wish solution of it:

"A goes to market with thirty prairie chickens, which he sells at the rate of two for one dollar, and for his thirty chickens gets $15. That is plain. B also goes with thirty chickens, but he sells at the rate of three for one dollar, and for his thirty chickens gets $10. Total received by both men for sixty chickens, $25. The next day B is sick. A takes B's chickens to sell them, but says to himself, "If I offer my friend's chickens at three for one dollar I can't sell my own at two for $1." So he offers two of his own and three of his friend's for $2. Now sixty divided by five equals twelve lots, at two a lot equals $24, or five for two equals forty cents apiece; forty by sixty equals $24. One dollar has disappeared, and yet he has obtained apparently the same price. Figures, they say, "won't lie," but they sometimes equivocate slightually. LAWYER.

OBJECTIONS TO HAMMERLESS GUNS.—In your last number (Feb. 21) appeared an article strongly advocating the W. W. Greener hammerless gun. I grant that if it is *perfection* we are aiming at, the hammerless gun comes as near it as anything yet invented; but cannot we be contented to let well enough alone? It seems to me that "perfection" in this case would be rather too much of a good thing. Your correspondent brings forward as one recommendation to the hammerless gun that we never have a *broken hammer* to mend. How often does a sportsman have a broken hammer to mend? Must use his gun rather roughly if he often has accidents of that sort; and for my part I would rather have a broken hammer to mend than my own or some one else'a arm or leg or shoulder, for there is about three times the danger of being shot with a hammerless gun than with the good old breech loader, which I do not think any hammerless gun can replace.

Further, our friend says, that with the hammerless gun the sportsman is not made to *blink* by the pulling of the trigger. Does Capt. Bogardus *blink* every time he pulls his trigger at Gilmore's? It seems to me that aportsmen of a slight degree of experience would get pretty well accustomed to pulling the trigger.

As to the objection that the hammerless gun is less dangerous while passing through a thicket or climbing a fence, it is to be hoped that most hunters know how to hold their guns in a proper position while in a thicket, and to put them over the fence first. And, indeed, this objection seems hardly worth noticing, for it stands to reason that if one gun is naturally more dangerous than another it will certainly be more dangerous in extraordinary circumstances.

And, lastly, I never saw yet a man calling himself a *sportsman* who would *forget to cock* his gun, even in the excitement of hunting. H. M. H.

New Brunswick, N. J.

We give with pleasure our space to our correspondent H M. H. All opinions for or against a new weapon may be useful; still the onward march of progress in all things is irresistible. When muzzle-loaders gave way to breech-loaders precisely the same arguments as our correspondent H. M. H. uses were advanced. One thing urged by all those who advocated the old style was that more accidents would occur with breech-loaders than with muzzle loaders. The very opposite is now found out to be the case. We do think that with the hammerless gun it may take some time before sportsmen can become acquainted with them; but it should be remembered that hammerless arms are by no means exactly novel, that is as far as cocking the piece by application of the finger on the hammer goes. The bolt action used fo military arms has been the gradual step forward which has led up to other important changes in lock mechanism. Some of these days we shall consider even the hammerless gun as old fashioned. The world must move.

LUX FEMINA FACTI.—No; we have not blundered in that quotation. It was the woman's privilege to be the light of this jaunt to the woods; the leadership was undoubtedly a thing of masculine assumption. We have always contended that the world, forest and stream, and all good things pertaining thereto, were made for woman as well as for man. We are therefore glad to present the subjoined letter in substantiation of our theory, simply premising that we have a companion letter from the husband, in which he expresses the very worthy resolution never again to go off into a corner and have his enjoyment alone:

EDITOR FOREST AND STREAM:

For many years, on the coming of autumn days, my husband, who is quite domestic in his habits at other seasons, has an attack of a migratory character, and the overhauling of tents, camp chests, and the varied paraphernalia that years of experience have accumulated in his outfit for the woods, finally culminates in a northerly flight about the time chilly winds and frosty mornings betoken approaching winter. Many a time, on bidding him adieu as he has started for a month's absence, have I wondered where in the vast solitudes of the northern wilderness existed a charm that could allure him from comfortable surroundings, and the regularity of his migrations served to deepen the mystery, until feminine instinct could endure it no longer, and my parting admonition in 1876 was, "I shall go with you next year." So it came about that last season, for the first time, I caught glimpses of the forest and stream primeval, and the rocks and lichens olden, and gathered some of the treasures that are stored in the solitude and sunshine of forest life. In a sheltered glade, adjacent to the rocks and rapids of a noisy river, among the magnificent pines and hemlocks, far from all signs of civilization, we pitched our tent, and the unspeakable charm surrounding that four weeks in the wilderness is a treasured memory. My husband was successful in the chase, and enjoyed the triumphs of a hunter, while I was captivated with the ferns, mosses and evergreens that grew about in bewildering profusion. We climbed the highest peaks, and worked our way through tangled swamps and thickets, paddled our bark canoe under the drooping branches of the spreading cedars that overhung the margin of the stream, and guided its course in safety among the rocks in the whirling rapids. We found pleasure in the Indian summer noonday sun, and our admirable outfit fully protected us, while the "patter of the rain on the roof" mingled with the roar of the storm far up among the tree tops. The snowy mantle that finally covered the trees brought new charms, and many weird and fantastic outlines were woven in the branches over us, and the crisp, frosty air and hillside climbing brought us health and color to the sallow cheek, and developed a relish for eating and sleeping that civilization knoweth not of. The mystery of my husband's migrations has been in a measure revealed, and a charm in the revelation folds me as closely, and we anticipate greater pleasure in the coming of the Indian summer days that will see us off again to the woods. KALOOLA.

For Forest and Stream and Rod and Gun.

BEARS IN THE GREAT DISMAL.

IN perusing my traveling friend, guide and companion in my southern trip this year—"Hallock's Gazetteer"—I came upon a passage which spoke of the game in the Dismal Swamp, page 167 (of "Fish and Game Resorts"), and it brought to mind an adventure there in 1863, or the winter thereof where for a time my regiment lay at Suffolk, in the edge of Nansemond.

One day I was out on our picket line on the Dismal Swamp side, when a boat came down the river literally loaded with game—saddles of venison, bear-meat, possum, ducks, etc. A lank, awarthy-faced man, rather past middle age I should judge, was in charge, and asked to be passed in with his cargo. Wanting some game myself, and wishing still more to know where to find it, I talked with him a little while and then passed him in, sending a man to show him to various quarters where I knew officers would soon buy up all his game. This man's name was Duke; perhaps the *Prentiss* Duke spoken of in your Gazetteer. But he was no *'prentice* at hunting; he was a foreman in the craft. When he sold out, which was speedily, he came to me, and, in a gruff tone, said:

"Colonel, I've heard you're right smart with the rifle. There's a powerful chance o' game up my way. Come to my Thin when the moon fulls and I'll give you a showin' at bar!" caTo say I jumped at that invitation is to utter truth, no more. When the moon was at full I got a Nansemond skiff, took two picked men to row or tow up the canal just as it best suited them, and started for Duke's. By the way, it is the easiest point to reach him: rail to Suffolk, and up the canal, I should judge seven or eight miles to his place. Am not certain as to distance. It seemed that I got there just before dark, had a splendid fish and game supper, enlivened by coffee which I took with me, looked at his hounds, curs and bear dogs, of which he had a yard full, and then got ready for our night hunt in the swamp bordering the banks of Lake Drummond.

Duke led out four bear dogs—they looked to me like a cross between the bulldog and bloodhound—and we started, he letting the dogs run as soon as we were out of his little clearing. In ten minutes they were yelping "like mad."

"They've struck bar!" was Duke's quiet answer to my look of inquiry.

We pushed on through the weird and tangled forest of cypress, gum, water oak, and I know not what else, the bright full moon casting fantastic flickers of light among the dense and varied shadows, nearing rapidly the spot where the dogs kept up their wild chorus. Soon, in a little open, we came to a thick, bushy persimmon tree, around the base of which the doga sat on their haunches barking their level best. They were silent at a word as Duke and myself walked up.

"You wanted bar, Colonel; there's a sprinkle for you," said Duke, quietly; "An old lady, and two cubs nigh full grown!"

So it was; three bears in one tree; better luck than I ever had before. The tree was low; I carried two army Colts in my belt and a Sharpa' carbine in my hand.

"I think I'll take a contract for all that meat, Mr. Duke!" said I, and I pulled for the head of the old bear an inch or two under the ear.

In a second she was tumbled down among the dogs, and too badly stunned to do any damage. Duke's knife let the blood from her neck, and then with my revolvers I "went for" the cubs. One fell at the first shot, giving the doga more fun, for it waa a body shot; but he was soon still, and then with two shots, one through the kidneys and the other a neck shot cutting the jugular, I "let down" number three—limber when he struck ground. The whole work probably took from three to five minutes. It looked too much like slaughter, but bear-meat was a luxury in camp, and I had come for meat as well as sport.

I will not tire the reader with repetitions, for the whole night was spent out, and in the morning Duke sent in two men with mine to bring out the large game; the small we packed in ourselves. Seven bears, four racoons, two wild turkeys and one fat "possum" was the result of one night's sport in the Dismal Swamp. Who could ask better?

NED BUNTLINE.

QUAIL SHOOTING WITHOUT A DOG.

MARLBORO, N. J., Jan. 28, 1878.

EDITOR FOREST AND STREAM:

I've been interested in reading some article in your journal describing the way quail shooting is conducted in some parts of California—i.e., without the use of a dog. It brought to my mind pleasant reminiscences of a day's sport in Ohio that I enjoyed a few years since, and prompted me to relate them. I may add that I've been a very active and enthusiastic quail shooter for the past twenty years, and during al this time do not remember to have had a single day's quail shooting (except the one I will try to relate) without the use of a dog. This exceptional day was very unexpected, and happened in this way:

I was visiting some relatives in Ohio, not far from the town of Dayton. A sporting friend whom I met proposed a trip up the Dayton and Detroit R. R. to a point not far distant from Sidney. My friend shot so little that he did not keep a dog, but he assured me that there would be no difficulty in procuring one at his relative's where we were to stop. We were soon *en route*, and found at our destination most comfortable and hospitable entertainment. During the night it snowed about two inches deep, and cleared away before day. In the morning we were late in getting out, as we waited for our guide and promised dogs. My friend finally ascertained that no dogs could be obtained that day, as they were all in use, so we determined to try it alone and do the best we could. It was a new country, and much of the ground was uncleared.

The first piece of ground we hunted was full of stumps and brush, and very extensive. In walking along the outside of this ground, and near some ragweed and stubble we discovered some quail tracks in the snow, upon what I supposed the feeding ground; but they soon returned again to the stumps, and then we lost them altogether. In one corner of this new ground was a large flock of sheep feeding upon corn fodder, scattered over an acre or two. We tracked the quail to this place from several directions, but invariably lost them here, and finally gave them up and concluded to go home. We had not thought of looking among the sheep for the quail, but here they were feeding upon the loose grain that they found shelled out—I suppose by the sheep. It so happened now that we were walking home directly through the large number of sheep, when what was our astonishment to hear the whirr of the quail's wings not twenty paces from us. I must confess I was so startled I did not get but one barrel into them, and that one aimed at the whole covey, thinking to kill them all, and, of course, with no other result than making a few feathers fly. My friend, if anything, was more frightened than myself, and could not get his gun into position at all. It was a fine, large covey, and they went out among the stumps and scattered most beautifully, and were carefully marked down. They did not lie very well—I suppose because of the snow—but gave us good shooting. There was scarcely any cover, and the ground was so large they did not fly out of it after several attempts. We followed them up most perseveringly, thinking this our only chance, and bagged ten very fine birds. On our way back we passed through a large cornfield, where the stalks had been left standing and the corn had been gathered out and placed upon the ground in large heaps. These heaps had been removed, but much loose grain had been scattered about upon the ground, which was getting bare in places, as the snow began to disappear with the warmth of the noonday sun, affording feeding for quail, etc. We were fortunate to find another large covey upon this ground, and to be ready for them when they first rose, securing three. Following them up into open shooting, we got nine more. Three rabbits and one ruffed grouse upon the edge of some large timber completed our bag, and we went home to enjoy a late but most excellent dinner. M.

CHILLED SHOT—A REPLY TO MR. KNOWLTON.

EDITOR FOREST AND STREAM:

I must confess that I was somewhat surprised to find so strong a champion in favor of chilled shot as Mr. Knowlton seems to be, knowing this gentleman to be a salesman for a shot manufacturer who does not make chilled shot and consequently might be expected to condemn it, as a matter of policy; but Mr. Knowlton generously suggests advantages for it which I think Messrs. Tatham & Bros. must have forgotten to claim. He proves to the sportsman that it is economy to use chilled shot, as it does not take as much powder to drive a number of pellets of hard shot with greater penetration and produce a better pattern than a like number of soft shot of the same size. A sportsman will readily see that he not only saves on his powder, but also gets a greater number of loads out of a pound of shot. Mr. K. could scarcely suppose that Messrs. T. & Bros. had neglected to experiment with an equal weight of hard and soft shot.

Before and since his communication I have made a number of experiments in that direction. The average result of a uniform charge of powder and shot by weight, the pellets in each load gauged and counted, shows, for soft shot—pattern 88½, penetration 14½; improved chilled—pattern 65½, penetration 29 3-6. Pattern 58 per cent., and penetration 49 per cent. better for chilled shot. When loaded by measure, the pattern is slightly decreased, and penetration somewhat increased on chilled. These results were obtained by using 4½ drachms Curtis & Harvey's No. 4 powder, a felt wad over it, and cardboard wad over the shot.

Mr. K. closes by condemning black lead finish, "which so fouls the gun, and taints the game," but which is used by all soft shot makers; thus, it seems to me, leaving the sportsman no choice but to use the "Improved Chilled Shot," to finish which plumbago is not necessary. It is scarcely necessary to state what every practical sportsman knows, that when a gun does lead it is with metallic lead, and not plumbago, the latter being a lubricator.

The communications from Mr. Geo. Hayden and Maj. Merrill in your last issue, seem to be from gentlemen of practical ideas, who understand what is wanted by sportsmen, viz.: Ammunition and appliances which will give best results. I agree perfectly with Mr. H. in using the best, strongest and cleanest powder. My experiments teach me that the best results with chilled shot are to be obtained by using strong shooting guns and strong powder. The killing penetration of soft shot may be increased by using stronger powder, but what is gained in penetration is more than balanced by loss in pattern, the increased propelling force causes the pellets to bruise each other so much more in passing out of the gun barrel, that fewer reach the mark, or, in other words, scatter more. I consider that the recently published trial was about as poor a result for chilled shot as could honestly be obtained. If quick, strong powder had been used, a felt wad over it, and a cardboard wad over the shot, the soft and hard shot sifted to exactly the same size, the result would have been twice as great in favor of hard shot.

I wish to correct a few errors which Maj. Merrill has made, as he will see by referring to your report of the trial. He says, "Each gun fired but one round, sixteen loads in all," when the fact is, each gun fired two rounds—one of hard, and one of soft shot—thirty-two loads in all. He will also notice that the guns showing in favor of soft shot, or nearly so, were comparatively weak in penetration, not shooting with sufficient force to mash up the soft shot.

I have experimented with various sizes of shot, at different distances, and find the result much the same. I was very much averse to using chilled shot, until I tried it in the field. After a month's shooting during which time I killed more birds, wounded fewer, and killed at longer range with hard than with soft shot, I was forced to believe in its efficacy. CHAS. RICHARDS.

CALIFORNIA WINE DEPOT.—Mr. Anton Meyer, of No. 392 Bowery New York, has been in business for over twenty-five years, having been the first to appreciate the excellence of the California champagnes. His trade mark—an M—is recognized among the best brands. Mr. Meyer has opened, in his extensive wine vaults, a rifle range in which shooting takes place every night. The prize for the best shot is a Creedmoor long-range Remington rifle.

PIGEON MATCHES.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

CONNECTICUT—*Stamford, Feb.* 23.—Three Bogardus traps, ten yards apart, shooters not to know which one was to be sprung. Messrs. Scofield and Grain shot at eighteen yards rise, and the rest at fifteen yards rise. Score:

Gothout	1	0	1	0	1	1	0	1	0	1—6
Fosdick	0	0	0	0	1	0	0	1	0	0—2
W Davis	0	0	0	0	0	0	0	0	0	0—0
H Davis	0	0	0	0	0	0	0	0	1	0—1
Wred	0	1	0	0	1	1	1	1	1	1—7
Murdock	1	0	0	1	1	0	1	1	0	0—5
Rickard	0	1	0	1	1	0	0	0	0	0—3
Scofield	0	1	1	0	1	1	0	1	1	1—7
Grain	0	1	1	1	1	1	0	1	0	1—7
Covell	0	0	0	0	0	0	0	0	0	0—0
Staples	0	1	0	0	0	1	0	1	0	1—4
Hoyt	1	1	1	0	1	1	0	0	0	0—5

Tie on seven—at three balls each.

Weed.....0 1 1—2 Grain.....0 0 1—1
Scofield.....0 1 0—1

Shoot off for second prize.

Scofield.....0 1 1—2 Grain.....1 1 1—3

Regular monthly shoots for a trophy will be held during the summer. CHOKE.

POWON SHOOTING CLUB—*Salisbury, Mass., Feb.* 23.—Glass balls, eighteen yards rise. Score:

Gadsoe	1	1	1	1	0	1	1	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	1	—13
Adrich	1	0	1	1	1	1	0	1	0	1	0	0	1	0	1	0	1	1	1	0	1	1	0	1	0	—17
D Folger	1	1	0	0	0	1	1	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	— 8
Whitmore	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	— 6
Hatch	0	1	1	0	1	0	1	0	0	1	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	— 8
S Marston	1	1	1	0	1	0	0	1	1	0	0	1	0	0	0	1	1	0	0	0	1	1	1	0	0	—12
N Folger	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	0	0	1	0	0	0	1	1	1	1	—10
E Kowell	1	1	1	1	1	1	1	0	0	1	1	1	0	1	1	0	1	1	0	1	1	0	0	1	1	—18
Beals	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1	0	1	0	0	1	—16
Moore	0	0	0	1	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	1	1	0	1— 9
Wales	1	0	0	0	0	0	1	1	1	0	0	0	1	1	1	0	1	0	1	1	0	1	0	0	0	—12
Eastman	1	1	1	1	0	1	1	1	0	1	1	1	1	0	0	1	0	0	0	1	1	1	0	1	0	—17
Greeves	0	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	0	1	1	0	0	0	0	0	1	—14
W Marston	0	1	1	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	— 8
W True	0	0	0	0	0	1	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	— 7
Batchelder	1	1	0	1	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	1	—11
Shafford	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	0	1	0	0	—21
J Kowell	1	0	0	1	1	1	1	0	1	1	1	0	1	1	0	1	1	1	0	1	1	0	1	0	1	—16
Patten	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	— 4

NEW YORK—*Newark, Wayne County, March* 1.—Second weekly practice of the Sportsman's Association; twenty-one yards rise; Bogardus' trap and Bogardus' rules governing. Score:

Miller	1	1	1	1	1	1	1	1	0	0—8
Pomeroy	1	1	1	1	0	1	1	1	1	1—9
Lehn	1	1	0	0	1	1	0	1	1	1—7
Duffy	0	1	0	1	0	1	1	1	1	0—6
Palmer	1	1	0	1	1	1	1	1	1	1—9
Blackmac	1	1	1	1	0	0	1	0	1	0—6

In shooting off ties of nine, Pomeroy won with seven out of eight. On ties of six, Blackmac won, breaking three out of five. SHOT.

FORESTER CLUB—*Buffalo, N. Y., Feb.* 16.—The Robson prize watch, valued at $300, which was given to the Forester Club, to be shot for four times a year for three years, was shot for to-day, and the twelfth contest was won by Mr. W. E. Richmond. The first shoot was May, 1875, won by Mr. W. W. Sloan; second, September, 1875, won by Mr. Henry R. Jones; third, November, 1875, won by George H. Van Vleck; fourth, February, 1876, won by Mr. Frank I. Dorr; fifth, May, 1876, won by Mr. Frank I. Dorr; sixth, August, 1876, won by Mr. Robert Newell; seventh, November, 1876, won by Hr. Henry J. Jones; eighth, February, 1877, won by Dr. R. V. Pierce; ninth, May, 1877, won by Mr. Henry R. Jones; tenth, August, 1877, won by Mr. Robert Newell; eleventh, November, 1877, won by Mr. Henry C. French, and the twelfth and last was on February 16, 1878, and was won by Mr. W. E. Richmond. Mr. Henry R. Jones having won the greatest number of times was declared the winner. Score:

Sheldon Thompson.....21 yards.....0 0 1 0 1 1 0 1 1 0—5
W C Jacus.....24 " .....1 0 1 0 1 0 0 0 0 0—3
George Smith.....25 " .....0 0 1 1 0 0 1 1 1 0—6
H R Jones.....25 " .....0 1 1 0 0 0 1 1 1 0—5
R Newell.....25 " .....1 1 0 1 1 0 1 1 0 1—7
J Sidney.....21 " .....1 1 0 0 0 0 0 0 0 0—2
F I Dorr.....24 " .....1 1 1 1 1 0 0 0 1 1—7
W W Sloan.....24 " .....1 1 1 1 0 0 0 0 1 0—5
R Dickson.....24 " .....1 0 1 1 1 1 0 1 1 0—7
H C French.....22 " .....0 1 1 0 1 0 0 0 0 0—3
W E Richmond.....21 " .....1 1 0 1 1 0 0 1 1 1—7

Ties on seven shot off—five birds each.

R Newell.....1 0 1 1 1—4 W E Richmond.....1 1 1 1 1—5
F L Dorr.....1 1 1 0 0—3 R Dickson.....1 1 0 0 1—3

Cohoes, March 3.—Score:

W Laing.....0 1 0 0 0 1 0 0 0 1—3 A Grant.....0 1 1 1 1 0 0 1 0 1—6

Second Match.

A Paul.....1 1 1 1 1 1 1 1 0 1—9 W Ryan.....1 1 1 1 0 0 0 0 0 0—4

W. J. W.

Poughkeepsie, Feb. 26.—Match between Von Der Linden and Hoffman teams. Score:

Von Der Linden Team.

A Von Der Linden, captain.....0 0 1 1 0 1—3
Henry Hart.....1 1 1 1 1 1—6
Geo Welker.....1 0 1 0 1 1—4
A Schoffer.....0 0 0 1 1 1—3

Hoffman Team.

V Hoffman.....0 0 0 0 0 1—1
Frank Van Wagner.....1 1 1 1 1 1—6
C H Young.....0 0 1 0 1 1—3
A Kunkle.....1 1 1 1 0 1—5

Second Match.

Von Der Linden Team.

Von Der Linden.....0 0 0 1 0 0—1
Henry Hart.....1 1 1 1 1 1—6
Geo Welker.....1 0 1 1 1 1—5
A Schoffer.....0 1 1 1 0 0—3

Hoffman Team.

V Hoffman.....1 0 1 0 0 1—3
Frank Van Wagner.....1 1 1 1 1 1—6
C H Young.....0 1 1 1 1 1—5
A Kunkle.....1 1 1 0 0 1—4

NEW JERSEY—*Riverton, Feb.* 22.—Match at 21 yards rise, 80 yards boundary; ground traps. Score:

J B Ellison	0	1	0	1	1	1	1	1	1	1	0—10
R H Wells	1	1	0	0	1	1	1	1	0	0	0— 8
R Wells, Jr.	0	1	0	1	1	0	0	1	1	0	1 0— 6
G W B Roberts	1	0	1	1	0	1	0	1	0	0	0 1— 6
R Nelson	0	0	0	0	1	1	0	0	0	0	1 0— 3
C C Reinhard	0	0	0	0	0	0	0	0	1	0	0 0 0— 1

NEWARK GLASS BALL CLUB—*Feb.* 27.—Regular shoot for cup; 140 feet from trap. Score:

R Fulleger	1	0	0	0	0	1	0	0	0	0	1	1	0	0	1	1	1	1	1	1	0	0	1	0	—12
Wm Richards	0	0	0	0	0	1	1	0	0	1	1	0	0	0	1	0	1	0	1	1	1	0	0	1	— 9
S Burr	1	1	0	0	1	1	1	1	1	0	0	1	1	1	1	0	1	1	0	1	1	0	1	0	—16
J Scheiber	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1	0	0	1	1	—15
T Richards	1	1	1	0	1	0	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	—19
W F Quimby	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1	—19

Ties on five at four yards back.

Richards.....1 0 1 0 1—3 Quimby.....1 0 0 1 0—2

PENNSYLVANIA—*Erie, Feb.* 28.—Second monthly shoot of the Northwestern Gun Club for champion gold badge. Score:

Jake Graham	1	1	1	1	1	1	1	1	1—10
Tim Lynch	1	1	1	1	1	1	1	1	1—10
Theo W Jarecki	1	1	1	1	1	0	1	1	1— 9
W Tracy	1	1	1	1	1	1	0	1	1— 9
A Vansciter	0	1	1	1	1	1	1	1	1— 9
W W Derby	1	1	1	1	1	1	1	0	1— 9
S S Wallace	0	1	1	1	1	1	0	1	1— 8
M C Lynch	0	1	1	1	1	0	1	1	1— 8
Chas Finch	0	1	1	1	1	1	0	1	1— 8
B Scott	0	1	1	1	1	1	0	1	0— 7
G W Hayward	1	1	0	1	0	1	1	0	1— 7
Arthur Conway	1	0	1	1	1	1	0	0	1— 6
A E De Rupert	0	1	1	0	1	0	1	0	1— 6
John E Graham	1	0	0	1	1	0	0	1	0— 5

Ties shot off—twenty-one yards

Jake Graham.....1 1 1 1 1—5 Tim Lynch.....1 1 1 0 1—4

The members of the club partook of a bountiful supper, at the expense of Jake Graham, and thoroughly enjoyed themselves.

Crosscut, Feb. 26.—Club shoot; eight birds each; plunge trap; 21 yards rise; wild birds; all drivers; wind quartering away to the left; swiftest birds ever shot at here.

G K Andrews	0*	1	1	1	0	†0	1	1	1—5
A D Newell	1	1	0	*0	1	1	1	0	1—5
T S Kirk	1	1	0	1	1	*0	1	1	1—5
H D Frisbee	1	1	0	0	*0	1	1	0	1—4
M B Robinson	0	0	1	1	1	1	0		—3

Second Match—Five glass balls each; 18 yards rise.

G K Andrews.....1 1 1 1 0—4 H D Frisbee.....1 1 1 0 1—4
A D Newell.....0 1 0 0 0—1 M B Robinson.....1 1 0 0 0—2

* Dead out of bounds.
† Killed with second barrel. ADRIMAN.

Philadelphia, March 4.—Sweepstakes match; twenty-one yards. Score:

C A Meyers	1	1	1	1	0	1	1	1	1—9
Col Frey	1	1	1	1	0	1	1	1	1—9
P Landshutz	0	1	1	1	1	1	1	1	1—9
John Miller	0	1	1	0	1	0	0	1	0—4
Fred Miller	1	1	1	0	1	1	1	1	1—9

Ties shot off—first miss out. Landschutz and Miller tied on four, and divided money. C. A. M.

Philadelphia, March 1.—The Semper Felix Club invite any amateur glass ball shooting club to a series of matches for mutual improvement. All communications should be addressed to Geo. H. Summers, Cumberland and Lee streets, Philadelphia. The second match, at 21 yards, for the championship, resulted in the following score:

Dr C P Smith....0 0 1 0 1 0 1 0 1 0 0 1 0 0 1 0 1 1 0 1 1 0 1 1 0 0 1 1—16.
H Wright.....0 1 1 0 0 1 1 1 1 0 1 1 1 1 0 1 1 0 1 0 1 1 0 0 1 0 1 1 1—19
Dr M A Wood. 1 0 1 0 1 0 0 0 1 0 0 0 0 1 0 1 0 0 0 0 1 0 1 0 0 1 0 0 1 0—11.

Bloomsburg, Feb. 23.—Match between Bloomsburg and Phillipsburg. Score:

Bloomsburg.

Dairymple	1	1	1	0	1	1	1	1	1 0—8
Scott	1	1	0	0	0	1	0	1	0 1—5
Creveling	0	0	0	1	0	1	1	1	1 1—6
Jones	0	0	0	1	1	1	1	0	1 0—5
Hulsizer	0	1	1	0	1	1	1	0	0 1—6
Hawk	0	0	0	1	0	1	1	1	0 0—4
Hoff	1	0	1	0	0	1	0	0	1 0—4
Dairymple	1	0	1	1	0	0	1	0	0 1—5—43

Phillipsburg.

Harris	0	1	1	1	1	0	0	1	1 0—6
Peters	0	1	0	1	1	1	1	0	1 1—7
Creveling	0	0	1	1	1	1	0	1	0 1—6
Leigh	0	0	0	0	0	0	0	0	1 1—1
Frazier, W	0	0	1	1	1	0	0	1	0 1—5
Frazier, P.	0	1	0	0	1	0	0	1	1 1—5
Lott	1	1	1	1	1	1	1	1	1 1—10
Levers	0	0	0	0	1	1	0	0	0 1— 3—43

In the shoot off Bloomsburg scored 16, Phillipsburg 17.

TEXAS—*Waco, Feb.* 12.—Eighth regular monthly match of the Waco Gun Club for the Ragland Cup. Score:

McColl	0	0	1	0	0	0	1	0	1	0— 8
Treadwell	1	0	0	0	0	1	0	0	0	1— 3
J Garland	1	1	0	1	0	0	0	1	1	0— 5
J Thompson	1	1	1	0	1	1	1	1	0	1— 8
Downs	1	1	0	1	1	0	1	1	0	1— 7
Creasp	1	1	1	1	0	1	1	1	1	1— 9
Early	0	1	1	1	0	1	1	1	1	0— 7
S Garland	0	0	1	1	1	1	1	1	0	0— 6
H Thompson	0	0	1	1	0	1	0	1	1	0— 5
Lane	0	1	1	1	1	1	1	1	1	1— 9
McCulloch	1	0	0	1	1	1	1	1	1	1— 8
Ahuond	1	1	1	1	1	1	1	1	1	1—10

WACO.

MICHIGAN—*Detroit, Feb.* 28.—Pacific Gun Club; side match. Score:

W H Gillman, captain	1	1	1	1	1	1	1	1—8
Bordwell	1	0	1	0	1	0	1	0—4
Minahan	1	0	0	1	0	1	0	0—3
Travis	1	0	1	1	1	1	1	1—7
Phelps	0	0	0	0	1	0	0	1—2—24
Chas Brown, captain	1	0	1	1	1	1	0	1—6
Thayer	0	0	1	1	1	1	1	0—5
Sheldon	0	1	0	0	0	0	0	0—1
Birmingham	0	0	1	0	0	1	0	1—3
Welch	1	0	0	1	0	0	0	0—2—17

Sheldon and Minahan had a trial of skill at fifteen birds each. Sheldon won by two birds. Brown, of the Pacific, and Mack, of the Detroit, also tried conclusions at five birds each. The victory went to Brown, who killed five straight against four by Mack.

National Pastimes.

LACROSSE AT GILMORE'S GARDEN.—The Iroquois lacrosse players, with Saivatis Aientonni as captain, and the Onondogas, under Thehaser, met on Tuesday night with their lacrosse bats at Gilmore's Garden. Lacrosse is a kind of shinny, only the sticks have a wider and longer crook, with netting, in which the ball is caught and tossed. To win a match the ball has to pass between two staves, about four feet wide and some five feet high. There is a good deal of general scrimmaging, with hurking and thrashing. The Indians showed great skill in running, doubling, and getting out of the way of one another. A match was played during the evening between the N. Y. University Club and the Ravenswood Club, of L. I. The prize for the Indians was a silver cup, given by Mr. W. M. Tilestou. The performances will be continued during the week.

THE BOGARDUS GRIP.—Captain Bogardus appeared on Monday at Gilmore's Garden in a double capacity. The Captain was to shoot glass balls and carry by main grip some unknown weights. Of course, most everybody knows "it is come down, Captain Scott," as far as his gun performances go, still some people were skeptical as to the Captain's grip. Now, Listz, the pianist, can stretch two notes over the octave, but if Bogardus were a performer on a Chickering or Steinway, he could run double octaves with either hand, so enormous are they as to straddle. The Captain's second finger is 4½ inches long. Placing his hands perpendicularly, and out, stretching only his thumbs, the little fingers being close to the hand, the Captain covers a distance of one foot two and a half inches. Of course, Alexander and Janvin had combined their forces to manufacture a pair of kids for Captain Bogardus. The Captain, with his thumb and two fingers, takes hold of the chine of a lager-beer barrel weighing 115 pounds, lifts it on and off a table, and seizing two barrels, one in each hand, takes a little walk round with them. With two dumb-bells, weighing 385 pounds, the same feat was performed. One hundred and one balls were smashed by Captain Bogardus' gun in six minutes and eighteen seconds. Master Eugene acquitted himself most superbly. Young Bogardus is going into practice with a 20-gauge Scott. No doubt this young gentleman's skill will do a great deal to popularize these small calibres.

New Publications.

THE MONTHLIES.

Scribner's is doing perhaps more than any other of our monthly magazines to popularize the sports and recreations of the field. We have more than once called the attention of our readers to the admirable series of papers on American sports, and to commend both the articles themselves and the excellent manner in which the publishers present them. In the February number Mr. Chas. C. Ward, a frequent contributor to FOREST AND STREAM, has a readable paper on "Moose Hunting." Mr. Ward writes with the spirit of the chase and all sportsmen will recognize in his work a truthfulness of delineation and an enthusiasm well befitting the grand sport of which he writes. The letter press is well supplemented by the engravings, the whole combining to make this the best description of moose hunting ever published in America. The March number of the magazine has a score of good things. Mr. Noah Brooks continues his "Personal Reminiscences of Lincoln," giving us several new anecdotes. Another paper of personal recollections is that of Mrs. S. A. Weiss, who writes of the "Last Days of Edgar A. Poe." Illustrated papers are: "An American Colony in a Normandy Manor House;" "An Earthquake Experience;" "A Trip to Central America;" "Dresden China," and "Kenyon College." Prof. W. G. Sumner has a thoughtful discussion of "What Our Boys Are Reading," calling attention to the trashy and in every way demoralizing story papers now scattered broadcast among the boys. This is a subject of grave consideration, and should engage the serious attention of every parent.

We shall do our share toward supplanting these trashy productions by commending to all boy readers of FOREST AND STREAM the two magazines prepared for them as magazines have been prepared for no other generation of boys since the world began—*St. Nicholas* and *Wide Awake*. It is a noticeable fact that under the very able management of the ladies who edit these periodicals, the most eminent literary talent in the country has been enlisted for the boys and girls. Each new number is a surprise to us, and this month the publishers are in no way behind.

St. Nicholas has the opening of a new serial, "Drifted Into Port," by Edward Holder, an English writer. Two more chapters of Miss Alcott's "Under the Lilacs," and six short illustrated stories, all bright and charming, of which the titles are: "Hansa, the Little Lapp Maiden;" "A Night with a Bear;" "Crip's Garret-Day;" "The Boy in the Box;" "Where Aunt Ann Did the Sugar;" "Johnny." Then there are "Secrets of the Atlantic Cable;" "A Monument with a Story," telling the story of Burke and Wells, the Australian Explorers; "Westminster Abbey;" and of the "How Series," "How Matches Are Made;" with other and excellent features.

Wide Awake comes with another stirring winter frontispiece—a snow-ball frolic—called "The Battle of the Three," and a jolly three they are, to be sure. The third of "The Child Toilers of Boston Streets" is "The Shovel Brigade," illustrated with life studies of the child toilers, by Miss Pierson. Mr. Arthur Gilman has an essay on "The Story of the King," telling all about the King Arthur of history and fiction. An equally instructive article is the first of the English literature papers, by Mrs. Lillie, and treats of "The Days of Chaucer." We suspect that these may be of interest to grown folks too. The serials, "True Blue" and "A General Misunderstanding," keep up their interest; and other stories are "Margy's Two Troubles," and "What Johnny Found." Poems are contributed by Mrs. Whelpin, Miss L. B. Humphrey, Wm. M. F. Round, with an amusing story in verse of the third "Misfortune" of "Little Miss Muslin," who borrows an umbrella. The usual features of the magazine are this month well sustained.

The *Eclectic Magazine*, now in its twenty-seventh volume, has long sustained its present high reputation as a compendium of the best trans-Atlantic current literature. Its pages are filled each month with the choicest selections from the English magazines, and with its judicious culling we are enabled to keep abreast of English thought. The March number contains, among other papers: "France as a Military Power in 1870 and 1878," by Sir Garnet Wolseley; "Spontaneous Generation," by Prof. Tyndall; a description of Kiyoto, the sacred city of Japan; "An Oxford Lecture," by Prof. John Ruskin; "Homer;" "French Home Life;" "Technical Education," by Prof. Huxley; the conclusion of Mrs. Oliphant's "Young Musgrave," and the opening of Black's new serial, "Macleod of Dare." There are a dozen other articles equally deserving of notice, with the usual literary notices, science and art, etc.

The March number of the *Phrenological Journal* has a biographical sketch of Dr. Nathan Allen, of Lowell, Mass., whose name is intimately connected with the introduction and development of the present admirable system of physical culture at Amherst College. Another biographical paper discusses Mme. H. P. Blavatsky, whose late work, "Isis Unveiled," has brought her into public notice. There are discussions of the question of consciousness while "Falling Through Space;" the phenomena of "Tongues of Fire;" a continuation of the chapters on "The Temperaments;" "The Use of Tobacco;" "Allopathy and Water Cure," and various other topics.

NEW METHOD OF HORSEMANSHIP, ILLUSTRATED, by F. Baucher. Albert Coggswell, New York.

From the name of the author has been coined a hippic word. To *Baucher* a horse, in fact, means to produce in the animal pliability of parts, equilibrium and ease, with diminution of fatigue. The book under review is devoted not only to the lessons which the rider must study, but the horse himself goes through a whole method of careful instruction. It is evident that, to give ease and grace, this combination of training, partaken by the rider and his mount, must accomplish wonders. The method of horsemanship, then, shows what steps must be taken in the education of the horse, and when the lessons are mastered, a safe and graceful seat is the result.

—A few years ago Maine was the greatest lumbering State in the Union, but now she is sixth on the list, and the business is rapidly falling off by reason of the wasting away of the forests and the competition of the Western men. Shipbuilders at Portland say they can get pine masts and spars from the Pacific coast cheaper than they can cut them in their own woods.

WINES AT $524 PER BOTTLE.—The vintage of 1811 has now acquired a peculiar celebrity, and the good wine produced that year all over France has been generally attributed to the influence of the comet. France was in that year passing through too anxious a crisis to care much for choice wines, and these vintages were, in the autumn of the following year, freely sold at $300 a cask. In 1868 there was a sale of the cellars of Chateau Lafitte, including much of the Comet-claret. The auction was held on the 27th of October, and as these were the days of the Second Empire, high prices were realized. The lots were started at $4 a bottle, and the bidding went up to $24, at which price a hotel-keeper at Bordeaux bought a large quantity.

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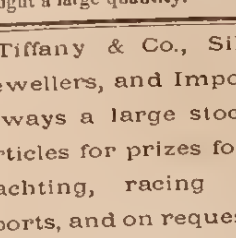

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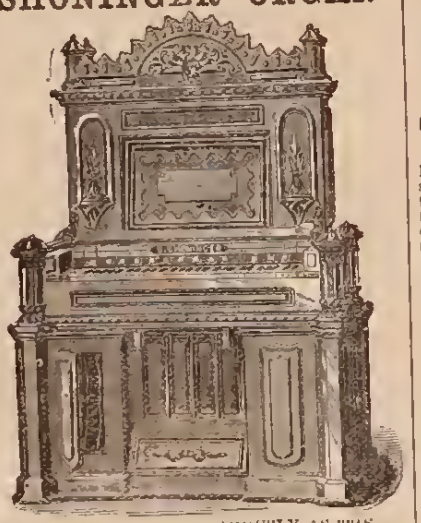
THE

SHONINGER ORGAN



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Samples of the Hammerless Gun now on exhibition, and orders taken by our agent. Guns to be delivered June 1.

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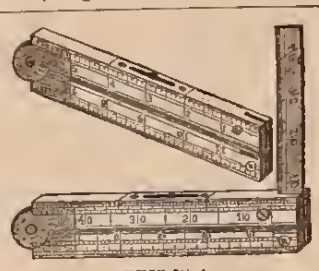

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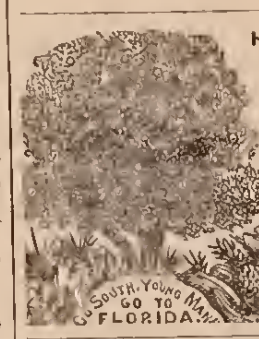

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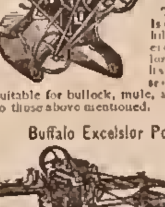

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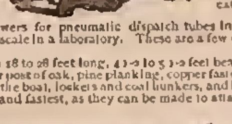

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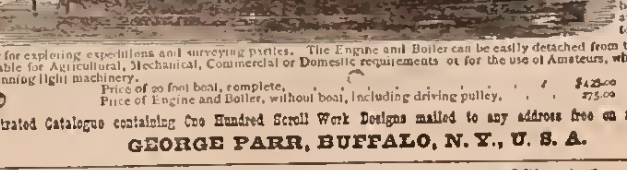

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Send description and prices to

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Hazard's "Electric Powder."

Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of 1 lb. *only*.

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Superior Mining and Blasting Powder.

GOVERNMENT CANNON & MUSKET POWDER; ALSO, SPECIAL GRADES FOR *EXPORT*, OF ANY REQUIRED GRAIN OR PROOF, MANUFACTURED TO ORDER.

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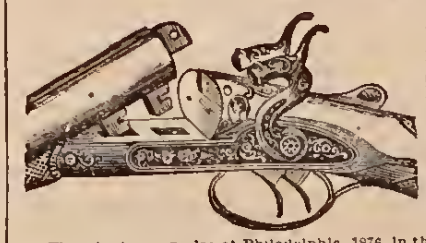

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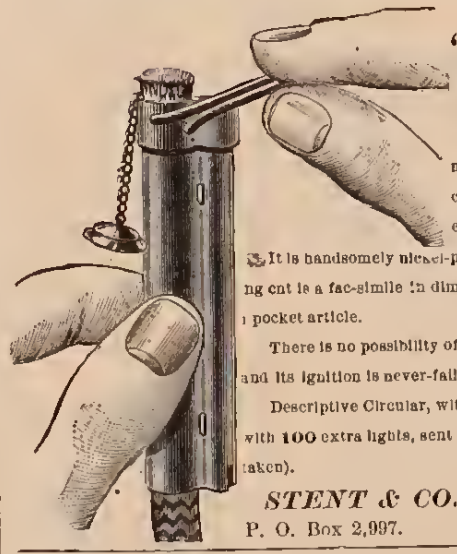

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Feb14 6m

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Monday, June 24, 1878,

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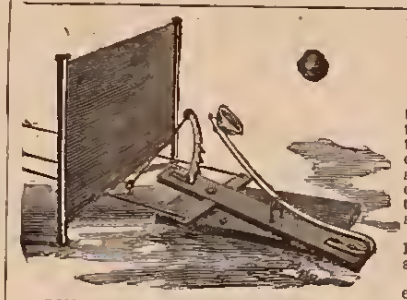

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THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MARCH 14, 1878.

Volume 10.—No. 6. No. 111 Fulton St., N.Y.

SONG.

By the late John Ward, Sheffield, England.

[*Written for the opening of the season for trout fishing of the River Derwent Association, Derbyshire, England.*]

AT length the first of April, once more has come again,
Again the Derwent Fishing Clubs have opened their champagne;
Of all the joint stock companies, so far as I can learn,
There is not one succeeds so well as our joint stock concern.

For our joint stock's the "Derwent Bank" which answers to our wishes—
That is, when we get credit there and draw large drafts of fishes.
True, sovereigns and notes are not held by the Bank of "Derwent,"
But what of that when fishes pass and silvery streams are current!

That trout and inrolps are akin, you cannot well deny,
Since every body knows that both are taken with the fly.
But flies at all times will not do, though Turton's self should dub,
And so the better to get through, we start well stocked with grub.

The wisdom of our ancestors—a well-known fact I'm stating—
Thought bulls and bears as well as hooks were suitable for baiting;
But now this most degenerate age destroys half our resources,
We've nothing but our hooks to bait unless we bait our horses.

We dearly love the finny tribe, and covet with all our powers;
Presenting silks and feathers too, to win them to be ours.
We don't indeed by word of mouth say, Trout, will you be mine?
The way we pop the question is to drop the fish a line.

The trout from Derwent's rocky shelves their answer never send,
For when the fish yield to our wish they always come themselves.
So now I've sang you all to sleep, and when for home you're stealing
Don't dream you've hooked some famous fish and on the road go reeling.

Swan Shooting on the Potomac.

"Like some full breasted swan
That, fluting a wild carol ere her death,
Ruffles her pure, cold plume and takes the flood
With swathy ebbs."—*Tennyson.*

SOME unsentimental, practical sportsmen, scarcely deserving to be classed higher than mere pot-hunters, have declared that the music of the dying swan is the fantastic creation of poetic fancy; and it is doubtless because the "wild carol" of the poor bird, when transfixed by the hunter's bullet, is not a strain to be compared with the lays of the muse, as our modern ears are taught. But you must remember that when that piteous, flutelike dirge was called music, it was in the days when the young shepherd was taught the divine art on the *tenera avena* by old Pan; and the instrument was of so limited a register that it would be a compliment to compare its notes to the reed-like sounds that the wounded swan utters when he perceives his inevitable fate at hand.

I remember once shooting mallard along the great Arkendale Marsh on the Potomac, when suddenly my faithful retriever, a red terrier, stopped and cocked his ears and tail, and there, in one of those serpentine "guts," that wind their tortuous way through great marshes, was a majestic swan, snow white, and winged by a shot, swimming down toward the open river with wonderful speed, and trying to get to the mouth of the tide stream before me. Running up to the mouth of the gut, I awaited him with my gun cocked—an eight calibre, "silver steel" weapon, made by Geoffreys of London. Seeing the little tints of blue on him, I knew that the shade of Lucullus could not desire a better temptation to visit this world again than that bird properly roasted and served with red Burgundy of Volney—"*le bon vieux sang de Burgoyne,*" as the old Soldin minstrels called it. My dog Bob trembled all over and whined in anticipation of my own delight; for he is too game a dog to eat game himself. But behold! my royal bird came up within twenty feet, and when I raised my gun to give him a quietus, he suddenly began to circle round, making that flute-like dirge with such a piteous accent that, though as a youngster I had been nursed in the camp and with all the horrors of war, I could not so harden my heart as to give that bird the death shot. And seeing me take down my piece, he presently half spread his snowy wings, and taking the wind directly aft, sailed majestically out into the open water, while Bob looked first at him, then at me, and then began to bark, as much as to say, "What can be the matter with that gun?"

I have known the hardest professional "duckers" to have such experiences with this bird; and it goes to prove the beauty and poetry of his nature, which caused the ancient bards to make the swan the type in mythology of the lapsing of animal passion, just as the story of Psyche and Cupid illustrates the lapsing of ethereal love by an inverse principle, as you may read in that quaint old curiosity of literature, "The Golden Ass," written by Apulius, and translated into English in a style more classic than the original.

As is the habit of the wild goose, the swan roosts out in the open water with his family around him, swimming out from the feeding grounds at nightfall, and separating from the flock as they go until presently, in the dusk, you only perceive a number of little snowy patches in groups on the water, and so glistening white is the plumage that the birds take a reflection in the darkest night when all the water, even the white caps and floating ice, is dusky black. To successfully decoy either geese or swan, the sportsman must understand that they come in to feed in the morning just as they go out at night, *i. e.*, in families, and they will swim for miles and miles sooner than take wing, unless the wind be high, when it is their delight to work up against it until they find a bar, which they know, even in strange waters, with an intuition that no pilot's science can qual. At such times a single decoy anchored judiciously on a bar will lure them group after group. I have known them to be "tolled" by a reddish colored dog, after the manner used with canvas-back and red head ducks, but this was only on rare occasions.

A Winchester rifle, from a blind, is perhaps the most satisfactory method to shoot them, though there are some grievous disappointments attendant on this style, as I experienced once in company with my agreeable and hospitable kinsman, Gen. Fitz Lee, on his splendid river estate, "Richland," between Aequia Creek and Quantico. Having fired at the swan for six days with buck-shot without declaring any dividend, I was at last fortunate enough to borrow a Winchester rifle from Col. Waller, and that very morning, as soon as the swan had collected on the bar, about 200 yards from the shore, I crept along down the main ditch, which drains the lowlands, and reached a position behind two great holly trees; and there they were, seemingly not three score yards away, riding gracefully on the waves, which, with the steady northeast wind, were rolling equal to old Chesapeake Bay; for the water here is six miles one way and twenty the other. My first bullet skipped clear over their heads, because I had forgotten the effect of the refraction of light; but making a proper allowance the next time, I had the satisfaction to see the ball light right in their midst, and without moving the rifle from my shoulder sent eleven shots into them by the time they could get up, for it is a clumsy bird to rise, in spite of its beauty in the water. In the meantime my host, who is the very ideal of a cavalry chief—handsome, jovial and amiable—

"That ever with a frolic welcome took
The sunshine and the storm"—

was watching with a telescope long enough to find a Congressman's wilt with; and he was promising himself a hearty laugh at my disappointment, when to his own chagrin and my delight, as the flock of birds, squawking and flapping, rose and labored up the wind, there was one fellow left riding on the sea, but with his head down in the water. I should certainly have plunged in and waded out to him, but the wind sweeping down, and the tide flooding with the current of a mill-stream, the counter forces immediately took the bird right out into the river with wonderful speed; so, dropping the rifle, I started up the beach to get the boat at full speed, but impeded by a pair of rubber boots which reached up somewhere between my waist and chin, so that when I reached my shallop I was fain to sit down on the gunnel and blow, while I cast a longing eye toward the snowy form of my first swan, swiftly fading o'er the waves;

"A white-sailed bark, launched on a billowy track,
That bore my dearest hope and ne'er came back."

Just as I had worked the boat out of her bed of ice and across the sand into the water, and had shipped the oars, I was aware of a voice that hailed me through the storm, and there was old Fitz standing on the bluff above, hallooing through his hands, trumpet fashion, "Go it, old boy, I'm betting on the swan." And again, as I pulled out, "Two to one on the swan." But though the bird was by this time a mile out, I was sure of overhauling the prize, for the wind and tide operated on the boat just as on the drifting swan, and I had only to steer up against the wind, and with little exertion my speed was sufficient. In about twenty-five minutes I was within 100 yards of him, and had measured his proportions with delighted eye more than once. But, alas! in the midst of highest hopes disaster doth ever await us poor mortals, just to prove how helpless we are; for which sentiment see any philosopher on psychology. Heading up to windward of my prize, and pulling with all my might, I already, in fancy, seemed to hold him up before my host in triumph, and then take him to the kitchen to show the cook how to roast him in the "tin kitchen" on a spit (*more Virginiensis*). In the midst of this delightful dream I was startled by a series of loud reports right ahead, which sounded something like a file-fire of musketry, and, looking around, there I beheld a rakish fishing schooner, just in stays, with her canvas flapping and cracking. I was just thinking why such a pretty craft should fail to get away at once on the other tack, when all at once I noticed that my swan was drifting right up to the schooner's weather-side, and before I had time for a thought the damnable, diabolical skipper leaned over the rail, grabbed my bird with a piratical hand, and hauled him inboard with a demoniacal chuckle; and then, as I stood up in the boat blaspheming at him, and wishing for the rifle I had left on the beach, the cantankerous pirate sung out to "haul the jib to windward," or some such water slang, and in a second the schooner was off on the other tack, and the unblushing rogues sitting on the cabin examining the swan—my swan, mind you—and pointing at me with derisive jeers.

Spare me a description of my reception when I came back, wet, draggled and mad; I hadn't even wit enough left to know that it was merely a cruel ill-timed joke to tell me that the whiskey was out, and the rifle, which I left on the sand, stolen.

As beautiful as this noble bird is when swimming on the water and arching his slender neck, he is still more so when, in the spring, at the first warm breath of March, he lightens up his weight for his long journey northward by practicing constantly on the wing in company with a thousand of his fellows. Day after day they will rise miles into the air, squawking and flutting to rally the others, and for hours and hours fly around in great circles, until at last the king, as he seems to be—some giant, hoary old fellow, with great horns protruding from his elbows—will circle higher and higher, signaling all the rest with a continuous fluting call, till at last a million of them, as it seems, squawing and flapping, will form up with military precision into a harrow, the king patriarch in the point of the triangle, and then, with a wild, weird chorus resounding and echoing away up in the clouds, they head their way to the north, and as far as I ever heard, nobody, Canadian nor Esquimaux, has been far enough northward to see where they rest their untiring wings.

It is the custom with certain traveled people, who are sometimes called on the Continent "hotel Americans," to decide American cooking and American dinners by comparison with those of Europe; but, saving a discussion, it is only necessary to cite the testimony of the High Joint Commissioners a few years ago as to the superiority of our game and fish when served in the style which obtains in the old country mansions of Maryland and Virginia, and in the Maryland Club, or at Welker's and Wormley's in Washington. One who remembers a rare symposium there, will forget sometimes the wilt and the good company, even the champagne and Burgundy, and paraphrase Sheridan Knowles' famous gourmand with the enraptured exclamation: "How I do revere a canvas-back roasted before the hickory fire, a twenty-pound striped bass wrapped up in brown paper and roasted in the ashes, a golden plover broiled, a wood cock with the bill (which is high, as well as long), cherry-stone oysters roasted in the fire, terrapin stewed in oyster liquor, etc., etc.!" But better than these, than all, is first and passionate love" towards a year-old eygnet roasted in a "tin kitchen" and put on the table with Burgundy. It is the very realization of an Utopian dream, a foretaste of the gourmand's heaven; and if the soul of the bird could witness the happiness his beautiful carcass affords, he would change the mournful death-song into a Bacchanalian refrain, for it is written that "true happiness consists in making others happy."

Page McCarty.

For Forest and Stream and Rod and Gun.

DUCK SHOOTING ON THE TENNESSEE RIVER.

DUCK shooting, with its many pleasures, has one drawback in most cases, and that is the severe hardships it brings with it. But where you can hunt this attractive game with but slight—if you can call it any—exposure, it makes, indeed, royal sport. The Tennessee River, with its fine, fertile banks, affords to ducks capital feeding grounds, which they seem to thoroughly appreciate, judging from the number that are ever floating peacefully on its beautiful body of water.

But when and how to get at them is a question which, unless one knows, is hard to be solved. There is but one successful time for hunting these birds, and that is after the river has overflowed its banks and is well up among the branches of the large willows which are so thickly studded along the water's edge. On account of the swiftness of the flood current, the ducks are forced to hug close to the banks and swim among the branches of the inundated trees. These floods, moreover, are of very frequent occurrence since the river has made its course between the mountains which so thoroughly cover the eastern part of Tennessee.

While paying a visit to this part of the country, I experienced the most enjoyable and picturesque duck hunt which I ever expect to realize. I luckily fell in with a gentleman who is well versed in handling a gun, and is noted for the good luck which invariably attends his duck hunts. Eagerly accepting one of his kind offers "to give the ducks a turn," one early morning in January, after a large flood tide, we, together with a steersman, pushed off in an ordinary row-boat from the foot of K.'s principal street into the sweeping current of the Tennessee. The weather was but a trifle cold, which we remedied by placing a small charcoal stove at our feet. The peep of day was just dawning, and far around we could hear the long baying of the hounds and the clear call of the hunter taking his dogs from their nightly coon hunt, causing the cliffs to catch up their sound until the echoes finally lost themselves in their countless repetitions. We continued noiselessly drifting down the river, and hugging closely the curving bank. The day breaking found me seated, with fixed eyes and throbbing heart, watching for the first duck. Suddenly, right before us, I heard the splash and clean cutting stroke of a duck. Up goes my gun, but before I could aim, my comrade asked, "What! are you really going to fire at a little wood duck?" He had not persuaded me of his good sense before I was made to know it by circumstantial evi-

dence. Scarcely had I cooled off before I saw a very home-like looking mandrake dodging first in and then out of the branches, and looking with a very distrustful eye at the stationery objects floating toward him. My comrade assured me that there were plenty of ducks among those branches, and soon his statement was verified. At last the distrustful duck became more and more so, until, at last, with a "quack! quack!" she rose from the water. There immediately followed such a whirring, splashing and quacking as only an immense flock of ducks can produce when startled from the water. Out rang four shots into the air, and down fell, with a splash, six of the finest mandrakes I ever saw. On we drifted, every few minutes scaring up either a flock, a pair, or a stray bird, which, if I failed to hit, my companion would invariably cause to halt. This continued until near mid-day, after which we scarcely saw a duck till about sunset, when up they started from all directions, and, with shooting and picking up our birds, we had plenty to do till we desisted, eager to come upon a house (which, by the way, were scattered at the distance of about ten miles from each other), where we might lodge for the night. Finally, we landed near by an old log cabin, which, in its time, must have been very fashionable. A slight rain had just set in, and, tired and hungry, you may be assured that we relished the pork, beans and pies, which were our "bill of fare" for supper. After a sound night's sleep, we woke up to find the rain still continuing. But we left our lodgings at 6 A. M., and proceeded on our hunt. It was during this rain that the breech-loading gun showed its superiority over the old muzzle-loader. I had a pin-fire breech-loading gun, while my companion had an ordinary muzzle-loader, and he was forced (although he took every precaution to keep the nipples dry) to be content with watching me shoot. After having drifted about sixty miles and bagged fifty-two mallards (we killed about twice that number, but the current of the river prevented our stopping to pick them up), we at last reached the place of our destination, a small railroad station called London. There we hailed the cars and were quickly taken back to Knoxville, where we, along with the ducks, were most warmly welcomed by our friends.

L. C. V.

THE LAKE REGION OF FLORIDA.

We present this week the second letter of our observant correspondent, describing a portion of Florida seldom visited or referred to by letter writers. There are very many of our readers to whom the information herein imparted, as to the climate and agricultural resources as well as the sporting inducements, will be of much value. We have been twice over this country, and can testify to its attractions to the hunter and settler:

LAKE REGION, March 3, 1878.

We left Waldo Tuesday morning, Feb. 26, for a few days' trip through the Lake Region. Striking off in a south-east course, in about three hours we arrived at Gen. Earl's place on the Santa Fe Lake. He has a pretty location on the banks of the lake, with quite a number of orange trees in bearing, also a grove of younger ones well started. Two hours more of rather a tiresome walk, our road being sandy, brought us to Melrose, a new settlement, at the lower end of Santa Fe.

The land in and around Melrose is rather high and rolling, as is the land generally in this region; the soil light and sandy, but, I should suppose, well adapted for fruit growing. Here frost is almost unknown, and vegetation is much more forward than at the places we have seen along the line of railroad. I think Melrose will grow fast, and in a few years will be quite a town. It seems to have many advantages, being high and healthy; also its location on the lake is fine. Santa Fe Lake is a fine body of clear water, six miles long, two to four wide, abounding in fish—black bass, pike, perch, bream, etc. Large flocks of ducks make this their winter home. In fact, this whole Lake Region, about thirty-five miles long by sixteen wide, abounds in fish and game, and the sportsman would be amply repaid for a few weeks visit, I think. We stopped at Melrose to spend the night, intending to take up our line of March in the morning. We sleep in a log cabin (for the novelty), and on awaking in the morning I take a look out of a crack, which runs very accommodatingly by my head, and find that it is raining very softly, but as Florida rain, like New York rain, is wet, we conclude to pass the day with our cards and pipes, which we do very satisfactorily.

Thursday morn is bright and clear—a beautiful day—and we buckle on our armor and start off in good spirits. We are bound for Mr. Wall's, on Pleasant Lake, eight miles South and East of Melrose. We have a sandy road and must take it easy, for we are in a Southern clime and nobody hurrys here. The sand here makes walking very wearisome; besides my boots are too heavy for this part of the country, and when Wall's house comes in view, we are glad. But it is all right soon, for we are sitting in the shady porch, fanned by a cool wind from the lakes, and all the troubles we ever had are forgotten for a while. We have struck just the right kind of a man and family and house for our headquarters. Mr. S. Wall has lived here about ten years between two lakes, both in sight; owns many acres of land about him; has a small grove of orange trees in bearing, a larger one of young trees, with considerable land under cultivation, and I have seen no better place for the sportsman and invalid than his. He is a hearty, genial, whole-souled man, a keen sportsman, a good fisherman, always ready for a tramp after deer or a day on the lake; and when you bring in your game or fish, just hand it over to his wife, and when you next see it it is not spread before you in most tempting array, then I am a poor judge of such matters.

Yesterday we took a little tramp in the woods. We saw nine deer in the distance, with plenty of signs. Our plans are all laid for a deer hunt with the dogs next week, of which I will give you a brief account in due time. We have tried the fishing. It is superb. You can catch black bass until you are fairly tired of fishing. They average six pounds; run as high as ten and over. This region is full of lakes, and by getting upon some slight elevation one can see two and three from the same place, and they all abound in fish and game, duck, geese and brant being plenty in their seasons. I notice in every little brook by the wayside, and in pools of standing water, multitudes of little fish, showing that the water is pure instead of stagnant, as one would suppose, and as it would be with us North. But I am making this too long. Will let you know about our deer hunt.

Yours,

CHAS. O. GLANWIN.

BUCKSKIN JACKET.—Messrs. Holberton & Co., of 117 Fulton st., New York, have made a jacket that will be a great boon to sportsmen and others who are exposed to the weather. The jacket is made of genuine Indian smoke-tanned buckskin, lined with flannel; is very strong, durable and perfectly wind proof; under a coat it does away with the necessity of wearing a heavy overcoat or thick, bulky underclothing, and being very soft and pliable, will not interfere with the movements of the shooter.—*See advertisement.*

Fish Culture.

MIGRATION OF FISHES.

BY J. BROWN GOODE—READ BEFORE THE AMERICAN FISH CULTURAL ASSOCIATION.

IT was formerly believed that all seasonal migration was directed toward and from the equator, but zoologists of the present day recognize another kind of migration quite as important, although not usually so extended. At the approach of the hot season in sub-tropical climates the birds seek a cooler temperature, either by flying northward or by ascending the high mountains. In like manner the fishes of any region may find water of suitable temperature by moving north or south along the shores of the continent, or by changing to waters of less or greater depth. The former may be called littoral migration and the latter bathic migration.

Bathic migration is the most common. The cod family, the halibut and flounders, the scuppaug, tautog, sea bass and sculpins are well known examples. The cod prefers a temperature of from 35 deg. to 42 deg. F., and this it secures in a temperate climate, such as that of Southern New England, by remaining on the off-shore banks in 15 to 35 fathoms of water, coming near the shore in winter. On the coasts of Labrador, Newfoundland, Nova Scotia and Eastern Maine, they are near the shore in summer, and in deep water in winter. In Norway the fish are caught to some extent in the fiords in the summer season, though never in the winter. In summer they still remain on the off-shore banks. The halibut move up and down on the sides of the great oceanic banks and the continental slopes with the seasonal changes of temperature. In the summer they are abundant in the shallows of South Greenland, while in winter they are out in deep water. On the coast of Massachusetts they come near the shore only in dead of winter, though abundant in summer on the edges of the outside banks in 80 to 300 fathoms of water. The sand-dabs (*Hippoglossoides limandoides*) are abundant in July, in water of 60 and 80 fathoms, ten miles off Cape Ann. In the middle of winter they swarm upon the sand-flats in 2 or 3 fathoms depth.

The Spanish mackerel, the bonito and the tunnies are good examples of the nomadic species. In the summer they throng our northern waters; in the winter they are under the tropics. Others, like the sea herring, appear to migrate in both ways. Their movements are both parallel with and vertical to the coast line. The researches of Boeck in Norway show that the schools approach the coast by gullies or submarine valleys from the oceanic depths. Such was doubtless the case on our coast, in their earliest approaches, but after having reached the shallows near the shore, the schools range along great stretches of coast line. Since fishes have no restrictions upon their movements, except those of food and temperature, all active species must traverse areas of many hundreds of miles during the year.

The tendency of all the researches made during the past few years have been to confirm the views advanced by Professor Baird, in an unpublished letter, written in 1873, to the Hon. Hamilton Fish, Secretary of State. "The question in regard to the migration of fishes is one that has attracted the attention of both fishermen and naturalists for many years past, and a great deal of eloquence has been expended by Pennant and other writers in their history of herring and other species. For many years it was considered beyond question that the sea herring, having their homes in the Northern Seas, were in the habit of prosecuting extensive journeys, in the course of which they successively visited the shores of Europe and America, penetrating into their bays and sounds, and returning afterward to the point from which they started; the adults decimated by the predaceous fishes and their capture by man, but their numbers kept up by the progeny, the result of their spawning operations, for which purpose it was supposed their journeys were initiated. In the same manner the shad and the fresh water herring of the American coast were supposed to start in the late winter along the southern coast of the United States in a huge column, the herring first, and afterward the shad, first entering the St. John's River in Florida, and while passing up the coast, sending off detachments into all the principal rivers, and finally stopping in about the latitude of the mouth of the Gulf of St. Lawrence.

This theory is at present almost entirely abandoned, and there is reason to believe that after the herring and shad have spawned in the rivers they proceed to sea, and spend the period until their next anadromous movement in the immediate vicinity of the mouths of the rivers, where they are followed, in due course of time, by their young.

This is illustrated by the fact that fish of nearly every prominent river show some peculiarities by which both the fish dealer and the naturalist can distinguish them; the difference not being sufficient to constitute a specific rank, but such as to mark them as local races. Numerous captures, too, in Gill nets and otherwise, off the northern coast, during the period when they should be gathered together in the southern waters, prove that a portion at least remain. It is difficult to imagine how a shad or a river herring, spawned in the St. Lawrence river or any northern stream, could avoid entering a more southern river, if in its vicinity; but if any fact has been well established of late years in the history of fishes, it is that the anadromous fish, or such as run up the rivers from the sea to spawn, will return, if possible, to the river in which they first saw the light. So true is this, that where there may be two or three rivers entering the sea in close proximity, which have become destitute of shad or herring, in consequence of long continued obstructions, and the central one only has been restocked by artificial means, the fish, year by year, will enter that stream, while those adjacent on either side will continue as barren of fish as before.

INFLUENCE OF OCEAN TEMPERATURE ON MENHADEN.

The influence of ocean temperature on the menhaden is not at all well understood, and I can here record only crude generalization founded upon very unsatisfactory data. I have before me three tables showing the variation of temperature by monthly means for Key West, Fla; Jacksonville, Fla.; Savanah, Ga.; Charleston, S. C.; Wilmington, N. C.; Norfolk, Va.; Baltimore, Md.; New York city; New London, Conn.; Woods Holl, Mass.; Portland, Me.; and Eastport, Me. Table I. shows the monthly means of surface temperature, table II. the temperature at the bottom near the shore, and table III. the average means of surface and bottom temperatures. The observations were all made at 3 P. M., and are continuous from March 1, 1876, to March 1, 1877. They are reproduced in appendix F. There is also a table of the daily observations of temperatures at the same stations. A study of these tables, which for convenience were mapped out in curves on section paper, affords some interesting results.

MINIMUM REQUIRED.

The monthly mean of surface temperatures at Eastport is greatest in September, when it is 50 deg. 6 m., while the highest daily observation is 51 deg. 5 m. The menhaden do not visit Eastport in midsummer. Let us divide the monthly averages for May, at Portland, into quarterly periods. The average for May 16th to 23d is 47 deg. 1 m.; for May 24th to 31st is 51 deg. The quarterly month averages for October are 53 deg. 8 m., 50 deg. 8 m., 47 deg. 9 m., 48 deg. 8 m.

The schools of menhaden arrive in Eastern Maine late in May and early in June, and depart usually before the middle of October. At Woods Holl the quarter-month's averages for May, as taken by the signal service observer, are 48 deg. 2 m. 49 deg. 6 m., 53 deg. 1 m., and 57 deg. 6m., approximately, or the monthly average, 52 deg. 3 m. These observations are made in the Great Harbor at the railroad wharf. Another series of observations, made by Captain Edwards for the Light-House Board, in the Little Harbor, are believed to indicate more nearly the temperature of the Vineyard Sound. These, however, are only for bottom. The difference between the monthly mean of bottom temperatures for May, at the two stations, is almost two degrees (1 deg. 8 m.) the figures being 51 deg. 5 m. for Great Harbor; for Little Harbor, 53 deg. 3 m. It does not seem assuming too much to place the quarter-month average for the first half of May at 50 deg. and 51 deg. 4 m. For November the Great Harbor quarter-month means are 51 deg. 51 deg. 47 deg. 7 m. 43 deg. 3. The menhaden strike into Vineyard Sound early in May or late in April, and linger until November and even December. At New London the quarter-monthly averages for the last half of April and the first half of May are 49 deg., 48 deg. 5 m., 52 deg. 5 m., 54 deg. 5 m.; for late October, 55 deg. 2 m., 54 deg. 9 m.; for November, 53 deg. 5 m., 51 deg. 1 m., 48 deg. 1 m., 46 deg. 1 m. The fish come on the eastern coast of Connecticut late in April, and are frequently taken as late as the middle of November. The temperatures of New London suggest that there may be something in error in the Woods Holl observations, so far as they indicate the temperature of the ocean in its vicinity. The periods of appearance and disappearance at Waquoit and Menemsha, in the Vineyard Sound agree nearly with those of Eastern Connecticut. The temperature of the Chesapeake must be studied from the observations made at Baltimore and Norfolk. At the latter place the April means are 52 deg., 56 deg 5 m., 61 deg. 2 m., 60 deg; the Nov. means are 59 deg., 54 deg. 6 m., 53 deg. 5 m., 48 deg 5 m.; at the former for April, 45 deg. 6 m., 50 deg., 54 deg. 5 m., 55 deg. 7 m.; for November, 54 deg. 2 m., 52 deg. 1 m., 50 deg., 47 deg. At Norfolk the averages for the last half of March are 48 deg. and 50 deg.

The movements of the menhaden in these waters have not been very carefully observed, but we know that they enter the Potomac late in March and early in April, and that they linger till the last of November. In 1874 the young menhaden lingered in the lower Potomac until the middle of December. In 1876 the average for December surface temperatures at Norfolk was 36 deg. 8 m.; for bottom temperatures, 36 deg. 4 m. In 1874 the average surface temperature for December at Norfolk was 43 deg., or 6 deg. 4 m. higher than in 1876—the year for which our tables of observations is made up. The average for Norfolk surface temperature in November was, in 1870, 53 deg. 4 m; in 1874, 55 deg. 1 m., or 1 deg. 7 m. higher. It is quite probable that in 1874 the water of the lower Potomac did not become colder than 50 deg. until December. At Wilmington the monthly means of bottom temperatures in 1876 and 1877 were, for December, 43 deg. 1 m.; January, 43 deg.; February, 48 deg. 5 m. In 1874 and 1875: December, 48 deg. 1. m.; January, 43 deg. 8 m.; February, 45 deg. 5 m. December, 1876, was unusually cold, the mean temperatures of the air being 46 deg. 3 m., against 59 deg. 1 m. for the same month in 1874. January and February of 1874 were relatively cold, the air temperature being 48 deg. 1 m. and 53 deg. 1 m., against 57 deg. 1 m. and 52 deg. 5 m. in 1870. The surface quarter month-averages for the last half of February, 1877, are 40 deg. 1 m., 50 deg. 5 m.; for the first half of March, 1876, 52 deg. 6 m., 57 deg.; for late November and early December, 1876, 57 deg. 1 m., 53 deg. 6 m., 40 deg. 6 m., 45 deg. 3 m.

No observations have been made upon the movements of the menhaden at Wilmington. At Beaufort, 30 miles further north, they appear to be absent during the winter. It is much to be regretted that there are no temperature observations from Cape Hatteras. The relations of this locality to the Gulf Stream are peculiar, and corresponding peculiarities in the temperatures no doubt exist. The hundred-fathom curve is distant about 40 miles from the point of the Cape, and the average summer limits of the Gulf Stream, as laid down upon the British Admiralty charts, extend nearly to this curve. The observations made at Wilmington, situated as it is in a bend of the coast, at least 100 miles from the summer limits of the Gulf Stream, and at the mouth of a river which rises 200 miles away in the elevated central portion of North Carolina, can hardly be taken as criteria of the temperature of Cape Hatteras. This is still more unfortunate from the fact that the movements of the menhaden, blue-fish, sea-trout and other warm-water species, are very peculiar at this point. It will be strange if the monthly mean of water temperature for Cape Hatteras, in December, and perhaps January, does not prove to be more than 50 deg. Savannah is at least 120 miles from the Gulf Stream, and its means for December and January, 1876—1877, as well as those of Charleston, are below 50 deg. Charleston water appears to be uniformly warmest. In 1874, December, in Charleston, averaged 48 deg. 8 m; in 1875, January averaged 50 deg. 2 m. The movements of the menhaden in this region have not been observed, but since in the north it is not more hardy than the shad, and since the shad do not venture into the Georgia and Carolina rivers in December, it is safe to predict that the habits of the menhaden are similar. Jacksonville Fla., is the only point on the coast from which there are observations showing a temperature uniformly above 51 deg., and here menhaden remain throughout the winter.

(*To be continued.*)

CONNECTICUT.—The Staffordville reservoir has been stocked with 10,000 land-locked salmon.

FISH CULTURE IN MICHIGAN AND INDIANA.—*Editor Forest and Stream:* In your issue of February 14, I noticed that you mentioned a shipment of 25,000 salmon ova from the Government Hatcheries to the Michigan State Hatchery at this place. Inasmuch as you did not mention the kind of salmon ova received, nor any previous shipment received from the same source, I will state that the 25,000 mentioned by you were a

lot of land-locked salmon eggs taken from the lakes of Maine, and donated by Prof. Spencer F. Baird, U. S. Commissioner of Fisheries, to the State of Indiana.

As Indiana has not any State hatchery of her own, our State Superintendent of Fisheries, the Hon. George H. Jerome, kindly volunteered to hatch them, and without cost.

As I understand it, the State of Indiana is at present even without a commission. Through the enterprise of Captain Allen, of Goshen, and three or four other gentlemen of that vicinity, strong efforts are being made to establish a fish-commission and secure an appropriation from the State Legislature, an amount sufficient to build and operate a State hatching house at some desirable point in the State, where the propagation of all our leading fresh water fish can be carried on with success. These gentlemen were instrumental in securing the above lot of salmon ova. They have paid all expenses for the transportation, by express, on eggs, from their own pockets, and intend paying all other expenses for the distribution of the young fish in the lake sand rivers throughout the whole State.

If a few more such men as the above named gentlemen were scattered throughout the States of the Union, our lakes and rivers that once were so productive, but now so sadly depleted, would, in a few years, be restored, and the lawful fisherman and sportsman would gather a munificent harvest therefrom.

The eggs for Indiana were received at the Michigan State Hatching House with a loss of only 5 per cent. They are now all hatched out and apparently in fine condition. The previous shipment of 50,000 land-locked salmon ova to this hatchery, was also a gift from Prof. Baird to the State of Michigan, being the largest shipment of salmon ova from that source made this year to any State in the Union. Michigan is now taking the lead of all other fish States in her artificial culture and propagation of food fishes, and her efforts are nobly assisted by the United States Commission. Wishing Indiana success in her new enterprise, I am, truly yours, etc.,

HENRY H. PORTER, Sup't of State Hatching House.
State Hatching House, Pokagon, Mich., Feb. 25.

FISH PROPAGATION IN MICHIGAN.—Three thousand California salmon ova have been deposited in Loon Lake, Assyria. That lake and High Hill Lake will soon be supplied with 12,000 whitefish fry.

The Game Protection and Shooting Club of Howell received 30,000 whitefish fry last week, from the Fish Commissioner, which they deposited in Thompson's Lake in that village.

—Of the 25,000 whitefish eggs consigned from Northville, Mich., to California, all but about 5,000 were parboiled by incompetent attendants.

BIRDS AND SALMON.—A correspondent of the Sacramento (Cal.) *Weekly Union*, writing of the fish law in that State, calls attention to a class of fish poachers which has so far enjoyed a little-merited immunity:

"The fact is also overlooked that a number of birds continually prey on the young salmon when on their way down the rivers to salt water. There are five species or kinds of these birds, the squawk, shag, crane, pelican and fly-up-the-creeks. The large fish drive the smaller ones on shore, and the birds gobble them up by the thousand. Some of the birds feed on them in the night and the others in the day time. I have seen them so thick that their guano killed the fish in the lakes and sloughs, the water being poisoned by it. If a price was set on these birds to thin them out, the salmon law vigilantly enforced everywhere, and especially on the spawning grounds, the fish would largely increase. I am quite sure the birds alone destroy more fish than are consumed for food in California by our people.

SALMON IN THE HUDSON.—The following is welcome news. We shall doubless have salmon in abundance in the Hudson:

PEEKSKILL, N. Y., March 11, 1878

EDITOR FOREST AND STREAM: I wish to mention the capture of a salmon, a true *salmo salar*, in the Hudson, about two miles north of our village. It was taken on the Flats this morning near the mouth of Snake Hole Creek, just below Iona Island, in an ordinary sieve, while its captors were hauling for perch and other small fish. It measured thirty-three inches in length, and weighed but eight and a half pounds, being in very poor condition and presenting the appearance of having recently spawned. Small fish of this species have been taken through the ice during the past winter in T nets, but nothing approached this in size. I regret my inability to forward you the fish, but it was disposed of before I saw it. Am I justified in supposing it to be one of the fry introduced into the upper part of our river a few years since?

S. H. W.

[Ans.—No doubt it is.—ED.]

Natural History.

DR. HAYDEN'S SURVEY.—Attention is again called to the grand work which Dr. Hayden's survey is doing, by the appearance of Vol. VII., of its quarto publication, which consists of Prof. Lesquereux Tertiary Flora This superb work, containing sixty-five lithographic plates and over 350 pp. of text, deserves an extended review instead of the mere mention here, which lack of space enforces. It is another reminder of the painstaking zeal of the author, and the energy and wisdom of the Chief of the survey.

We have also to call attention to the issue of No. 1, of Vol. IV., of the bulletins of the survey. Besides some papers by Drs. Coues and Yarrow, already referred to in these columns, it contains Notes on the Ornithology of the Lower Rio Grande, by G. B. Sennett; Descriptions of New Tineina from Texas, by V. T. Chambers; a paper by Prof. A. R. Grote, on Noctiud Moths from California; Notes on the Mammals of Dacotah, by Dr. McChesney; a new classification of the Herodiones, by Mr. Ridgeway, and many other papers of interest.

MILD WEATHER IN NEW BRUNSWICK.—Our correspondent H. G., writes us from St. John, as follows:

"While strolling near the city, on January 11, I observed mall bird which proved to be a hermit thrush (*T. pallasii.* When I saw him he was feeding on the berries of the mountain ash. The cedar bird (*Ampelis cedrorum*) has also been with us all winter, and feeds upon the same berries, which are quite abundant about the suburbs of the city. With the cedar birds I observed several red linnets; also several pine grosbeaks, feeding quite contentedly on the same tree. These birds were all remarkably tame, especially the pine grosbeaks, which allowed me to approach within a few feet of them. Is it not rather a rare occurrence for these birds to remain so far North at this season of the year. I have frequently observed the robins here before at this season of the year, but never these birds.

RARE VISITORS.—During the violent storm of snow and wind which prevailed in New England, January 20, a female Louisiana tanager (*Pyranga ludoviciana*) was observed to approach the window of a house in the city of Lynn, in which there were a number of caged birds. It was evidently suffering for want of food. An open cage was put out for it with food, into which it immediately entered, and allowed itself to be easily captured. It was evidently a wild bird, was an adult female, and, though ravenous for food, was not in a wasted condition. This bird, during the summer months, is a resident of the regions west of the Great Plains, and in the winter is a visitant of Mexico and Central America. The great storm in which it was captured came to us from the Mexican Pacific coast; its progress was heralded several days before it reached us finally, coming toward us at the rate of about 800 miles in twenty-four hours. It seems probable, therefore, that our visitor being overtaken some five thousand miles away in the vortex of this tempest, may have been an unwilling traveler forced to visit the inhospitable shore of Massachusetts Bay. This is the third species from the far West that has turned up on our seaboard—*Plectrophanes ornatus* at Gloucester, the lark bunting at Swampscott, and now this tanager at Lynn. It seems more and more probable that these erratic visits of birds that do not belong to our fauna are much more common than we have been in the habit of supposing. Their visits, with occasional calls upon us, from such species as the blue-gray gnat-catcher, the tufted titmouse, the cerulean, Audubon's, and the yellow-throated warbler, the Oregon snow-bird, the scissors-tail fly catcher, the white ibis, frigate pelican and sooty tern, prompt one to ask what we may not expect to see.

T. M. BREWER.

LOCAL ORNITHOLOGY.—I have a male redwing blackbird, in which the two outer feathers of the tail are pure white. Also, a fine specimen of the porcupine, fully albino, with pink-red eyes. It was an adult male. Crows have been in plenty during the winter. Snow buntings and red polls have been very scarce in this vicinity. We regret the absence of their cheery notes, and the flitting of their charming wings have so often gladdened and made pleasant the tedious winter days. Feb. 28.—Robin reported seen. March 2.—An Acadian owl heard filing his saw preparatory for business.

M. C. H.
Warner, N. H., March 4.

SPRING ARRIVALS IN VERMONT.—*Ferrisburg, Vt., March 7.*—The weather is quite springlike just now, and this morning I saw a song sparrow, two blackbirds and a bluebird. If my memory serves me right, it is early for any of these in this latitude.

R. E. R.

FOOD OF THE WILD PIGEON.—To-day, on the market, a huckster had for sale 1,200 pigeons (*Columba migratoria*), just received from the Chicago market. They are what are called "trapped pigeons," and are in excellent condition for the table. All trapped pigeons that I have ever seen, until now, have had their crops filled with some sort of cultivated grain, but these birds, without a single exception, had their crops filled with acorns, specimens of which I send you. As I know hardly anything of botany, it is impossible for me to say to what species of oak these acorns belong, but my impression is it is the pin oak of the Southwest, sometimes called "Black Jack Oak."

The question now is, did the men who trapped these pigeons bait their nets with pin oak acorns?—and if so, where is the locality of their industry?

The knowledge of the food of a bird is an introduction to his life-history. 'Twas said once that the passenger pigeon had never been killed in the Northern States without rice in his crop, but I believe now that all agree that this bird can gather his daily meal from the rice swamps of Carolina and digest it the same night on the soil of Northern Ohio.

I never see the passenger pigeon flying or for sale on the market, without thinking of the naturalist Audubon and the much respected naturalist Alexander Wilson.

Yours, respectfully, DR. E. STERLING.
Cleveland, O., Feb. 6.

[Our impression is that, as our correspondent suggests, the acorns are those of the Black Jack Oak.—ED.]

A LARGE WOODCOCK.—A correspondent, Mr. G. Lyman Appleton, who writes from Bryan Co., Georgia, informs us of the killing of a nine ounce woodcock near that place. This is certainly an unusually large bird, but Mr. Appleton says it was exactly like the others that he killed the same day, so that it could scarcely have been anything but an American bird. Our correspondent writes:

"I killed yesterday a woodcock that weighed nine ounces. Is not this a remarkably large bird for this country? I have shot woodcock in Europe much larger than this, but never saw one here so large before. A friend and myself killed fourteen other birds yesterday, and weighed them all. We were much surprised to find the wonderful difference. The largest of the fourteen weighed 8 ounces and the smallest 4¼ ounces. The average of the fourteen was 6¼ ounces; only two were over 7½—all the rest from that down. Do you know the greatest weight of European woodcock?"

We cannot explain the difference in size, except by referring it to individual variation. There are large men and small ones.

In a note recently received, the same correspondent asks what is the difference between the European and American woodcock, and do the former ever occur in this country? To the last question we reply yes; and to the first say that the European bird is much larger, weighing from 12 to 15 ounces, while the black markings of the plumage are much finer and the russet lighter in shade. There are other differences, but these are the most striking to the unscientific eye. Does not our correspondent remember how his European birds looked?

ANOTHER VICIOUS OWL.—The account of the attack of an owl upon a human being, by "Dom Pedro," in your last issue, finds something similar among the "fixed facts" which are known by myself. About twenty-five years ago a Mr. Colwell, of New York State, going home at night through a piece of woods with a tall hat on, was greatly surprised to find his hat suddenly struck (as from one behind), and so violently as to fall in front over his eyes. Thinking it very strange (especially as it fell in an opposite direction from that which it would have taken had a low bough hit it) he picked it up and put it on his head, and proceeded on his course. He was trying to account for this singular circumstance, when off it went a second time. Hearing this time (having all his senses thoroughly aroused) a slight whirring sound as of wings, he took his walking-stick, after readjusting his hat, and prepared for defence. Shortly he heard the sound again, and bringing his cane, with both hands, suddenly and vertically through a quick sweep in front of him, he hit, as his hat went off the third time, a large owl, stunning it so that it fell on the ground, where the fluttering wings told him where to strike to finish his task. His owlship was of course soon overcome, and he bore the trophy of this singular occurrence home in triumph.

SUBSCRIBER.
Matawan, N. J., Feb. 9, 1878.

A DOMESTICATED TEAL.—Mr. James H. Comall, of Mount Pleasant St. John, has in his possession a blue-winged teal, which was caught while quite young on the Grand Lake meadows, St. John's River. Mr. C. has had this interesting little pet in his possession nearly six months, during which time it has become quite domesticated. Having had full liberty of his work-room, it appears to be quite contented. Through the day it remains very quiet, but in the evening amuses itself by flying around the room, on one occasion settling on the stovepipe, which proved a little too warm for his feet, which were sore for several days afterward. It has had several opportunities of escaping. Upon one occasion it walked out into the yard, looked all around as though surveying the situation, and then allowed itself to be driven back into its old quarters. On another occasion, on a stormy night, the work-room door blew open, allowing the bird full opportunity to escape if it had felt so inclined. Mr. C. upon coming into his work-room the first thing in the morning, and finding the door open, did not think it worth while to look for the duck, feeling quite confident that his little pet had escaped; but after working for about two hours, to his great surprise the teal walked out of his box as usual and took his morning stroll around the room, and then laid down by the stove, for it appears to be very fond of the heat. It feeds on Indian meal and water, and is also very fond of canary seed, which it picks up singly from the floor quite expertly. It has apparently no fear for any one, it and an old spaniel being on quite friendly terms. They will feed together and lie down together; the teal without the least fear, and the dog without the least ill-feeling toward it.

H. G.
St. John, N. B., Feb. 3, 1878.

KNITTING TOGETHER OF THE BONES OF A FOX—*Dunbarton, N. H., Feb. 8.*—Seeing an article in this week's paper about the growing together of the bones of a bird, I think I can state a similar instance in a red fox. About a year ago, while driving along the road, I saw a fox sitting on the snow under an apple tree. I drove to the nearest house and borrowed a gun, which was loaded with blasting powder and No. 2 shot, and went back and crept behind a fence, and then, by imitating the squeak of a mouse (which, by the way, I have never known to fail, unless the fox should see or scent the shooter), I called him up within about thirty yards, but failed to kill him, breaking the near hind leg above the second joint. The following winter I shot a fox in the same locality, and on skinning him found that the near hind leg had evidently been broken, as it had grown together, leaving quite a large hard bunch on the bone. I may be mistaken about its being the same fox which I shot at, but I am certain that I never have known of a fox being killed about here (and there are a great many shot every winter), with a broken leg, unless it showed signs of having been recently done; and I have known of several instances in which a fox has had his leg broken and the hunters fail to get him.

C. M. STARK.

[The growing together of bones recently broken is by no means uncommon, and every collector of birds and mammals has his attention called to it now and then.—ED.]

THE WEIGHTS OF DEER.—I have heard from trustworthy sources that the deer of Northern Wisconsin and Michigan occasionally weigh as much as 300 lbs. I have shot for many seasons in that locality and can personally vouch for two bucks weighing 217 lbs. and 228 lbs. The latter was killed late in the season and was in poor condition. A year ago last fall, shooting with a party in Chateauguay Lake, Franklin Co., N. Y., I saw a large buck which weighed 258 lbs. E. E. F.
New York, March 2.

DEER SHEDDING THEIR HORNS.

IMPORTANT EVIDENCE.

MOOREFIELD, W. Va., Feb. 1, 1878.

EDITOR FOREST AND STREAM:

I feel almost like an intruder on venturing any further remarks on this subject. However, as I believe I was the first to provoke the discussion, and as my interest is unabated, I trust you will pardon me a few comments on "Penobscot's" article. I most earnestly beseech that writer to ponder well over that excellent advice furnished by Judge Caton. I beg of him, as a fellow sportsman, to take notes of his doings, lest by some little indulgence in hyperbole he bring our whole craft into disrepute. Let me not offend when I venture the opinion, that had he found a horn for every day he ever hunted he would still lack a few of filling a "city bedroom." Let the gentleman reflect a little, and I am sure he will either be more modest as to the size of his room, or at least come down a horn or two. If, after roaming the mountains of Maine and California, he does not comprehend what is meant by a "secret place," let him come to the insignificant Alleghanies, and he may soon learn. By permission of the writer I desire to lay before your readers the contents of a letter lately received by me in answer to inquiries about park deer. The abundant opportunity for observation, and the name of the writer, give ample assurance that it will be read with great interest. It tells it's own story:

BALTIMORE, January 20, 1878.

Dear Sir—Yours of 20th inst. received. In regard to your first inquiry, "Do deer bury their horns?" I answer, emphatically, they do. After a careful observation of eleven years, I have abundant evidence of this fact. They sometimes butt their horns off in their contests for the does, but when they are about to shed them (during Dec.) they get off and rub the horns violently against a tree. After the horns are off, they paw the ground, also using the nose to make a cavity. After which they stamp the horns in, frequently covering the place with leaves. On several occasions I have taken four officers with me, hunted the park through in sections, but we have never found more than five horns in any one season. As a further evidence, I, in company with an officer, have watched the whole proceeding. They seldom leave both horns in one place. (Dispensing with "Penobscot's" *cache* arrangement.—Syc.)

These facts can be substantiated to the satisfaction of any one who, if in this vicinity, will take the trouble to call at the park. We have one seven year-old buck, whose fine antlers we wished to get for one of the Commissioners. I detailed a man to watch his movements. Both horns were obtained after the buck had bucked them, the whole proceedings being watched by my detail. At this time the bucks go singly, and seem droopy. The rutting takes place with our deer about the second week in October. If two bucks cross each other after different does, they keep on; if after the same doe, after a struggle ensues, the doe looking on at a respectful distance. When the battle is over—often ending in the death of one—she goes off with the victor, showing her pleasure in many ways, as licking his wounds or his face. In one instance I found two dead bucks lying close together, the ground bearing evidence of a fierce struggle. Our deer shed about the middle of April, and look quite shabby until the middle of May. They get quite thin at this season, seeming to get along better during the rough winter, when they feed on the undergrowth.

After the rutting season is over, the bucks herd together in separate squads from the does. In regard to your third question, I have always observed that the spike bucks keep a good distance between themselves and the older bucks. I have never seen one chasing a doe, that did not come to a dead halt on being crossed by an older buck. I think they seldom get a jump until they are at least three years old, unless by chance. They are the ones which do so much damage to the trees by sticking their spikes in the bark, and often killing a tree in one night by girdling. This year I have put North Carolina tar on the trees which they have attacked, and I find it a sure preventive. They will not go near a tree coated with tar. Very truly,

W. H. CASSELL, Supt. Park Police, Balto.

I take great pleasure in quoting the above letter of Captain Cassell, though his statement contradicts a former one made by me in regard to spike bucks. I accept it unconditionally, and am glad to be corrected by such authority. To my mind the dispute about the burial of horns is settled, and I trust that at least your correspondent will cease to ridicule the idea. If it be possible for men who shoot at deer heads with the rifle for a frivolous pastime, or those who have witnessed hundreds of bloody struggles between deer to acknowledge an error, why I shall consider they have erred in their observations, and not

SYCAMORE.

DEER SHEDDING THEIR HORNS.—La-Shar-u-Kittibutz, Little Chief of the Pawnees, writes us from his cattle ranche among the sand hills of Nebraska, on this subject, as follows:

"White tails commence shedding their horns here as early as the first of February, and the last buck that I saw with horns (and he had only one) was on the 16th of February. I am told that the black tails (mule deer) shed about the same time, but as I haven't seen a black tail since January 1, I can't tell anything about it. As for elk, I am pretty sure that they shed about the first of March, but can't say positively. I see that one of the correspondents of the FOREST AND STREAM says that deer bury their horns or hide them when they shed; but they don't do it in this country, for I find freshly shed horns every day in the sand hills, and they lie right out in plain sight on top of the ground."

As a conundrum for those who believe that deer knock their loose horns off against trees, we would like to ask what those animals do which live in a country without timber?

DEER'S HORNS—GROUSE SHOOTING.

RIDGEWOOD, N. J., March 4, 1878.

EDITOR FOREST AND STREAM:

Noticing several communications in the FOREST AND STREAM AND ROD AND GUN relative to deer shedding their horns, I will give you my experience in relation thereto. I grew up in what was considered, at one time, a very good deer country, and have an experience of thirty years' shooting, in which time I have shot and killed many deer (and *have not*, a much greater number). In Northeastern Pennsylvania has been my only experience. I have never, in my thirty years' shooting, observed where a buck had shed his horns before Christmas, and I have never seen a buck with his horns after February, and, if my recollection serves me, not after the month of January. I believe that the bucks drop their horns between the times I have mentioned, and in a quiet way—not by force against trees. On high ground I have observed more old horns than on level or low land, yet I have discovered them on both high hills and low, level country. Now, as to the fawn's spots My observations are that they are, as a general thing, entirely off by the 1st of September; still, I would not say I had not discovered them in September, but it's a rare thing. I wish to be understood as not doubting the opinions and experience of others, but I firmly believe that different climates may change time of losing the spots. I wish that I had done as Judge Caton suggests, for memory is uncertain—noted down all that came under my observations while engaged in the pursuit of gunning during the time I have referred to. It would undoubtedly be an interesting story to the lovers of the gun and rod. It would afford me much gratification to have some of our older hunters for deer and other game give their experience.

Now, Mr. Editor, I observed in last week's paper, a record of the work of two pot-hunters headed, "Market Shooting in Massachusetts," a total of fifty-four days—1,189. One thousand one hundred and eighty-nine birds, or an average of twenty-six birds per day!—several days as high as thirty to thirty-eight partridges, besides woodcock. I suppose they mean by partridge our pheasant, not quail. Now, I shall presume that the said George and John Stone, the market shooters, must be, judging from their success, similar to some of our pot-hunters in Pike County. Upon the examination of the birds you will, perhaps, find where a little brass wire has encircled the neck, and the bird is unharmed, so far as shot is concerned. I am sorry to say we have, once in a while, a very successful shooter in our country. Sometimes he will be gone two or three days at a time, and will return with a bag of fifty or sixty birds. Yet he is considered only an ordinary shot I myself had the opportunity of testing his way of killing, and I found the wire had done its work well; and further inquiries led to the fact that the party had several pot-hunters in the woods awaiting his arrival. He bags the game and returns loaded. Great success! What glory!

You will pardon me for my insinuations, but I will close by saying that it would afford me *a fearful sight of pleasure* to accompany these gentlemen for one week during the best shooting season. Poor as I am, I would cheerfully pay the week's expenses, give them all their game, if they would average twenty-five pheasants, if this is what they mean by partridges per day. I am fifty-five years old, have followed shooting for thirty years, and it certainly would be a gratification to me to witness one week's shooting with this party on terms I have stated, so that I might see what I have never seen, and what, I believe, I never will.

PENNSYLVANIA.

["Confess, confess, hath he not hit you here?"—ED.]

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDENS FOR WEEK ENDING TUESDAY, FEB. 19.—One bald eagle, *Haliaetus leucocephalus*, presented; two rough-legged buzzards, *A. lagopus var sancti phannis*, purchased; two white rabbits, *Lepus cuniculus*, presented.

Arrivals for Week Ending Feb. 62.—Four hybrid fowls, presented; one white rabbit, *L. cuniculus*, presented; eight dingos, *Canis dingo*, born in garden.

For Week Ending Tuesday, March 5.—one great horned owl, *Bubo virginianus*, presented.

ARTHUR E. BROWN, Gen'l Supt.

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—[Ad

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE TRUE SHAMROCK.

We have often been asked about it, and have puzzled our brains over the vexed question of which is the true shamrock. St. Patrick's Day will soon be here, and many, doubtless, would like to know what the true shamrock is. Antiquarians abroad have exercised themselves considerably on the matter, and there are many plants of the clover family that are designated as the Shamrock. Many think that it is the *Trifolium repens*, or common white clover; others think it is the *Trifolium minus*, or small yellow clover; while others declare, and with much probability, that it was not a species of clover at all, but the common wood sorrel (*Oxalis acetosella*), the leaves of which look like clover, and which is one of the most common of the early spring flowers in Britain. The antiquarians argue that in the days of St. Patrick Ireland was very thickly wooded, and that as this plant (the *oxalis*) grows very abundantly in woods, it was doubtless very plentiful in Ireland, and would readily be used by St. Patrick to illustrate the doctrine of the Trinity to his hearers; and, besides, it is not certain that the two species of clover before-mentioned—not being indigenous to the country, were introduced before St. Patrick's time.

The Irish themselves do not appear to have any decided tradition as to which plant is the correct one, and it is quite a vexed question which cannot be solved at this day. In fact, while writing, two Irishmen, well posted too, argue the the point—one for the *Oxalis*, and the other for *Trifolium*, Either will do for the believer, and the Trinity is as well represented by the *Trifolium* as by the *Oxalis*.

"SPORTS" IN PLANTS.

Mr. C. M. Hovey, the able and experienced horticulturist of Boston, has had something interesting to say on this subject to the Horticultural Society of Massachusetts. He says:

"What is a natural sport? To most horticulturists and cultivators of experience this may appear a simple question, but by numbers of persons it is not so well understood. A natural sport is a variation of peculiar change of any part of a plant from its normal state. Take, for instance, the Camellia, or Japonica as it is often called. Here we have the old Double White (*alba plena*), a Chinese variety, imported into England so long ago as 1739, and since then extensively propagated and disseminated all over Europe and America. Yet it is still the very same flower it was in 1739, so far as we know ourselves, or can learn from descriptions, paintings, or books. It has never been anything else. If, however, you or I had a plant which should, upon one particular branch, show a flower of a different form or color, that particular flower would be denominated a 'sport.' So, too, if the leaves were to assume a different shape, or the branches some peculiar form, that would be also a sport, because, in either instance, it has departed from its original type. Such a flower or branch is, therefore, a 'natural sport,' and so considered in these remarks. It is somewhat extraordinary, when we notice the character and importance of these sports, that so little has been written upon the subject. In the very hasty manner in which I have been enabled to look through the works of various authors I find that it is scarcely mentioned at all. Mr. Knight, in his numerous physiological and horticultural papers published from time to time in the 'Transactions of the Royal Horticultural Society,' does not speak of sports. Loudon, in his various exhaustive volumes on trees, plants and shrubs, has little or nothing to say of them. Lindley, in his 'Theory of Horticulture,' does not notice them, and M'Intosh, Thompson, and other authors, do not give us any information upon the subject. Indeed, it is only in the periodical works upon horticulture, and scattered through many volumes, that much can be learned, and this in the main recorded of only a few particular sports. When we reflect a moment upon their importance, and consider how much our pleasure grounds and gardens, our greenhouses and conservatories, have gained in valuable additions through these sports, we are surprised that so little has been treasured up regarding them. The fact that we know so little of the cause of these sports is probably the reason why the record of their production is all that can be found. It is only within a few years that they have assumed any prominence, though, undoubtedly, they have existed for a long period. The very curious variegated trees from Japan, though probably some are from seed, are, many of them, undoubtedly sports, for it is not probable that so many seedlings should be precisely like the parent, except in the color of the leaf. Loudon, in describing one of the very dwarf forms (*Abies clanbrasiliana*) of the Norway Spruce, states that it was said to have been found at Belfast, but, he remarks, that to him 'it was very doubtful whether such a stunted variety as this was ever found in a bed of seedlings; we think it more probable that it is a continuation by cuttings of one of those bird-nest-like monstrosities that are occasionally found on all trees;' in reality a sport, though he does not use that word. As we have stated, little can be learned about sports in books, and we are driven to form our own conclusions regarding them. That they do take place on original plants there is no doubt, but it would seem that this tendency to sport is greatly increased by continued reproduction from seed. We have stated that, so far as we know, the old Double White Camellia has, in nearly a century and a half, never sported. Yet, when we look at that incomparable and most exquisite of all flowers the Camellia fimbriata, a perfect counterpart of the Double White in leaf and form, except that its petals, pure as the driven snow, are as delicately cut as the most delicate of fair hands alone could cut them, throwing a charming fringe around each petal, we think this, too, was a sport saved by some observant and enthusiastic cultivator of the Flowery Kingdom, and bequeathed to us as a token of the care which that heathen nation has ever bestowed upon one of the most beautiful handiworks of the Creator. The Azalea is another Chinese plant which, at the present day, is the most 'sportive' of all that we possess; in fact, it has become so to such a degree that a name signifies but little. Sometimes the flowers of striped varieties are all white, sometimes red, and at others parti-colored, and many of our varieties are perpetuations of these sports, some of which continue true and others go back to the original. As to the cause of these sports we have little to say. Our only theory is that, having undergone so many cross fertilizations, they have become, as we often say, 'somewhat mixed,' for the older varieties of the large-flowered, or rather large-leaved kinds, of the Phœnicea and alba type remain very true and sports among them are exceedingly rare—indeed, we ourselves do not know of one. I trust that the few instances I have mentioned of the origin of sports will show you the importance of observation. No doubt many interesting additions might have been made to our variety of plants, had the cultivators of fifty years ago been as numerous or unremitting in their labors as those of recent years. The number now who are on the look out for every sport is legion, and the yearly additions to our catalogues show that they are not idle."

VERDURE FOR TREELESS PRAIRIES.

ST. LOUIS, Feb. 22, 1878.

EDITOR FOREST AND STREAM:

In some former numbers of your valued paper I noticed reasons were set forth why our Western prairies are treeless. If I remember aright, the principal reason assigned for their being so was that the soil generally is too fine and compact. So far as my observation and experience go, these conclusions are erroneous, as wherever forest or fruit trees, indigenous to the locality, have been properly set out or propagated from seeds, they thrive and grow remarkably well. Last spring I put out a quantity of fruit and forest trees of various kinds in a firm, hard, loam soil, and I have never seen a finer growth anywhere. I procured about 500 little cottonwood stocks from a sand-bar in the Saline River, set them out, and many of them attained a growth of more than three feet in height the past season. My theory as to the prairies being bare of trees is the almost annual fires that sweep over all their surface, licking up and destroying every vestige of living tree and shrub. On most of the water courses trees and small fruit bearing shrubs are to be found, but remote from the track of the devouring prairie fires, and where no fuel was afforded no grasses grow. There has been no trouble in making trees grow on timber claims, on sod ground, when they could be kept secure from fires; and the day is not far distant when fine tracts of woodland will be present to view, where now nothing greets the eye but vast tracts of treeless prairie. I am glad Congress granted the right to enter quarter sections of government lands for tree culture. Its provisions are: That ten acres shall be broken the first year; that during the second year another ten acres shall be broken, and the first ten acres be planted with forest trees not less than twelve feet apart; and so on yearly until forty acres are thus planted. At the expiration of eight years, if proof is made that the conditions have been complied with, the trees properly cultivated, etc., then the government gives the person entitled to it a patent and full ownership. Many such claims have been entered throughout our Western States, notably in Kansas, but I regret to state the great bulk have been forfeited for non-compliance with the conditions attached to the entries. It looked easy to set out ten acres of little forest trees each succeeding four years, but when the time came to do so a great majority of these timber claimants hacked down and out, and their claims have been taken by others for homesteads and pre-emptions. On many accounts I am sorry to see so little true grit displayed by these would-be philantropists, for if all the land is to be taken up for farms we shall have no forests or timber culture to speak of. It certainly is no great task to collect sufficient forest trees to plant ten acres the second year after entry, and continue on until one-fourth of the land is planted. Nuts and seeds could be gathered and propagated the first year, and sprouted ready for setting out the second (as this mode is allowed by the act of Congress). The land between the rows of trees could be cultivated to good advantage for trees and crops until the expiration of the eight years; so, also, the balance of the tract. I am a lover of trees, and it would do my heart good to see our vast prairies dotted all over with well-tended and growing forest and fruit trees.

D. L. DICKINSON.

AMERICAN WOODS FOR PARIS.—One of the most remarkable exhibits designed for the Paris Exposition is a tablet of native American woods, which consists of a mosaic tablet eight feet wide and twelve feet in height, and was designed expressly for Mr. William H. Lippincott, the well-known Philadelphia lumber dealer, by the best artists and architects of the Quaker City. The tablet is in the Egyptian style, and consists of a flat moulding on the outer edge made of three quarter circles of bird's eye and curled maple, with a triangular-shaped piece of bois d'arc and beech filling the blank portion of the circle. The main panel is of white and yellow pine, ash, striped and plain walnut, poplar, apple, chestnut and sycamore. The bottom is a broad piece of close-grained oak skilfully carved. Resting on the oak rail is an antique vase of various woods, from which springs a lotos plant with a wide-spread flower and leaves, all carved with great delicacy from ordinary American building woods. At the right and left upper corners of the tablet are dragons, made of California red wood. The open spaces of the design are filled in with rosettes in relief composed of Florida, North Carolina and New Jersey cedar, with caps of white holly and locust, forming a most beautiful contrast to the deep red cedar. The tablet is suspended by large rings of black walnut relieved with hickory, from a handsome bracket with a polished hickory roller. On each side of the bracket is a flying bat carved from butternut wood. Forty-three different varieties of native American woods enter into the construction of the tablet, including, besides those already named, birch, elm, cypress, spruce, gum, hemlock and others. Two cross-bars bear the the words, "Lippincott, Bois d'Amerique pour l'exportation." The whole affair has been pronounced to be the finest collection of American woods ever gathered together.—*Graphic.*

NEW YORK HORTICULTURAL SOCIETY.—The regular monthly meeting of the above society was held at their rooms, 53 West 33d st., on Tuesday of last week. The room was crowded with visitors, and the display of plants and flowers was unexpectedly fine. Mr. Boileau delivered an address on the proper method of training and fruit trees, a resume of of which we will have much pleasure in laying before our readers next week. This is the season these things ought to be attended to, and we try to draw attention to all these things in their season.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7 Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb Secretary.

MASSACHUSETTS KENNEL CLUB.—The absolute work of this leading New England Club has now fairly commenced, so that everything will be in perfect order for the opening of the Bench Show at Boston, which takes place on the 26th of this month, to be continued on to the 29th. Entries are being made rapidly. From the demand which has been made on us for blank entries, we should suppose that the attendance would be very large. It looks as if this bench show would be a representative one, as a number of the St. Louis winners will again strive for victory. Of course the champion list will be a large one. The judges are: For setters and pointers, John Davidson, Esq.; spaniels and Chesapeake Bay dogs, hounds and non-sporting dogs, Dr. L. H. Twaddle, assisted by Mr. T. H. Scott, of England. Mr. Charles Lincoln will act as superintendent.

FOR THE BOSTON BENCH SHOW.—Mr. James R. Tilley will send to Boston some of his finest Gordon stock, including Whip, Ring, Grace, Gypsie, Count, and a lot of likely puppies.

BEAGLE FOR THE BOSTON BENCH SHOW.—Mr. Geo. Pounall, of Christiana, Pa., will send to the Boston show one of his best beagle bitches. Mr. Pounall's kennel is well known, and his breed of beagles—a not common race of dogs in the United States—is among the best.

TREMONT HOUSE, BOSTON.—During the bench show for exhibition of dogs, the well-known Tremont House will charge a dollar less than usual rates. The Tremont House will be the headquarters of the Massachusetts Kennel Club.

BALTIMORE KENNEL CLUB.—We shall be very glad to forward to any one desirous of exhibiting their dogs, the rules and regulations of the Baltimore Kennel Club, with the list of premiums, also blank entries for the Bench Show, which is to take place on Tuesday, April 23d; Wednesday, 24th; Thursday, 25th, and Friday, 26th. The show will be held at the Masonic Temple, North Charles street. The officers of the association are: Pres., J. Addison Smith; Sec., L. R. Cassard; Treas., Philip Rogers; Executive Committee, Thomas A. Symington, A. Jenkins, Jr., M. D. Groverman, R. Stuart Latrobe, Charles S. Bancroft, H. S. Zell: Charles Lincoln, Superintendent, P. O. Box 767, Baltimore. Special Prizes—Up to the time of printing the prizes offered by the club, a large number of *special prizes* have been presented, and a list of the same will be printed and circulated as soon as it is complete, together with the classification under which they will be awarded.

THE VALUE OF DOGS IN VIRGINIA.—The Lynchburg *Virginian* of the 7th inst. says: "Mr. Hunter's Dog bill passed the House. This bill allows owners to value their dogs at $100, and to pay to the Commissioner the tax on that amount, which is $1 for the first dog, and 50 cents for all others. After the dog is so listed for taxation, he becomes as much personal property as a cow or a horse. Of course no one is compelled to pay the tax: it is purely voluntary. It will have the effect of stopping the stealing of valuable dogs, and a stolen dog will be as rare as a stolen horse. This tax will place some thousand dollars in the State Treasury."

THE MONTCLAIR BEAGLES.—The beagles which were ordered out from England some time ago by the Montclair Riding Club, arrived last week in good condition, by the steamer Holland, of the National line, after a passage of seventeen days. This club began hunting with a paper scent last autumn, and soon grew enthusiastic over cross country riding, and resolved to procure a pack of hounds, and decided upon beagles. The pack comprises six dogs and four bitches—Brilliant, Bluebell, Equity and Countess, who have been hunted in Yorkshire to hares, rabbits and a drag; Faithful, Trumpeter, Rambler and Monitor, from a kennel in Cheshire, where they have hunted hares; and Tickler and Rattler, who have been hunted in Kent for a drag and for rabbits.

DISPENSING WITH A CAP FOR CANKER OF THE EAR.—A correspondent from Philadelphia sends us the following plan for keeping the dog from troubling his ears, in canker: "I see, by looking over your answers to correspondents, that you often have occasion to give a cure for canker in the ear, and you advise the use of a cap placed on the head, to keep the dog from shaking his head. I will give you my cure, which I think you will find very beneficial. I use a solution of equal parts of lead water and water poured into the ear three or four times each day; and in place of the cap a strip of common sticking plaster, heated and placed on the inside of the ear, and then tied under the throat, which will answer much better, and is not as troublesome." The sticking plaster is very good, if it can be kept on.

FOR DISTEMPER.—A correspondent from Mount Carmel, Ill., sends us the following prescription for distemper. As there is nothing noxious in the compound, it can do no harm:

"I have used this with good success for a great many years, having handled dogs of all kinds. I find the receipt invaluable: Mix 3 oz. bitter aloes, 3 oz. saltpeter, 3 oz. pulverized sulphur, with lard, so that it will easily run out of a bottle. Drench twice a day, morning and evening, with the mixture. The above is sufficient for two doses. I have never yet lost a dog on which I have used this preparation. J. W.

FOX HUNTING IN TENNESSEE.—A few days ago there was a meet of a portion of an old "Fox Chasing Club," which is now nearly extinct, although measures are being taken to revive it. There were present with their "packs," D. D. McFall, L. M. Matthews, Gen. A. Bowen and Gen. James A. Fleming, and about forty invited guests. They started Reynard in a few minutes, and ran him back and forth over a bit of country about two miles square. After a run of some 15 miles, the fox was shot by one of the party, one and a half miles ahead of the hounds. Foxes are plentiful here, and good fields for chasing. Packs are owned by gentlemen living near, and all that is lacking to rival Virginia in fox chasing is the organization of two or three clubs, which we expect to have in due time. VAL.

Columbia, March 2.

FOXES AND SPIRITUALISM.—The Culpeper (Va.) *News* is troubled about an old fox whose wiles have proved too much for the huntsmen of all the counties round about. The peculiar method of mystification employed by this four-footed phantom seems to consist in walking rails and leading dogs and hunters round about promiscuously, and then vanishing into thin air, leaving everything at a dead loss. We confess that we can account for the phenomenon only by accepting the theory that this is not a real fox, only a shadowy semblance. We believe it to be the avenging spirit of some Virginia Reynard, who, in the flesh, suffered martyrdom by the shot-gun; and not losing his brush in the time-honored way prescribed by the precedents of all fox hunting, has now returned to avenge the indignity offered to his kith and kin. The huntsmen, horses and hounds of Culpeper County may follow the chase until doomsday, but we venture to predict that they'll never catch that ghost.

THE DOG DERBY—COOMASSIE THE WINNER.—The three days of coursing on Altcar Flats, near Liverpool, recorded the victory of Coomassie. Forty thousand spectators were present on the first day of the meeting. The weather was all that could have been desired, and on the last day the excitement was intense. The result was finally in favor of Coomassie, last year's winner of the same cup. This is one of the most remarkable facts in connection with the contest, for never before in its annals has the same greyhound pulled through twice in succession. Master McGrath, it is remembered, won in 1868 and in 1870. Peasant Boy is the only instance in which a dog ran up twice, and this meritorious performance the black accomplished in 1872, when he was second to Bed of Stone, and in the next year when he occupied a like position to Muriel; but Coomassie's performance stands unrivaled. Coomassie is a light fawn, and weighs no more than 43¾ pounds. She ran in the name of Mr. Stocken, but is the property of Mr. Thomas Loy, who purchased her for $1,000 from a gentleman who bought her for $250 from her breeder, Mr. Caffley, a Norfolkshire gentleman, who, a few days previous to the meeting, failed to obtain a bid for Queen, the dam of Coomassie, at auction. The party connected with Coomassie won a tremendous stake, and the public also won largely, much to the grief of the layers of odds. The second greyhound was Zazel, the property of Lord Fermoy. This was his first venture, and to come out second best in a field of 64 was no small victory. Besides the cup there went as first money to the winner, Coomassie, $2,500; second money, Zazel, $1,000; third and fourth money, Whistling Dick and Rival Belle, $250 each. The next four hounds got $150 each; the next eight, $100 each, and the next sixteen, $50 each. The Waterloo Purse, for greyhounds defeated in the first round of the cup, fell to Adelaide, who was very much fancied for the cup itself.

A CORRECTION.—In a former issue Belle and Trim were credited as belonging to Dr. S. Reilly Becher. This was an error; the dogs were bred by, and are the property of Dr. S. Reilly Bucher, of Lebanon.

NAMES CLAIMED—*Paris, Ont., March* 2.—O. Totten claims name Princess for his orange and white setter bitch pup, out of Mr. B. Capron's Blanche by Bute, he by Carlowitz—Rose, she by Rufus—Rose.

NAME CLAIMED.—Sport: Mr. S. Washburn, of Esperance, N. Y., claims the name of Sport for his liver and white pup, out of Bess and Captain.

—Sam: Rev. J. A. Dobson, of Newark, New Jersey, March 8, 1878, claims the name of Sam for his five months liver and white cocker spaniel dog pup, purchased of Mr. P. McKoon, and out of his Fanny by Captain.

VISITS—*New Bedford, Mass., Feb.* 9.—Joseph Bassett's (of Foxboro, Mass.,) Bess visited my Gordon setter Tom, winner of first at Boston, Sept., 1877. The pups should be exceedingly handsome, as both Tom and Bess are perfect specimens. J. H. J. DOANE.

WHELPS. *New York.*—Mr. F. C. Mercillott's "Pet" whelped on the 5th inst. Eight—six dogs and two gyps, by Morford's Don; seven died soon after birth; one dog living.

Sea and River Fishing.

FISH IN SEASON IN MARCH.

SOUTHERN WATERS.

Pompano, *Trachynotu carolinus.*
Drum (two species). Family *Sciænidæ.*
Kingfish, *Menticirrus nebulosus.*
Sea Bass, *Sciænops ocellatus.*
Sheepshead, *Archosargus probatocephalus.*
Snapper, *Lutjanus caxus.*
Grouper, *Epinephelpus nigritus.*
Trout (black bass), *Centropristis atrarius.*
Striped Bass, or Rockfish, *Roccus lineatus.*
Tailorfish, *Pomatomus saltatrix.*
Black Bass, *Micropterus salmoides: M. nigricans,*

☞ The trouting season on Long Island, which opened last year, and previously on the 15th of March, does not open this year until the 1st of April. The law is now uniform throughout the State.

FISH IN MARKET—RETAIL PRICES.—Hackensack smelts, the most delicious and the finest in flavor, have been taken in large quantities this week, and are selling at 15 cents. Their small size, when compared with other smelts, has prejudiced people against them, whereas the smaller smelt are, in reality, the finer flavored fish, having the peculiar cucumber flavor. Our quotations are:

Striped bass, 18 cents; large do., 15; smelts, 18; green do., 20; bluefish, 15; frozen salmon, 35; green do., Halifax, $1.25; mackerel, 25; small do., 15; James River shad, 40 to 75; white perch, 15; Spanish mackerel, 35; green turtle, 18; terrapin, $18 per doz.; frost fish, 6; halibut, 15; haddock, 6; codfish, heads off, 8; do., heads on, 6; blackfish, 15; Newfoundland herring, 6; flounders, 10; do., small, 6; sea bass, 15; eels, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 25; turbot, 25; scallops, $1.50 per gallon; soft clams, 30 to 60 per 100; whitefish, 18; pickerel, 15; yellow perch, 10; salmon trout, 16; Virginia black bass, 18; hard crabs, $2. 0 per 100.

PENNSYLVANIA.—Yellow catfish are caught in the streams emptying into the Delaware.

GIGANTIC TROUT AT RALSTON, PA.—Several correspondents, including our worthy and veracious friend, William Holberton, who has fished at Ralston for eleven years, take exceptions to Jack's statement in our issue of February 28, that he took 23 dozen (!) fine trout in the neighboring waters, which averaged 2¾ lbs. each (!), and we do not wonder at it. We would not have printed the statement unqualified had it come under our special notice, and we will allow Jack the saving grace that he intended to say that the trout averaged 2¾ pounds *per dozen.* If Jack really designed to impose upon us, he deserves to have his head held under water in the coldest spring-hole of the river until his teeth can no longer chatter. The hotel at Ralston, and the scenery round about, including the old mill or forge, are all very fine; but the trout—well, we have said.

TENNESSEE—*Nashville, March* 7.—The weather for the past few days has been unfavorable to anglers, though the market is kept well supplied by the net fishermen. Some of the buffalo caught in the Cumberland River are very large, frequently weighing from thirty to forty pounds. Reelfoot Lake is the place, however, from which the main supply comes. This lake was formed by an earthquake which took place near New Madrid, on the Mississippi River, in the year 1811. The earth sank to a great depth where the lake now is, and the waters rushed in from the river. Trees are still standing all through the lake, which corroborate the fact. The quantity of fish in the lake is incredible, and of all kinds that are found in the rivers and creeks in this part of the country. There seems no doubt but there is a subterranean connection between the lake and the Mississippi River.

Columbia, Tenn., March 9.—Some few trout (called bass) are being taken, and the sport and creels bid fair to be unusually fine. Suckers and mullets are caught in abundance. Some fine bass and pike in market from Reelfoot Lake. VAL

FLORIDA—*Bay Port, March* 4.—The abundance of fish here in the Wickawacha River is truly surprising. All along the river are what they call alligator holes, great deep places. They average 50 feet wide by 100 feet long, and from 10 to 40 feet deep at low tide. Most all the large fish in these rivers retreat to these holes—sheepshead, red snappers, groupers, mullet, growlers, garfish, redfish, sea trout, black bass and small sharks. The other day I caught in half an hour thirteen black bass, which together weighed sixty-three pounds, and a half bushel of sea trout, besides a sprinkling of snappers and redfish—in fact, I caught more than I could give away, and within a week the veritable bluefish of the New England coast have become quite abundant here. I struck a school the other day and caught eight nice ones. Yesterday I caught a new kind of fish: none here ever saw it before. It was shaped somewhat like a mackerel, had the same kind of fins and tail. It was about three feet long and of beautiful shaded blue sides, with sixteen golden spots of about ¼ inch in diameter on each side. The fish was supposed to weigh about eigh pounds. To-day we had him fried, and it was the best fish I ever ate in Florida. The fish was very slender, with peaked head and a formidable mouth. I had two others bite, but they were larger and snapped my line at once. We desire to learn the name of the fish This morning I saw lots of them in the river. Yours truly, G. F. WILLIS.

[Our correspondent's fish bears a close resemblance to the skipjack, or ladyfish, except as respects the golden spots on side, which are those of a Spanish mackerel. The family name of the latter is scomber, while the skipjack, from a partial resemblance to a pike as well as a mackerel, is included among the scomberesocidæ. Both are voracious feeders, but the Spanish mackerel is capricious. The skipjack are usually quite common on the Gulf coast of Florida, and a nuisance to the angler. We have never seen *Scomberesox maculatus*, if this described fish is such a one.—ED.]

WISCONSIN—*Ashland, March* 2.—Herring and trout fishing yield poor returns.

ICE-FISHERMEN ADRIFT.—A large field of ice on Saginaw Bay, near Bay City, Wis., broke loose one day last week, carrying with it out into the lake fifteen of the fishermen, who had remained in their shanties. They were rescued after a day's adventure and peril.

SOMETHING NEW FOR ANGLERS.—Mr. S. F. Fisher, a jeweler, of Columbia, Tennessee, has just obtained a patent on a reel that has many points of merit. It multiplies four and one-fifth times; has an alarm and rubber that are thrown in and out of gear by milled knobs. The spool runs on tempered steel points, is accurately balanced, and fits the cap so closely that it is impossible for dust to get in. It has compensating screws at ends of spool, and can be oiled without taking off cap. They are so accurate and finely finished that one will last a lifetime with proper care. Mr. Fisher is making arrangements to manufacture them in quantities, and as soon as he gets his orders filled, will put them on sale in all the principal cities where, we are confident, they will meet with rapid sales.

MACKEREL AND SCUP AS FOOD FOR COD.—Early this week Captain Masher, of the schooner Mary and Carrie, while fishing some six miles south of Sandy Hook, when catching cod, on opening them, found in some of the larger fish scup, or porgie, and mackerel, the latter weighing about a pound. These fish had furnished food for the cod quite recently. Now this, if proved to be true, may point to some very important facts. The question arises, "Do the mackerel or scup winter near our shores?" Mackerel are caught off our immediate shores in the later part of April, and porgie or scup toward the close of this month (March). This finding, then, of these particular fish in the cod should be more thoroughly understood. Professor Spencer F. Baird, of the Smithsonian, is very desirous of having these facts verified. Will the fishermen who are after cod in the vicinity, should they find any mackerel or scup in the cod, be good enough to preserve the mackerel or scup, and forward them at once to E. G. Blackford, of Fulton Market, New York, so that the fish may be sent to Washington for verification. The migratory fish, it seems, will be narrowed down after a while, but it is only by means of constant observation that positive facts can be determined.

PASQUE ISLAND—*Mr. Editor:* Pasque Island is situated about twelve miles south of New Bedford, Massachusetts, lying between that city and the Island of Martha's Vineyard, and being one of the group of the Elizabeth Islands. It is about one-and-a-half miles long, by one-half to three-quarters of a mile wide in its widest part, and containing over one thousand acres. Its surface is undulating, with abrupt and rocky shores, with here and there a sandy beach, which affords fine bathing. The island is covered with grass, which affords fine pasturage. Many years ago it was heavily wooded, but to-day there are only two or three stunted cedars, with the exception of the young shade trees that have been planted around the house by the club. It is asserted that the timbers in the old farm house, the only dwelling on the island except the club house, were hewn from native trees.

This island was purchased in 1867 by a number of gentlemen, and a club formed, incorporated under the laws of Massachusetts, by the name of "Pasque Island Corporation," which to-day has about forty-five members. They have built a pretty and substantial two-and-one-half story club-house, stable, ice-house and other outbuildings for the comfort and accommodation of themselves and guests during the fishing season, which commences about June 20 and ends about October 15. A few years since, on account of the increasing membership, some ten members clubbed together and built and furnished at their own expense a wing of two-and-one-half stories to the main building, divided into rooms, which are their private property, and only occupied by them, except by their permission. The club-house and wing has a wide covered piazza running around it on three sides, so that upon the hottest day, which is rarely eighty degrees in the shade, you can always find a cool and shady place with a good breeze. One of its luxuries is the cool nights, as it is seldom but that you need a blanket over you, and there is no annoyance from mousquitoes. Pasque Island is the healthiest and pleasantest place I know of to spend a few weeks vacation with one's family.

Stands are erected at all the best fishing points around the island, to which are fastened chairs for the comfort of the angler. There is a record kept of the striped bass taken each day, by whom, weight, etc., no account being taken of any other fish. Those who do not wish to try the bass can take a boat and anchor almost anywhere off shore and take all varieties of bottom fish found upon the New England coast. Bluefish and weakfish afford fine sport, and are very abundant. Often the bluefish run as large as twelve pounds, and are so plenty as to give one all the sport he wants with rod and reel, and which affords more sport than any other way of taking them.

The club owns three mules and wagons, which convey the anglers to and from their fishing stands and bring home the day's catch.

It is not unusual or rare to take bass as large as forty or fifty pounds. Aug. 16, 1873, the writer killed one of fifty pounds after a fight of half an hour, which tested his tackle and skill. The sport it afforded him will never be forgotten.

Section 2 in the certificate of incorporation prohibits seining or taking fish within forty rods of the shore in any other mode than by hook and line, under a penalty of a fine for each offence.

We have a fine garden, with a professional gardener, which supplies all varieties of fresh vegetables to the table. We have our own cows, raise our own chickens and eggs, and only rely upon the main land for our meats, which are sent us twice a week from New Bedford by a propeller chartered by the club to convey passengers and freight to and from the island.

You see our table is supplied with everything necessary for the comfort of the inner man, unequalled by the best hotels of the most fashionable summer resorts. Your readers may think I am an enthusiast, and so I am when Pasque Island is the subject. I would not sell my share of membership for $5 000 could I not procure another.

As the summer approaches my impatience is great to once more migrate to my beloved Pasque Island.

LABRAX LINEATUS.

New York, Feb. 25, 1878.

WHERE SOME GOOD TROUT FISHING CAN BE HAD.

Mr. Editor: Fifteen years ago I made my first visit to the far-famed trout streams of Maine. Every year since then (but one) those grand old mountains and beautiful streams have welcomed me to their wild wood home. Ten years have passed since I killed my "large fish." I had been a faithful follower of Sir Isaac for five years, and flattered myself that I knew where the big ones lay, and that I knew how to take them. Many a hard fight have I had with large fish since that time, but never with so large a fish, and under such disadvantages.

It was the last day but one of September, 1868, that I stood on "Jig Rock" in the sun, between Trout Cave and the Rips, above the Upper Dam Camp. I could see heavy fish rising occasionally just below, slowly but surely making their way up towards me. At last a monster fish broke water about fifty feet below me.

With a half turn of the wrist, and a gentle movement of the arm, the "jay bird" pitched upward and outward, and landed as gently as a snow flake some forty feet away. A gleam of golden light shot upward, the water parted, and, good heavens! what a mouth closed over the fly, and sank from sight. To say I struck him hard would be stating it lightly, for the leader "twanged" like a cross-bow. With a mighty rush he found his way up stream past me, and as I had a fair view of his great length and size, I fairly "shook in my boots." Up stream for a hundred feet, and as I put the pressure on, aided by the swift current, he turned down stream. Down past me he rushes with a velocity that makes the water hiss as the line cuts through it. As he nears the Rips-the pressure is brought to bear on his mouth, for he must be stopped now, or good-by to trout, leader and all.

See! the noble old green-heart rod bends to the half circle. Never had its faithfulness been put to such a test; but it came off conqueror at last. As the trout headed up stream once more, he came within ten feet of me, and "sniked" at this turn of affairs, while I called loudly for a boat to take me off the rock. Just at this time his troutship turned a double somersault, and went tearing around like a race-horse. The rock I stood upon was cone shaped, and slippery at that, and had you seen me "waltzing around" and "cutting up" generally, you would have said it was rightly named "Jig Rock."

At last I got into the boat, and continued the fight until he rolled up his golden sides near the surface, when the landing-net was passed under him, and he lay in the bottom of the boat. He measured twenty-seven and one-half inches in length, girted eighteen inches around the body, and eight and one-half inches across the tail when it was spread; his weight was 10¼ lbs. He was measured and weighed in the presence of twenty gentlemen, and all, without exception, said it was the "boss trout," and I thought so myself.

I have had the pleasure of fishing in all the favorite places on the whole range of Richardson lakes and streams, and I prefer the upper dam fishing to any other, unless the fishermen are so thick that it is impossible to cast your fly within rifle shot of the dam without doing so over somebody's head, which is generally the case in the fall of the year.

If a sportsman cares for comfort and good fishing also, I would advise him to stop at the middle dam, for the cook—Mr. Frost—cannot be beaten by any man or woman in the Maine woods, and the accommodations will be excellent, as Brooks, the proprietor, is building a good hotel, 75x25 feet, two stories high, with eighteen good sleeping-rooms.

The building will be completed by the time the lakes are open. The price of board will be reasonable, and no one will go away from the house dissatisfied. There is to be a large ice house connected with the establishment—a great item in packing fish to take out to the woods. I understand the carriage to Umbagog Lake is to be put in good condition for back board conveyance the coming season, making the place very easy of access, either by the way of Upton, where Mr. C. E. Reyerson, the proprietor of Lake House, will see his guests well cared for, or by the way of Andover, where Mr. Thomas will welcome sportsmen to as hospitable a house as there is in Maine, while his good lady will see to it that you have plenty to eat, and excellently well prepared at that.

I have had the pleasure of tracking over all the different routes to reach this famous fishing ground. If one cares to go quickly, comfortably and cheaply, take the Worcester and Nashua, Portland and Rochester route from Worcester, Mass., to Portland, Me., then the Grand Trunk RR. to Bryant Pond or Bethel, where stages will be in readiness for passengers.

I shall hardly care to say that the conductors on this route are "angels in disguise," but it is safe to say they are gentlemen in every sense of the word, and passengers are made as comfortable as they would be at home; and if you should chance to ask a question of the conductor, you need not reach for your shooting iron, for the answer will be pleasant. The best thing about going this route is, you save hotel fare, also back fare across the city of Boston both ways, and it saves one day's time from the lake to New York city or any part of Connecticut, which is a great item when one has a nice lot of trout he wishes to keep, and is anxious to meet his family—if he is lucky enough to have one.

In conclusion, let me say, if any one has doubts about good fishing grounds at or near the Middle Dam Camp, I would whisper in the reader's ear that our party of four gentlemen, in 1876, took 300 lbs. of trout, twelve of the largest weighing 43 lbs., and all were hooked in the mouth at that. If fishermen cannot be satisfied with such sport as that, and the facilities I have named for getting to the grounds, they ought never to have the privilege of "netting a line" as long as their miserable lives are spared.

E. T. W.

KENTUCKY WATERS.

EDITOR FOREST AND STREAM:

The first column that we Kentuckians read in your good paper is the fishing column. We shoot but little comparatively in this region, for the reason that game is very scarce. A few birds each season are bagged by some enthusiastic gunners, who do not mind a day's tramp, or of several days, for that matter, which will result in bringing to bag a half dozen partridges per diem. But when it comes to the "gentle art" of angling, the devotees at the shrine of good old Izaak are quite numerous and indefatigable. In the days long agone, Kentuckians enjoyed a world-wide reputation as marksmen, and their feats with the rifle have formed the attractive feature of many a story of actual history or wild romance. That day has about passed. The deadly accuracy of their long rifles, *or some other cause*, has almost eradicated the game of our good State, and those who seek recreation afield in these degenerate times are forced to be content with what amusement they may "pluck from fitting time" by the more quiet banks of some tortuous stream, where black bass can be "lured to their undoing."

We have many streams in our State that afford splendid sport to the angler. Our larger streams, as the Kentucky and Licking Rivers, for some unknown reason, afford but meagre sport; but Green and Salt Rivers, in the Southwestern part, and Rock Castle and the forks of the Cumberland, in the Southeast, together with Dix River and Elk Horn Creek, in the central portions of the State, all afford fine sport in bass and newlite (cropple) fishing.

This brings me to remember the very interesting note of "Kentuckian" in your issue of 28th ult. from Stamford, and the comparative merits of the ordinary reels of the East and that made by Mr. Milam at Frankfort, known as the "Meek's reel." Now, our manner and method of fishing here may be peculiar and different from that which prevails at other places, as we use live bait and know but little of fly fishing—in fact, though I have fished for many years, and with a great many of our most successful fishermen, I have never seen a fish taken with the fly, or even seen a regular fly-casting line, though the delicate, wispy fly rods have now and then been exhibited as curiosities. In our section we use a stiff bamboo or West India cane, 8½ or 9 feet long, rigged with wire loop at each alternate joint, and a Meek's reel, armed with a hundred yards of the finest grass or silk line. With such tackle and three buckshot as sinkers, any expert angler is enabled to drop his minnow eighty or one hundred feet from him in any part of the stream he may choose; and for bottom fishing with a live minnow, no other tackle compares to it. Indeed, no one who aspires to be an angler ever thinks of contenting himself with the best click or balance handle reel, although costing less than one-third the price of the Meek. *They will not work;* they fail to deliver the line rapidly enough to land your bait unharmed to the distance it is necessary often to put it to lure the wary bass. An adept never tangles his line. It is only the result of awkward handling, and never occurs when a fisherman is handling his own tackle. If the bobbin is very full, and the "alarm" hears but lightly, it will run so fast as to tangle the line by over-running; but the expert appreciates that, and with the tip of his thumb barely touching his bobbin, regulates to a nicety its delivery, and his bait is landed exactly where he elects, without the violent jerking that often deprives the poor minnow of its life and its usefulness when a reel is used with slower and harder delivery. Only very impecunious fishermen will be content to forego a Meek. It is the dream of his life to be able to invest $18 or $20 in a No. 2 or No. 3, and then his dream of life is beatifically fulfilled. Our bass fishing in Elkhorn has just opened. One gentlemen a few days since—March 1—made a string of seven fine fellows—the largest weighing three pounds and the smallest one pound. Like your correspondent from Stamford, I have no earthly interest in the sale of these reels, but, being an enthusiastic angler, would like to see my brethren of the craft armed with the best implements to be had. A little practice and some patience until the art is obtained, and the lovely excellence of the Meek will endear it to every lover of perfect tackle. Try again, brother anglers; you will not regret it.

ELKHORN.

Midway, Ky., March 6.

THE MEEK REEL AGAIN—A MEEK REPLY TO A MEEK MAN.

MR. EDITOR: I expected somebody would "pick me up" for intimating that the Meek reel was not all perfection in all kinds of fishing, and now I suppose that I have my hands full in answering my brother of Stamford, Kentucky. It is not to be wondered at that "Kentuckian" should defend the merits and reputation of the Kentucky reel. I am glad, however, that he presents the case in such kindly language and friendly spirit. It may be safely wagered that he is a gentleman as well as a sportsman.

Having persistently fished with this reel for fifteen years, in all sorts of weather and water, I ought to know something about it. Of course, one man may perform better than another (there is a knack about these things), and my assertion simply meant that I myself could do better casting and more satisfactory work with a good balance reel than I could with a Meek, and I stick to it. Until within the two last years, I used nothing but the Kentucky reel, and even now always have one on hand when "out fishing," but prefer the other. I think that the Meek reel might be altered in some particulars so as to improve its qualities for casting. For instance, it is too wide for fifty yards of the fine linen or silk lines in use in bass fishing. Unless the line is carefully and evenly wound when reeling in, it has a tendency to bunch in the centre or on one side; then, woe betide you on the next cast. [For Hallock on reels, see "Gazetteer," page 515.] No man ever did or could pay much attention to the manner his line went on the reel when taking in a four or five pound bass. Whatever his intentions might be the fish would not permit it. Then, too, the weight and fight of the fish packs the line tightly on the reel. The least impediment of this kind sends the reel whirling the other way and you have a tangled line—not that packing does not happen with other reels, but the effect is not so disastrous.

A few days ago a pickerel was caught in Fowler Lake, Oconomowoc, weighing twenty-one pounds, and a day or two later a similar fish was taken from Silver Lake, two miles from the village—weight, twenty-three and a half pounds; length, three feet six inches. Come up, Kentucky!

GEO. A. SHUFELDT.

Chicago, March 5, 1878.

[The chief trouble with the Meek reel, in our opinion, is that it is too wide. With the shape of the Orvis reel, which is high and very narrow, the Meek reel would be vastly improved. It would take up line rapidly and more evenly, while the line would be less likely to foul on the parts projecting on either side of the rod. To obviate the latter difficulty entirely, adjust the reel plate so that it will screw into the extreme butt end of the rod. There is a gentleman, a jeweler, in Grand Rapids, Michigan, who affixes his reel in this manner, but his name has gone from us at present.—ED.]

A REEL WITH A HISTORY.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I was much interested in the article "A Gun With a History" in your issue of Feb. 14. I have seen a salmon reel, which has, I think, a more interesting history. It belonged to Dr. Livingston, and was used by him during one of his journeys into Central Africa. It is a large bronze reel, some four and a half inches in diameter, and one and three-fourths in breadth, capable of holding three hundred yards of line. It is now in the possession of Mr. John P. Loeser, of Denver, Colorado, and was presented to him by the Rev. Horace Waller, Vicar of Leytonstone, England, who accompanied Dr. Livingston upon one of his exploring trips in Africa. To Dr. L. there attaches an interest, greater, perhaps, than to any traveler of modern times, and whatever belonged to him, or was used by him, must, in some degree, share that interest. As I looked at the reel there came into my mind a vivid picture of the trials, privations, hardships, exposures, fatigues and dangers so bravely and uncomplainingly borne by the courageous and true man, now, alas! departed, who once used it.

C. B.

THE BOSTON SHOOTING SUIT.—Messrs. G. W. Simmons & Son, the Boston manufacturers of the well-known Shooting Suits, have found it necessary to appoint an agent in New York for the sale of their goods. Messrs. Fowler & Fulton, of 300 Broadway, New York, will be constantly supplied from Boston with a full stock of the shooting suits. If men in the field only could appreciate what a comfort it is to have dry clothes on, and how health is increased thereby, all sportsmen would buy the Boston shooting suits. Four kinds of suits are made, from $16 to $60. It is a perfect outfit, including a cap. In the $60 suit leggins are included. Messrs. Simmons & Son, of Oak Hall, Boston, supply hunters' tents and patent decoys.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
March 15	8	05	4	45	4	20
March 16	9	02	5	46	5	30
March 17	9	54	6	40	6	21
March 18	10	46	7	30	7	07
March 19	11	38	8	21	7	54
March 20	0	04	9	12	7	37
March 21	0	57	10	05	9	22

NEW YORK BAY REGATTA.—From the very marked success of the Newburg Regatta last year, ex-Commodore Joseph Nobles, of the Columbia Yacht Club; ex-Commodore John D. Brassington, of the Manhattan Yacht Club; ex-Commodore A. L. Kreymeyer, of the Pavonia Yacht Club; Nathaniel B. Lockwood, of the Empire City Yacht Club, and Mr. John M. Sawyer, of the Brooklyn Yacht Club, met in convention last week, and resolved to give a regatta in New York Bay, that should be called "the first annual New York Bay regatta for open yachts," that should be free to all open yachts, without regard to clubs and without entrance money. In order to obtain funds to carry out this resolution, each of the five members (referred to above) were authorized to receive subscriptions, which are to be devoted to the prizes and other expenses of the regatta. It was also resolved to invite a delegate from each yacht club to confer with the members of the committee upon further arrangements, as this was virtually a national enterprise in which all yacht owners would be more or less interested. The event will come off in June or July, and a large meeting is to be expected.

SEAWANHAKA YACHT CLUB.—The programme of the regattas of this club for 1878, is:

First regatta, Saturday, June 15.—Open to all clubs, with the usual restrictions. A Corinthian regatta for second class schooners and first and second class sloops. Two schooners and three sloops in either class to start. Regatta to be sailed with time allowance. Prizes, $150 in each class, $450. Second regatta, Saturday, June 22.—An ocean race, twenty miles to windward and return, starting from Sandy Hook, for first and second class schooners and first and second class sloops. Owners to command and steer their own boats. Open to all clubs with the usual restrictions. Two yachts to start in either class. Prizes for schooners, $150 each, $300; prizes for sloops, $100 each, $200. Third race.—Annual regatta at Oyster Bay, July 4. Five prizes, at $50 each, $250. Corinthian cruise to start from Oyster Bay the day after the regatta.

There may be some alterations in this scheme, possibly in the time of the Corinthian regatta.

ATLANTIC YACHT CLUB.—The opening regatta of this club will be held May 30; a regatta for open boats early in June; the regular regatta June 17th; followed by a regatta for catamarans. The officers newly elected are: Com., George A. Thayer, of the schooner yacht Triton; Vice-Com., William Cooper, of the sloop yacht Orion; Rear Com., William Hildreth Field, of the sloop yacht Kaiser; Meas., George B. Moffat; Rec. Sec., John B. Morgan; Cor. Sec., J. Lawrence Marcellus; Treas., Richard C. Field; Trustees—George A. Thayer, J. R. Maxwell, J. H. Rhodes, L. A. Fish, W. H. H. Beebe, W. W. Beebe; Com. on Membership—W. W. Richards, Austin H. Easton, William Peet; Regatta Com.—H. S. Manning, A. H. Farrington, Austin H. Easton.

JERSEY CITY YACHT CLUB.—At the annual meeting, March 7, the following officers were elected for the ensuing year: Commodore, John A. Nugent; Vice-Commodore, A. P. Ball; Treas., Asa Brainerd; Sec., James T. Grady; Measurer, George N. Weston; Directors—John A. Nugent, A. P. Ball, Asa Brainerd, James T. Grady, George N. Weston, John A. Hilton, William Clarke, John H. Carnes, Charles E. Gardner, J. A. Roberts and A. B. Reynolds.

ST. AUGUSTINE YACHT CLUB.—Saturday last was a gala day for the St. Augustine (Fla.) Yacht Club, it being the fourth annual regatta. Other sports added interest to the programme.

NEENAH YACHT CLUB.—*Neenah, Wis., March* 5.—We have one of the finest lakes in the country for fishing and boating, and there are a number of yacht races during the season which are very interesting. The present season promises to be very lively, as some new yachts have been built the past winter, which will make a fleet of over thirty on the lake. We expect boats here from Chicago, Milwaukee, Madison and Geneva Lake to participate with us in our races in July and August. Inclosed you will find a copy of the by-laws, etc., of the yacht club here. S. F. HENRY, Secretary.

—Considerable disappointment is felt in yachting circles that the reported prize of $2,500, offered by the managing committee of the Paris Exposition, has proved to be a fable.

THE AMERICAN AMATEUR CHAMPIONSHIP.—To settle the question of the championship for amateur rowing crews, the Watkins, N. Y., Regatta Association have announced a grand national test regatta, open to all amateurs, to take place May or June next, on Seneca Lake, N. Y. Representative races will embrace fours, pairs and singles, and will be one and five-sixteenths of a mile straightaway (exact distance of Henley course). Winning crews are to be sent to Henley-on-Thames and Paris Exposition races by the Watkins Regatta Association as representative amateur oarsmen of America. Exact dates and details of regatta will be furnished in a few weeks and forwarded to all amateur clubs in the United States.

METROPOLITAN ROWING ASSOCIATION.—At a meeting held last Saturday evening, the following clubs being present—Argonauta, Atlanta, Carman, Columbia, Dauntless, Hesper, Nassau, Nautilus, Vesper and Winona—it was resolved to open the regattas of the club to all amateur boat clubs in the world. The first regatta will be held July 4, on the Hudson River, somewhere between the Battery and Spuyten Duyvil.

ACQUACKANONK ROWING CLUB.—This club of Passaic City, N. J., has elected the following officers: Pres., John M. Gill; Capt., Wm. J. Cooper; Lieut., Chas. Pike; Treas., Jos. W. Highie; Sec., Cornelius Demarest; Trustees, Wm. J. Cooper, Chas. White, J. W. Highie. E. C. B.

YALE AND HARVARD.—The course for the regatta at New London, June 28, is down the Thames, toward the city, the finish to be at Winthrop's Neck, a neck of land a quarter of a mile above the city. Buoys will be anchored along the centre of the course one-eighth of a mile apart, and the start and finish will be marked by stern-posts placed on opposite banks. The choice of a referee, hereafter to alternate between the two colleges, falls this time to Yale, who selected Professor A. M. Wheeler, of New Haven. The conditions for spectators are most excellent. It is proposed to run flat cars along the railroad track on the river bank, keeping the sight-seers abreast of the race the whole distance.

THE YALE CREW.—The crew chosen for the coming race with Harvard is as follows:

		Weight.	Height.
Curtiss, '79	Bow	165	5 feet 10¾ inches.
Clarke, '78	2	168	5 " 11¾ "
Wight, '80	3	171	5 " 11 "
Hyde, '79	4	172	5 " 10½ "
Taft, '80	5	161	5 " 11¼ "
Rogers, '80	6	191	6 " 3½ "
Livingston, '79	7	171	5 " 11 "
Thompson, '79	Stroke	184	5 " 10½ "
Polhemus, '79	Substitute	165	5 " 11½ "

—Harvard has challenged Cornell to an eight-oared race at New London, next June.

Game Bag and Gun.

GAME IN SEASON IN MARCH.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocets, etc., coming under the group *Limicolæ*, or Shore Birds.

RETAIL PRICES, POULTRY AND GAME.—*Game*—Canvas-back ducks, $1.50 to $2 per pair; red head, $1.00 to $1.25; brant geese, $1.25; mallard ducks, 40 to 50 cts.; black do., 40 to 50 cts.; widgeon do., 30 to 40 cts.; broad bill do., 40 cts.; teal do., 40 cts.; wild geese, per piece, $1; quail, per dozen, 40 cts.; wild pigeons, flights, $1.75; stall fed do., $2.50; Philadelphia squabs, $4.00.

Poultry.—Philadelphia and Bucks County dry picked chickens, per pound, 20 to 22 cts.; do fowls, 15 cts; do turkeys, 20 cts.; do ducks, 20 cts.; do geese, 15; State and Western chickens, 12 to 15 cts.; do turkeys, 15 cts.; do fowls, 13; do ducks, 16 cts.; do geese, 10 cts.; capons, 25; slips, 22; spring chickens, per pair, $1.50.

NEW HAMPSHIRE—*Nashua, Feb.* 26.—The prospect for quail shooting next fall is very good. The Fish and Game Club has a membership of 45. Officers for 1878 are: Pres't., Edward Spalding; Vice-Pres't., Hon. Virgil C. Gillman: Clerk, Chas. E. Whitmarsh; Treas., Geo. H. Andrews; Executive Committee, Gill. C. Shattuck, Aaron King, A. W. Greeley; Attorney, E. E. Parker. The club has been actively engaged in the stocking of our waters with salmon and bass. WENN.

Dover, March 11.—We note that blue-birds and robins have arrived, and wild geese are flying over. Ducks of the different kinds have begun to bed along our coast in large numbers. G. A. W.

MASSACHUSETTS—*Salem, March* 12.—A woodcock lost its life last Monday night, the 4th ult., by flying against Hospital Point lighthouse, Beverly. Wilson snipe are along. Spring birds are very early. Black ducks are getting into some of the inland meadows, etc. Ipswich, Rowley, Parker River, and Newburyport marshes and rivers free of them. R. L. N.

CONNECTICUT—*Lakeville, March* 8.—Robins, bluebirds, redwings, blackbirds, etc., plenty; have also seen ducks going North. W. H. W.

NEW YORK—*New Utrecht, March* 4.—The birds are commencing to go north rapidly. Meadow hens (*Rallus crepitans*) were seen on our meadows a week ago, and woodcock are striking on. I flushed one a few nights ago in my yard, and to-day a friend brought me a female bird which flew against a telegraph wire, severing its throat and causing death. Scattering flocks of blackbirds, bluebirds and robins are passing, and the gulls have left our bays. The crows and English sparrows are building their nests, and if the instinct of birds is a good criterion, we shall have an early spring. The frost is out of the meadows, and if the weather continues fine, the next warm rain will bring on the first flight of English snipe, which will give sportsmen better recreation than glass-ball shooting. J. H. B.

Eldred, March 11.—Under above date, we hear from the veteran hunter, Isaac M. Bradley. The new protection law will probably make partridges very abundant here the coming season. One man shipped, last fall, over one thousand birds, and more than five thousand were sent from here.

Buffalo, March 8.—Blue birds and meadow-larks here to-day. Pigeons flying plentifully in the southern part of the county. No snipe yet. UNOAS.

NEW YORK STATE ASSOCIATION.—We acknowledge from John B. Sage, Esq., the receipt of the constitution and by-laws of the N. Y. State Association, amended, to 1878. The constitution has been ably revised by the Secretary. The most notable change is that of section 5, in regard to the treasurer, who now has to execute a bond for $4,000. Some fifty clubs will be represented at the coming convention. Mr. Sage has been busy in New York arranging the programme, which, thanks to his energy, is sure to be a very complete and interesting one.

NEW JERSEY.—*Barnegat Inlet.—Kinsey's Ashley House, March* 11.—Our bay is full of geese and brant. More of the latter came into the inlet on Saturday in one day than we have known for years. B.

PENNSYLVANIA—*Titusville, March* 11.—Pigeons have been flying every day last week, but most too high to be shot. Several flocks of geese passed over Saturday. Poor weather for fox-hunting; none have been killed lately. "Clinton fox-hunter" relates of finding a dead fox half eaten by some animal; perhaps it was a dog, for we have a dog that delights in eating the same after being skinned. He does it not for hunger, as he has plenty of fresh meat every day. O. H. W.

TENNESSEE—*Nashville, March* 7.—Now that the season for shooting quail, turkeys and deer has closed, our sportsmen are anxiously waiting for the appearance of jacksnipe and woodcock, of which there is generally an abundance about here, for a short time, in the marshy places and along the river banks. Immense numbers of wild fowl are also to be found at Reelfoot Lake, such as ducks, geese, brant and swan. Many of our sportsmen go there for shooting as well as for fishing. A pigeon match came off a few days ago on the fair grounds at Murfreesboro between the following crack shots of the place: Messrs. Horace Childress, J. D. Miller and Dr. J. H. Nelson, of the one part, and Messrs. H. O. Smith, Jos. E. Arnold and W. J. Childress of the other. It was won by the former after a closely contested match, the victors winning by only one bird. J. D. H.

KENTUCKY—*Louisville, March* 7.—Val. Cowling and Sam. Hutchings returned from Kankakee this evening with one hundred and ten ducks.

—The *Louisville Sunday Argus*, of which newspaper Mr. W. H. Stanley is the "Rod and Gun" editor, reports ducks plenty on the river from that city to Westport. Louisville is to have a shooting tournament during the spring races.

FLORIDA—*Halifax Inlet*, March 1.—The hunting in this region has improved under the new game law, and more deer have been killed than for the last two or three years. A lad twelve years old, from Philadelphia, who was out with a hunting party near New Smyrna, is reported to have killed a bear, a deer and a wild-cat. [Good work for a boy of twelve. —ED.] I notice the white herons and egrets, being no longer hunted for their plumes, are becoming tame and easy of approach. S. C. C.

ILLINOIS—*Peotone, March* 4.—Ducks and geese numerous. Prairie chickens are quite plenty here; the males can be heard drumming on a sunny morning. Quails are scarce; have seen none for a long time. Saw robins, blackbirds, and meadow larks on the 2d. T. U.

IOWA—*Winterset, March* 6.—We have a fine prospect for grouse during the coming season. They were quite plenty last year, and as the winter has been so unfavorable for trapping, there will be an abundance after the spring hatch. Quail are very plenty. J. W. M.

WISCONSIN—*Janesville, March* 7.—Canvas-backs arrived in large numbers, March 5, at Lake Koshkonong. Col. L. A. Harris, Thos. A. Logan (Gloan) and Ben Robinson, all of Cincinnati, are at Bingham's, Koshkonong. R. V.

Janesville, March 7.—Blue birds and robins first seen here Mar. 3; wild geese and some ducks seen on the prairie for the past week. Large flocks of wild pigeons flying here to-day for first time. Weather warm and poor prospects for spring duck and snipe shooting. R. V.

WISCONSIN—*Menasha, March* 1.—Game season will probably be unusually good. S. L. H.

COLORADO—*Colorado Springs, Feb.* 27.—The sage brush on the line of the Denver and Rio Grande Railroad, about twenty-five miles south of this place, abounds in jack rabbits, with now and then a specimen of his more Northern brother, *L. campestris*, and a fair sprinkling of the ubiquitous cotton tail. Large bags (in this case gunny sacks) are brought home by the sportsmen who care to go down after them. On Saturday last I shot six inside of an hour, and fifteen in about three-fourths of a day. A few ducks are making their appearance, though not in sufficient numbers yet to make it worth while to go after them. C. B.

A SPORTSMAN'S RESORT IN WYOMING.—A correspondent writes from Wyoming Territory under date of February 8:

"Our camp is located on the road from Fort Reno to Fort Custer, where the road crosses the Tongue River. We are five miles from the foothills of the Big Horn range of mountains. We have had the most enjoyable trip conceivable, and all the sport the hardest to please could desire. We put up a most comfortable log cabin, and built the best chimney and fire-place I ever saw out of the slabs of sandstone we found just where we wanted them, and got everything in the most comfortable shape, ready for some cold weather, and have been most agreeably surprised not to have any. The snow fall has not exceeded six inches, and it disappeared almost as fast as it fell. We have determined to locate here, and open a resort for sportsmen in combination with stock raising. This is the best wooded, watered and grassed country in the United States. Besides, an abundance of good coal crops out in many places. Some of it can be fired with a match. As soon as I can get buildings erected, and otherwise prepared to make one comfortable, I propose to open a house for sportsmen. Such a place for game—bear, buffalo, elk, deer and mountain sheep—I have never seen. The streams are full of the finest trout, while this mountain climate is simply superb. H. D."

NEW BRUNSWICK—*St. John, Feb.* 25.—There is much complaint about cariboo slaughter. Some time ago eight carcasses was openly exposed in the country market here for sale, and last Friday seven were brought down to Moncton from the North Shore. We had a "Game Protection Society," but the big fire destroyed their records and upset things generally. They intend to reorganize; such a society is wanted very much. The cariboo were killed by our own people, and not by outsiders. C. W.

NEWFOUNDLAND—*Harbor Grace, Feb.* 17.—Our old friend, the partridge, seems to be getting scarce, and the cluck cluck of his voice is less frequent. Some say the rabbits destroy the eggs. How far this is true I know not. I am of opinion, however, that the rabbits are far better for the poor people. You must have setter dogs to hunt partridge. There are four nice setters here—Shot, Grouse, Pat and Grouse. Pat is a fine, smart, light, humorous young Irish dog. He is complaining of cough now. C.

WILD PIGEONS.—The first flocks of the usual wild pigeon flights have appeared in Oceana and the adjoining counties of Michigan.

PENNSYLVANIA.—*Tionesta, Forest Co.*—Pigeons are very numerous in this county and have been all the winter. McK.

Hornellsville, N. Y., March 5.—Wild pigeons are reported a few miles west of here. JOHN.

Mexico, Mo., March 2.—Pigeons here for two weeks past; are now flying northeast.

CAPTAIN BOGARDUS IN NEW JERSEY.—On Tuesday, March 19, Captain Bogardus and his son, Eugene, will give an exhibition at Marion, N. J., at the grounds of the Jersey City Heights Gun Club. Captain Bogardus will shoot 300 glass balls in twenty-one minutes. There will be a sweepstakes open to all amateurs, and, to conclude, Master Eugene will shoot a match of 25 balls, 10 yards rise, with a 20 gauge gun, weighing 5¼ pounds. The captain will commence shooting at 4 o'clock.

FIELD, COVER AND TRAP SHOOTING.—Copies of Capt. Bogardus' work on Field, Cover and Trap Shooting, with the appendix, may be had at this office. This, the second edition, contains the rules for glass ball shooting. Price $2.00.

ENGLISH EXPERIMENTS IN PENETRATION AND TRIAL OF EXPLOSIVES.—The London *Field* proposes making a series of experiments with various powders, and for this end has constructed a new machine gun rest. "By imitating the human shoulder and allowing a certain amount of elasticity in the slide, we have," says the *Field*, "fortunately succeeded in our efforts, and we have obtained a rest which equals, if it does not improve upon, the best shooting of any of the gunmakers' experts." The difficulty heretofore in using a double gun was that the double-barreled guns being closer at the muzzles than at the breeches, the projectiles crossed at the line of fire. Our English contemporary is ere this fully under way with the experiments, and we look for the elucidation of many interesting questions, particularly in regard to recoil. The former plan of counting penetration by the sheets, we suppose, will be adopted by the *Field* experts. Nothing can be more slow and tedious than this method. In a former issue we explained a new plan of getting penetration, which simplifies all this and gives quicker and, we believe, even more accurate results.

QUAIL SHOOTING WITHOUT A DOG. HOW IT DOES IN THE AZORES.—G. W., a correspondent at Chippewa, Ontario, Canada, is kind enough to send the following interesting letter:

"In your issue of March 7th I noticed an article from Mr. ———, of Marlboro, N. J., on 'Quail Shooting Without a Dog,' and as he has been interested in reading some article in your journal describing the way quail shooting is conducted in some parts of California, *i. e.*, without the use of a dog, perhaps he would be again interested in hearing of the same shooting in the Azores (western) Islands. Quail shooting without a dog.—I only had the sport I speak of once, but a brother-in-law had it several times, and some of it grand, if you can call slaughter grand. We left the hotel at Porta del Gardo on the Island of San Miguel, which is the capital of the group, at eleven o'clock one morning on a bright day, and we returned (to the hotel) at two. We had no dog, and at the time it would not have been possible. We managed to bag eleven brace of quail. The fields on the islands are very small, and divided from each other by little brush fences. One of us would go down the middle of the field we were in, while the other would walk by the hedge, so putting up the birds, and which very seldom got up more than one at a time. To be sure, many got up that we never shot, it being the first time that I ever shot at quail. I managed to kill seven. We both had breech-loaders. My brother often after that, with a pointer, which he found on the island, in two hours' shooting, has bagged sixteen brace of the same bird (quail). There are a few woodcock in the islands, but so few it is thought not worth the trouble hunting them up. Where we did the above shooting was some two miles back in the country from the city, and through the newly 'hoed'—they do not plow them—fields, it was very tiresome walking. I hope your correspondent will be interested with the above account, though poorly written. Yours, etc., G. W.

THE "DO-FUNNY."—In a recent issue we described a very ingenious combination tool, presented to us by S. B. Dilley, which we supposed to have been invented by him, but find that we were mistaken; which see below:

LAKE CITY, Minn., March 5, 1878.

My Dear Hallock: Your mention in your last issue of the combination tool, so kindly intended, has become serious. Your valued journal at hand one day, and the next come pouring letters of inquiry for the "Do-funny." This proves the value of your columns as an advertising medium. Now, this may "do" for you, but is no "funny" matter. I may be arrested for piracy, and held up to scorn by the man who so successfully invented so desirable an article. I am not the inventor, and do not know who is. I hope whoever he is he will see the benefit that an advertisement in the FOREST AND STREAM would be, not only for himself, but for the good of the fraternity in general.

Respectfully, yours, S. B. DILLEY.

PAINE'S FEATHER-FILLED GLASS BALLS.—"To make the feathers fly" is a most desirable thing. There is a double reason for using a ball with feathers in it. Firstly, there is the satisfaction of sight, which enjoys seeing the flying of the feathers, that adds to the fun; and, secondly, if a ball is struck by the shot, the feathers must scatter, and any doubts as to whether the ball is hit or not must be removed. All the Paine feather-filled balls are carefully made, and are of the same weight and size, so that the delivery from the traps must be uniform. The demand for the Paine ball has been so large that machinery has now to be used in order to fill the balls with feathers. No sportsman's warehouse can be complete without the Paine feather-filled balls. The headquarters for these balls is the Bohemian Glass Works, 214 Pearl street, New York. The balls are put up in barrels, and are guaranteed to contain three hundred.

CHILLED SHOT.

It has been proved by experience that *ordinary shot is so jammed out of shape before leaving the gun*, that a great many pellets fall short of the mark or fly out of range. It also flattens on entering an object, lessening its penetration. To obviate these difficulties use "IMPROVED CHILLED SHOT," which is hard enough to retain its spherical form, and so makes a *better pattern* and has *much greater penetration*.

Squirrel shooters often find the ordinary shot flattened just beneath the skin, and it frequently requires a number of loads where a single charge of chilled shot would kill, and it is an undisputed fact among duck shooters that soft shot flatten on the feathers, and sometimes on a wing bone. Chilled shot would break the wing and pierce the feathers, finding a vital spot. For woodcock and all brush shooting it is more advantageous, as it cuts the bushes, and flies with more accuracy than soft shot.

There is much said about the best kinds of powder, and but little about the best shot, when it is, at least, equally important. The query among sportsmen, therefore, should be, what kind of shot is most perfect when it leaves the gun? This can be learned by firing into a large bag of bran or some other soft substance, preserving the shot for examination. The strongest powder and strongest shooting gun will show the best result in favor of chilled shot, by crowding the soft shot more in the gun barrel.

The chilled and soft shot being of the same diameter, the number of pellets is alike *by measure*, but *by weight* the chilled shot will be found to be a little lighter, say eight pellets to the ounce in No. 7.

Number.	12	11	10	9	8	7
Standard diameters	5-100	6-100	7-100	8-100	9-100	10-100
	6	5	4	3	2	1
Standard diameters	11-100	12-100	13-100	14-100	15-100	16-100
	12	11	10	9	8	7
No. pellets in an oz. avoirdupois	2,385	1,380	868	585	409	299
	6	5	4	3	2	1
No. pellets in an oz. avoirdupois	223	172	130	100	88	73

TATHAM & BROTHERS, New York.

MOMENTUM AND PENETRATION.

MORE ABOUT CHILLED SHOT.

NEW YORK, March 8, 1878.

After reading the interesting article on chilled shot by Major Merrill and Geo. Hayden, I desire again to occupy your space in connection with the same subject. I still think that, to ensure a fair trial and to prove whether soft or hard shot has the longest range, equal weights of each should be used with the same charge of powder. For shooting game, long range is of much more service than penetration, and, as is shown in both articles referred to above, the extent of penetration in trial shooting depends so much on the methods employed and the targets, etc., used, that it is not always a fair test of the relative range of the two kinds of shot. For the same reason it is clear that penetration does not vary "with the weight of the pellets into their velocities," although momentum does, for penetration and momentum are not always proportionate.

In the case quoted by Col. Merrill, the gun shooting with the greatest force (momentum) caused in one trial the least penetration. If the range of shot is sufficient to reach the bird, there is little fear but the penetration will be sufficient to kill it; but if the shot is too light to attain sufficient momentum to insure long enough range to reach the bird, it is a clear case that the gunner will go home with an empty bag, notwithstanding the fact that at some target trial, the penetration of the shot was all that could be desired. Theory and practice are, in shooting as in most other matters, quite different things. It is a question of serious import to owners of valuable guns whether they are willing to risk the injury of the inner surface of the barrels by the action thereon of the hard shot, without any compensating advantages.

Yours truly, H. W. KNOWLTON.

P. S. A word to Mr. Richards' article in years of the 7th inst. His implication, that because a man is compelled to work for others in order to support himself, therefore, of necessity, he cannot give an honest opinion, is, to say the least, ungenerous, and, if true, would invalidate Mr. Richards' opinions on the subjects in question. "Chilled" shot has been made in England as well as by American manufacturers, and as any of the latter can make it, they would not be likely "to condemn, as a matter of policy," an article out of which money could be made. It may, however, be "a matter of policy" to ascertain that an article possesses the qualities claimed for it before staking one's reputation on its manufacture. To do this requires discussion and trial, hence my article. The gist of the matter is contained in this fact—which cannot be disputed—that heavy bodies with similar motive power have a much longer range than lighter ones. H. W. K.

PIGEON MATCHES.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

NEW YORK—*Newark, March* 4, 1878.—The Wayne County Sportsman's Club held their regular competition for the Champion's Badge at Lyons to-day; match open only for members of club; 7 birds; 21 yards rise:

S Damewood	1 1 1 1 1 0 1—0	J Wirts	1 1 1 1 1 0 1—6
S A Dayton	0 1 0 w	A Hale	1 1 0 0 w
J Burgdorf	0 1 0 w	B Hotchkiss	0 1 0 w
J Streetor	0 1 1 0 w	J Seee	0 1 1 1 1 1 1—6
C G Elliott	0 1 1 1 0 w	W Miller	0 1 0 w
H Wadsworth	1 0 1 1 0 w	O Helmer	1 1 0 1 1 1 0—5

Ties on six—26 yards rise.

S Damewood	1 1 0—2	J Wirts	1 0 0—1
J Seee	1 1 0—2		

On ties on 2, 31 yards rise, Damewood won, killing 2 birds and Sees 1 out of 3.

Sweepstakes; purse, $48; $18 to first, $14 to second, $10 to third, $6 to fourth; 5 birds, 21 yards rise:

C G Elliott	1 0 1 0 0—2	J Sees	1 0 0 0 1—2
A S Hale	1 0 0 1 0—2	J Burgdorf	0 1 1 0 1—3
H Silsby	1 1 0 1 1—4	G Jones	1 0 1 0 0—2
S Damewood	1 0 1 1 0—3	J Wirts	1 1 1 1 1—5
B Hotchkiss	1 0 1 1 1—4	W S Murray	1 1 0 1 0—3
G Stempton	1 1 1 1 1—5	S A Dayton	0 0 1 0 1—2

On ties of 5, 26 yards, 3 birds each, Wirts won first money, killing 3; Stempton lost first bird and withdrew.

Ties on 4, same conditions, Silsby won second money, killing 3; Hotchkiss killed first, missed second and withdrew.

Ties on three, same conditions.

Damewood	1 1 1—3	Burghdorf	0 0 0—0
Murray	1 1 1—3		

Second tie on 3, 31 yards, 3 birds; Damewood won, killing 3; Murray lost first and withdrew.

Ties on 2, 26 yards, 3 birds; Dayton won fourth money, scoring 2; Jones, 1; Elliott, Hale and Sees lost two each and withdrew.

Shoot at glass balls, 18 yards; purse $11.

S A Dayton	1 1 1 1 1 1 1 1 1 1—10		
B Hotchkiss	1 1 1 1 1 1 1 1 0 1—9		
H Silsby	1 1 1 0 1 1 1 1 0 1—8		
G Stempton	1 1 1 1 1 1 1 1 1 1—10		
C G Elliott	1 0 1 0 1 0 1 0 1 0—5		
O Helmer	1 1 1 1 1 1 1 1 1 1—10		
J Wirts	1 1 1 0 1 1 1 1 1 0—8		
J Burgdorf	1 1 1 1 1 1 0 1 0 0—7		
W Miller	1 1 1 1 1 1 1 1 0 1—9		
S Brownell	1 1 1 0 1 1 1 1 1 1—9		
S Hale	1 1 1 1 1 0 1 1 0 0—7		
H Servis	1 0 1 1 1 1 1 1 1 1—9		
S Damewood	1 1 1 1 1 1 1 1 1 0—9		
H Compson	1 1 1 0 1 1 0 1 1 0—7		

Ties on ten, 21 yards.

Dayton	1 1 1 1 1—5	Helmer	0 w
Stempton	0 w		

Daytou won first money.

Ties on nine, 21 yards—miss and out.

Servis	1 1 1 1 1 1 1—7	Brownell	1 0 w
Hotchkiss	1 1 1 1 1 1 0—6	Damewood	0 w
Miller	1 1 0 w		

Servis won second money, $4.

On ties on 8, Silsby and Wirts divided third money.

SHOT.

Croton Landing, N. Y., March 9.—Score of our last glass ball shoot; sixteen balls each:

H Tice	13	A Rohr	1
C M Teller	14	W E Tallcott	11
A Tompkins	11	E Travis	2
E Baker	6	S McCord	16
Chas H Warring	10	W Hance	10
J A Chase	15	W Southard	12
C W Tallcott	14	F D Fox	

SOUTH ORANGE CLUB.—Match at South Orange, N. J.; 18 yards, 3 traps; score:

Burt	1 0 1 1 0 1 1 1 1 0 0 1 1 0 0 1—10
Crowell	1 1 1 0 1 1 0 1 1 0 1 1 1 0 0 1—11
Ball	1 0 1 1 1 1 1 1 1 1 1 0 1 1 0—13
Brown	1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1—13
Hilton	0 1 1 0 0 1 1 1 1 0 1 0 1 0 0 1—9
Pierce	0 1 0 0 0 0 0 1 0 0 1 1 1 1 1 1—8

Double balls, six pairs, 14 yards rise.

Brown	10 11 11 10 11 11 10—11		
Ball	10 w		

SOUTH ORANGE.

FOUNTAIN GUN CLUB—*Parkville, L. I., March* 6.—Regular monthly shoot for champion gold badge; 80 yards boundary, 1¼ oz. of shot; H and T traps; ties shot off at three birds. The Long Island rules to govern:

B Water	21 yds rise	1 1 1 1 1 1 1—7
G Henry	21	1 1 1 1 1 1 1—7
Williams	25	1 1 1 0 1 1 1—6
Madison	25	1 1 * 1 1 1 1—6
McMahon	25	1 1 1 1 0 1 1—6
Henderson	28	1 1 1 1 1 0 0—5
Bohling	21	1 1 1 1 1 0 0—5
Durfee	30	1 1 1 0 1 1 0—5
White	21	1 0 1 1 0 1 1—5
Cary	21	0 0 1 0 1 1 1—4
O'Connor	21	1 1 0 1 1 0 0—4
Cleaver	—	1 1 * 1 1 * —4

Messrs Millen (25), 3; Hansen (21), 3; Race (21), 3; Slane (25) 3, and Jamee (21), 2.

Same Day—Trial match, 21 yards rise, and all other conditions same as above:

Cary	0 1 1 0 1 0 1 1—5	White	0 1 1 1 0 1 0 1—5

Ties on five.

Cary	1 1 1—3	White	1 1 0—2

LONG ISLAND.—Match between Flatlands and New Utrecht, March 2. Score:

Flatlands.

W Garrett	01 11 11 11 11—9
J D Remsen	11 11 01 11 10—8
J J Ryder	11 01 01 11 11—8
Samuel Lott	11 01 01 11 11—8
L H Smith	11 00 11 01 11—7
P G Konwenhoven	01 11 00 11 01—6
J Skidmore	10 10 10 01 10—5
P W Remsen	11 00 00 00 01—3—54

New Utrecht.

G P Cowenhoven	10 01 11 10 11—7
J Skidmore	10 01 01 00 11—5
J Lott	01 11 10 01 01—6
P Ravenhall	00 10 01 10 10—4
P Monfort	11 10 10 10 11—7
J Cowenhoven	00 11 01 01 11—6
J Batty	00 11 11 11 10—7
F Van Nostrand	10 10 10 11 10—6—48

Sweepstakes:

L H Smith	1 1 1 1 1—5	H Wyckoff	1 1 1 0 1—4
J H Batty	1 1 1 1 1—5	P W Remsen	1 1 0 1 0—3
G P Cowenhoven	1 1 1 1 1—5	A Van Brunt	1 1 1 0 0—3
P Monfort	1 1 1 1 1—5	J J Ryder	1 1 1 0 0—3
C Konwenhoven	1 1 1 1 1—5	C Bennett	1 0 0 1 1—3
P G Konwenhoven	1 1 1 0 1—4	J Suydam	1 0 0 0 1—2
J D Remsen	0 1 1 1 1—4	Steve Lott	0 0 1 0 0—1
P Ravenhall	0 0 0 0 0—0		

A match at glass balls, March 7, resulted in the following score:

New Utrecht.

J Batty	1 0 1 1 1 1 1 0 1 1—8
G P Konwenhoven	1 1 1 1 1 1 1 1 1 1—10
J Van Pelt	1 0 1 1 1 1 1 0 0 0—6
P Ravenhall	0 1 0 0 1 0 1 0 1 0—4
J Skidmore	0 0 1 1 1 1 1 1 1 1—8
J Lott	0 1 1 1 1 1 1 1 1 0—8
P Monfort	1 1 0 0 1 1 1 1 1 1—8—52

Flatlands.

L H Smith	1 0 1 0 1 1 0 1 1 0—6
W H Garrett	1 1 1 1 1 1 1 1 1 1—10
J Remsen	0 0 1 1 1 0 1 1 1 1—7
P Remsen	1 1 0 1 1 1 1 1 1 1—9
C Konwenhoven	0 1 1 1 1 1 0 1 1 1—8
S Lott	1 0 1 1 1 1 0 0 0 1—6
R Baisley	1 1 1 0 1 1 1 1 1 1—9—55

First sweepstakes:

J Batty	1 1 0 1 1—4	R Baisley	0 0 1 1 1—3
P Monfort	1 1 1 1 1—5	C Konwenhoven	1 0 1 1 1—4
L H Smith	1 1 1 0 1—4	W Garrett	1 1 0 1 0—3
S Lott	1 1 1 1 1—5	J Skidmore	0 1 1 1 0—3

Ties on five.

P Monfort	1 1 1 1—4	S Lott	1 1 1 0—3

Ties on four.

J Batty	1 0—1	L H Smith	0 w

Second sweepstakes:

J Batty	1 1 1—3	C Konwenhoven	1 1 0—2
P Monfort	1 1 1—3	R Baisley	1 0 1—2
W H Garrett	1 1 1—3	J Skidmore	1 1 1—3
L H Smith	1 1 1—3	S Lott	1 1 1—3

Ties on three—miss and out.

J Batty	1 1 0 w	L H Smith	1 1 0 w
P Monfort	1 1 1 1 1 1—7	J Skidmore	0 w
W H Garrett	1 1 1 1 1 0—6	S Lott	0 w

Ties on two—miss and out.

C Konwenhoven	1 0 w	R Baisley	1 0 w

At a match against time, Mr. L. H. Smith, of Flatlands, broke 17 balls in 70 seconds, and 40 balls in three minutes. Will some amateur try and beat this?

PENNSYLVANIA—*Shepardstown, March* 5.—Day windy; birds, strong flyers. Prairie Club rules; 21 yards; 80 yards boundary. Score:

Rupp	1 0 1 1 1 1 1—7	Slyder	0 1 0 1 1 0 0 0—3
Boss	0 1 1 0 1 1 0 1—5	Bailey	0 1 1 0 0 0 0 1—3
Brandt	0 1 1 1 0 0 1 0—4	Moore	0 0 0 0 1 1 0—2
Stine	0 1 1 0 0 1 0 1—4	Corbin	0 0 0 1 1 0 0 0—2
Hugwalt	0 1 1 0 0 1 0 1—4	Keller	0 1 0 0 0 0 0 0—1
Ulrich	0 0 0 0 1 1 0 1—3	Crist	0 0 0 0 0 0 0 0—0
Overdeer	0 1 0 1 0 0 1 0—3	Comfort	0 0 0 0 0 0 0 0—0
Itamer	0 1 1 0 0 1 0 0—3		

Tie on third, miss and out, Stine won.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

S. L. W., Utica.—A first class house, and who sell reliable guns.

MOIRA, N. Y.—Address the advertiser. We know nothing about it.

PAPER, Tillonte.—For clubs of three or more the price of the paper is $3.

F. B. P., Albany, Pa.—We don't know what it costs to teach a dog to play tricks.

C. T. J., Jr.—Is chilled shot liable to burst a choke-bore? Ans. Not in the least.

J. W. P., Jr., Philadelphia.—Have written to Nichols & Lefevre, and will inform you shortly as to your question.

F. F., Columbus, Ohio.—The gentleman whose name you ask for is in the employ of Messrs. Conroy, Bissett & Malleson.

JOHN, Albany.—Which numbers of your paper contained the full account of the dog show last summer? Ans. May 10 and 17, 1877.

GEORGE HENRY, New Hope.—Write to G. W. Pouasli, Christiana, in your State; he has some of the finest beagle hounds we know of.

M. C. H., Warner, N. H.—The bird description you send is that of the young male of the red wing blackbird *Agelæus phœniceus* (*Linn.*).

R. H. M., Wytheville, Va.—We wrote blue, not black. Probably the mistake was the stenographer's in transcribing from his short notes.

S., Westfield, Mass.—Want to get my dog into good condition for a bench show. Ans. Exercise and regular feeding twice a day is the best thing.

SOUTH FORK.—Will the correspondent with this pseudonym, who contributed an article to the kennel department June 23, 1877, send us his address?

C. TAMPA, Chicago.—The amount you mention is not large, but everything is in favor of a sober, industrious and energetic man. Would prefer Texas.

H. G. D., Philadelphia.—What is the best food for a Newfoundland dog during the warm months? Ans. "Mush," with occasional little scraps mixed in.

E. A. T., Mexico, N. Y.—Is there a work on the marine compass? Ans. Consult Appleton's Encyclopedia and Draper's Intellectual Development of Europe.

W. D., Virginia.—Can I get the common English wild rabbit in America? Does any one import the English pheasant? Ans. Chas. Reiche, 64 Chatham street, New York, imports both.

C. P. S., Richmond, Va.—The 22 Ballard should be understood as 22 Ballard's. It was not one ball which perforated the six inches of lead, but a series of balls which traversed the lead.

H. H. T., Concord.—Have a single-barrel Remington; weight, seven pounds, 12-bore. What would be the proper charge for snipe and small birds? Ans. 2¾ drs. powder and 1 oz. shot.

C. D. K., Halifax, N. S.—The canoe builders at Peterboro, Ont., are John S Stephenson, who is the inventor of the bass-wood canoe, and Wm. English. Thomas Gordon's address is Lakefield.

C. H. H., Columbus.—There is the kennel stud book published by the London *Field*, and the *American Kennel and Sporting Field* of Arnold Burges, with some few pedigrees, the latter yet incomplete.

PHOTOGRAPHY.—The correspondent who wrote inquiring where he could secure lessons in photography can probably have instruction at the Cooper Institute. Write also to Wm. R. Howell, 841 Broadway.

J. W., Pittston, Pa.—Have a Remington No. 10, 28 in. barrels, weight, 8½ lbs. What kind of powder should I use to obtain good results? Which would you advise me to use? Ans. Use Orange Lightning No. 6.

A. C. W., N. Y.—1. How many copies will your FOREST AND STREAM binder hold? 2. Was there a law passed last year prohibiting shooting game in Richmond Co for three years? Ans. 1. Twenty-six numbers; costs $1.50. 2. Yes.

A SUBSCRIBER, Gouverneur, N. Y.—Where can I procure a pocket spring-balance scale for weighing trout? Are they accurate and what is the price? Ans. At most any fishing tackle store. Very accurate and price from $2 down.

C. T., West Meriden.—We advised Texas, being more familiar with that State than Colorado. Would prefer Texas or Colorado to Kansas, as we think it is likely that sheep raising will bring both these States into greater prominence.

J. R. B., Jr., Boston.—1. What powder does Captain Bogardus use? Ans. 1 Bogardus when he shoots black powder uses No. 6 Orange Lightning. 2. Geo. H. Sampson, 25 Congress st., is the agent of the Orange powder in Boston.

LONG RANGE, Sag Harbor, N. Y.—Mr. Reiche, of No. 55 Chatham street, had goldfinches, but the demand was greater than supply. Expects to have some more shortly. Price of males, $2; females, $2.00, but females are hard to get.

E. M. E., Hancock, N. Y.—Does the book published by you (the Sportsman's Gazetteer) treat on fly fishing for trout? Ans. Most carefully and exhaustively. It is also a compendium of all matters and subjects relating to sport, excepting the turf.

H. K. S., Greenfield, Mass.—Who is there in this vicinity that can train a Gordon setter in good shape for field work? Ans. S. T. Hammond, of Springfield, would be likely to give you the necessary information where such a trainer could be found.

F. V. A., Phila.—A setter five months old has an irritation on his belly. It does not seem to inconvenience him. Continues scratching the part. Ans. Probably mange. Try application of kerosene oil, well rubbing in twice a day for a short time. Wash off each day.

F. A. S., Honesdale, Pa.—Where can I get green heart for fly rod making? Ans. Any of the large makers keep it. Conroy, Bissett & Malleson have it. Green heart, however, is not in the same vogue that it used to be. The former person we wrote you about has removed from the city.

E. M., Greenboro, N. C.—A pointer recovering from distemper. Has swelling on left side of neck. Does not seem to hurt him. What shall I do for it? Ans. Probably enlargement of some of the glands of the neck. Avoid exposure to cold and wet, and use gentle rubbing if it does not hurt him.

A. G. B., New York.—Where can I purchase a book on yacht signals; also a map of the Hudson River? Ans. "The American Yacht List," published by Neils Olsen, Steward of the N. Y. Yacht Club. For best map of Hudson River address John Featherston, care of Day line of Albany steamers, office at Vesey st. pier.

C. E. C., Boston.—For two weeks at one time in the fall, is there any objection to a red Irish setter, owing to their high feeling and desire to run wildly? Is a dog but slightly broken of any service in the field? Ans. A well broken pointer is probably best in such a case. A badly broken dog is generally worse than none.

H. F. W., Elmira.—1. Cannot a very fair fly rod be purchased for $3 or $4? 2. Will not trout take a fly better than a worm during April and May? 3. Is the fishing at Ralston, Pa., best suited for fly or bait? Ans. 1. Yes. 2. Generally, though capricious at times. 3. We are afraid the fishing at Ralston has been very much exaggerated. Use fly.

J. C. S., White Plains.—1. Was born on the 22d day of April, 1850—what day of the week was that? 2. What is the best dog for coons? 3. What does an advertisement cost in your paper? Ans. 1. On a Monday. 2. A mongrel, some little foxhound in him, with terrier. Most any dog will track and tree a coon. 3. See editorial page of the paper.

PLANKERS, Hudson, N. Y.—Can you give name of person who wrote quite a lengthy article in FOREST AND STREAM some time ago on spaying? I wish to write and thank him, as my friend Dr. F—— and myself have performed the operation on several, and that successfully Ans. We have mislaid the address and advertise for it in this column to-day.

A. T. F., Oshawa, Ont.—1. Which shell is preferable for the Creedmoor Remington, 2¼ or 2 7-16 ounce, and which is more common in use by the distinguished American riflemen? 2. Also, if you can, give one your opinion on the respective merits of the —— and ——. Ans. 1. The 2 7-16, and is the one used. 2. Both good guns, can make no differences.

G. H. M., Bridgeport.—1. Where is a good place to trap in Maine? 2. How many times can the Evans rifle be shot without reloading? Ans. 1. The country around Upper Richardson Lake is quite good. Around Moosehead Lake—say fifteen or twenty miles east of it—is another good place. 2. The Evans rifle fires some thirty-four times without reloading.

A. S., Cleveland, O.—A black setter pup, 10 months old, out of good stock, but has a ridge of hair on the top and back some 2½ inches long, which won't lie down. Will it come out when he grows older? Does it show Newfoundland blood? Ans. If out of "fine stock" there can be no Newfoundland in him. Probably after his puppy coat is shed he will be all right.

F., Alexandria, Va.—1. Which is the better for squirrels, ducks, etc., Hunter's Pet Rifle or a No. 2 Remington? 2. Where can I get a second-hand one of either kind? Ans. 1. They are pretty much the same as to effectiveness; both are fairly accurate. The Pet can be packed more readily. 2. Mr. Squires, of No. 1 Courtland street, N. Y., has a second-hand Pet for sale.

H. O. Jr., Stamford.—May is rather early for the Northern Pine woods for a person in delicate health. Go into Northern Maine, there are plenty of small settlements there, where a guide can be had who could show you good fishing and hunting, and where camp expenses would be slight. There is a range of country north of Lincoln or Enfield which might do.

M. K. J., Colorado.—Why not use a rag moistened with water to clean a B. L. gun? Everybody says, "Use oil, turpentine, or petroleum." I find water cleans the gun better and quicker than any of the above. Ans. The only trouble is that water may get into the finer mechanism of the gun and produce rust. Water first is good for the barrels, and a lubricant afterward.

M. A. T., Third Auditor's Office, Washington.—In regard to Mr. J. P. O'Neil's apparatus for measuring penetration, which you say was in use by you two years ago, the patentee says he does not claim disposition of cards, because that was done by Dingall some years ago; but what Mr. O'Neil does claim is the combination, so that pattern and penetration can be taken at the same time.

W. A. P., Virginia, Nevada.—I want a rod for general fishing with two tips. Our fishing consists of brook trout ¼ to 2 pounds weight, and lake trout from 2½ to fifteen pounds. Can I get a good rod for $25? Ans. We would recommend a heavy split bamboo, say from 13 to 13½ feet long to weigh 12 to 13 oz., such as are made for land-locked salmon They may be had in New York for from $25 to $30.

C., Danville Jc., Maine.—My deer seem to be much troubled with lice; can you tell me of a remedy? Ans. Anoint with mercurial ointment, muzzling the deer so that they cannot lick the parts anointed. Wash off with warm water afterward. Or apply the pyrathrum roseum, or Persian insect powder, to be bought of druggists; or use soft soap with the addition of a few drops of liquified thymol.

J. Y., Wapakoneta, O.—When you speak of 3¾ drs. of powder do you mean weight or measure? For ducks I use a 12-bore Parker, 7½ lbs., with brass shells; have been loading 3½ drs. of powder, using a Dixon & Sons charger, and 1 oz. of shot. What is the proper load? Ans. 1. By measure. 2. You might increase charge of powder a trifle. Stop when the recoil is manifest. Try 4 drs.; guns vary.

O. T., Paris, Ont.—In a pigeon match where there are several prizes and several men tie on highest score would those who thus tie shoot off for all the prizes, or only for first prize? Ans. For first prize only; second and third prizes would go to those who made second and third best scores on first shoot. For instance, if the match is for 10 birds, the ties of 10 are first shot off; then those of 9; then those of 8, and so on.

D. O. C., N. Y.—1. Can you inform me how long it will be before Vol. 1 American Kennel Register will be published, and when time for filing pedigrees for Vol. 2 will close? 2. I see that May 19 is one of the days set apart for the bench show. Is there not some mistake, the 19th will come on Sunday. Please enlighten me. Ans. 1. That is what no fellow can tell. In the 20th century, we are afraid. 2. We have copied the dates from the announcement.

J. F. B., Baltimore.—Can you furnish me with a full pedigree of Colburn's Gordon setter Dash? Ans. Our Kennel Register, comprising several hundred pedigrees, which we had carefully prepared, was taken from us by the solicitation of the National Kennel Club and placed in the hands of Arnold Burges, of Hillsdale, Mich., who is now compiling the Stud Book. Better address the owner of Dash, George S. Colburn, 86 Worth street, this city.

I. L., South Pittsburgh, Tenn.—My setter puppy, six months old, coughs occasionally; has a red eruption on the inside of his hind leg The hair is coming out. It is not sore, but he licks and bites it. Have washed it, and been advised to use iodine. His eyes are blood-shot, and a discharge comes from them. Passes small white worms. Is this eruption serious, and what shall I do? Ans. The eruption is probably mange. Try kerosene oil rubbed in twice a day for a short time. Continue to use soap and water, and give plenty of exercise and less food.

E. H. H., Boston.—Can three young men, with a capital of $500 to $700 each, start in the sheep raising business in Texas? Is Colorado better than Texas? Ans. 1. Yes, they can make a moderate start with that capital. We shall soon publish what available information we have on this subject. 2. Sheep raisers in both States are satisfied with their ranges. See the letters recently published from our Texas correspondent and the opinion contained therein of veteran Australian sheep-raisers.

J. C., Girard, Kan.—Can you give me a receipt to cut rubber, or make rubber cement? Have tried all three receipts given in your book, but none of them work. Where can I buy it already cut and a good article? Ans. We know of no other receipt. Those referred to have received the endorsement of our New York rubber dealers. Perhaps you have not mixed the ingredients properly. You can procure a preparation for the purpose from Hodgman & Co., 23 Maiden Lane, N. Y. Price 25c., 50c., and $1, sent by mail.

L. F. N., Johnstown, N. Y.—At Hot Springs, Ark., can deer be shot now? also can you catch trout in that country? I think of staying a couple of months, would you take Winchester and fly rod? Ans. Most of the buildings at Hot Springs, Ark., were burned last week, and we cannot promise good accommodations. There is excellent shooting for deer, and good bass fishing in the vicinity. It is well enough to take your Winchester rifle for bears, but deer are out of season. Take your fishing rod by all means.

W. B. B., Charleston, S. C.—The Dittmar powder has been very much improved, and we have every reason to suppose that it is now made of a constant standard. Conservatism is a good thing, but, as you remark, may be carried to too great a pitch. Wood powder is extensively used in England, and, we believe, in time, Dittmar powder will be in demand here. That Bogardus used it in his 5,000 glass-ball match has brought it into favorable notice. Write to Mr. Squires, No. 1 Courtland street, N. Y., about it. He is agent for the Dittmar powder.

M., Wisconsin.—1. Where can I get a treatise on mink culture? 2. Who is Secretary of the Interior? 3. Have the red-head ducks been domesticated? If so, where can I obtain them? Ans. 1. No special treatise on this subject. See back numbers of this journal, especially July 2, 1874 and Oct. 22, 1874; also consult Cone's "Fur Bearing Mammals." 2. Hon Carl Schurz, of Missouri. 3. Not so far as we know—but you can, perhaps, obtain live specimens of the European pochard, a near relative of our bird, from Reiche Bros., of Chatham street, New York.

TROUT, Hempstead, L. I.—Has a man a right to catch trout out of his own pond to eat out of season under the present law? Ans. He has no right, but in case of sickness or prostration or danger of starvation no judge would take cognizance of the offense. We quote from the opinion of an eminent jurist as follows: "If every man could kill and destroy at his own option what the statute was intended to protect, what need would there be of any statute? If the statute does not apply to all, it is without the breath of life." We send a pamphlet copy of the full opinion, and can furnish other parties to a limited extent if they will send 6 cents for postage.

A. A. F., Sing Sing.—Will a game law made and passed by the board of supervisors of a county hold good if the law on the same birds is different from the State game law? Ans. The section 32 of the game law of N. Y. reads: "It shall be lawful for the board of supervisors of any county to make regulations protecting *other* birds, fish, or game *than those mentioned in this act*, and such ordinance shall be published in the papers in such county in which the session laws are published and in the State paper before going into effect." We can find no authority for alteration of the State law, and should therefore decide that such alteration could not be legally binding.

NEW SUBSCRIBER, Georgetown, D. C.—In your Answers to Correspondents, in regard to calibres, you speak of 10 8 being about ⅜ of an inch and 12's being about 1-16th of an inch less. Again, you give measurements to the one thousandths of an inch. Which is exact, the first measurement or the second? Ans. The word *about* in the first measurement was our saving clause. It was only approximate. The measurements to a thousandth of an inch are absolutely correct and were furnished us by Mr Hobbs, of the U. M. C. Co. Mr. Hobbs has gauges which show exactly the thousandth of an inch. It was Whitworth, of England, who first determined for actual work measurements of this delicate character.

AMATEUR, St. Klamath.—1. What is the composition of the wax used in tying trout flies? 2. Can you recommend a glue impervious to water and adapted to the mending of wading stockings, rubber boots, etc., and where can it be obtained? 3. Where can a stock of feathers for making flies be procured? Ans. 1. One ounce clear rosin, one fourth gill of percha, one teaspoonful crude linseed oil; put them in a cup, heat and keep stirring, and when thoroughly mixed pour out into cold water. Take it, and then go through a candy-pulling process with it. To soften it, add a little more oil; to harden it, more rosin. (See Hallock's "Gazetteer" page 588.) 2. Try rubber cement. Cure India rubber, cut into the finest shreds, say a piece as big as a walnut, and dissolve in benzine Wait with patience until the rubber dissolves. 3. Miss McBride, No. 880 Broadway, New York.

H. M. B. D., Corning, N. Y.—1. I wish to make a portable canoe. What wood can I use for the frame which will be as light, elastic and durable as possible? 2. Will a sample of paper I send be suitable for covering the frame, or at least paper like it? 3. And what water-proof preparation can I use to saturate the paper with? 4. Where can I find a book which treats of the art of making artificial flies for use in American waters? Ans. 1. Bass wood or white cedar would probably be the best. 2. Yes. 3. Use marine glue between the layers of paper and cover the outside with pellucidite of a water-proof varnish, sold by the Averill Paint Company, of this city. Your canoe if built of ¼ inch white cedar planks would probably be lighter than if built as you propose. 4. Hallock's "Sportsman's Gazetteer."

GUN MAKER, Rawsonville.—Will you or some of your readers please inform me how short a twist, and whether even or gain, is used in the "express" rifles? For .44 muzzle-loader how long a bullet and how patched? Would 28 in. a slight gain, handle the Exp. ball? 2. Could any one learn the Japanese language by himself, and what works would be necessary? 3. How long a bullet did the British riflemen use at Creedmoor in muzzle-loaders, and how were they patched? Ans. Refer you to an article in this week's paper, in which full details are given. 2. Suppose it would be very difficult. The best dictionary is one English and Japanese, by J. C. Hepburn, M. D., published by the Amer. Pres. Mission, Shanghai, of which the Messrs. Putnam & Son, of New York have an abridgement. There is a teacher in N. Y., Mr. F. Yamada. 3. 13 inches long. Patched with paper. Can send you one if you want it.

INQUIRER, Washington, D. C.—Do you know of Tonks, of Boston, as a gun builder? 2. Have a 12 gauge, Damascus barrels, B. L. gun of the above make, 7½ lbs. weight; would the breech be strong enough to bear the charge if I placed upon the same stock a pair of barrels, 10 gauge, full choke? 3. Can cylinder bores be changed to choke, and is it done (if done at all) by reboring or by inserting a piece in the muzzle. Would the change increase the recoil? 4. Will a 12 gauge choke bore shoot as far and strong as a 10 gauge choke? 6. Is the lever under guard any stronger than the top snap action? 6. Is the pistol grip stock as strong as the straight stock? 7. Is the —— or —— $100 gun as good in point of finish and shooting powers as —— of the same make? Ans. A good maker and turns out excellent work. 2. Would not advise it, might be a trifle dangerous. Don't 3. By reboring. 4. Shoot further. 5. As to strength, the under lever is said to be the stronger, but the best makers build guns in both ways. 6. Pistol grip must make it stronger. 7. Respectfully decline answering.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MARCH 14, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous contributions will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager

OMELETTE A LA NOUVELLE HOLLANDE.

IF he who makes two blades of grass to grow where but one grew before has deserved well of mankind, surely he who has discovered a new dish has performed for the race a far greater service. In the rush and hurry of American life, too little attention is paid to the pleasures of the table, and to appreciate the comforts of good living one must travel eastward 3,000 miles. We, ourselves, confess to a vast delight in things gastronomically excellent; we like to have our dishes well cooked and delicately served, our wines of proper vintage and at just the right temperature, our coffee black and strong, with all its delicious aroma preserved, yet with none of the bitterness which comes of our cooking. We experience most extravagant feelings of pleasure in the discovery of a new comestible, and have devoted no little time to making experiments in gastronomy. We are familiar with the roast beef of old England, the frogs of France, and the national dish of the Italians; have eaten pates at Strasbourg, sturgeon with the Cossacks of the Don, black bread with the Magyar peasants of Hungary, and locusts and wild honey on the banks of the Jordan. We have dined at the Trois Freres, enjoyed ices at Tortonis, chops at Tavistock's, by old St. Paul's, and have eaten *marins* and sipped *madere* at the *Cascade*, in the Bois, and picked the bones of *petitos cailles* on the piazza San Marco, in beautiful Venice.

In the course of a long and not uneventful experience we have been introduced to more than one novelty of the table; have partaken of jerked meat on the plains, grizzly bear meat in the mountains, tomales and chile colorado in the land of Montezuma, cowees with the Pawnees, and, to our sorrow, have been obliged to break our fast on sand rats, and to dine on a tough old dog badger.

In striking contrast to these last meals was a delicious breakfast which we recently enjoyed, and which consisted in part of a dish which was wholly new to us. Our friend, Mr. F. H. Thompson, was kind enough to send us, some days since, a fresh emu's egg, which had been laid in the Gardens of the Cincinnati Zoological Society but a short time before. The specimen was most beautiful, but aside from its attractive appearance, thoughts of its economic value occupied our mind. The contents, when extracted, filled to the brim a large soup plate, and furnished us with one of the most delicious omelets we have ever eaten. Having discovered this new dish, we, with all modesty, lay claim to a position among the ranks of the world's philanthropists.

And this is but another instance of the comprehensive scope of this journal. Here, 10,000 miles from his native jungles, we announce in clarion tones to the lean and hungry bush-ranger, that his companion of the forest, the *Dromaius Novæ-Hollandiæ* will afford him the means of a fat and easy subsistence.

To the farmer, the inference from the above remarks is obvious; invest your unemployed capital in the importation of a herd of emus. Do away with your hens, which grow tougher day by day, and never lay except on the stomach of the eater. Save the expense of supplying *Gallus domesticus* with hot food twice a day, whole corn and scrap cake *ad libitum*. The emu needs none of this—give him a trough filled with a good assortment of pebbles and broken bottles, and he will ask for no more; nay, he will grow fat on such a diet, for this is his natural food.

We are not yet prepared to furnish an exhaustive treatise on emu culture, but we wish to suggest that if an emu lays at a single session an omelet for eight, while it takes a hen a fortnight to accomplish the same feat, then we fail to see why the emu is not destined at no distant day to play an important part in the commerce of the world.

THE SPORTSMAN'S YEAR BOOK.

"Away, away to the forest glades,
Fly, fly with me the haunts of men.
I would not give my sunlit glades,
My talking stream and laughing glen,
For all the pageantry of slaves.
Their fettered lives and trampled graves."—ANON.

TO the true sportsman—he who is filled with an intense love for the innocent and health-giving pursuits of land and water, and to whom familiarity with nature and her bounties yields that pure delight and lusty strength worth millions to a man—every season of the year, in this our own America, yields tribute.

When March, with lengthened days, raw winds and pelting rains, ushers in the spring, the wild duck's fancy lightly turns to Labrador, on whose rocks she last season built her nest and reared her young, and all over the drowned lands and lagoons of Florida and the Gulf States may be heard the quack of gathering squadrons massing for the northern flight. Headed by some old drake who knows the route, these dusky divisions wheel and circle in momentary indecision, and are off for the north. But our friend, the sportsman, heard that quack, and knew well its import. And now we find him lying *perdu* in the rustling sedge beside each water course from Maine to Florida. For the ducks stop occasionally to feed and rest, and then the boom, boom of the heavy ducking guns carry terror to their hearts and decimation to their ranks.

It is a bright page in the sportsman's year-book, when the "spring flight" comes. There is a freshness in the surroundings. The face of nature that but a short time since was wrapped in an icy covering, seemingly impenetrable, has relaxed to the gentle seductions of the sun's rays. The ice has gone out. The notes of the blackbird are heard from the dead trees in the marsh, and as the sportsman, lying in his blind with breech-loader ready, drinks in the beauties of the surroundings, and feels the soft southern breeze on his cheek, he is happy. But the spring duck shooter must not give way too much to fancy. Listen! That "soft, southern breeze" brings on its wings a subdued murmur, which soon becomes a confused babble, and, peering through the blind, our friend sees a large troop of mallards making direct for his decoys. With bated breath and retriever at "down charge," he waits, trembling lest the ducks, discovering the deception, wheel and destroy the chance for a shot. No! They are coming head on now. They circle, the leader plumps into the midst of the stools, discovers the cheat, and flutters to rise. Now is the time, and the number fours hurtle in their midst, dealing death.

When the ducks are gone, comes the snipe, that little autocrat of the marshes, who springs from his little tussock of hog grass with a shrill "Skeap, skeap," and with an erratic zig-zag flight, tests the quickness of the shooter's eye and finger to the utmost. Barring the bad walking, spring snipe shooting is glorious. The birds lie well to the dog, and require a slashing snap-shot to bring to bag, and are, withal, a toothsome morsel when properly cooked.

About the middle of April the pigeons begin to fly, and although this bird is not strictly game, yet show me the sportsman who can find no delight in bagging this little fellow, and I will show you an anomaly. There are but few sections of the Eastern and Middle States where the pigeon is now found abundant. In some portions of Pennsylvania, in those vast wooded tracts, an uninhabited wilderness, because it can be nothing else, there are still some few nesting-places where the pigeon breeds undisturbed. From these haunts in the spring they come forth in quest of food, extending their flights more or less as necessity requires. The supply of last year's acorns failing, down they swoop on the farmers' fresh sown grain, and here, snugly ensconced behind some friendly stone wall or stump fence, we find our friend, the sportsman, popping away at the rushing plunderers, and demeaning himself not a whit; for behold! his game pockets are full. But summer has come, and with the heat, our sportsman, excepting an occasional excursion to the beach for shore birds, ceases shooting. The gun is cleaned, oiled, and hung upon its accustomed rack, while from its case is drawn the plant fishing-rod. Tackle is overhauled, flies are tied, and the exact condition of each trout, salmon and bass rod determined. For June is here, and our friend is somewhat bewildered with the multitude of vistas opening before him, each one leading to some happy angling ground where he knows the "finny denizens" are but waiting for a dexterous cast of the gaudy fly to be lured to their destruction. The sportsman angler is now ubiquitous. Upon the salmon rivers of Canada and the provinces you find him with his long, double-handed rod hard at work killing the heavy, but lively, *Salmo salar*. In the Adirondacks he is content with smaller fish, but more of them, and his creel is filled with that finest of all game fish, the *Salmo fontinalis*, or brook trout.

At the Rangeley Lakes, in Maine, the more ambitious members of the guild are whipping the bright waters of that wonderful chain of lakes, angling for and procuring those giants of the race, the Rangeley speckled trout, which, although identical with the ordinary *Salmo fontinalis*, often reach the extraordinary weight of seven pounds.

Ah! the sportsman is in clover now. You can hear the musical "click" of his reel and the "swish" of his skillfully cast leaders wherever the trout and his peer in point of gaminess, the bass, abound. His loud, cheery laugh wakes the echoes of the Pennsylvania pineries, and you hear the plash of his wading boots in the crystal streams that come leaping down the Blue Ridge. June and July are halcyon days for the true sportsman. At no time of the year is he happier than now. His appetite is enormous. His lungs are strengthened by the invigorating air. The outside world is forgotten; he cares not a straw for business or politics. All these seem folly in his sight. He loses himself in the following of his favorite pastime. The ecstacy attendant upon the capture of his legitimate prey is enough of joy for him, and he would willingly stay in the sweet spot forever.

But August has come, and our true sportsman bids adieu to rod and line, and, taking up the gun again, makes ready for woodcock shooting. This delicious little game bird is now well grown and found in low, swampy undergrowths, where the soft, slimy ooze is easily penetrated by his long, sensitive bill as he bores for succulent worms, which form his diet. The discomforts of summer woodcock shooting are many, but heat and mosquitoes predominate. Nevertheless it is good sport following the yelping cockers as they dart hither and thither, flushing the birds, who rise with a nerve-tingling flip-flap, showing their graceful forms but an instant as they top the underbrush and stretch away. A snap-shot through the brush is all the shooter can hope for. He must cover the game instinctively, and oftentimes by taking the line of flight he will drop his bird, even after it has passed from sight. Woodcock shooting also continues through September and October, when, with the first hard frost, he migrates.

With the 15th of August comes pinnated grouse shooting, and our Western sportsmen take the field and find splendid sport among the young, unbroken packs. So plenty are these birds that a couple of crack shots, over staunch dogs, can easily bag, in one day's fagging, fifty brace. But on the dry, treeless, waterless prairies, both men and dogs suffer from heat and thirst, and it is oftentimes necessary to take a supply of water for the dogs, or the creatures would give out before the day was half done. Grouse shooting has the name of being the finest and most thoroughly enjoyable of all the sports in which the gun and dog figure; and well may it be so considered, for in August the birds are comparatively tame and easily knocked down. Later they grow more shy, stronger of wing, and by the middle of October, large bags of pinnated grouse are the exception.

Having now taken our sportsman through the spring and summer, we come to that season dear to every lover of legitimate sport—autumn. The foliage, now ripe and touched by an occasional light frost, has taken on those lovely tints peculiar to the American forests in the fall. A mellow haze fills the atmosphere, softening the landscape and giving an air of indescribable beauty to the face of nature. There is a "vague, indefinable something" pervading all things that speaks of decay, although the sun still shines with undiminished fervor, and the frondage, though slightly tinged with color, is just as thick as in midsummer. Glorious Autumn! he must indeed be a misanthrope who cannot see in thee the embodiment of all that is bright and beautiful in nature. Thy very decay, which we know is the harbinger of nipping winter, but tends to enhance thy beauty, and so we hail thee, loveliest season of the year!

September offers to the sportsman ruffed grouse, woodcock, wood-duck, blue-wing teal and general duck shooting, although the two last-mentioned varieties of duck are the only ones of the great family *Anatinæ* which have begun their fall migrations.

Probably the ruffed grouse of all American game birds is the hardest to bring to bag, owing, first, to the impenetrable nature of the cover he frequents, and second, to the fact that it is almost impossible to make him lie to a dog. When flushed within shot, the ruffed grouse offers a large, fair mar

but will carry off a large charge of shot, even though planted in a vital point; its extreme tenacity of life enabling it to fly several hundred yards, when it will drop dead, the sportsman mentally scoring a clean miss, when had he followed up the bird, as all sportsmen should do, he would have saved himself the chagrin and self-torture of missing, as he supposed, a fair shot.

So extremely wary is this bird, and so perfectly able to take care of himself, that a man is justified in shooting him in season in whatever way he can—flying, drumming, on the ground, on a tree—any way. You can't annihilate him, his instincts are too acute, and sportsmen can congratulate themselves that there is at least one game bird in our land that never will be exterminated so long as our game protective laws are enforced. The ruffed grouse is found in all the hilly wooded tracts of the Union—more abundant in the Eastern and Middle States than other portions, owing to the nature of the cover, which is more suited to its habits. It is a delicious game bird, its flesh being far superior to any other of the species.

With autumn well advanced, our sportsman is kept busy. The close season on all game birds and animals has expired, and he is not confined to single species, but the whole broad field is open before him, and no country on earth presents such a variety of bipeds and quadrupeds, strictly game—besides others which, although not game, yield sport—as this broad land of ours.

He may go out some bright, frosty November morning, ostensibly for quail. Let us follow him as, with a trusty companion and a pair of blooded setters, he sallies forth. Our friends are in high spirits, men and dogs both seem to partake of the general "snap" pervading the atmosphere, and many a jolly song rolls out upon the morning air as the hunters wend their way across the fields to the stubble, where they have been assured two or three bevies were "using." The walk is quite a long one, and by the time our friends have arrived upon the ground, the morning sun has dispersed the frost and the stubble is in fine condition for the dogs to show that remarkable power they possess of finding the birds by scent alone. At a word from the master they are off quartering the ground thoroughly, and leaving no clump or tussock bordering the field unexplored by their sensitive noses. Soon the advance dog strikes the trail of a roading bevy, and with all due caution works it up. Slowly, inch by inch, he draws towards the birds, the hot scent growing every instant more furious, until at last, right over the hiding quail, he stops, motionless as a statue. The other dog who has been following, noting every movement, also stops and backs the first. It is a pretty picture, a brace of staunch dogs on a point. It seems too bad to spoil it by walking in and flushing the birds. But our sportsmen, nothing loth, get them up, and as they whirr away like bullets, the round reports of the four barrels speak the death knell of as many quail. Having accurately marked down the survivors in the west field, our sportsmen advance, and again is the same scene enacted, and so on until either all the birds are killed or the bevy so scattered as to make further pursuit unprofitable.

Let us now follow the hunters as they turn their steps toward yonder gully that seems to have been formed by some great convulsion. Scaring, as it does, the whole mountain side, its course is plainly marked by the depression in the evergreen foliage. The mouth of this gorge looks dark and forbidding, shaded, as it is, by the sober pine and hemlock, with an undergrowth of laurel and cedar. But it is in just such places as this that the ruffed grouse lurks, and with the sportsmen at the bottom and the dogs working up the thickets along the sides, many fair cross shots are obtained. It is hard work, and if two or three brace are bagged by the two guns in an hour's toiling, our friends may feel that they have done well. In knocking about in a late autumn day an occasional hare will be bounced from her form, only to be bowled over to help out the assortment. In passing by the creek-side a belated plump of teal may be induced to pay tribute to the already plethoric game-bag, while a shot now and then at a black or gray squirrel is not wasted. So when, at sundown, our sportsmen return from the field and empty upon the kitchen table the fruits of their prowess, there are quail, ruffed grouse, hare, ducks and squirrels. A goodly sight they are, laid out in neat array, and although the result of a hard day's work, our sportsmen vow they never passed a more pleasant day, and while partaking of the smoking dinner kind hands have prepared, they talk of incidents of the day's sport; and when the after-dinner pipe is being discussed before the glowing hearth, they live over again in fancy those happy hours just passed.

But our sportsman, tiring of small game, has, during the autumn, larger and nobler species at his command. The common Virginia deer, the great moose and elk, the black bear and wild turkey are all in fine condition, offering the best sport in the world, that in which there is a dash of danger. The No. 8 cartridges are changed for buckshot, or the shot-gun is rejected entirely for the heavy rifle, and the light moccasin or shoe pack takes the place of the heavy-soled, long-legged hunting-boot. No whistling or singing can now be indulged in, for in the pursuit of any of the above-mentioned large game, the strictest silence is necessary.

In pursuing the common deer many devices are employed by the sportsman to get within shot, the principal ones of which are stalking, running with hounds and shooting at "licks." All of these require patience, endurance and a quick eye to aim the deadly tube accurately and bring down the game. The deer is common in nearly every State of the Union, and one need not go far to find fair shooting. The wild turkey and black bear are also comparatively common, having a wide distribution; but to find those "monarchs of the forest," the elk and moose, the sportsman must take a long journey and be prepared for a season of genuine "roughing it." Comparatively few elk are now found east of the Missouri river, the onward march of civilization having driven them from their old stamping grounds. But they are still plenty in those far off localities, and the sportsman of nerve, grit and good horsemanship may have royal sport among these noble fellows.

The moose is also well nigh exterminated in our country, a few still linger on the northern confines; but in the British Provinces alone is he found in numbers sufficient to make pursuit profitable. The usual method employed in hunting the moose is to repair, some moonlight October night, to a favorable ridge, and while your Indian guide sounds his birch-bark moose-call, in imitation of the cow, listen for the crashing through the undergrowth of the amorous bull, and as he dashes into the open, expecting to meet the cow, an ounce ball finishes him. A trifle unfair, perhaps, but as a single shot seldom kills, and a wounded bull moose is no mean enemy, perhaps the sportsman is justified; for a fair shot at one of these noble creatures is an event seldom repeated in a lifetime.

Both turkey and bear shooting are of a nature to test the staying qualities of the most sturdy sportsman. These creatures are best pursued when the snow is on the ground, during the months of December and January, and hunting for them may properly be classed under the head of "winter sports." Bears are tracked with dogs, brought to bay, or "treed," and shot. Turkeys are tracked in the snow, while a careful watch is kept out ahead; and unless all the little minutiæ of silence, keeping out of sight with the birds up wind, etc., are observed, the chase might as well be given up, for, at the first suspicion of danger, these wary birds are off, running like race-horses and leading the hunter a long chase, only to foil him again as he approaches too eagerly.

In most of the States the close season for all game, except hares and ducks, begins January 1st. But as in this latitude, at this time of year, nearly all the ponds and watercourses are frozen, the ducks have all left; but hare shooting, either brown or gray, is good sport. To make this branch of shooting agreeable, a pair of beagles or an old slow hound is the correct thing in dogs. The sportsmen take positions on "runways," and by standing perfectly still, the hare will bound along within a few feet of the stand, offering the fairest possible shot.

There are many true sportsmen who still enjoy the sport of running foxes. Not the sort with "whipper in," and horse, and hounds and horn, but the real old-fashioned fox hunting, with gun and dog, following Reynard all day through the snow, taking advantage of every ridge to cut him off, and at last being rewarded with a running shot, which tumbles the sly fellow over in the snow.

Pickerel fishing through the ice is a sport that, for real excitement and genuine fun, ranks high enough to be included in the category of the sportsman's winter pursuits. The method of taking the fish, as practiced on our fresh water lakes and ponds, consists of chopping or chiseling as many holes, a foot in diameter, as the patience and muscle of the party will admit. Laths about eighteen inches in length, with an auger hole through them about six inches from one end, are then taken, and a round stick thrust through and placed across the hole in the ice, resting upon its edges. A line, twelve feet or more in length, with hook baited with a live minnow, is tied to the short end, and when a fish bites, up flies the long end of the lath, which is the signal to the watchful fisherman that a fish is on. Oftentimes, in place of the bobbers, the line is fastened to a simple twig set in the ice by chopping a little hollow, thrusting in the butt of the bough, dashing in a little water and loose ice, which soon become solid, holding it firmly. A red rag is tied to the top, and when a bite occurs, the jerking movements of the rag soon catch the sportman's eye. A party of four men to a hundred lines will be kept busy if the fish are biting at all eagerly. Great is the excitement when a number of bobbers fly up at the same time. And the rush for the lines often results in verifying the truth of the old saying, "the more haste the less speed," and many an eager sportsman attemping to stop too suddenly on the slippery ice has either gone helplessly sliding on beyond his objective point, or possibly thrust a leg into a convenient hole.

Occasionally a signal will fly up at some outlying station and attract the attention simultaneously of two of the sportsmen who are standing beside the great log fire built on the ice. Off they both dart, and the race is watched with much interest and amusement by the other members of the party. The winner triumphantly waves the fish in the air and proceeds to put on a fresh minnow. Some sportsmen may sneer at the pickerel and consider him beneath their notice; and we grant that he is rather a sluggish summer fish. But in winter he throws off that apathy, and a five-pounder on a short line requires careful manipulation to get safely on the ice. We will guarantee, however, that to partake of him baked with cream sauce will conquer all prejudices, no matter how deep seated.

And now that the winter is made enjoyable by hare and fox shooting and pickerel fishing, we bring our sportsman to his starting-place. That he has been busy and that his sporting proclivities have been fostered and exercised through the last twelve months there can be no doubt. Every season, from its treasure-house of sylvan delight, has ministered to his wants. And here we leave him, with a vigorous frame, a fresh fund of knowledge relative to his mother nature, an appetite for innocent and healthful recreation uncloyed, and, in a word, in splendid condition for launching forth on a new sporting year.

H. W. De L.

New Haven Register.—William Parsons, Jr., a prominent lawyer in Lock Haven, Penn., assumed the editorship of the New Haven *Register*, March 1st. Mr. Parsons is a son-in-law of the late Minott A. Osborn, and former editor of the *Register*. Mr. Parsons is a young man of very promising ability, and we are sure that the *Register* will be ably edited, as it has heretofore. Mr. Parsons is a graduate of the class of "'68," Yale.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April 2.
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May —.
National Sportsmen's Association, Wilkesbarre, Pa., June 11.
Illinois State Sportsmen's Association, Quincy, June 11.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dewance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President.
Missouri State Sportsmen's Association.

European Quail and Land-Locked Salmon for Connecticut.—W. H. Williams, Esq., Secretary of the Salisbury (Conn.) Bird and Fish Protective Company, writes us as follows:

"We have just received from the State Fish Commissioners 10,000 young land-locked salmon, which are safely deposited in our lakes, and an order has been sent to the American consul at Messina for 200 European quail, which we hope to get and turn out this season."

Sicilian Quail.—Several associations of gentlemen having requested us to inform them whether Judge Everts would import quail for them, in case he sent for any birds for himself this year, we wrote to Judge Everts, and have had the reply, which will be found below. We beg to state that in our opinion the successful acclimatization of the European quail is by no means certain as yet. Mr. Everts says, "If the birds come back in the spring," etc. Should, however, the quail, after having migrated to the South, return to their Northern homes, and it becomes desirable to import birds, there are many nearer points on the Mediterranean than Sicily from whence quail can be had. As Mr. Gluss, of revered and culinary memory, said, "First catch your hare." Let us then patiently await further developments:

"Your favor of March 2d is received. In reply, would say that I had not intended to send any further orders for quail this spring, having already sent two separate orders for birds for Western Vermont. If your friend wishes for the birds, he can send an order to Mr. Bonano, care of George H. Owens, consul at Messina, and on notice of the order will write Owens, who is a personal friend, to do all in his power to fill the order, and they can be shipped with others already ordered. I think birds shipped us Bonano ships them are very certain to come through safely. I would not recommend any person to order less than two hundred—the more the better—and would turn them down near enough together so that they would not separate too far. I think that was the trouble with Hapgood's quail. I am constantly hearing of more nests and young birds hatched last summer. I heard of three nests on our farm last week, all of which hatched large broods—one of them sixteen. If the birds come back in the spring to their old breeding grounds, so that the parties importing them will be sure to derive immediate benefit, large numbers will be imported another year.

M. G. Everts.

Rutland, Vt., March 4.

The Adirondack Guides to the Front.—We recorded two weeks ago, with a great deal of satisfaction, the formation of the Long Lake, N. Y., Game Club. All sportsmen who repair to the North Woods will appreciate the beneficial results likely to follow such a movement on the part of the Adirondack guides. A Glens Falls correspondent writes:

"Charlie Hanner is an old guide of mine, and I see by the Forest and Stream that he is President of the Long Lake Sportsman's Club. This is a move in the right direction. Once the guides in the woods are interested in the protection of game, much success may be accomplished."

—There has been much complaint recently of the operations of still hunters in the Adirondacks. Great numbers of deer have been slaughtered in the "yards."

A Suggestion as to Guides.—Commenting upon the antagonism so often existing between landholders and sportsmen, and the rebuffs experienced by the latter when seeking permission to hunt over property, our correspondent, "Greenwood," suggests that much of the trouble is traceable to a third party—the guide. After speaking a good word for the many members of that craft who have rendered him good and faithful service, he says:

But, notwithstanding all this, it is but too often the case that guide and pot-hunter are synonymous terms in the estimation of the community. However, in those cases where the guide is most obnoxious he is least necessary; namely, in a thickly settled country. The landholder who would accede to the request of the gentleman sportsman will refuse point blank when the sportsman is accompanied by the well-known, well-posted guide, whose intimate knowledge of the haunts of the game is derived from systematic tracking and watching of the breeding and roosting spots. The farmers, not usually sportsmen themselves, have a kindly feeling for the birds that breed upon their premises, and will almost invariably, if aware of the location, leave unharvested and unmolested spots rather than disturb the nest of a bird. And there is also the proprietory interest in the game; and it is with indignation

expressed in no measured terms that these farmers complain of the wily guide who leads directly to the game, and knows where, with unerring certainty, from hour to hour to follow them till the last poor fledgling is bagged. Let me suggest to sportsmen the experiment of hunting and shooting without a local guide wherever practicable to do so. They will find, as I have by experience, that their intercourse with the landholders will be far more pleasant, their sport fully as good if not better, their expenses less, and that places now prohibited will then be accessible to them. Of course you must expect some rebuffs and absolute refusals. Do not be too easily discouraged, and, above all, keep your temper. Bear in mind that the farmer who was poached on yesterday is in no humor to-day to grant hunting privileges; bide your time. It will require patience, good humor and tact to succeed. In fact, the pursuit of the permission to shoot will be found in many cases as exciting as the shooting of the game, and you will encounter many a stubborn proprietor as sly and hard to approach as his game. If possible make your first approach to him without your gun and dog. It is not prudent to show a red flag to a strange bull. Give him a newspaper or a cigar, put him in a good humor with himself, and often the invitation to shoot will anticipate the request. Or, if you are in the field, go directly to him; don't wander about his place or pull trigger till you have seen him, and my word for it you will make friends instead of enemies of the landholders, who will in time welcome you with pleasure instead of with suspicion as a depredator whose every movement is to be closely watched.

GREENWOOD.

NEW YORK ASSOCIATION.—At a meeting of this association, Monday night, Hon. Robt. B. Roosevelt, the newly-elected President, suggested that a suitable place near the city be purchased, where the members could establish themselves as a club, and pursue their propensities as sportsmen. This will be made the special business of the following meeting. It was proposed that, to avoid confusion in the fish law, a competent person should draw up a comprehensive law, and have it passed separately. Mr. Charles E. Whitehead, senior counsel, rendered a very satisfactory report of the condition of the various suits in progress for the enforcement of the Game laws, and said that the newly-appointed detectives, after a searching tour of the city, had only reported two well-authenticated cases of violation of the law since March 1, a fact which he considered was an indication that the people intended to observe the law.

—The Greenwood Lake Ice Company have stored 1,800 tons of pure transparent ice. The lake is now open and the voice of the peep-frog is heard in the sloughs.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship

And three team medals, which will be awarded to the teams making the first, second and third best scores. Other prizes will be offered also, to take place at Conlin's shooting gallery. Open to teams from any organized rifle club.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Offhand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. Entrance Fee—Five dollars to be paid at the office of the FOREST AND STREAM AND ROD AND GUN, No. 111 Fulton street, N. Y. All teams desiring to compete must be entered ten days before the time the match is announced to take place. The match to be governed by the rules of the N. R. A. relating to teams. Captains of the competing teams shall meet one week before the commencement of the match, make all preliminary arrangements, choose referees, and decide in what order their respective teams shall shoot. The referees shall elect an umpire, whose decision in all cases shall be final.

The match will commence on Monday, March 18.

The following teams have entered: N. Y. Rifle Club, Centennial Rifle Club, Scotch-American Club, Seppenfeldt Team, Zettler Rifle Club, Hellwig Rifle Club, Newark Rifle Club, Yorkville Rifle Club, Irish-American Rifle Club.

At a meeting held at Conlin's gallery, on Tuesday evening, all the above clubs were represented by their various captains. Judge Gildersleeve and Major Fulton were appointed judges, and T. C. Banks as referee.

The clubs will shoot in the following order:

Zettler, Yorkville, on Monday, March 18th; Seppenfeldt, Newark, Tuesday, 19th; Hellwig, Centennial, Wednesday, 20th; Scotch-American, Thursday, 21st; New York and Irish-American, Friday, 22d.

The prizes are as follows:

1st—The FOREST AND STREAM AND ROD AND GUN badge; 2d—The Union Metallic Co's badge; 3d—The Shepard badge; 4th—Ballard rifle, presented by Messrs. Schoverling & Daly; 5th—Revolver, gilt and pearl-handled, presented by the Messrs. Remington; 6th, 7th, 8th and 9th—A prize of $2.50 in gold to the highest score in each team not winning one of the above prizes.

It was agreed that any team after the champion team should select prizes in the list.

Captains of teams agreed to send in the names of their men, with those of the reserve. The shooting is to commence at 7½ P. M. on each evening.

As ninety men will shoot, the contest is likely to awaken a great deal of interest. In the teams may be found, perhaps, some of the champion shots of the United States.

PROJECTILES.

ENGLISH AND AMERICAN POINT-BLANK RANGES CONTRASTED—ELEMENTARY PRINCIPLES OF RIFLE SHOOTING.

In the FOREST AND STREAM AND ROD AND GUN of the 14th inst., I observe one error in that very able and interesting article of Col. Ship, of the Virginia Military Institute, on the fall of the rifle ball on leaving the barrel. This error is doubtless due to an oversight of his, for his writings show he must be familiar with the science of rifle shooting. He says: "Suppose a gun fired over a horizontal plane, with the axis of its bore parallel to the plane, it will strike this plane at a certain determinate distance, depending upon the charge, piece, bullet, etc., and this distance is called the "point-blank range." Here he errs if he intended to define the American point-blank range. It is the English point-blank range he defines. I will, for a comparison, quote both definitions:

English—"Point-blank in gunnery denotes the position of the gun when pointed, so that it is parallel to the horizon. Point-blank range is the distance to which a shot fired in the point-blank or horizontal direction is carried."—*Brande's Encyclopædia.* This covers the definition of the Colonel for the range, as will be seen. The range is a trial of the power of the gun.

American—"By point blank, in rifle shooting, is meant the second point, where the trajectory of the ball in its downward course cuts the line of sight."

This mathematical point in theory corresponds to the exact centre of the target in practice. If the centre be aimed at and struck, the shot is both theoretically and practically a true point-blank shot.

"By point-blank range is meant the straight line or shortest distance to the point-blank or second intersection of the line of sight by the trajectory."—*Hallock's Sportsman's Gazetteer, p.* 547, *and* FOREST AND STREAM, *July* 8, 1875.

Thus the English point-blank range is measured from the piece to where the ball strikes the level ground; the American, to where it intersects the line of sight. Thus, in the English service, point blank refers to the position of the gun. It is in a point-blank position when the axis of the bore is horizontal; the American point-blank refers to the second intersection of the line of sight by the trajectory of the ball, or to the centre of the target in practice; and by custom and common consent to the whole bull's-eye.

Thus, in the American service, two lines as elements determine the point blank. It is entirely independent of the pointing of the gun or of the direction in which the axis of the barrel points. This fact brings out another very important one, and one I wish particularly to be noticed, viz.: That point-blank or centre shooting can never be found along the prolongation of the axis of the barrel. Why? Because the axis of the barrel prolonged, and known as the line of fire, is not an element in the definition. But point-blank or centre shooting is always to be found along the line of sight, and where the ball meets or intersects it. Remember the barrel always points above the centre of the mark when the centre is aimed at and hit with the centre of the ball.

In point-blank practice, as at Creedmoor and generally, we cause the ball to strike where we wish it to by raising or lowering the rear sight. I speak only of elevations. Raising or lowering the rear sight lowers or raises the breech. This in effect causes the muzzle to point upward or downward. By this means we cause the ball to go higher or lower as we please. We are thus enabled to bring the ball down on the line of sight just where the aim is, at the centre of the target. This is the way we make point-blank shots. You will see they are always made by a falling ball, and never by a ball going straight from the gun, for the gun never shoots straight. To resume: In an article entitled "Point Blank and Point Range Explained," for which see FOREST AND STREAM of June 1, July 8 and Aug. 19, 1875, and wherein I regarded the fall of the ball under the influence of gravity, I used these words:

"The moment the 'new beginner' with the rifle will discard the false idea which many have, that the 'rifle carries straight,' that moment is he in a condition to begin to understand rifle shooting. Many persons, and some of life-long experience, still cling to this false notion. The course of the ball must be, and always is, a curved line; gravity is always pulling it down. This curve, however, is very small within a short distance, but at long ranges it is astonishingly great."

I am now very much obliged to Mr. Stokes for asking Prof. Ship this question: "Will a bullet shot from a rifle, the axis of the bore being parallel to a perfectly level plane, be the same distance from this plane when ten feet from the rifle as when it left the rifle?"

Mr. Stokes had contended it would, and quoted as authority from "Hallock's Sportsman's Gazetteer" (a very fine work). The subject was referred to Col. Ship for decision. All should carefully read that letter in reply. It is full of instruction. His reply was:

"You are right in your view. * * * Gravity opposes no resistance to motion in a horizontal direction, but it acts in the vertical direction, and will pull the bullet down in the first ten feet; even in the first one-tenth part of an inch."

Such is his reply, and he doubly proves the fact; and I here add this will be the case no matter if the ball has received the force of a thunderbolt and the speed of lightning. I hope we may hear from your able correspondent in Richmond more frequently.

MAJ. H. W. MERRILL.

New Rochelle, N. Y., Feb. 20, 1878.

THE UPSET OF BULLETS.

I noticed in the Rifle Department of your issue of the 17th instant a letter from Mr. F. Hyde. The greater part of the letter is devoted to the subject of "recoil." With this subject I have nothing to do at the present time, though I will say, *en passant*, that in my opinion the writer is much nearer the truth than are a great many others whose letters appear from time to time in your columns.

The statement in Mr. Hyde's letter which does not seem reasonable is, that "the bullet continues to be upset and shortened till it leaves the barrel." If the bullet is upset enough to fill the grooves at once, as Mr. Hyde admits, how can it be shortened still more? There is no more room for lateral expansion; and if the bullet is shortened, it *must* expand laterally.

The experiment described by Mr. Hyde is not at all conclusive. He says: "I shot a Sharps 550-grain bullet in a 2 6-10 chambered rifle, but fired a 2 1-10 shell, thus bringing about one-half the bullet into the chamber. I caught the bullet in sawdust, and found, about one-third the distance from the heel, a plainly-marked ring around it, showing what part had been caught in the chamber by the blow; but behind this ring the marks of the rifling showed as plainly as in front of it, and must necessarily have been made after the force that formed the ring."

In this last statement Mr. Hyde is undoubtedly right. The marks of the rifling behind the ring were impressed upon the bullet after the ring itself was formed, but not in the way in which he seems to think it was done.

My explanation is, that at the instant of the explosion of the charge, the bullet was upset and shortened, and expanded laterally till it filled that part of the chamber between the mouth of the shell and the point where the rifling commenced. As the shell was 5-10th inch shorter than the chamber, of course nearly 5-10th inch of the bullet would be caught in the chamber and expanded laterally till its diameter was considerably greater than the diameter of the barrel through which it had to pass. This being the case, it will readily be seen that it would be impossible for the bullet to pass through the barrel of the rifle without receiving the impression of the grooves upon its surface.

To my mind, Mr. Hyde's experiment proves that my theory is the correct one—viz., that the upset and lateral expansion of the bullet is complete before it starts on its passage through the barrel.

Trusting that I make myself understood, yours very truly,

HENRY FULTON.

New York, March 11, 1878.

LONG-RANGE AND SHORT-RANGE.

It is probable that long-range shooting will not attract general attention during the coming season to the extent it has throughout the last few years. The prospective indicates the approach of nothing similar, in point of interest, to the past international matches; in fact there are several items tending to cause the belief that this will be an "off" year among the long-range marksmen.

The American teams, having successfully held the champion trophy, have the "field" to themselves. At present our marksmen are like Micawber, "waiting for something to turn up." The English and the Scotch long-range shots are silent in reference to the sending of a team against our skilled ones, but this quietness is not thought to be "the calm before the storm." The Australians are too far away from their northern brother riflemen to be able to form the habit of visiting them often, and consequently there are few prospects of hearing from their quarter of the globe. Our cousins, the Canadians, may show a little valor, but a match with their "crack" shots would be too much like a family dispute to cause much enthusiasm. The Irish are showing the most enterprise. Their leader, Major Leech, from all accounts, is endeavoring to have an international match shot on neutral ground. He suggests having the "shoot" in France at the French Exposition. What progress he has made toward accomplishing the object in view has not been announced. There is, however, no eagerness manifested on this side of the ocean to have the "gauntlet thrown." The reason for such indifference is not owing to a lack of confidence if a challenge should be accepted. An explanation for the backwardness may be because of the number of formidable obstacles in the way which would require more loss of time and trouble in removing than has ever been the case previously in organizing a representative team, and raising the requisite amount of funds to carry the enterprise along. Those who would be the prime movers in such an undertaking, if they could see their way out, refrain from taking hold of the helm on account of the difficulties to be met with. Outside of New York and vicinity, the riflemen of the United States have never exhibited a creditable amount of "vim" in aiding any of the past moves for sustaining the American skill with the rifle. For this reason little is expected from them toward putting new life in the sport. In many instances the leading riflemen of the country have done comparatively little else but shoot, and in some cases their business was left to take care of itself too much, and, as a natural result, suffered. Thus, in looking through the present spectacles, the outlook is not very promising in favor of a lively season among the long-range shots. But who knows what is to come? Some never-say-die type of individuals may rake up the smouldering brands of long-range marksmanship, and cause a renewal of the blaze of enthusiasm over the "poetry of shooting" among the knights of the trigger.

ONICO.

THE SPORTING RIFLE.—No. 1.

CHICAGO, Feb. 22, 1878.

I am very frequently in receipt of letters or personal applications soliciting advice as to the selection of a rifle for sporting service. Most of these inquiries come from persons of little or no experience in rifle shooting, but many of them are from men who are more or less familiar with rifle practice, but have no knowledge of the principles which should govern them in selecting a rifle for a special object. As it is impossible to reply in a single communication to all the questions which present themselves, I have thought that a series of articles, extending through several numbers of the FOREST AND STREAM AND ROD AND GUN, setting forth the requirements of the sporting rifle and the principles on which they are based, might be of interest to a large class of readers, and furnish such information as many persons are seeking for. The prominent position which of late years has been assigned to long-range shooting, as the crucial test of the excellence both of men and weapons, has tended to withdraw the attention of manufacturers and of sportsmen from the really more important and practically useful requirements of the sporting rifle, and the quick and ready manipulation demanded in sporting service.

Of course no sportsman would ever think of taking the long-range target rifle, with its elaborate and delicate arrangements of sights, for the purpose of shooting game; neither does the use of such weapons, as practiced on the established ranges, tend to the promotion of such practical knowledge as would ever be of any use in legitimate game shooting, and only on rare occasions in military service. Except upon the plains, where one must sometimes shoot at very long range or not at all, 200 yards may be taken as the very outside limit at which a sportsman should ever allow himself to shoot at any game for which the rifle is used; and, in reality, not one shot in ten is ever taken at deer at more than half that distance.

It is idle to cite single instances of remarkable shots in proof of what may be done. I can tell my share of stories of

that kind, and in my early hunting days, like all young hunters, was as ready, perhaps, as any one to blaze away at game at almost any distance, and take the chance of the possibility of killing, and the much greater probability of missing or inflicting a wound which might doom the poor animal to a slow and miserable death.

But such shooting is barbarous and unsportsmanlike. Clean and speedy killing should be made a matter of principle by every man who would preserve the manly spirit which comes of a noble exercise, and prevent its degenerating into a cruel and brutal butchery. Much can be excused to youth and the excitement of an inexperienced hunter, but after a man has become familiar with the powers of his weapon and the habits of the animals he pursues, he should consider it an act to be ashamed of to fire a shot at any animal without a reasonable certainty of killing it. One hundred and fifty yards is as long a shot as one can take at a deer when standing still, with any such certainty, and the rifle best adapted for ready and efficient service up to that distance is very different in its character from that required for long-range shooting.

The great desideratum in long range target rifles is the preservation of extreme accuracy up to a distance four or five times as great as is ever required in game shooting, and this is secured, first, by the use of a very long bullet, by which the momentum of weight is secured without increase of atmospheric resistance, which would necessarily result if it were attained by increasing its diameter; second, by a very sharp twist to the grooves of the rifle, which is essential to keep the bullet spinning to the end of its flight, and prevent its turning obliquely to its course, which would be fatal to its accuracy. But this sharp twist tends to reduce the initial velocity of the bullet, so that for the first two or three hundred yards of its flight it will be found to require a greater elevation than a rifle using a lighter bullet and having a slower twist, though the former will "hold up" to a much greater distance, because it derives its momentum from its weight, whereas with the latter the momentum results from its greater velocity, which is speedily reduced by atmospheric resistance. The long-range guns, therefore, are, in one sense, less accurate than those which give a greater initial velocity to the bullet; that is to say, they do not give so flat a trajectory for the first portion of its flight. But the great object in the sporting rifle is to give as flat a trajectory as possible for the first two or three hundred yards, or, in other words, to give the greatest possible initial velocity, so that for any distance at which game is usually shot the aim may be taken exactly at the object, or with no other change of elevation than is secured by a fine or a full sight.

Every experienced sportsman knows that more game is missed by over or under shooting than in any other way, and the reason is, that with many, if not most rifles, the curve of the trajectory is so great that even at short ranges the sights must be carefully adjusted, and unless the exact distance is known the elevation is mere guesswork. In reality, no elevating sight ought ever to be used in ordinary game shooting, and the sporting rifle ought to be so constructed, and the relative weights of powder and lead so adjusted, that with a very fine sight at fifty yards, and a very full one at 150, it may be reliable for a two-inch ring at the first distance, and an eight-inch ring at the last. The secret of the skill for which our backwoodsmen were so celebrated forty or fifty years ago, was simply that within the range of 100 yards, beyond which the shooting of game was almost unheard of, no allowance was necessary for the dropping of the bullet, except a fine or a full sight, which long experience enabled them to apply almost instinctively. Only draw the bead on the game within ordinary sporting range, and down it went. The rifles were of very small bore, with a long twist, and the little round bullet was driven out with a velocity which made its course practically a straight line within the limit of its range. But those rifles would be useless for long range shooting, and the men who used them knew nothing of the long bullets, sharp twist and elaborate system of sights, by means of which we have so greatly developed the power of the weapon. On the other hand, in the development of those powers, we have lost sight of some of the essential requirements of the sporting rifle, which must of necessity be sacrificed in order to obtain the greatest possible accuracy at very long range. H. W. C.

HINTS AND HELPS IN THE CHOICE OF A RIFLE.—With a view of assisting your readers in the selection of rifles best adapted to their use, I present the following considerations to this end:

If one should order a sample each of all the rifles made, he would have nearly five hundred weapons on hand. All rifles are guns, but all guns are not rifles. Guns that have spiral grooves cut in the barrel are rifles. I make this distinction, because *smooth-bore rifles* are often asked for. There are smooth-bore muskets and rifled muskets, but not smooth-bore rifles. If you want a rifle, of course you have some idea of what you wish to do with it. You contemplate, perhaps, a visit to the Adirondacks, or you are going to Florida, or have planned a more extended trip to the Rocky Mountains. In all these cases you are going on a tour of recreation, and will want what we call a "sporting" rifle. These are made in a variety of styles, weights, bores, sights, etc. For these purposes, any of the following rifles will be found serviceable, viz: 26, 28 or 30 inch; 38 and 44 calibre, rim-fire; 40 or 44 calibre, centre-fire; weight, 8½ to 10 lbs., with combination sights which can be used as either plain or globe and peep sights at will. The question as to length of barrels and weight of rifle is left to every one to decide for themselves, as it is a matter of choice or taste. The shooting is not affected thereby. The bore (or calibre) can best be determined upon when the character of the game the sportsman will probably meet with is known. If big game, then the larger bullet is necessary, in which case more powder is required, and the longer barrel; the smaller game will require the lighter projectile, hence the shorter barrel; medium game will be best managed by an intermediate length of barrel and weight of ball.

The centre-fire cartridges are better only because they can be readily reloaded, which is a *desideratum* where cartridges are not easily obtainable. The rim-fire cartridges are more economical, and can be found at almost any country store.

To all classes of hunting rifles previous remarks apply, except for buffalo and other wild game usually hunted for their hides and fur. For such, a heavier ball is necessary. For this purpose the 43 cal. 77 grains, 45 cal. 70 grains, or 50 cal. 70 grains are best suited. These should be centre-fire, on account of the convenience in reloading in the woods. The barrel ought to be not less than 30 inches to 34 inches in length, and weight of rifle not less than 10 to 12 lbs. The cartridges for these rifles may be increased in powder charge 10 to 20 grains at pleasure.

I pass next to target rifles, in the selection of which the principles laid down in the sporting rifle apply, except that distance is to be considered instead of game. These rifles should be centre-fire, for the reason that more care can be bestowed upon the filling of cartridges, which will of course insure greater accuracy and uniformity in hitting the point aimed at.

For short range up to 300 yards, the 26 or 28 inch, 40 cal., 50 grains, 8½ lbs., with ordinary peep and wind-gauge sights, may be depended upon; but if greater distance, say up to 500 yards, 70 grain cartridge of the same bore, 44 cal., 77 grains, or 45 cal., 70 grains, and 30 inch barrel, are more desirable. Same as to sights, except at 500 yards, the Vernier peep sight is preferable. If you go back further on the ranges, say up to 800 yards, the powder charge must be increased up to 90 grains, and the Vernier sight indispensable. The rifle should weigh not less than 10 lbs.; this is the maximum weight allowed under the rules at Creedmoor and Wimbledon. At the extreme or long ranges, 800 to 1,200 yards, nothing short of the rifle designated the Creedmoor is to be relied upon. This rifle is 34 inch barrel, weighs 10 lbs., 44 cal., (*i. e.* 44-100ths of an inch in diameter), and has "Vernier peep and wind-gauge globe sights." Some prefer them with pistol-grips, but as most riflemen assume the back position, the plain grip is just as good. The powder charge used differs; some prefer 95 grains, others think 105 better, while many content themselves between these figures. There is no choice in the quality of these guns. The ordinary style is equal in shooting qualities to the higher grades; the difference being in the finish, ornamentation, etc.

The question of head or fore-sights must be settled by each shooter; but the majority of marksmen use the open bead disc, having a different sized aperture for each distance—especially is this the case since the round bull's-eye has come into vogue. Hair or set triggers are not allowed at Creedmoor and other ranges organized on the same basis.

AMATEUR CLUB.

THE WINCHESTER RIFLE FOR DEER SHOOTING.—In FOREST AND STREAM of Feb. 7th I see that "Viator" wants the opinion of some of your subscribers in regard to the Winchester Rifle (model 1876, 75 grains of powder) as a gun for deer. My belief is, that it is as good an arm for any kind of game America affords as is made. If we want to compare it with his Express rifle, we can say that the Winchester is superior, on account of its rapidity of firing; for you must remember that a man does not very often kill a running deer in less than three or four shots within three hundred yards; and supposing it was loaded with Express bullets, it would be once as formidable again. As an instance of its shooting qualities, while in Klamath county I killed a large buck elk at one hundred yards, the last shot striking him in the fore shoulder, and passing completely through him. There is no doubt that the Express bullet would have damaged him just as much if it had hit him; but, as I have already stated, a man does not often hit a running deer in less than three shots. I have also tried the Winchester 1876, with explosive bullets (made by inserting a 22 cartridge in the head of the bullet). I killed a doe once, this way, at one hundred and twenty-five yards, the ball striking her in the hind thigh and shattering her terribly. I would not advise the use of explosive bullets in a Winchester, on account of the danger of a cartridge exploding while pumping rapidly at running game. PTARMIGAN.

San Francisco, Feb. 18.

SHELLS FOR THE WINCHESTER REPEATING RIFLES.—Your correspondent, "G. S.," in FOREST AND STREAM of March 7, alludes to a defect in his cartridges, caused by their upsetting after being carried for some time in the magazine, from jolting. This difficulty has occurred only in a few of our rifles, and is only the second one we have heard of. This objection was removed as soon as ascertained. If G. S. will send us his correct address, we will "make him happy" by sending him some cartridges that are right?

O. F. WINCHESTER, President.

New Haven, Conn., March 9, 1878.

[Will "G. S.," of San Louis Park, Colorado, kindly send us his address?]

THE EXPERIENCE OF A BOSTON MEMBER OF THE TEAM.

LETTER FROM W. H. JACKSON.

BOSTON, March 1, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I am pleased to comply with your request for me to give my experiences with the N. R. A. as a competitor and member of the American team. As I was the only one of the team outside of New York, and not a member of the Association, I have not read all of the strictures upon the N. R. A., but I think I know the spirit that actuates the association. The outs are always bitter against the ins where there are honors to come, oblivious that these honors have been won by that indefatigable toil and untiring devotion which have brought rifle practice into the front rank in America. Gentlemen who have borne the heat and burden of the day, and who still have their shoulder to the wheel, I am satisfied are alone fully capable of leading us. It is an easy matter to give advice. I prefer, however, the knowledge of experience and the absolute attrition of facts. These have placed New York as the leading State in rifle practice, and carried to a successful issue two international competitions, sent a team to Europe, organized a team to meet the Irish team, and have held successful semi-annual meetings for the last four years. The N. R. A. may have made some mistakes; it is by mistakes that experience is gained. We must weigh the N. R. A. by what it has accomplished, and not by its errors. I think it has properly earned its title in every way. I am not jealous of its officers, neither do I wish to curtail their honors. There are some that are always desirous of puffing themselves up, but they are not the workers. They would like to gather the fruit, but will no plant nor tend the vine. Such men are probably jealous that the title, N. R. A., has been earned by the parent association of America and they not consulted.

To prove that I am not making empty assertions, I will give my experience as a competitor and member of the American team: The N. R. A. invited all riflemen, native born, to meet at Creedmoor on July 17, 1877, to compete for places upon the team, with a record of 180 out of 225. Three of us of the Massachusetts Rifle Association decided to enter the competitions. We took the pleasantest route to New York, which was the steamboat, and were delayed by the fog upon the Sound, and did not arrive at Creedmoor till noon, two hours late. By the strict rule we had forfeited our chances by not appearing to enter our names at ten o'clock. But we found a target reserved for us, and Col. Wingate and the committee ready to give us all the assistance necessary to make us feel at home, and these most comforting words were said to us: "Don't hurry, gentlemen; we will wait for you." A fearful storm ended the competitions for the day with the 800-yards range, but the spirit was evinced on the range to give us every chance from the start, and this good treatment followed us through all of the competitions. Col. Wingate was always present, and was never arbitrary in his decisions. Targets were assigned by lot, and every one was made to feel that he had all the right that anybody else had. This kindly feeling manifested by the New York riflemen toward us, who were strangers, was very encouraging; in fact, the story that was constantly being dinned into our ears before we came to Creedmoor, that "it was useless for us to waste our time—we should have no show"—was entirely set aside by the markers' kindness, and politeness of all that we came in contact with. In the second competition, when I had made 98, and it seemed pretty certain that I would be one of the team, old riflemen came up and congratulated me. These were precisely the same gentlemen who were competing with me, and my success was their loss. This generous spirit gave me heart. When at the final competition I was placed in the first six, there seemed to be a general rejoicing that an outsider had won his place upon the team, and the controversy settled that none but New Yorkers could make a team.

The "survival of the fittest" was the motto of the committee all through the competitions. Targets, scorers, attendants and conveniences were supplied for the needs of every one. As soon as the team organization was completed and we commenced our regular practice, the parental care and influence of the N. R. A. was manifest in a hundred different ways. Not by any control upon our actions, but by the constant care to supply all of our wants and make us comfortable. Members of the team who had received these attentions in the past might have looked upon it as a right; I regarded it as a privilege.

I think Creedmoor is the proper place to hold inter-State matches and international matches. There is no range in the country with its conveniences and space. The only drawback I know of is the short-sighted policy of the railroad, which charges such high fares and gives such poor accommodations, and who would not even give passes to the American team.

From the first I found no difficulty in shooting at Creedmoor. In the second competition, first day, I scored 211, a higher score than I have ever made upon our range. After two match I could shoot no better at Creedmoor than at home. In fact, I think that a strange range, if it is properly flagged, is as good to score over as a home range. I found that team shooting was detrimental to individual shooting. One loses his individuality for the greatest combined success, and the habit of expecting some one to watch for us is to induce carelessness when one has to depend upon one's own watchfulness. I call attention to a letter from Col. Wingate, in the *Spirit of the Times*, Feb. 9. It is from a man thoroughly acquainted with rifle practice, and identified with its interests from the very earliest as an earnest worker. He covers the whole ground in a very able manner, and I heartily indorse his ideas. W. H. JACKSON.

N. R. A. A.—A meeting of the Directors was held on Tuesday last. Major Fulton, Col. Scott, and Col. Ward were appointed as a committee for designs for "score-blanks." The committee on finance reported as follows: "As under the provisions of the by-laws of the association no obligations of the association beyond those necessary for current wants shall be made until the Finance Committe has considered and reported upon the necessity and propriety of the proposed plan, hereafter no bills shall be acted upon by the Board of Directors, or passed to the Treasurer for payment, until they shall have first been referred to and signed by the Finance Committe." A contract was made with a firm for the erection of a club house. The range is to be opened April 1.

In regard to the request of Messrs. Tiffany & Co., asking permission to take the Centennial Trophy, the American Rifle Team decide to grant the permission after June 1, in case no foreign team should accept the challenge to compete for the trophy by June 1. The following gentlemen were appointed to prepare a plan for the selection of the next American Team: Gen. T. S. Dakin, Isaac L. Allen, Major H. S. Jewell, and L. Weber. An adjournment was then taken.

BOSTON, *March* 5.—Best scores for three prizes at rifle gallery, 655 Washington street:

F Hollis	4	4	5	5	5	4	5	5—37
E F Richardson	4	4	4	4	5	5	5	5—36
C W Chamberlin	4	5	4	5	3	5	4	5—36
N W Covell	4	4	5	4	5	4	5	4—35
L L Hubbard	5	4	4	5	5	4	4	4—35
J C Haskell	4	5	5	5	4	4	4	4—35
L Marchant	5	4	4	4	5	4	4	4—34

E. B.

WALPOLE RIFLE CLUB—*Walpole, Mass., March* 5.—At the annual meeting held this date, the following officers were elected for the year ensuing: Pres., William Moore; Vice Pres., W. H. Pray; Sec. and Treas., W. Glover. Directors—Wm. Moore, W. H. Pray, W. Glover, T. H. Gray, R. S. Gray, J. E. Mann, H. P. Blake. Executive Committee—Wm. Moore, W. H. Pray, W. Glover, T. H. Gray, Joseph Hawes, E. F. Lewis, H. P. Blake, H. A. Pickering.

W. GLOVER, Sec.

NEW HAVEN, *March* 3.—The following handsome score was made by F. I. Allen, of the Yale Rifle Club, at 200 yards, with a Ballard, with no sighting shots:

4 4 4 5 4 5 5 5 4 5 4 4 4 5 4 4 5 4 4 4 5 5 5 5 5—102

NEW HAVEN RIFLE ASSOCIATION.—The regular monthly shoot of the New Haven Rifle Association was held at Quinnipiac range, on Wednesday, March 6, together with the regular competition for the association medals. Following are the scores made:

Military Match—200 yards.

N M Bassett	5	4	4	5	4	4	5	29
W Gunn	4	4	4	4	4	5	3	—28
F J Calvin	4	4	3	5	5	4	3	—28
S R Smith	4	4	3	4	4	4	4	—27
W Gunn	4	4	4	4	3	5	3	—27
L O'Brien	2	4	4	4	4	5	4	—27
A Z Downs, Jr.	3	3	4	4	4	4	4	—26
A Z Downs, Jr.	4	3	3	5	4	3	4	—26
N M Bassett	4	4	5	4	3	3	3	—26

There were, besides these, ten scores of 25, four of 24, four of 22, and eight others ranging down to 12.

All-Comers' Match—200 yards.

Dr A Rulekoldt	4	4	5	4	5	5	4—31
W E Story	5	4	5	4	4	5	4—31
F I Allen	4	5	4	4	4	5	4—30
J E Stetson	4	4	4	5	5	4	4—30
J E Stetson	4	5	4	4	5	4	4—31
C Z Gordon	4	5	4	5	3	4	5—30
N M Bassett	4	4	4	4	4	4	5—29
W E Story	4	5	4	4	4	4	4—29
C Z Gordon	4	4	3	5	3	4	5—29
P O'Connor	3	4	4	4	5	3	5—28

There were, besides these, two scores of 27, one of 26, four of 25, two of 24, and seven others ranging down to 15.

All-Comers' Match—500 yards.

W Gunn	4	5	4	5	5	5	5—33
F J Colvin	5	4	5	4	4	5	4—31
N M Bassett	5	5	4	5	2	5	4—30
R M Walker	5	5	4	4	4	5	2—28
C Gerner	4	3	3	5	3	4	5—27
A Allen	4	5	4	0	3	5	5—26
F J Colvin	2	4	4	3	3	0	2—18

Military Match—500 yards.

F J Colvin	4	5	5	5	4	5	5—33
F C Bronson	4	5	3	5	4	3	4—30
R M Walker	4	3	4	4	4	4	5—28
F J Colvin	4	4	4	3	4	4	5—28
P O'Connor	4	3	4	2	4	5	3—28
R M Walker	4	5	3	5	2	3	4—26

There were seven other scores, J. C. Thompson getting 23, F. J. Colvin 23, A. Allen 21, and J. P. Landers 16.

All-Comers' Medal—200 yards.

F I Allen	4	5	4	4	5	4	4	4	5	4—43
W E Story	4	4	4	5	4	4	4	5	3	5—42
A Knickoldt	4	4	5	5	5	3	4	4	4	4—42
C Z Gordon	5	3	4	5	4	4	4	4	4	4—40
J E Stetson	4	4	5	4	4	4	3	4	4	4—40

There were three other scores in this match.

"Military" Medal.

	200 Yards.							500 Yards.							Total.
S R Smith	4	4	4	4	4	5	5—30	4	5	5	5	5	4	4—32	—62
F C Bronson	3	5	2	4	3	4	4—25	4	5	5	4	4	4	4—30	—55
R M Walker	4	3	4	3	3	4	3—26	5	2	5	4	4	5	4—29	—54
A Allen	4	4	4	4	2	4	3—26	4	4	3	5	3	5	3—27	—52
J E Stetson	5	4	5	3	3	5	3—28	2	4	4	3	3	4	3—23	—51
N M Bassett	5	3	4	4	5	3	3—27	5	5	4	4	4	0	0—22	—49
F J Colvin	5	2	2	3	5	0	4—21	0	5	3	5	5	4	4—26	—47
J C Thompson	4	3	0	4	3	4	2—20	3	5	5	3	3	4	3—24	—44
A Z Downs, Jr	4	4	3	4	4	4	5—28	3	3	2	2	2	2	3—16	—44

MEYERS' GALLERY, 392 Bowery.—Exceptionally good shooting has been made lately here. The following scores show the string measurements:

John W. Schneider, 10-16, Rem. rifle, $15; John P. A. Kedenburg, 1 3-16, $6; P. J. Fenning, 1 5-16, $5; Henry Evers, 1 6-16, $4; Philip Klein, 1 7-16, $3; Phil. Volkmann, 1 8-16, $2 50; Will Klein, 1 8-16, $2; Will Bird, 1 14-16, $1 50; Bruno Kuhlmann, 2 5-16, $1; John Muller, 2 6-16, one bottle of champagne; Mr. Ross, 2 7-16, one bottle of champagne; Max Waller, 2 11-16, one bottle of Madeira.

—Seppenfeldt Rifle Club, March 8; 125 feet, off-hand: bull's-eye, 2½ inches; Creedmoor target, possible 50; score:

N W Boch	47	C Keller	44
Aug Gruneberg	47	John McCoy	43
Wm Seppenfeldt	47	G Strassener	43
T Garrison	46	E McCoy	43
D Sullivan	46	A H Anderson	43
Ed Story, Jr.	46	A Kahny	43
Wm Gottenberg	45	M Heuman	43
E Holtzmann	44	Chas Laing	43
M Morrissey	44	Th Brossard	41
M Kern	44	H Rothenberg	39

YORKVILLE RIFLE CLUB.—The following scores were made at the call for a first subscription match of the Yorkville Rifle Club; 5 entries to constitute a match; rifle, any within the rules; position standing; 15 rounds, 100 yards; open to all members of the Y. R. C.:

W W Dodge	4	4	5	5	4	4	4	3	4	4	4	4	5	5	3—62
J J Reilly	3	4	5	4	4	5	4	4	3	4	4	4	5	4	—61
J R Smith	4	3	3	5	4	3	3	2	4	5	4	5	5	4	—58
A Smart	4	5	4	3	4	4	4	3	4	4	0	4	4	3	—54

At the gallery (Grohman's), 1,581 Third avenue; regular weekly shoot of the Y. R. C., and third competition for a FOREST AND STREAM team:

Gardner See	4	5	5	4	5	5	4	4	4	—45
Otto Kelz	4	5	4	4	5	4	4	4	3	—42
Max Rattey	5	3	5	5	4	3	5	4	4	4—42
A Smart	5	4	5	4	4	4	3	5	5	3—42
J R Grohman	5	4	4	4	3	4	4	4	5	4—41
J Levy	5	3	4	4	3	5	3	4	4	4—39
A Geritzen	3	5	5	3	4	5	4	3	3	4—39
F Kassell	4	5	3	4	3	3	5	3	4	4—38
J R Smith	4	3	4	3	4	4	3	4	2	4—36
J L Paulding	Proxy; not shooting.									

WEST VIRGINIA.—Maynard Club, of Wheeling, vs. Wellsburg and Bethany teams, March 9, for a Maynard mid-range rifle; 100 yards, off-hand; 4-inch bull's-eye: Creedmoor count:

Maynard Team.

Dwight	4	4	5	5	4	4	4	4	4	4—42
McVay	4	5	4	4	5	4	4	4	4	4—42
Worthen	5	5	3	4	2	4	4	4	4	—40
Wallace	4	4	4	4	4	3	5	4	3	—39
Stanton	3	3	3	4	4	4	4	4	4	5—38
McCulloch	4	4	4	3	4	4	3	4	2	—36—237

Wellsburg Team.

McIntyre, J	4	5	4	5	4	4	4	4	4	—42
Applegate	3	4	4	4	5	4	4	4	4	—40
Owens	4	4	4	4	4	3	3	4	4	5—39
Wilson	4	4	4	4	4	4	4	4	3	4—39
McIntyre, R	3	4	4	4	3	4	3	5	4	4—38
Barnes	4	4	3	4	3	3	4	4	4	4—37—235

Bethany Team.

Ridgeley	4	4	4	4	5	4	3	5	4	3—40
Virgin	5	4	4	3	4	3	4	4	4	4—39
Byrne	4	3	4	5	4	3	5	3	3	4—38
Finley	3	4	3	4	3	4	4	4	4	4—37
Shriver	5	3	4	4	3	3	3	4	3	4—36
Stivers	0	3	3	3	4	3	3	4	3	4—30—220

J. D. S.

New Publications.

THE COMING EMPIRE; OR TWO THOUSAND MILES IN TEXAS ON HORSEBACK. By H. T. McDaniels and N. A. Taylor. A. S. Barnes & Co., New York, 1878. *For sale at this office.*

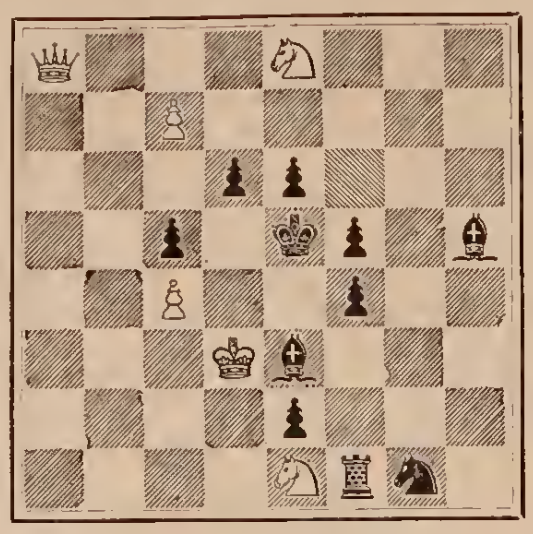
Texas is a wonderful country, and two thousand miles is a long journey. One man can see and hear a great deal in one thousand miles; two men in two thousand miles can see just four times as much. Our author (the singular pronoun is used throughout the book) became a stock holder in the Texas Western Railway. Like a sensible stockholder, he saddled his horse and rode forth to see for himself the wonders of this new country. And what is more sensible, he started out in the best of humor and kept his good nature through it all. Something of a philosopher withal, his philosophy helped him in all the exigencies of Texas travel. Left alone on the prairie by his faithless steed, treed by wolves, surrounded by the *feræ naturæ*, or in the depths of Saint Angeles, it was all sunshine to him. Commend us to such a travelling companion and *recenteur*. The book abounds in episodes. The story of "Strap Buckner," the hero, endowed with an overmastering genius to knock people down; who vanquished whole villages of white men, whole tribes of Indians; who was vanquished only by Satanas himself, and even now, mounted on his steed, the gift of King Tinlahcahoma, on tempestuous nights whirls down the valley with sulphurous glare, while the cowboys lift up their prayers and the Great Medicine Man sounds his big bongooree—this is a story to engage the genius of an Irving. With a keen sense of the humorous, our author combined the faculty of gathering enough facts and practical knowledge of the country he traversed to make his book valuable to all who are seeking information of what may be justly termed a "Coming Empire." Those of our readers who are interested in sheep culture and Texas sheep ranges will find in these pages descriptions of sheep farms and farmers, a class of men with whose intelligence and good manners the writer seems to have been most favorably impressed.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 9.

Tourney set, No. 6. Motto:—S—ir Q—uickly U—nderstand, A—nd R—emember E—ver C—hess I—s R—oyal. C—hess L—ives E—ternally.



White to play and give mate in three moves.

SOLUTIONS TO PROBLEMS—NO. 6.

1—B-R3	1—K tks R	1—	1—K-Kt6
2—B tks P ch	2—K move	2—Kt-B ch	2—K R 5
3—Kt-B male		3—Kt-Kt6 male	

1—	1—K-Kt6	1—	1—P tks P or Kt
2—Kt-B ch	2—K tks P	2—Kt-B7 ch	2—K tks K
3—Kt-Kt6 male		3—B tks P mate	

PROBLEM NO. 7.

1—Q-B6	1—Kt-Q6 ch	1—	1—Kt-B6
2—R tks Kt	2—K tks P	2—Kt tks B	2—Kt-R5
3—Kt tks B mate		3—R-Kt3 mate	

1—	1—Kt-Kt7	1—	1—K tks P
2—R tks Kt	2—any	2—Q-R6 ch	2—B int
3—Q-R6 mate		3—Kt-B mate	

SOLVER'S TABLE.

The subjoined table contains the solutions received from competing solvers to March 7, 1878, inclusive.

G. R., Phila., Penn., 8; Waldmann, Rocky Hill, N. J., 7; E. H. W., New Haven, Ct., 8; Rev. L. W. Mudge, Princeton, N. J., 7; W. B., Waterbury, Ct., 8; Wm. Mylchrist, Middleton, Ct., 4; R. H. Seymour, Bolyoke, Mass., 7; Prof. D. S. Jordan, Irvington, Ind., 4; Prof. C. Jacobus, Matawan, N. J., 4; E. I. Bradford, Webster, Mass., 2; W. D. Willis, Savannah, Tenn., 3; Rook, New York City, 4; Franklin Benner, Astoria, L. I., 4; W. A. Briggs, Montpelier, Vt., 6; Wm. Parker, New Britain, Ct., 6; Rich. Fairley, Chatham, N. B., 2; Geo. Noble, Fishersville, Canada, 1; Chas. C. Hebbard, Cambridge, Mass., 5; O. K. Andrews, Mahonington, Penn., 5; Geo. A. Lee, 1; E. S. Bradford, Webster, Mass., 3; Harry M. Wheelock, Red Wing, Minn., 3; Status, Boston, Mass., 7; Bishop, New York City, 4; Incog., Boston, Mass., 6; A. Taylor, Phila., Penn., 1; F. A. N., New Orleans, La., 1; A. M. J., Galveston Texas, 6.

We commence below the publication of the variations in the *Handbuch* on the Vienna or Queen's Knight opening. They will be published as games and continue weekly until the *Handbuch* variations are exhausted.

Game No. 22.—VIENNA OPENING.

White.	Black.	White.	Black.
1—P-K4	1—P-K4	8—P-Q B4	8—Kt-K2
2—Kt-Q B3	2—B-Q Kt5 (a)	9—P-K R4	9—P-Q3
3—Kt-Q5 (b)	3—B-Q R4	10—Q-K Kt5	10—Kt-Q2
4—P-Q Kt4	4—P-Q B3	11—P tks P	11—P tks P
5—P tks B	5—P tks Kt	12—B-Q Kt2	12—P-K B3
6—P tks P	6—Q tks R P	13—Q K3	13—Q Kt-B4
7—Q-K Kt4	7—P-K Kt3	The game is even	

NOTES.

(a) This move is the invention of Hampe and the opening is known as the Vienna.

(b) The more favored continuation is with the gambit move. If 3—Kt-K B3, 3—B tks Kt; 4—Q P tks B, 4—P-Q3; 5—B-Q B4, 5—Kt-K B3; 6—B-K Kt5, 6—B-K Kt5; 7—Q-Q3, 7—Castles; 8—Castles Q R, 8—Kt-Q2 and neither player has the advantage.

Game No. 23.—VIENNA OPENING.

The first two moves are the same as in the above game.

White.	Black.	White.	Black.
3—P-K B4	3—P tks P	9—P-Q4	9—P-Q3
4—Kt-K B3	4—P-K Kt4 (a)	10—Q B tks P	10—B-K3
5—B-Q B4	5—P K Kt5	11—P-Q5	11—B-Q2
6—Castles (b)	6—B tks Kt	12—P-K5	
7—Kt P tks B	7—P tks Kt	White has the best game.	
8—Q tks B P	8—Q-K2		

NOTES.

(a) The following (*Schach Zeitung* 1862 p. 107) variation which occurs in the King's Gambit can also be arrived at, viz.: 4—Kt-K B3; 5—P-K 5, 5—Kt-K R4; 6—Kt-Q5, 6—B Q R4; 7—P-QKt4, 7—P-Q B3; 8—Kt tks B P, 8—Kt tks Kt; 9—P tks B, 9—Q tks R P; 10—B-Q B1; 10—Castles, etc.

(b) The opening moves, which are analagous to those in the Muzio Gambit, form a game in the *Schach Zeitung*, 1855, p. 314, between Falkbeer and Brien.

Game No. 24.—VIENNA OPENING.

The first moves are the same as in game No. 22.

White.	Black.	White.	Black.
2—Kt-Q B3	2—B-Q B4 (a)	7—B tks Kt	7—Q P tks B
3—Kt-K B3	3—Kt-Q B3 (b)	8—B-K Kt5	8—B-K Kt5
4—B-Q Kt5	4—Kt-K B3	9—Q-K2	9—Q R-Q
5—Castles (a)	5—Q-K2	The game is even.	
6—P-Q3 (b)	6—Castles		

NOTES.

(a) The *Chess Journal* (1871, p. 38) observes that this move Anderssen gives the preference. The opening can afterward resolve itself into a King's Gambit declined.

(b) Imagine, *Schach Zeitung* 1860, p. 54, occurs 3—P-Q3!

(c) Paulson attained the same position in a game with Morphy (*Schach Zeitung*, 1858, p. 99) as follows: 2—Kt-Q B3, 2—Kt-Q B3; 3—Kt-K B3, 3—B-QB4; 4—B-Q Kt5, 4—Kt-K B3; 5—Castles. Then continued by: 5—Castles; 6—Kt tks K P, 6—R-K; 7—Kt tks Kt, 7—Q P tks Kt; 8—B-Q B4, 8—P-Q Kt4; 9—B-K2, 9—Kt tks P etc. White could have maintained the P by playing on his 8th move B-Q3.

(d) At this point 6 Q—Kt-Q5 can be played advantageously.

Game No 25—IRREGULAR OPENING.

The following game is said to have been played by Napoleon the great.

White. Mme. Remusat.	Black. Napoleon.	White. Mme. Remusat.	Black. Napoleon.
1—P-B3	1—Kt-K B3	8—Kt-K R3	8—Q Kt-B6 ch
2—P-K4	2—Kt-Q B3	9—K-K2	9—K1 tks Q P ch
3—P-K B4	3—P-K4	10—K-Q3	10—Kt-K4 ch
4—P tks P	4—Kt tks P	11—K-tks K1	11—B-Q B4 ch
5—Kt-Q B3	5—Kt-K Kt5	12—K tks B	12—Q-Q Kt3 ch
6—P-Q4	6—Q-R5 ch	13—K moves	13—Q ch mates
7—P-K Kt3	7—Q-K B3		

Game No. 26.—ALIGAIER GAMBIT.

The following skirmish is taken from the last number of the *Nuova Rivista Degli Sacchi*, of Italy.

White. Dilettante.	Black. Pr. of Mussini.	White. Dilettante.	Black. Pr. of Mussini.
1—P-K4	1—P-K4	8—Q tks B P	8—B-Q3
2—P-K B4	2—P tks P	9—B-Q B4 ch	9—K-K12
3—Kt-K B3	3—P-K Kt4	10—Q-K B5	10—B-K Kt6 ch
4—P-K R4	4—P-K Kt5	11—K-B	11—P-Q4
5—Kt-K Kt5	5—P-K R3	12—Q-K B3	12—Kt-tks K P
6—Kt tks P	6—K tks Kt	13—K-Kt	13—R-B
7—Q tks P	7—Kt-K B3	14—Resigns	

OUR EXCHANGES.

We have not, as yet, seen the January, February and March numbers of the *Schach Zeitung*, *Westminster Papers* and the *Chess Players' Chronicle*. We request that these exchanges will note this, and act accordingly.

CURSORY JOTTINGS.

—The Holyoke, Mass., *Transcript's* chess column is conducted with marked ability by Seymour and Carpenter, and is one of the best that finds its way to our table. We wish it unbounded success.

—One of our foreign antagonists desires to arrange a postal card game with an American player. Address, without further ceremony, Serg.-Maj. W. McArthur, Barracks, Chichester, Eng. Foreign games, we find, are "just the thing" in our case, as one is not obliged to transmit a move every day or two.

—The *Voice* of Cleveland, says that "We learn with much pain that the Cafe International * * * has been destroyed by fire." Please to respect McK.

—The chess players of Peoria, Ill., have organized a club, and elected Miss Jennie Johnson as Secretary.

—Jules Grevy, the successor of M. Thiers, has a great reputation as a chess player. In this game and shooting he finds his chief recreation.

—Mr. C. S. Bell, of Detroit, Mich., announced, on the thirty-eighth move in a game with B. F. Fields, of Hannibal, Mo., a mate in forty (!) moves. Next.

—The Holyoke *Transcript* states: "Nearly all the population of Patumahoe, New Jealand, Auckland, have formed themselves into a chess club. It contains fifteen members out of a population of five or six families."

—Solvers will kindly communicate us any errors they discover in their score in this week's table of scores.

ANSWERS TO CORRESPONDENTS.

C. A. G., N. Y. City.—You may expect to hear from us very soon. Excuse delay and long silence

A. D. O., Hartford, Conn.—We are anxiously awaiting a reply to our last letter. Hurry up.

Mr. Duffy, London, Eng.—Please to inform the editor-in-chief of the C. P. C. of our exchange notice in this column.

A. Taylor, Philadelphia, Pa.—The following move in Game No. 10 should have been printed: 12—K Kt-K B3. Have written you on other subject.

Rook, N. Y. City.—Your address is earnestly requested. Upon B-Q6 then Kt tks Kt P ch mate.

Reader, Bloomington, Ill.—There are several chess magazines printed in the English language, viz.: *Chess Journal*, Dubuque, Ia., *Westminster Papers and Chess Players' Chronicle*, Eng. The *American Chess Journal* has not yet made its appearance under the new management, but Mr. Loyd, of Elizabeth, N. J., will publish the first number very soon.

W. A., Briggs, Montpelier, Vt.—Shall we not hear from you soon? Another tourney set would please us not a little. Can you not send on a game or two played beneath the shadows of the Green Mountains?

W. Mylchrist, Middletown, Conn.—By all means send on some of your games and those of other players in your city, particularly one or two of Oldack's best efforts.

H. M. Wheetock, Red Wing, Minn.—Quite pleased to add your name to the solver's list, and shall expect an occasional contribution of games and tourney problems from you.

T. P. B., Detroit, Mich.—Thanks for copy of constitution and by-laws of the Detroit Chess Association. What are the duties of the Sergeant at-arms?

NIBLO'S GARDEN.—This most popular house of entertainment gave on Monday last the first representation of a new piece entitled, "The Serpent and the Dove," due to Mr. W. E. Barnes. Abounding with dramatic incident, the interest is fully sustained until it culminates with the final act. The plot, in its simplest conception, is that of a girl, left an orphan, by the death of a mother on shipboard, who is married at her mother's request to Captain Barton, who commanded the ship. In a delirium of grief, Elsie Elliot, just after her marriage, jumps overboard, and is rescued by her husband. As Elsie is but a child, and her husband of mature age, Captain Barton places his young wife on the Continent to be educated, and leaves her for two years. Temptation comes in the way. Count Dorsey schemes to encompass her ruin. Elsie is close to falling into the snares of the serpent when her husband returns. By craft and trickery the Count makes the husband believe that the wife is false to him. He lays a trap for the husband, and having induced him to come to a rendezvous in a lonely house, the Count binds the Captain with cords, and placing a loaded gun with the muzzle pointed to the Captain's breast, so arranges it that when a candle burns down a slight thread will be consumed, and the weights which are attached to the trigger of the gun will be unloosed, and thy their fall discharge the piece. Just in time, Elsie, the wife, having providentially gotten rid of her seducer, flies to her husband's rescue, and arrives only in time to release her husband. Just as he is dragged by Elsie from the place of danger the gun is discharged, but the Captain is unhurt. There is an amusing Dutchman, a funny Irish girl, and a Dundreary. Mr. S. W. Piercy, as Captain Barton, assumed a somewhat thankless character, and played the part with exceeding dignity and elegance. Miss De Forrest is an agreeable actress, who filled the character of Elsie with pleasing grace, and for a first performance the whole play was well and effectively carried out. The piece is exceedingly well mounted, the scenery being new and appropriate. "The Serpent and the Dove" is a good, honest piece, and there is no reason why it should not, for its intrinsic merits and the excellence of the performers, draw crowded houses to Niblo's for a long time to come.

Rational Pastimes.

How to Make a Cricket Ground.—The following information, from James Lillywhite's *Cricketer's Manual*, is so practical and valuable, that we republish it for the benefit of those who may wish to prepare a field for athletic pastimes:

"Select a field or piece of ground as nearly level as possible, although where the situation is not dry, a slight fall from the centre will be useful; but this must not exceed one inch to the yard. As a rule it may be stated that a piece forty yards square will satisfy the requirements of any ordinary club. The object is to render this piece as much impervious to rain, or to enable the rain to percolate as quickly as possible; and here comes the most important question of all—the nature of the subsoil. As on this depends so much of the expense to be incurred, too much attention cannot be given to it. The chief point is whether the subsoil is dry; whether it is likely to hold the water in wet weather; whether it is clay, sand, gravel, or peat. A dry level is a natural aid that will tend to make the formation of a cricket ground a very economical proceeding, as the expense of drainage is necessarily avoided or much lessened. But there are few dry levels, and hence consideration must be given to the character of spongy substances. The first principle is to underdrain with three-inch tiles, the depth and distance apart of the tiles to be determined according to the light or heavy nature of the subsoil. If it be clay or peat—especially the latter—it may be found necessary to remove six or nine inches of it, and replace with good loaming mould. This mould should be well trodden down, and especial care should be given to levelling it, and to the removal of any stones before the turf is placed on it, as on this mainly depends the evenness of the work when finished. The drains must be near together, on account of the water-holding nature of the ground, and they must be deep enough to take away the water at a sufficient depth to prevent the earth from sucking it to the surface. Drains placed near the surface are of no real use; the tiles should be at a depth not less than three feet.

Great care should be taken, too, in laying the turf. Each soil should be about three feet long by one foot wide, and in thickness should not exceed 1¼ inch, as from the cutting through the roots a new life and vigor are given; and it is even a benefit to old grounds merely to take off the turf, prick up the surface, level, and relay the same turf. The sods should be placed very tightly together, and made as level as possible as each is laid, as this saves much after trouble, and the ground is fit to play on at an early date. The best turf for cricket grounds is obtained from the large open downs, where it is well fed off by sheep; but this, too, will require to be well tended, to clear it from weeds, before it becomes thoroughly fit. Should your ground be finished in time, it should be given a top dressing. The best time of the year to commence making new grounds, or redress old, is about the middle of October; and when necessary to introduce seeds, it should have a good dressing of well-sifted loamy mould. Any species of sand should be avoided, as tending to make the surface gritty and loose.

The following hints for making a close, velvety turf are from the pen of M. H. Sutton:

In the first place, careful preparation of the ground proposed to be laid down to turf is necessary. This should be commenced in the winter by draining, if found requisite, and digging to the depth of six to twelve inches, according to the nature of the soil. When this has been done, the land should be leveled and made firm with a spade, and subsequently raked, to remove stones, etc. Should the natural soil be too stony, it will be advisable to procure a supply of good mould, and spread this over the land to the depth of two or three inches. If the soil is poor, some well-rotted stable-dung will be very beneficial. Where this cannot be obtained, we would advise as the best dressing of artificial manure 2 cwt. of superphosphate of lime and 1 cwt. of Peruvian guano per acre. In March, after the ground has been made thoroughly fine and clean, a heavy iron roller should be used to make it perfectly level; and as the subsequent appearance of the ground depends, in a great measure, on this part of the preparation, we cannot too strongly urge the importance of its being well done. The ground should then be evenly raked, and the seed sown. April and September are the best months for sowing. As to the sorts of seed suitable for cricket grounds, etc., we can, after a long course of personal observation of the numerous kinds which have come under our notice, confidently recommend the following varieties as most certain to produce a close, velvety turf:

Cynosurus cristatus, Crested Dogstail; *Festuca ovina*, Sheeps' Fescue; *Festuca tenuifolia*, Fine-leaved Fescue; *Lolium perenne Suttoni*, Sutton's Dwarf Perennial Rye Grass; *Poa pratensis*, Smooth-stalked Meadow Grass; *Poa sempervirens*, Evergreen ditto; *Poa nemoralis*, Woodside Meadow Grass; *Medicago lupulina*, Yellow Trefoil; *Lotus corniculatus*, Birdsfoot Trefoil; *Trifolium repens perenne*, Perennial White Clover; *Trifolium minus*, Yellow Suckling.

These should be mixed in their proper proportions, and sown at the rate of three bushels or sixty pounds per acre (English), or one gallon to six rods or perches.

After the sowing has been accomplished, the ground should be again rolled, and as soon as the young plants have attained the height of two or three inches, the whole plot should be carefully gone over with a sharp scythe. Frequent mowing and rolling are indespensable to maintain the turf in order. By adopting these means, a close green sward will be obtained in nearly as short time as a ground produced by turves, while it will be far more permanent, and at much less expense.

It will sometimes happen that annual weeds indigenous to the soil come up; these can be easily checked, if not destroyed, by mowing them off as soon as they make their appearance. Plantain, dandelions, and daisies, too, will often appear, and these must be cut up each one singly about an inch below the surface (not deeper), and about a teaspoonful of salt dropped over the cut part. Birds are very fond of grass seeds, and care should be taken to keep them off until the seeds are well up.

Moss is generally a sign of poorness in the soil, or a want of drainage; to effect its removal we advise, after raking off as much moss as possible, a top-dressing of quicklime mixed with rich compost, applied in the winter, and a sowing of more seed in the spring, or a top-dressing of soot will, by encouraging the growth of grass, destroy the moss.

This should be applied in the spring at the rate of about sixteen bushels per acre. It often happens that, owing to frequent playing, cricket grounds get bare and destitute of grass. To improve them there has been specially prepared a mixture of fine grasses and clovers, which will quickly form a thick, close turf. In such cases play should be discontinued on the bare places by the end of August, and immediately after a shower the ground should be lightly harrowed and seed sown thickly at the rate of fifteen to twenty pounds per acre. After sowing give a good rolling, and mow and roll as frequently as possible during the autumn and spring. A light dressing of well-rotted stable manure during the winter or early spring months will greatly encourage the growth of the grass, and help to produce a close-growing turf; or if this is not procurable, either 1½ cwt. of superphosphate or 1 cwt. of guano might be applied per acre."

The Amateur Athletics.—A convention of delegates of amateur athletic clubs was held at the Knickerbocker College, Sixth ave., last Wednesday. The following clubs were represented: American Athletic, Amateur Athletic, Fanwood Athletic, Friendship Boat Club, Greenpoint Athletic, Harlem Athletic, Englewood Athletic, Manhattan Athletic, Nautilus Boat Club, Orion Athletic, Plainfield Athletic, Scottish-American Athletic, Yonkers Athletic and Shorthills Athletic. The following definition of an amateur was adopted: "One who has never taken part in an open competition or for any stake, public money or entrance fee, or competed with or against a professional athlete for any prize; who has never taught, pursued, or assisted in the pursuit of athletic exercises as a means of pecuniary benefit." The meeting adjourned to meet again upon the following Wednesday.

Harvard's Athletics.—The first meeting of the Harvard Athletic Association, for the present year, was held last Saturday in the college gymnasium. The sparring match between V. Stow and W. Seymour was decided in favor of the latter, and the silver cup of the association awarded to him. Vaulting with one hand was won by F. B. Keene, who cleared 5 feet 4½ inches. In light-weight wrestling, W. A. Gaston threw C. Stetson. The contest between the former and A. H. Rogers was declared a draw, and postponed to the 15th. Next came a broad-sword exercise match by A. Matthews and P. J. Barlow, the latter winning. The programme was to have closed with a middle-weight, but no one appeared against J. A. Wetherbee, and he was declared victor and presented with a silver cup. The sports will be continued on the 16th and 23d.

The *Crimson*, which has opened a sporting column, urges the Athletic Association to institute challenge cups for encouraging efforts in pedestrianism.

—The base ball season was opened at Prospect Park, Brooklyn, last Saturday, by a game in which members of Chicago, Columbus, Canada and other leading professional clubs took part. Bond, of the Bostons, pitched on the side that scored 1, and Corcoran, of the Buffaloes, on the side that scored 8.

Pedestrianism.—The task of walking 89 miles in 26 hours, with 10 minutes to spare, was accomplished by Miss Von Hellern, at Cincinnati, last Saturday. Physicians present condemned the performance as too severe and very injurious to the pedestrienne's health.

The London Six-days' Walk.—This walk, at Agricultural Hall, London, beginning next Monday, will be contested by a number of noted pedestrians, among them Weston, O'Leary, Vaughan, who has a record of a greater number of miles in three days than either of the former, and Smyth, who has just walked 2,000 miles in 1,000 hours at Dublin.

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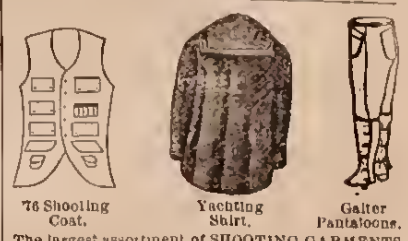

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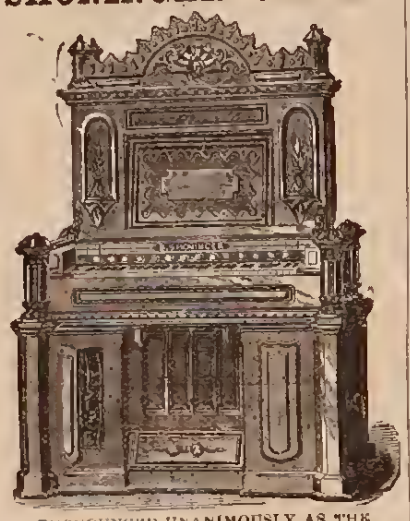

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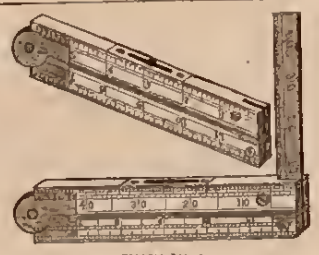

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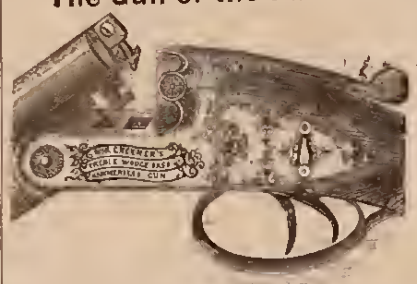

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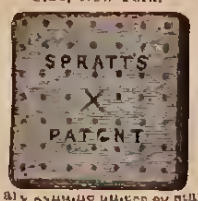

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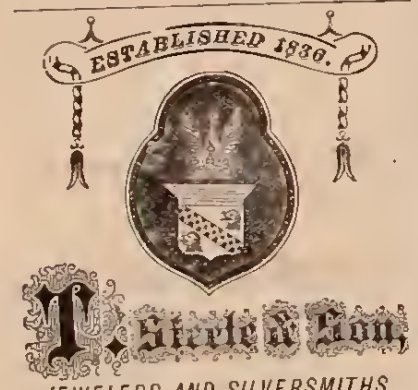

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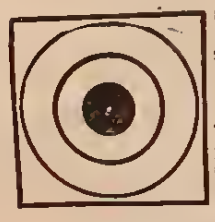

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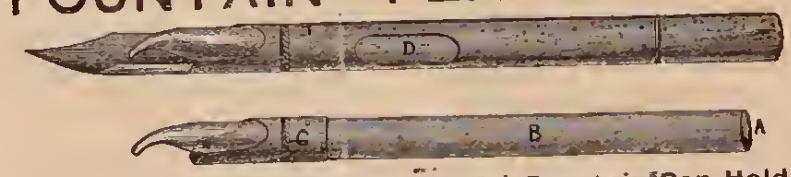

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One Million and a Quarter

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NO SHORT COUNT.—Every barrel is warranted to contain enough over three hundred to allow for reasonable breakage. Will also contain copies of the Standard Rules for Glass Ball Shooting, for one, two, or three traps.

CARD.

During Mr. Paine's absence in England his Patents were grossly infringed upon. Glass Balls and Traps of the most worthless description were sold in large numbers. Balls that could not be broken with a cannon were thrust upon the market by thousands. On his arrival home, seeing this state of affairs, he immediately, with his fruitful brain, invented the Paine Feather-filled Glass Ball. American sportsmen are the best judges of its magnificent success.

No Sportsman's Warehouse is Complete without Paine's Feather-filled Class Balls. Men and Boys, from Maine to California, shoot at them! Old ladies darn socks on them! Children learn Geography on them! Babies cut their teeth on them! If you want a Ball for main strength and endurance try some other.

WARNING TO ALL.

The following will show how fully we are protected in the manufacture of the Paine Patent Feather-filled Glass Ball, and as the price is SO LOW there is little or no incentive beyond curiosity to infringe on the Patent:

UNITED STATES PATENT OFFICE.

IRA A. PAINE, OF NEW YORK, N. Y.

IMPROVEMENT IN CLASS-BALL TARGETS.

Specification forming part of Letters Patent No. **196,379,** dated October 23, 1877; application filed September 22, 1877.

To all whom it may concern:

Be it known that I, IRA A. PAINE, of New York City, in the County and State of New York, have invented a new and useful Improvement in Balls for Trap Shooting, of which the following is a specification:

The figure is a side view of one of my improved balls, part being broken away to show the construction.

The object of this invention is to furnish balls for trap-shooting which shall be so constructed as to "make the feathers fly" when broken by the shot, producing the same effect as when birds are struck by the shot.

The invention consists in a hollow glass ball for trap-shooting, filled with feathers or other light material, as will be hereinafter fully described.

A represents the ball, which is make of glass, is smooth upon the outer side, and has a neck upon one side for placing it upon the trap.

The ball A is filled with feathers B or other light material, as shown in the figure, which, when the ball A is broken by the shot, will be scattered through the air, showing that the ball was broken by the shot, and producing an effect similar to that produced when a bird is struck by shot, and enabling the marksman to see the effect of his shot, the smoke having time to disappear before the feathers can possibly reach the ground.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A hollow glass ball for trap-shooting, filled with feathers or other light material, substantially as herein shown and described.

Witnesses:
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Oct18 tf

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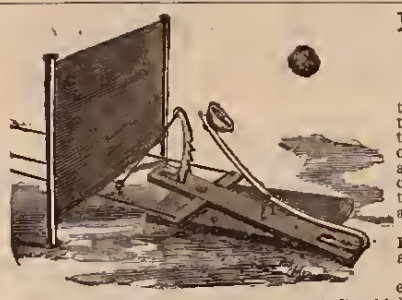

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These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

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Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy. | NEW YORK, THURSDAY, MARCH 21, 1878. | Volume 10.—No. 7. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

IN MEMORY OF A GOOD DOG.

My poor old dog has had his day—
And happy days we've had together,
When woods with red and gold were gay,
In the glorious autumn weather.
When o'er the aftermath's dark green
Was wove the gossamer's silver sheen,
And over all the blue sky bent;
But now the woods are bare and gray,
And all of autumn's glories spent,
And my poor dog has had his day.

My poor old dog has had his day—
No happy days have we together,
Since all the woods are bare and gray,
And gone the pleasant autumn weather.
His tuneful voice no echo wakes,
The fox no more his lair forsakes
In fear of him who lies below
The roar of Winter's wild affray—
In quiet sleep beneath the snow—
My poor old dog has had his day.

A.

The Tent in the North Woods.

EDITED BY THE PROFESSOR AND LEATHER-STOCKING.

"And this our life, exempt from public haunt,
Finds tongues in trees, books in the running brooks,
Sermons in stones—and good in everything."
As You Like It.—Cum Var.

THIS being our first station in the Wilderness is a proper *Punctum Saliens* (Latin is good to begin with) for this, as yet, unopened record.

We left Louisville, on the Black River Railroad, Aug. 23d, at 7 A. M. A light spring wagon carried our party of three, with two guides; the *impedimenta* (Latin again) being stowed in canvas bags at our feet. The road is twenty miles to Fenton's, where we dined. The first half is an open country—sandy, but good traveling; the rest a narrow path in the woods. From Fenton's the road is all in uncleared land, and is very rough for the horses. Ten miles, most of which we walked, brought us, at 6:30 P. M., to Wardwell's. This, the last outpost of civilization, is a small log tavern, in a little clearing, with the primitive forest all around. A small lake spreads a clear mirror for the distant landscape of forest-crowned hills. We were hungry and tired, and after a hearty venison supper, crept to our lodgings in the loft and slept soundly.

This morning we found two light boats awaiting us, in which we left at 9 A. M., making our adieux to civilization—such as it is—at this outpost and threshold of the great Northern Wilderness. This day's work has been navigating up Beaver River, toward Albany Lake, our first destination. The stream is about two rods wide and very winding; the water of a dark forest stain. The immediate shores are chiefly crowned with alder, illuminated here and there with patches of the burning lobelia cardinalis, whose reflections set the stream aglow. Tall pines and spruces look over the bushes along shore. There are no clearings and no signs of human life, but the occasional hunters' camps. Deer tracks are frequent on the shores, with slides of otter. After passing the South Branch Inlet, the stream becomes narrow and difficult with snags. At 5 P. M., landed and raised our tent near an old bark shanty, which seems to have been unused this year. We are fortunate to-day in the absence of the dreaded insect annoyances.

The situation of our camp is picturesque and really beautiful. The bank rises abruptly some ten feet from the stream to a level table, planted closely with spruce and balsam, almost as thick as they can stand, and to the exclusion of nearly every other tree. From the dense gloom below, these spiry-topped foresters have stretched upward with longing aspirations toward the light, emulating each other in the towering altitude to which they could attain. Dense undergrowth covers the mossy soil, except for an area of a rod or two, where it has been cleared by our predecessors, who erected their hunters' home.

This home, of the stereotype form, merits a brief description. *Ex uno disce omnes* (the Latin is irrepressible). A horizontal pole, about eight feet long, is supported by crotched uprights some six feet from the ground. Against this poles lean at an angle of about 45 degrees, with occasional cross-pieces; the cover is made of sheets of spruce bark, with the smooth side below. To obtain this bark the hunter selects full grown spruce in good condition, and cuts a circle close to the roots, and another as high up as he can reach. A vertical cut then enables him to develop from the trunk a sheet of bark nearly six feet square, flat and water-tight; a few of these construct a roof perfect against the weather. The sides of the mansion are either of similar pieces or else of brush. The fire being built in front, the heat is reflected downward by the polished inner surface of the bark upon the sleepers below, who, on their beds of boughs, with their feet toward the glowing embers, take such rest as the punkies and other rightful owners of the soil allow. When the camp is an elaborate one, a dinner table is a necessary adjunct; this is composed of a single sheet of bark, supported on short poles and crotched sticks, with comfortable log seats, and moss cushions if you are luxurious.

We pitched our tent hard by the shanty, and the men in a few minutes cut us a large bundle of rank grass from the river's edge for a bed. Rubber sheets and blankets perfected the accoutrements for the night's repose. Pillows are not on the hunter's list of necessaries, but a taste for luxuries added some small empty bags to our kit. Filling these with moss and ferns they lay with a most inviting plumpness at the head of the tent. The success of the experiment was proved by the utterance of a thrice repeated "Bully!" as each tired head sank to its soft repose.

It is time to introduce into this faithful record the members composing the party. First in the order of seniority comes the Professor. The Professor, now in the middle of his fifth decade, is a hearty lover of nature, but, it must be confessed with sadness, can neither hunt nor fish, and has never been in the bush before. He takes everything as it comes with unruffled good nature, and is always ready to do more than his share of the work. A great traveler, a keen observer, an excellent authority on things scientific, he is a most valuable acquisition to the expedition, and is frequently called upon to pronounce on some form of animal or vegetable life. His common attire is a suit of blue flannel, with a slouched hat, and he goes armed with a pocket magnifying glass ready for instant use. He is a bachelor, and as shy of womankind as old Mr. Weller himself, and, like old Weller, attracts the fair fair sex *nolens volens*. The little divinity in petticoats, who presides over Wardwell's table, lost her heart to him, and gazed disconsolately down the river as the unconscious Professor was borne away on its swift flowing current, serenely munching a plum-cake made expressly for him by her own fair hands.

Leather-stocking stalks next into the picture, our special artist, and joker in ordinary to the expedition. His common attire is a pair of moccasins which he got among the Indians, a fez cap which he brought from Egypt, a pea-jacket which he wore in his voyage to Greenland, and leather breeches with scalp trimmings, which he traded for among the trappers of Oregon. A repeating rifle, a heavy army revolver, Arkansas tooth-pick, a pocket box of carpenters' tools and a trout rod complete his toilet, without which, in perfect order and polished to perfection, he never ventures abroad.

Venator, though last mentioned, begs not to be considered the least of his honorable company. Blessed with a fine physique, a quick eye and legs of cast-iron, he is devoted to the sports of field and flood. Many are the trout he brings to our table, and many are the pan-cakes he takes from it. Behold him attired in a suit of bramble-proof corduroy, and a pair of huge wading-boots, while a hole cut through his slouched hat for purposes of ventilation, allows a long lock of hair to wave defiantly in the breeze.

It remains to speak only of the guides, the brothers Sylvester and Orlin. Born in the depths of the forest primeval, they revel in the woods, and pine in the clearings; nothing in the circle of polished society has for them half the attractions that are furnished in their intimate association with black flies and mosquitoes. The song of the latter is music to their soul, and the smoke of a smudge is as the breath of Araby. Rowing, cooking, wading, shooting, long tramps with lodgings on the cold ground, all such employments are alike to them, provided there is hardship in them and the flavor of the wilderness. It is a happy faculty that can make a home of a desert, and find comfort and sweet companionship where wild beasts most do congregate.

We remained at our camp on the following day, some of the party exploring up stream to the rapids, some four miles. Broke camp on the 26th. We left this picturesque little temporary residence with regret, for it had become quite homelike. The evenings around the fire were lovely. The heat of the day abated as twilight came on, changing to actual chilliness at a later hour, making the forest ingleside attractive. The firelight illuminating a little circle of the dense foliage, a young moon struggling through the tops of the trees, the spicy odor of the balsams and spruce, the absolute silence, broken only by the faint ripple of the stream, the occasional hoot of an owl and the distant howling of a wolf, united to form a scene not to be described and appreciable only by the enthusiastic lover of woodland life.

We found the stream snaggy and difficult. The guides were half the time in the water pulling the boats over some obstinate root or fallen tree. There is hereabouts no good "floating ground" for deer; the best we have seen is a long reach of still water below the South Branch, a few miles down from our camp. The signs of deer, however, are numerous; sometimes we come to one of their runways, and very frequently see their fresh tracks in the mud along shore, where they come down to drink or to feed upon the water plants. At the "Little Rapids" we made our first "carry." The stream here has considerable descent over a thick bed of granite boulders, but with no rock *in situ*. Loaded boats are dragged down among the stones, but in going up stream everything must be carried over the path about a quarter of a mile. Our kit is packed in several large bags with shoulder straps. The boats themselves walk over the track inverted on the sturdy shoulders of the guides, who are armed with a wooden yoke shaped for the purpose. The whole transfer is rapidly effected.

We re-embarked, and after a couple of miles came to what they call a "draw." This is another rapid through boulders, which, however, admit the loaded boats to be hauled upward. The passengers walked around a path in the thick woods three quarters of a mile, in rubber coats, a rain having set in. Our lower extremities, of course, got well saturated from the reeking bushes, but the poor guides got a thorough soaking, having to wade the whole distance. The weather had now changed, and a fine drizzling rain pursued us for the rest of the day.

The stream now expanded with marshy shores. Some ducks were seen, but kept out of shot; even Leather-stocking, with his double-patent duplex, back action—none genuine without signatures of patentee—arsenal of weapons, was unable to touch them with a ball. Venator was more lucky with his trout rod, and fished up a mess of speckled beauties from among the lily pads. The Professor smiled approvingly as he paddled at the stern.

The shores continued to recede on either hand, leaving a marshy lake, with narrow winding channels of open water between fields of reeds and lovely white water lilies. The Professor, ever ready with his learning, told us that these were called *Nymphea odorata*, which we were very glad to know, as we would not have suspected it.

Albany Lake unfolds gradually from its marshy entrance. There are some distant views of ridges, clothed with evergreens, and granite ledges show in some places along shore. Woody points project on right and left, narrowing the lake to an eighth or a quarter of a mile, with intervening basins of nearly a mile in width. This wild sheet of water is very incorrectly laid down upon the maps (1871). It is very much larger than there represented. We shall become better acquainted with it bye-and-by.

It was a good long pull up the lake against an easterly wind before we came to the camping-place. A sand beach and a little notch in the line of forest directed us to the place. We found a large and well constructed shanty of spruce bark, opening inward, away from the lake winds. It has the unusual luxury of two apartments—one for the table and cuisine, and one for sleeping—each, of course, has but three close sides, the other being open toward the fire. The bark roof was badly warped and split and very leaky, and the dining-room speedily proved uninhabitable in the heavy shower which came rattling down as soon as we landed. We managed to eat our supper on the ground, avoiding the wet spots, and then made our lodgings sufficiently dry by patching the roof with bark, and tacking up an india-rubber sheet. The camp-ground being on a slope, brought down the water in streams through the shanty, and we had to cut channels to save ourselves from a flooding. To add to the discomforts, the smoke filled the cabin, and nearly drove us out. We wept over our situation abundantly, but never would desert the shanty.

The men went out in the rain to float, or at least to explore for floating, but the wind caused a heavy sea and drove them home. By midnight we were all settled to the labor of sleeping on our anything but downy couches, soothed by the monotonous patter of the rain on the thin shields of bark that interposed between us and the storm. Suddenly the sleepers were aroused by a piercing cry: "Get up! the river is on us! It is pouring through the shanty two feet deep!". We started up in alarm; Leather-stocking was seen on his feet gesticulating wildly; he raved incoherently. A moment more revealed the fact that he was sound asleep. His frightful torrent was a vision of the night. Venator thought it was not wholly unconnected with pancakes.

The morning broke, but brought no relief to the well-soaked adventurers. A deep ditch of muddy water encircled the fire, and a mountain torrent rushed madly through the two sections of the shanty. After a hurried breakfast, we all took a hand in patching the roof of the camp. Small holes were plugged with sticks, larger ones were covered with bark, while sunken spots were propped up and bark gutters made for irremediably leaky apertures. The result was tolerably satisfactory. The space in front of the fire, where we had found a rough bench already constructed, but useless on account of the storm, was reclaimed for its proper purposes. The half of the shanty, where the table and cuisine were situated, was restored to its first uses, and we were at last able to sit or move around without plumping down into a puddle of water, or getting a stream in the eye on casually looking up.

When the situation cleared, Venator bethought himself of his boots, which, from being once high and mighty, were become, through exceeding dampness, limp and unsatisfactory. If he tried to get into them wet as they were, he was sure to stick half way; and he knew by past experience that, if he did succeed in entering their cavernous depths, and wished once more to bring his feet to the light of day, that the strength of all the men in camp could hardly draw him forth from their too friendly embraces. The Professor, on being consulted, suggested that large fires should be built at different points adown the yawning abyss of the legs. Leather-

stocking darkly hinted that the sudden disappearance of his river last night could only be accounted for on the supposition that it had been completely engulfed in the vast emptiness of the boots. The guides advised hanging them in the heated atmosphere of the roof, and this was finally done; and there they reposed the rest of the day, basking in the warmth of the fire. On examining them at dusk, they were found completely dry, and as stiff and unyielding as a long exposure to tremendous heat could make them. And when Venator got them on, after much tribulations, his legs were as well protected from all possible dangers as though encased in Milan armor of proof.

Dinner brought consolation to the expedition. Beans were the order of the day. Venator, though he never eat the article, made a glowing speech in their favor; the Professor smiled benignantly, and muttered that in Latin they were *Materia ventosa:* while Leather-stocking said nothing, but combined them silently with the primary elements of his frame.

The rainy day drew its slow length along; everything was damp and dreary, and the "moist, unpleasant bodies" of the huntsmen were surrounded by a reeking mist. The skies cleared at sunset, however, and the placid surface of the lake tempted us forth for a short paddle. Beyond us a loon was floating, calling the echoes of the hills with his wild laugh. A bullet from the ready rifle of Leather-stocking cut short his amusement and dashed the spray from the spot where he had been sitting. With a quick eye to business, the loon dove simultaneously with the crack of the gun, and finally emerged with a scream of defiance far beyond and out of shot. A brave old veteran, he! The whistling lead and pinge of the bullet were as familiar to his ears as to those of any war-worn soldier. Not a hunter came near him but saluted him right royally with a broadside of all arms. But he lives and laughs! and well he may, for few and far between are they who bring down a loon with a rifle bullet, and he knows that his plumage is no small trophy. And now his mate joins him, and their chuckles are heard in the gathering gloom. The rosy gleam fades out against the forest-tipped hills; darkness covers everything, and we paddle quietly back to camp. The comforting flask is passed from hand to hand; then, the last pipe smoked, the last joke told, we wrap ourselves in our blankets and seek our rest. From the far distance comes the solemn hoot of an owl, then the splash of a trout in the lake. And now slumber claims us all, and the prolonged and sonorous snoring alone breaks the silence.

Bright sunshine greeted us in the morning, awakening in Leather-stocking, special artist to the expedition, a keen desire to photograph. The camp-ground was first fixed for posterity, and the party then set out in further search of the picturesque. A lovely spot revealed itself half a mile up the lake. A long rocky shore, of smooth granite, dipped down at an easy slope into deep water, overhung by evergreens. At the terminus of this solid beach a narrow cape of rock thrusts itself out into the water, its surface rounded smooth by ancient glaciers. A cosy little harbor of deep water lies behind it. The view along the point, with its clumps of Christmas greens, the lake in the distance and on either hand reflecting like a polished mirror the blue outlines of the distant hills, was seized upon incontinently by the enthusiastic artist, who grouped the boats and assistants around in imposing attitudes before fastening their shadows forever. Posterity will know the most minute particulars concerning the state of our wardrobes. That nail in the seat of the boat has made its mark for all time.

At noon we packed up to embark in search of a more desirable situation. The traps were speedily gotten together, and we abandoned the old smoky shanty with no feelings of regret. A mile and a half westward, on the north shore, we found the place we sought. It was a projecting point, beautifully clothed with spruce forest.

There are divers considerations affecting the choice of a greenwood home. Among them is the risk of falling trees. It may be set down as an axiom, that at some period or other every individual tree in all the mighty forest is bound to come crashing down to earth. There are sundry unpleasant chances of your being just there when some one of them bows its ancient head. Look well, then, to the condition of your vegetable neighbors.

A thrifty grove covered our point; a fine view was commanded by it of the lower part of the lake. Smooth spots were found for tent and shanty, and a huge boulder with a vertical side rose over the prospective hearth-stone. The axes were quickly at work. The canvas walls were raised, and a shanty, of a little more permanent character than a single night's lodging requires, soon reared its rustic architecture among the boughs. We even constructed a table, of a sheet of bark, supported on poles and crotched sticks, with pine logs split for seats, and similarly supported on each side. We ate our slap-jacks that night with great satisfaction, and slept on a softer bed of boughs than bad wooed our weary limbs since we had entered the tract of old John Brown.

(To be continued.)

For Forest and Stream and Rod and Gun.

ON THE SUNFLOWER RIVER.

The following is the promised continuation by our correspondent, H. L. S., of St. Louis, of his adventures with the bears among the cane-brake of the Sunflower River, Miss. The first letter was given in our issue of Jan. 24, and it will be remembered that after capturing their bear the party were about to test the merits of the steak:

The residents of the Sunflower, and, in fact, those of Vicksburg, are extremely partial to bear meat, and I found our friend Walue could hardly wait our tardy cook's preparation. I had a faint recollection of interviewing bear steak on a previous occasion with rather discouraging results, still I thought myself hungry enough to be able to dispose of my share. Ned, I knew, would eat his if it killed him, and straightforward Uncle Joe would eat bear if he liked it, if not he would let it alone. I furtively watched my companions as they proceeded to discuss its merits. Ned's first installment passed from view with apparent relish; his next—must I say it?—seemed to produce a slight pallor on his firm, well-knit features; the third I never saw raised to his lips. I would not dare say this if Ned were not at this writing at least a thousand miles away. Uncle Joe deliberately spat his first mouthful on the ground, and said "He would be shot if another piece of that blasted bear ever got into his mouth." I tasted bear also, and silently stole away to the rear of the tent out of observation. Suffice to say that we all, except Uncle Joe, learned to like bear meat before our hunt was over. It only required unlimited patience, combined with persistent practice.

We determined to spend the next few days still-hunting for deer. In the meantime we sent a man across the country to invite Holt Collier, the great bear hunter of the Mississippi, to join us with his fine pack of hounds. As still-hunting is little resorted to South, our friend made sport of our intentions, but we had practiced this method too many years in the Lake Superior regions not to know our own capabilities. To the astonishment of our doubting comrades, we hardly missed a day without bringing down one or more deer, most of them, however, were ordinary animals of their kind, with one exception. One day I reached the banks of a little bayou (as all small streams are called here) some four miles from camp, and sat down on a log to rest and drink in the beauties of the surrounding landscape. As my eye was wandering up the bayou that wound so gracefully among the stately cypresses and giant oaks until lost in the distance, I suddenly saw emerging from a thicket, about 100 yards distant, a fine buck. My rifle was at my shoulder in an instant, and as I was about to fire I caught sight of another buck, the largest I had ever seen, issuing from the same thicket. For a moment the peculiar sickness, incident to such occasions, took possession of me, but it was momentary. Taking deliberate aim well forward, as he was walking, quartering toward me, I fired. I distinctly heard a heavy thud on the ground, then all was still. I was astonished at this, but, quickly reloading, awaited the result. The smaller buck had passed from view in the underbrush. Shortly I saw him reappear through an opening, feeding as if nothing had happened. I fired at him, wounding him slightly, when he concluded to take his departure. I then approached the fallen monarch cautiously, for I had some suspicion that he was playing 'possum, but found this was not the case. The ball had entered the shoulder, ranging upward and backward in such a manner as to shatter the spinal column almost its entire length. I afterward found it flattened and shapeless, lodged against the skin, being the only time that the body of a deer had ever succeeded in stopping one of my .46-cal. bullets. The animal was estimated to weigh from 250 to 300 pounds, and many of my St. Louis friends will testify to his excellent gastronomic qualities. There seems to be here two varieties of deer. Although the majority of those we killed appeared to be the genuine red or Virginia species, we frequently met those more compactly built, with shorter legs and necks, bearing a greater resemblance to the Rocky Mountain or black-tailed deer. This large buck was of this species.

The following noon Holt Collier arrived in camp, followed by seventeen dogs, which, added to our previous pack, made twenty-seven. All was now bustle and excitement, preparing for the next day's bear hunt. The "starters" were chained together in pairs to prevent them from doing any private hunting on their own account. A deer was cut up, boiled, and fed to the dogs. Ponies, saddles, etc., were properly looked after, and guns carefully inspected.

Early the next morning we were all in the saddle except Uncle Joe. It was a fine morning, the atmosphere being clear, cool and bracing, and as we galloped along the trail leading to Nelton Lake, where we expected to start a bear, we felt the keenest delight at the prospect before us. But a few minutes after the dogs were let loose a portion of them were in full pursuit of some animal. I asked Holt what he supposed it to be. "Nothing but a cat," was his laconic reply. Soon the dogs ceased their pursuit of the cat, for at a little distance they had heard the voice of one of the starters. "That's a bear!" cried Holt, as all the dogs joined in the pursuit. The woods rang with their music. "Come on;" said Holt, "we must keep in hearing of the dogs." Up the banks of the lake, then down again we rode. Keeping as nearly abreast of the dogs as possible. Occasionally some one would attempt to cut off the bear by pressing into the cane, but without success. At last bruin took a different direction, leaving the cane for the open woods, then a great tumult among the dogs—snapping, snarling and fighting was heard. We pressed forward rapidly, and on coming up to the scene of conflict were just in season to find Uncle Joe pulling and tugging at the hind legs of a small bear, while the dogs were doing their best to keep the animal in their possession; but Uncle Joe, as usual, was victorious. "What have you got there, Uncle?" said Ned. "What is left of a bear," said that matter-of-fact individual. True enough, twenty-seven dogs were too much for one small bear, and they had not only killed him, but would have soon eaten him if it had not been for the timely interference of Uncle Joe. Soon we had the dogs on the trail of another black denizen of the cane-brake. "This time it is no baby," Holt said, "but a tough old fighter who does not propose to be eaten by the dogs." Now could be heard a sharp battle in progress, and some one or more of the dogs would retire howling and discomfited. Then the bear would push on, and we found it a difficult undertaking to keep up with him, for he led us through the thickest cane-brakes, and our party was scattered in its endeavor to follow. As for myself, I had deliberately made up my mind to keep in view of Holt as long as I could remain in my saddle. This I succeeded in doing for a few miles, then that man of iron began to surge ahead. Cane-brakes, interwoven with vines and briers, huge fallen trees and the various obstacles peculiar to southern forests, seemed little hindrance to his break-neck speed. In my frantic efforts to "hold my own," my hat had early passed from my possession, and had it not been for the close cut that my barber had recently given to my hair I should have soon found myself in the predicament of poor Absalom of old. My coat and pants were rapidly assuming the appearance of those belonging to the most abject street beggar, and I was obliged to realize the fact that slowly but surely I was falling behind. Humiliated and discouraged, I listened to the gradually receding voices of the hounds. To add to my discomfiture the day was rapidly drawing to a close, and the prospect of a night spent alone and supperless in the wilderness was presenting itself to my imagination. Nevertheless I pressed forward; frequently I would find myself almost hopelessly entangled in some thicket and be obliged to retrace my steps long distances or to make tiresome detours to avoid the ever recurring cane-brakes. Fainter and fainter grew the voices of the hounds, until the dim aisles of the forest ceased to convey them to my ears altogether. I stopped and dismounted, and proceeded to investigate the situation, while pondering on the mutability of all human expectations, and, hesitating what course to pursue, once more the faint echoes of the chase greeted my ears, nearer and nearer, louder and louder, until the woods rang again with the merry voices of our faithful animals. I remounted, and with fresh zeal pressed on. Presently the dogs seemed to have come to a halt in the centre of a large cane-brake. Pushing on as far as possible with my horse I then dismounted and made my way on foot, arriving at last, panting and perspiring, at the scene of the conflict. Perched on the huge limb of an oak lay the bear, looking angrily down at his foes. It took but a moment to bring my rifle to *bear*, and with the report he fell to the ground pierced through the heart. He was instantly covered by the dogs, and in his death struggle mortally wounded one of them.

Holt soon came up, and the hunter's horn resounded through the forest. This was a signal to our companions that the hunt was over, as they made their appearance one by one, each heartily congratulating me upon my success. Wearied in body but light of heart we returned with our trophy to camp.

H. L. S.

For Forest and Stream and Rod and Gun.

GAME OF THE SANDWICH ISLANDS.

An article on the Sandwich Islands, which appeared in one of your late numbers, has awakened a good many memories of pleasant times sporting there under the care of the extremely hospitable white residents.

"What!" some one will ask. "Game on those little dots in mid-ocean? Did he hunt parrots or monkeys?"

Not at all. The islands are large, covering six thousand square miles, and all that are of any size have game of some kind. Deer on Molokai; wild cattle, which give fine and exciting sport, on Kani; wild turkeys on Oahu, and, perhaps, some of the other islands; besides duck and snipe in their season on most of the lowlands.

The deer were presented to King Kamehameha Fifth, and placed on the island to increase and multiply, which they do, as fast as the wild dogs, which range in packs, will allow, for no native is allowed to kill them.

The cattle are remnants of the stock originally given to the first king of the islands, Kamehameha First, by Vancouver, on his visit to the kingdom during the latter part of the last century. They were given with the agreement that not one of them was to be molested, and this agreement was kept; although, before the end of that time, the damage the fast-increasing herd did to the crops was very great.

The turkeys, as near as I could discover, "growed." The real puzzle was the snipe, for in any but the right season they may be sought everywhere on the islands but will not be found. In other words, they migrate. This is the more curious when it is considered that the Hawaiian group is over two thousand miles from any mainland. Can snipe fly as far as that without rest? or do they go from island to island westward toward the Chinese coast, finding rest every two or three hundred miles?

The fishing about the kingdom is good most of the year. The ocean mullet is the favorite with the islanders. At one time almost all the lowlands near the ocean were laid out in fish ponds, where young mullet were imprisoned and fattened for eating; but, as the Kanakas have diminished the ponds, many of them have been allowed to go to ruin. All the walls of the ponds, by the way, were built of white reef coral. Of course, all the fish usually found in semi-tropical waters abound—the flying fish most abundant. The natives eat their fish, and even squid, or devil-fish, raw and alive, with their poi. One of the descendants of the kings, a dusky nymph of some 400 or 500 lbs. weight, bothers her dependants almost as much as the whale did the New York Aquarium keepers, to provide her with a sufficient supply of her favorite little fish, the ohua, which wriggling dainties she eats alive by the handful, with a variety of seaweed. At low tide, the reefs by which the islands are surrounded are many of them laid bare, and afford delight to the naturalist by the display of corals, algæ and crustacea which fringe their edges or fill the interior cells. I would like to go into particulars about the flora of the islands, both the indigenous, with its two hundred varieties of ferns and fern trees, which grow on every crag of the volcanic mountains, veiling their rugged, blackened faces, or which serve to render more enchanting the many charming valleys with their clear running streams and misty waterfalls. The forests of Ohias, with their dark green leaves, crimson flowers and fruits; the long, silvery-green lines on the mountain sides, made by valleys filled with the foliage of the Kukin or Candee nut tree; or of the numberless flowers and flowering trees brought to the islands from different parts of the tropics. The islanders are a flower-loving race. They never consider themselves dressed unless they are covered with wreaths of bright flowers or sweet-scented myrtle, and, indeed, until late years, this was their only dress.

But I began with the thought of telling you with what pleasant surroundings a huntsman can shoot turkeys under the care of the genial island ranchers, and of one hunt in particular, with Captain H., among the hills back of Kahuka Ranch, on the Island of Oahu. To do this you must have a little idea of the topography of that island. The island winds from northeast to southwest. It is divided by an almost impassable range of mountains, which slope gently down toward Honolulu on the southeast. This slope is divided at right angles to the range by a succession of deep fertile valleys. The northern side of the barrier is the grander; that half of the range has fallen away and disappeared in many places, leaving precipices often from 800 to 2,000 feet sheer, from whose base fertile plains stretch out toward the sea. There are broken by valleys which lead up, in many cases, to alps, where the cattle find pasture through the year. Only one good pass leads through the mountains from one half of the island to the other. Nunano Valley, which rises gradually from Honolulu until at its highest point it breaks through to the northern side between two lofty peaks at an elevation of 800 feet above the ocean, which reaches away into the distance beyond the plains at the foot of the perpendicular descent.

Kahuka Ranch occupies over 20,000 acres of plain and mountain on the northern side. When the invitation came to visit the Captain and see how a large ranche was conducted, it was accepted with pleasure. Colonel J. offered me a mount and an invitation to stop at his ranche of Kualoo on the way. The Colonel has been trying a number of years to raise the grade of horses from the wiry little native pony to one more resembling an American horse, and has succeeded admirably, as the specimens brought round for us on that lovely morning proved; for a more delightful animal I never put leg over than that little brown horse with the long unremembrable native name, the tireless, easy gait and the sure foot for the mountain passes. Our way led from the city up the gentle slope of Nunanu Valley, first by the most beautiful gardens of the world, until clear of town, then through soft green meadows watered by clear running brooks, and bounded on both sides by high cliffs. No view yet in front of us as we ascend, except the rising valley with its rocky boundaries and overhanging peaks; but one of surpassing beauty behind.

We turn in our saddles and gaze long on the picture framed by the black walls of the valley and the dark blue sky above. The foreground meadows, bordered by waving bananas, with here and there the spike of a flowering century plant or plume of a palm. In the middle distance the town is only known among the dense tropical foliage of tree and vine, by the gleam of a white house or steeple and the masts rising from the inner harbor. Beyond the ocean long lines of white breakers marking the reef and separating the pale green of the shallower water from the deep blue expanse of the slime-bearing Pacific. Only one ship in sight; all her white sails spread to urge her onward away from a haven she seems loth to leave, as she rocks idly to and fro on the long swell. Near us the murmur of the little river tells where it winds through the valley. One does not need to eat "Lotus day by day" in this paradise to feel

"How sweet it were, hearing the downward stream,
With half shut eyes, ever to seem
Falling asleep in a half dream,
To dream and dream.

"To watch the crisping ripples on the beach,
And tender lines of creamy spray,
To lend our hearts and spirits wholly to the influence
Of ever offered charm to every sense."

For six miles of gentle but continuous ascent we followed the valley, which narrowed gradually, until just as the mountains seemed closing in upon us we came suddenly on to a precipice as steep and abrupt as an Alpine pass, and a view of the fertile northern plain, checkered with fields of rice and cane, bounded as every island view is by the blue of the ocean. Our way was down well cut zig zags, then ten miles across the level to Kualoa. The next morning after a hasty look around the beautiful place, at the stock and a fine lot of pea fowl, which the Colonel keeps to protect his fields from grasshoppers, I was away northward across the plain, a long ride to Kahuku. It must be said right here, and might be dwelt on, that no people have the art of hospitality more thoroughly learned than the Hawaiian, and my reception was genuinely cordial. The next morning after an early breakfast mine host said that he was not a mighty Nimrod, but having to ride some distance up the mountains to see how a certain herd was doing, he would show me a likely place for game on the way, appointing a rendezvous where we could dine in the open air on the mountain side. On the way, as he had promised, he pointed out a narrow valley thickly wooded, where, he said, a flock of turkeys had roosted the night before. With a "Good luck to you; bring us something to eat for dinner," he was off, and I turned toward the valley. My hunting has always been more for the delight of the sense than for the slaughter of game, more to see them in their haunts than to bring them out, though the latter must be generally the result, and particularly such a day as this to sustain a sportsmanlike reputation, if possible, though the temptation was to sit down in the shade on the hillside in this air, too balmy to be felt, and smoke the day away, watching the ocean as it slept in the morning light, the shadows of the mountains, or the boatswain birds wheeling slowly among them, rather than rouse myself to tramp, or rather creep after the gobblers, though experience told me that the excitement would soon bring the right tone of feeling, and the tramp make the after rest more delicious.

Leaving my horse with the boy I started up the valley alone with my rifle, watching and listening at every step. After a long careful hunt it seemed certain that they had left the place, when one of the flock in his chase after an unlucky "hopper" appeared in a clearing two or three hundred yards away. To hide and wait developments was my immediate move. They were feeding toward me leisurely, not as if hungry, but more for the pleasure of the stroll, with an occasional tidbit of ripe guava or other delicacy thrown in. In fact, I was hunting with a sure thing on a dinner, but enjoying the sport of finding extras under pleasant circumstances. They came on, until within perhaps fifty yards of me, when the crack of my rifle sealed the doom of a fine young cock. The ball had struck him fairly in the head. As soon as he was "conscious of his death," as the darkey said of the turtle, we sought the rendezvous where our jolly host was waiting. His cook had brought up all that was necessary for preparing the expected turkey, which, after being duly admired, was given to him. We whiled away the time before dinner, and then sat down with good appetites and a bill of fare fit for a king. First course: Mullet cooked in the coals, a la Hawaiian; *piece de resistance*, the turkey, washed down by claret, cooled in the spring at our side; vegetables, bread fruit and dried bananas; desert, oranges, from the tree over our heads, of a delicious spicy flavor; guavas, from neighboring bushes, with cream and sugar; Ohias, *au naturel*; a bunch of fine native bananas which grew handy; fine old kona coffee and a beverage, to which limes, that the natives brought, added just the right smack, closed the repast. Our pipes and quiet talk held us until the lengthening shadows warned us homeward, where we arrived satisfied with a day well spent. A day such as can be had by any one visiting the "Happy Isles." B.

NOTES FROM CALIFORNIA.

IN a recent issue of the FOREST AND STREAM, I noticed a statement or report to the effect that prairie chickens are working their way toward this coast. The report probably originated from information given by one of the California State Fish Commissioners, Hon. B. B. Redding, himself an ardent sportsman, to one of our local papers. Mr. Redding, who doubtless knows what prairie chickens are, spoke very confidently of their having migrated as far west as Battle Mountain, Nevada, on the line of the Central Pacific Railroad, a considerable numbers, and said that their advent in that quarter was a matter of surprise as well as joy to the inhabitants thereabouts. He thought, however, the hundred-mile (or more) Humboldt Desert, which lies to the west of Battle Mountain, would be an obstacle in the way of their direct migration toward the Pacific slope; but that the birds would probably work north and around the desert, and finally find their way down into our California valleys. A few weeks ago I was speaking of this matter to a well-known sportsman of this city, who, almost every season, spends some weeks in Eastern Nevada shooting sage-hens, etc., and he quite positively contradicted the statement relative to any recent immigration of prairie chickens from the far West to that section. He asserts that there have been some there for many years, and hat the birds have been and are now found to the north of Battle Mountain, up through Idaho, and in Oregon, and have been there as long as he has known the country. It seems to me, however, that—as one or the other must be mistaken—the latter is in some part in error. It is possible that there have been a few chickens that far West for some years, and also that they are to be found in Idaho and Oregon. But it does not follow that of late the immigration this way has not increased, and that Mr. Redding—who has abundant means of acquiring information on such subjects, and who is as much interested in our game as he is in the introduction and propagation of fish—is not really right after all. His connection with the Central Pacific (as Land Agent) takes him over the entire route several times a year, and he has opportunities to observe for himself and to acquire information on such matters that few others possess.

It is to be hoped that Redding is right in this matter, and that the prairie chickens are really coming this way, as they are a much needed addition to our stock of game birds. True, there are grouse in this country, but they inhabit the most inaccessible mountain tops in the Sierra Navada and coast mountains, and are beyond the reach of sportsmen who go out from our cities and valley towns for hunting. Deer, hares, rabbits, squirrels, geese, ducks, quail and doves, we have plenty of, but those who used to hunt the prairie chickens out West think there can be no sport equal to that.

Speaking of our California quail, I see that a correspondent of yours in one of the southern counties, says that dogs are of no use there in hunting these birds. I don't know what kind of ground they have there, but I have never seen any part of this State where quail could be successfully hunted without a dog. They may not when first found lie very close, but after a shot or two they do, and I have frequently had to kick them out of the grass or underbrush before they would fly, and they are a hard bird to find if not killed outright, hence a good dog is indispensible. Their worst habit is lighting on trees. A large covey may take to a tree, and it will require a keen eye to discover one of them. And the most provoking part of the business is, they always go out on the wrong side of the tree when they once make up their minds that they want to go. Our mountain quail is a larger bird than the valley quail, and of quite different plumage, being about a third larger, and nearly twice the size of the Bob Whites of the Eastern States. They are a hardy bird, and frequent the snow belt of the Sierras, where they are plentiful. Their distinguishing feature is a long plume, which, beginning on the top of the head and falling gracefully backward, extends down almost to the middle of the back. They are a very game bird, but steady flyers and are not hard to shoot for good wing shots. I learned the other day that down on one of the islands near the mouth of the Sacramento River (Andrus Island, I think) somebody is raising a lot of the genuine "Bob Whites," brought out from the East. A gentleman told me he had seen the little fellows, and knew he was not mistaken. I had not before heard of their introduction. Our mountain quail would be just the thing for the Middle States, and our valley quail for the Southern States. I wonder that some of the sportsmen back there don't introduce them in considerable numbers. They can be had without difficulty, as a great many are trapped every year. They are so easily trapped, in fact, that in some places they use them in the place of pigeons for pigeon shooting, the latter being very expensive—twenty-five cents a piece, generally.

Some months ago our Fish Commissioners received from New Zealand four English pheasants (two cocks and two hens), in good condition. They got permission from the military commander of this department to turn them loose on Goat Island, in San Francisco harbor, where they have good cover and water. The island, also, has lots of quail. The Commander issued an order prohibiting shooting on the island until the birds might have time to multiply. Some weeks after they were put out the Commissioners went over to the island with a couple of cocker spaniels, and found the birds all near together, the dogs putting them up, and they taking wing as well as though "native to the manor born." It is hoped that they may live and increase, and it is thought they will, as our climate ought to be well adapted to them.

Ducks and geese are here without number this year, the farmers in some localities having to bait the ground with poisoned grain to get rid of them. In a few weeks the snipe will be in. They do not stop hereabouts in the fall, as there are few spots where they can bore until the winter rains have softened the ground and produced temporary marshes.

We have just had one of the worst storms that has visited us for years, and it is expected that—as in former cases—the wild pigeons will be compelled to leave their mountain haunts and come down into the oak grooves of the valleys to feed on acorns. There is a place a few miles from here where they came a few years ago by thousands, and afforded a month's sport of the best kind. If they come this year there will be grand fun, and I will detail some of it for your Eastern readers. There is one advantage we Californians have over our brethren of the North and East; that is, we can shoot throughout the whole season, from September 15 to March 13, and generally the latter part of the season is best. The weather is mild and pleasant (when not raining), and if a person ain't afraid of getting a wetting he can hunt every day through the winter.

Sacramento, Cal., Jan. 15. AMIGO.

A MONTH IN THE ADIRONDACKS FOR $30.

To those who have but a limited summer vacation, and who must return to their posts at a certain day and hour, the following statistical account of my experience in the North Woods may be of value:

"I left New York on the special express, 10:30 A. M., Hudson River and N. Y. C. RR.; reached Utica 6:55 P. M.; took the Black River and Utica RR. for Boonville, and reached Boonville, thirty-five miles from Utica, about 8 P. M. Remained over night at Geo. May's, Hurlburt House; $2 a day; omnibus and porters in attendance to convey passengers and baggage to hotel free of charge. At 8 A. M. I started for the woods and Fulton chain of lakes, twenty-four miles distant, twelve miles over mountains and rolling country, a few miles through deep sandy cuts and over high sandy mountains, to Sand Hill. From this hill to Moose River, about six miles, road very good in ordinary dry weather—good wheelog and walking. Moose River is reached about noon, a very small town, with a hotel near the river. Bark peelers and tanners are the chief inhabitants. Moose River is crossed by an old, wide scow-boat that won first prize in the Harlem regatta—distance, one mile and return; time, seventeen hours fifty-five minutes and forty-five seconds. At any rate, the geatest boy will ferry one across free of charge, unless one feels flush, and can contribute a dime. The sportsman then begins his travels in Brown's Tract. The pleasures of the woods begin here. Do not feel discouraged at the acres of mud and stagnant water encountered in the fourteen miles to Comstock's. The "Forge House," and the fishing and hunting will amply repay you. The road from Moose River to the "Forge House," commencement of the Fulton Chain of Lakes, is the worst I ever saw, not excepting General Grant's campaign from Culpepper Court House, May 4, 1864, daylight, through Virginia, to the surrender, 2:30 P. M., April 9, 1865. The sublime still quiet of the woods is grand beyond description, and affords much pleasure to one coming from the large and noisy city of New York. Nothing is to be done for fourteen miles but to enjoy that supreme quiet which is only found in the woods and on the prairie. Hell Gate is a small body of water to the right of the road, seven or eight miles out, barely discernible through the woods, next the old Arnold clearing, where in years gone by stood a hotel. This is two and a half miles from the "Forge House," over good roads. If one leaves Moose River at 12 M., the "Forge" can be reached in five or six hours, giving ample time in the woods. I have walked it in three hours and forty-five minutes, but I did it when the roads were good, and to satisfy myself that my powers of endurance were as good as when in the army. I presume an ordinarily good pedestrian can walk from Boonville to the "Forge House"—twenty-four miles—in nine hours. Parties going into the woods generally reach the hotel from 5:30 P. M. to 7, from Boonville; but pedestrians should start early, get into the woods before the heat of the day, bring the hotel into sight at four in the afternoon, take a bath in the lake and an hour's sleep before a good dinner at "Comstock's." This is, by all odds, the best kept house in the woods, if one will bear in mind that all supplies must be brought in on the snow. Parties here determine at which lake of the chain they will go into camp.

One can remain at the hotel for $2 per day, 50 cents a day for boats, and $3 per day for guides. Special arrangements can be made much cheaper, according to time or number. At Ed Arnold's, head of Now Lake, one can board in a log cabin at $1 per day, and sometimes can arrange to have a boat at $1 per week—bed and board first class. Nothing can be done without a boat; there are no roads, and, without a guide, one would soon get lost. After a night's rest and a good breakfast at the "Forge," we come to the fishing. There are always from one to six guides at the hotel, who may be engaged ahead by letter. They are all good, industrious, honest men, young and old, earn their three dollars per day with whomever they go, and have been in the business from one to forty years; know the woods, lakes and rivers, how the fish run and where they lie at different times of the year to a certainty. Three dollars per day is the price, board included; but after one has been out a few times they can soon learn to find the spring holes in which the speckled lie without the expense of a guide. One who wishes to travel cheaply can write to Ed Arnold, Boonville, and he can get accommodated for seven to eight dollars per week, boat included. Let him fit out with fly rod, four dozen good, assorted flies, a half dozen eleven feet leaders, good reel and oil line of about fifty to seventy-five feet, all costing from $15 to $35, as one feels he can afford; a pack basket and trout basket, which can be had for $6 or $8; a couple woolen shirts, blue in color, one to put on before leaving home, the other to be packed in basket; a change of underclothing, a common tin drinking cup, needles, thread, etc., and whatever other little articles one may think he needs to make good wear and tear. The whole outfit will weigh from twenty-five to thirty pounds, and should be carried on the back, with nothing swinging below the hips or on the side. Thousands go into the woods who carry a great number of articles they never find use for. A good woolen blanket strapped on top of a pack basket or knapsack will be found indespensable to those intending to camp out in a bark shanty, of which there are quite a number on the different lakes very handsomely situated, and all ready waiting for occupants. Whoever reaches them first is "owner of all he surveys, his right there is none to dispute." A gill of tar oil, to be had in any drug store for twenty cents, kept well corked in a bottle, must not be forgotten, to keep away the punkies and mosquitoes. Tobacco smoke is also a good preventive. The flies last from warm spring until about the middle of August. Without oil of tar I always found it impossible to fish a spring hole. Ed Arnold's I found a very convenient and central place to stop, at the head of the Third Lake, overlooking a beautiful sheet of water, about a mile long and the same distance wide. From the top of the log house one can see the speckled and salmon trout jumping all over this mile square in the early morning, up to about noon every day from five to twenty at a time, in different directions. Arnold's is a couple of miles from Big Moose Carry and Fourth Lake, six to eight miles from Big Moose Lake, which is about five miles long by one wide, very deep in some places, picturesque, handsome and full of speckled and salmon trout, the salmon weighing from one to twenty-five pounds, very solid and cold when taken out of about forty feet of water on a hot day in July or August. Into Big Moose quite a deep, wide stream flows from the upper and Northern end, which is also full of large speckled trout. Big Moose Carry, by way of Fourth Lake, leaving Third Lake and Arnold's early after breakfast, is the route generally taken to the North Branch of Big Moose River for speckled trout. When in the spring holes go into camp in the vicinity of the Indian Hole first night out. Next morning, at the peep of day, fish the Indian Hole, then breakfast, make the carry around the riffs, and, if the day turns out cloudy, fish down the river and up the main branch to Comstock's. Then you are ready for a five-mile run through the First Second and Third lakes, back to camp. A small broiling iron, made of fine wire, will be found very convenient for cooking fish on such an expedition as this. From Camp Arnold a party can go to Little Moose Lake, about eight miles distant, making one carry and return the same day, but will find it much more pleasant to fish the spring holes late, go into camp for the night, and return to camp next day, fishing before sunrise. Fish in any of the other lakes can be taken the same way, returning same day or not as one feels disposed. I speak of this plan more particularly on account of invalids, who may not have the strength to endure the fatigue. Now, as to expenses: Fare from New York to Utica, $5; Utica to Boonville, $1.41; horse to carry baggage and fisherman from May's Hotel to Forge House, $5; May's Hotel, supper, lodging and breakfast, $1.50. I would recommend to those who can walk to do so by all means, as they will feel much fresher next day and more ambitious to take the trout on the fly than if they had come over the rough road horseback. Sixteen dollars will pay all expenses to and from Brown's tract; $26, if one has a horse, both ways. Fifty dollars will give one three or four weeks in the woods, covering all expenses—even $30, if parties travel in threes and six, as the boats cannot well carry more than three at one time. All this small sum of money your doctor and druggist will undoubtedly feel deprived of. FLY ROD.

A VALUABLE RECIPE.—Cut this out and paste it in your hat It may some day save the life of your mother in-law:

"A man who had announced his first attack of rheumatism learned in one-half an hour that the following would cure it: Iodide of potassium, quinine, glauber salts, onions, raw lemons, raw silk, oil silk, gin and tansey, rock candy and whisky, Turkish baths, a potato carried in his pocket, a horse chestnut carried in his pocket, an eel skin around his leg, a suit of red flannel, chloroform liniment, hot lemonade, a trip South, a dry atmosphere, equable temperature, sulphur baths, mustard and hot water, camphor liniment, and electricity."

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—[Ad

Fish Culture.

MIGRATION OF FISHES.—No. 2.

BY G. BROWN GOODE—READ BEFORE THE AMERICAN FISH CULTURAL ASSOCIATION.

MAXIMUM TEMPERATURE.

On the coast of eastern Maine we are told that the menhaden schools keep passing to the eastward until about the middle of July, when their impetus is apparently checked, and their movements for thirty or forty days seem to be local only. During this period the temperature at Portland varies from 60 deg. to 70 deg., this being the height of midsummer. The monthly means for July and August, 1876, were 66 deg. 7 min., and 63 deg. 9 min. The same months at New London are placed at 73 deg. and 73 deg. 3 min.; at Norfolk, 84 deg. 1 min.; June, July and August, at Jacksonville, average above 85 deg., and we have no satisfactory evidence that the menhaden are seen there in midsummer. At Key West the lowest monthly mean is December, at 66 deg. 4 min., in an unusually cold winter.

RANGE OF TEMPERATURE PREFERRED.

These facts seem to indicate that under ordinary circumstances the menhaden prefers a temperature of 60 deg. to 70 deg., Fahrenheit. When the rising temperature of spring has passed the limit of 50 deg. to 51 deg., the fish are certain to appear; and when the falling temperature of autumn reaches that point their departure is equally sure, though a few individuals may linger in water not congenial to them. The opposite limit seems to be marked by the line of 80 deg., or perhaps 75 deg.

An easterly or northerly wind, lowering temporarily the surface temperature, causes the school to sink below the surface. The chill of night also drives them down.

These conclusions are not regarded as final. The movements of the fish about Cape Hatteras are very puzzling, and need to be interpreted by a series of careful temperature observations.

THE RELATIONS OF THE TEMPERATURE OF THE WATER TO THE SEASONAL MOVEMENTS OF THE MENHADEN.

The relations of the temperature of the water to the movements of the menhaden schools having been studied, a new question is at once suggested. When the schools disappear from our coast, driven by falling temperatures, where do they go? The answer must be in the form of a theory, for no one has seen them during their winter absence; at least no one has been able to identify the New England and Middle States' fishes after their departure in the autumn. It is evident that there are but three courses open to our coast fishes when it becomes necessary for them to leave inshore:

1. They may swim out to sea until they find a stratum of water corresponding in temperature to that frequented by them during their summer sojourn on our coast.

2. They may swim southward until they find water of the required warmth.

3. They may descend into the abyssal depths of the ocean, there to remain for a season in partial or total torpidity.

The last of these theories is the least plausible, from the fact that it necessitates the greatest change in habits. The susceptibility of the menhaden to slight changes of temperature has been pointed out. Hybernation in the oceanic depths involves a change of ten to twenty-five degrees colder than that preferred by them in summer, as well as other important changes in respect to specific gravity and pressure.

The hybernation theory is a favorite one with the fishermen of the British provinces, and has recently received strong support from Professor Hind in his treatise on the "Fisheries of North America." His arguments refer to the mackerel, although the scup, tautog and herring are included by implication. He refers to the appearance of the mackerel "with scales on their eyes and blind," and suggests that the winter sleep of fishes is probably much more general than is usually supposed. He takes the position that there are only two alternatives possibly open to fishes which cannot live in cold water. They must migrate south or hybernate. His arguments naturally fall into two categories—those against migration and those in favor of hybernation. Those in favor of hybernation may be summed up as, first, the testimony of fishermen and travelers; second, the quoted opinions of theorizers; third, peculiarities in early and late fish; and fourth, the alleged hybernation of other fishes.

TESTIMONY OF FISHERMEN IN FAVOR OF HYBERNATION CRITICISED.

1. The statements of one M. Pleville le Peley, "an eye-witness," are quoted both from Lacepede and H. de la Blanchere. M. le Peley gravely states that he had observed about the coasts of Hudson Bay "the mud at the bottom of the small, clear hollows, encrusted with ice around their coast, entirely bristled over by the tails of mackerel imbedded in it nearly three parts of their length" (Hind. op. cit. Part II., p. 10, note); and again "affirms having seen in the middle of winter, in deep, muddy bottoms, myriads of mackerel packed one against the other, with one-half the body plunged in the mud, where they remained during the winter. As soon as spring came they aroused themselves from their torpor and appeared always on the same day on the same coast at the surface of the sea, and repaired to favorable spots to spawn" (Part I, p. 78). The absurdity of these statements renders it unnecessary to criticise them. The other testimony is less definite. A Newfoundland fisherman remembers to have heard his father say that forty years before "he had often seen mackerel in White Bay come on shore like squid, with scales on their eyes and blind, about Christmas" (Part I, p. 78); and again a statement quoted from the Rev. John Ambrose that "mackerel have been brought up from the muddy bottoms of some of our outer coves by persons spearing for eels through the ice" (Observations on the Fishing Grounds of St. Margaret's Bay, N. S., by Rev. John Ambrose, and Proceedings and Transactions of the Nova Scotian Institute of Natural Sciences, 1866-7, quoted by Hind op. cit. Part I, p. 79), which statement is not supported by the personal evidence of Mr. Ambrose, being merely a hearsay story. And this is all. Prof. Hind, in Part II of the same work (p. 10) remarks confidently: "That the mackerel spends the winter months in a torpid condition near to the locality where the school first show themselves on the coast has already been adverted to;" and again refers to "the fact already noticed that it is taken in winter from muddy bottoms." I submit that no such fact has been established, and that Prof. Hind's generalizations are without foundation. There is much better evidence to prove that swallows hybernate in the mud of ponds, a theory which has had numerous advocates since the time of Gilbert White, of Selborne.

THE CONCLUSIONS OF THEORIZERS IN FAVOR OF HYBERNATION, CONTINUED.

2. Prof. Hind first quotes from "La Peche et Les Poissons" of M. de la Blanchere. The statement, printed as it is in a single paragraph instead of two, and not given in full, conveys the impression that M. de la Blanchere indorses the views of Pleville le Peley, already quoted. On the contrary, he states explicitly: "The question of the annual and regular appearance and disappearance of this fish is still unsolved." He then proceeds to contrast with M. le Peley's views of Duhamel de Monceau, Anderson and others, who represented that the mackerel pass the winter in the Northern seas, and in spring, beginning their migrations, pass Southward, visiting first Iceland, then Jutland, then Scotland and Ireland and the coasts of Continental Europe, in autumn assembling together for a return to the polar regions. Then he quotes Pleville le Peley and remarks: "This theory associates the mackerel with many other sedentary fishes which pass the winter at the bottom of the sea, stupefied by the cold into a kind of lethargy, and would seem to explain why in October young mackerel of ten and fifteen millimetres are taken, why in winter others of larger size are taken, not with a line, but with nets which entangle those which have not already buried themselves in the mud or the sand." (Nouveau Dictonnaire General des Peches, etc., Part I de la Blanchere; Paris, 1868, p. 183, article maquereau). Another quotation is made (Hind, op cit. Part II. p. 10) from Shaw's "General Zoology or Systematic Natural History," published 1803. Hind asserts "that the four disputed points in relation to the natural history of this fish are there asserted, namely, its local habits, its torpidity during hybernation, the film over the eye, and the fact of its being partly embedded in the soft mud or sand during its winter sleep."

I admit that Shaw asserts the presence of a film over the eye He does not, however, even give the theory or hybernation his personal indorsement, but, remarking that the long migration of the mackerel and herring seems at present to be called in question, continues: "It is thought more probable that the schools which appear in such abundance round the more temperate European coasts in reality reside during the winter at no very great distance, immersing themselves in the soft bottom, and remaining in a state of torpidity from which they are awakened by the warmth of the returning spring and gradually recover their former activity." Even if Shaw could fairly be quoted as a supporter of this theory, his opinion is of little value. He was not a naturalist, but a book maker, and his compilations are acknowledged to be inaccurate. (See a criticism on Shaw's General Zoology in Gills Arrangement of the Families of Fishes, etc., 1872, pp. 40 and 41.)

The opinions of Dr. Bernard Gilpin and the late Rev. John Ambrose, two excellent Nova Scotian observers, are quoted, (part I., p. 79) though with no apparent reason, for the latter remarks only that "it is the opinion of some" that the third run of mackerel, which takes place at St. Margaret's Bay about the first of August, are not returning from the Gulf of St. Lawrence, but from sea, and "it may be that a portion of the immense school, passing eastwardly in the spring, strikes off to some favorite bank outside to deposit the spawn. Or there may be a sort that never go as far east or west as the others, but winter along our shores, etc., etc.," while Dr. Gilpin expressly remarks that though the *asserted torpidity and blindness* favor the idea of hybernation, he does not think that we have yet sufficient proof to assert them as facts.

The authorities, support of the hybernation theory do not, in fact, support it, and the testimony cited by Prof. Hind is merely tradition and popular opinion, some obtained directly, the remainder at second hand.

ARGUMENTS FROM THE ALLEGED HYBERNATION OF OTHER FISHES, CONTINUED.

Still another set of arguments is based upon the supposed hybernating habits of other species of fishes. Prof. Hind remarks: "In seas which are not ice-incumbered the winter torpidity of the mackerel may be of very short duration; in ice-incumbered seas it may extend over several months. In this particular this mackerel resembles the sturgeon of the Caspian Sea, whose torpidity during the winter is well known, and this winter sleep is not confined to these fish, but is probably much more general than is usually supposed." (Part II, p. 11). Here we have a definite statement. The mackerel hybernate, and the winter sleep is not confined to the mackerel.

The only hybernation which is definitely known to occur among fishes takes place in the fresh water lakes and streams of cold regions. The fish are driven by cold into the deeper waters, and there remain in a state of torpor proportionate in degree to the amount of cold which they experience. They may even be frozen up in the midst of a mass of ice and recover their vitality when the ice is melted. Mr. Milner had a mud-minnow (*Melanura limi*) which was frozen in solid ice in the middle of an aquarium globe three or four times, and each time recovered its vitality upon thawing out. Marine fishes in the extreme north doubtless undergo similar experiences, though I am not aware that any record of such a phenomenon has ever been published.

In warm regions an analogous phenomenon takes place, which has been called æstivation. When the lakes and streams are dried up by the heat the fish seek refuge in the deepest pools, and, when these too are dried, they bury themselves in the mud at the bottom and remain torpid until the rainy season refills the reservoirs and revives them. Hybernation and æstivation do not appear in any case voluntary acts. The fish do not become torpid of their own volition. They avoid it as long as they can, and only succumb when they are deprived of means of escape. They never become torpid when there are greater depths to which they can retreat.

(*To be continued.*)

Abstract of the Twelfth Annual Report of the Fish Commission of Connecticut for the Year 1877.

THE limited appropriation of the last General Assembly has restricted the operations of the Commission. The distribution of land-locked salmon fry was as follows to the ponds and lakes where in 1876 100,000 of the same species were planted:

"5,000, Waramung Lake, New Preston; 5,000, Bantam Lake, Litchfield; 5,000, Hog Lake, Lyme; 5,000, Gardiner's Lake, Salem; 5,000, Twin Lakes, Salisbury; 5,000, Wauoscoponus Lake, Lakeville; 5,000, Spectacle Ponds, Kent; 5,000, Square Pond, New Fairfield; 5,000, Snipsic Lake, Rockville; 5,000, Hampton Pond, Easthampton; 5,000, Long Lake, Winsted; 5,000, Wangambourg Pond, South Coventry; 5,000, Balahack Brook, South Windham; 1,000, Salton stall Lake, East Haven; 1,000, Rogers' Pond, Branford; 500 Valley Pond, Woodbridge."

With the exception of the 5,000 destined for New Fair field, arrived in good condition at their various destinations; and of the total number 9,989 died before hatching, and 4,262 before reaching the proper age to be transferred to the waters of the State. There is every reason for great encouragement in the work of introducing black bass. The fish of this variety originally planted some years ago have increased at a wonderful rate, and the Commissioners have during the past year been in receipt of numerous reports of the success of their efforts in this direction. Many bass weighing four and five pounds have been captured from waters which once contained only inferior and insignificant fish. In connection with this topic it may be noted that the opinion expressed in the FOREST AND STREAM of May 17, 1877, that the introduction of bass into the Connecticut was deleterious to the shad fishery, has been amply sustained by subsequent facts, the return for the shad seines in 1877 being fifty per cent. greater than that of 1876.

The principal object for which the Fish Commission was established was the attempt to restore to the rivers of the State the salmon formerly so abundant, and to increase the supply of shad. The results with the latter fish were so successful that Congress was led to the provision of a Government Commission, which has been instrumental in placing shad in the waters of nearly every State in the Union. After much perseverance the Connecticut Commissioners succeeded in obtaining a limited number of salmon eggs, until, in 1874, more than 1,100,000 were placed in the Connecticut. These are to return in 1878 or 1879. Of the appearance of salmon in the river or in the ponds west of its mouth there were several reports during the past season. Much encouragement is to be taken from the success of Massachusetts in the Merrimack River salmon stocking, a report of which from Com. Brackett is embodied in the present report. Much complaint is justly made of the futility of the efforts on the part of the Commissioners, so long as the present abuses by fishermen with gill-nets are not corrected. This is a matter demanding new legislation, and as to the proper regulations to be enforced the Commissioners suggest:

"1st. The time of fishing for shad should be so changed that none could be taken except between March 15th and June 15th of each year.

"2d. No salmon should be taken in any of the waters of this State previous to July 1, 1880. If statutes should be enacted as suggested, even then the work would not be complete.

"Experience has shown that they must be enforced, and this can only be done by employing honest and fearless men who will devote their whole time to it during the fishing season, and of course a sufficient amount of money must be appropriated to pay them for their services. The simple question is, whether the money which has been devoted to this work by the State during ten years shall be sacrificed to the rapacity of a few fishermen, or whether Connecticut shall have an equal chance with her sister States to test the success of the labors of her Fish Commissioners."

THE BLACK BASS OF CAPE COD, MASS.—WHEN AND BY WHOM THEY WERE INTRODUCED.—*Mr. Editor:* The first talk of the introduction of the black bass in Southeastern Massachusetts, was at the summer mansion of the late Samuel T. Tisdale, at Agawam, East Wareham, on or about the first day of August, 1849. Prominent among the guests was the late Mr. Preston H. Hodges, then the landlord of the Clinton Hotel, located on the east side of the City Hall Park, New York. After the feasibility of moving live bass from some Western lake to Wareham was duly considered, Mr. Tisdale made the following proposition to Mr. Hodges: "In the proper season next year, 1850, if you will procure the fish (bass) at some convenient point and convey them to Wareham, I will pay all bills, except your time, which you must take from the fund of amusement consequent in the capture of that historic game fish, which, to me, is a stranger." Mr. Hodges accepted the proposition, and on the 15th of the following June he put out for Saratoga Lake, with necessary tackle and tanks, and commenced operations, and readily captured twenty black bass, and started by rail for Wareham. On his arrival at Springfield, Mass., the vitiated water was drawn from the tanks and fresh iced water introduced in its stead, and, strange to relate, in a few moments every fish turned up dead. Of course this was a sad disappointment, but Mr. Hodges took the first train west for Saratoga, and again was successful, as he captured twenty more bass in a reasonable time, and again shaped his course for Wareham, via rail to Albany, from thence by boat to New York, where he changed the water; and taking a stock of cochituate, embarked on a Fall River steamer to Fall River, from thence by rail to Agawam, East Wareham, where he arrived with his nineteen bass (one having died on the trip.) These fish were placed in the Flax Pond, a small sheet of water near Mr. Tisdale's residence, at 10:45 o'clock A. M., on the 4th day of July, 1850.

The next year, 1851, about the same number of bass were introduced in other waters in this locality by the same individual. The increase of black bass is truly wonderful; it is probably due to the great amount of food our waters contribute to their voracious appetite, and by their hardy habit. To-day, more than one hundred lakes, ponds and rivers in Eastern Massachusetts are populated from this early private enterprise.

Rhode Island and Connecticut are also reaping a harvest of fish, due to the enterprise of two men, whose names should be enrolled in the history of fish culture. It would be useless to write at length concerning this truly game fish, as he is too well known to the readers of the FOREST AND STREAM AND ROD AND GUN for me to relate anything new in his nature and habit.

I have never taken a bass here over four and one-quarter pounds, yet, it is not uncommon to see larger ones, and there are reliable reports that several were taken last season weighing from six to seven and a half pounds.

Of course, in my life I have angled with a great variety of rods, say beginning with an alder stick, white cedar, hemlock, birch, and so down with the pace of time, of numerous artistical joint rods of domestic and foreign make, but I am frank to confess that I never have handled but one rod in my life.

On one of the last days in September I went with a friend for black bass, when he proposed to change rods. I at first declined, as I feared I would injure his rod, but as he insisted, by complimentiug me on my experience, I accepted the proferred exchange. The rod was a Leonard make, of eight ounces, split bamboo. I made a few casts when something lively struck my bait, and when satisfied I had the lad hooked I allowed him a short play. On account of snags, and being assured I had a lively customer to contend with, and what to me seemed a frail rod, with all his stubbornness I raked him to my feet, netted and landed him in what I thought was good style, and he proved to be a black bass of three and a quarter pounds weight. This, to me, seemed a thing of life, in comparison with anything I had ever used.

I never take a black bass from the water void of a reverential thought of Mr. Samuel T. Tisdale, really the prime mover and benefactor to the sporting circle of this community, by the introduction of that fish, a patrimony for all time, without money or price. I hope no man—in fact, no true sportsman—will take black bass or any other game fish during the close season; but, perchance, there be such in our community, they are unworthy the name of man, and much less the honored name of a sportsman, and they should be infamously branded by the true sporting circle as frauds. CYRUS LISCOM.

Wareham, Mass., March 6.

CARRYING COAL TO NEWCASTLE.—That is what it seems at first thought. Mr. E. S. Marks, one of Seth Green's efficient helpers, has visited the State hatchery at Caledonia for the purpose of taking back to the Felton chain of lakes about 200,000 brook and salmon trout, 100,000 of each. In the hatching-house near the Old Forge House 200,000 frost fish are to be hatched and placed in the waters. The advantages of this location for hatching purposes are now so apparent that it is considered certain that the State will establish a permanent State Hatchery there, to supply all the northern quarter of the public domain with fry.

—The number of whitefish spawned at the Wisconsin State Hatchery this season will approach seven millions.

—Esopus Creek, Kingston, N. Y., has been stocked with black bass and yellow perch.

MINNESOTA.—Wm. Golcher, one of the State Fish Commissioners of Minnesota, has resigned his office and gone to California to reside. The vacancy is to be filled by the Governor. Dr. Robt. O. Sweeny is the present sole incumbent in the Commission.

—The French Society of Acclimatization, of Paris, has just acknowledged the receipt of a shipment of brook-trout eggs from Seth Green. They were first packed in the usual manner and then placed in a refrigerating box, and that arrived in excellent condition.

Natural History.

HABITS OF THE RUFFED GROUSE.

EDITOR FOREST AND STREAM: MONTREAL, Feb. 8, 1878.

The days of my boyhood were spent near Sheldon, Vermont, and in my youthful rambles, gun in hand, through the forests that surrounded my native home, I fear that I was an inveterate young pot-hunter, for it was my favorite sport to stalk and shoot the cock grouse on their drumming logs—a feat that requires no small amount of patience and stealthy creeping. I remember one day, when I was following through the underbrush and trying to get a shot at a drummer that had run off from his log, before I could draw a bead on him he ran toward another drumming log that was also occupied by a male grouse. As the first one approached I saw the possessor of this log set his feathers up on end and draw in his head, spread his tail out like a fan over his back, and with wings also spread and hanging down by his side, he slowly strutted along the log in a style that would have caused any beholding Thomas *Gallopavo* to have died with envy. At his appearance, the bird that I was following made himself as small as possible, and darted rapidly away through the brush. The occupant of the log, after turning several times slowly around, lowered his crest and started in pursuit of the intruder.

Some years after this occurrence I was tracking on the snow a covey of grouse. When I came in sight of them they ran into a spruce thicket, and as I approached this thicket one of the birds came out and slowly approached me with feathers up on end, and with wings and tail spread, looking like an animated ball of feathers. I watched his actions for a few moments as he strutted toward me, turning slowly from side to side, then I knocked him over with a charge of No. 6 shot. He was an unusually large old cock-grouse, evidently the patriarch of the flock. Three years ago last November, while shooting grouse in the woods that border the Black River, at the rear of this island, I passed over Mud Creek into a narrow strip of bush that covers the point of land between the creek and river, where my spaniel flushed a grouse, which, with feathers up and head drawn in close, fluttered slowly along toward me in a wavering, hesitating manner, as if he had a half mind to stop and give battle to his disturber. After he had passed me I covered him and pulled the trigger. Snap! a miss-fire, and the bird dropped into a thicket of sage-brush and wild grass. I replaced the defective cartridge with a fresh one, and sent my dog to put the bird up again, but though he coursed that patch of brush through and through he failed to find his game again. The following autumn I had a similar occurrence happen me. When shooting grouse on the burnt lands that lie north of the river St. Maurice, a few miles above Three Rivers, my dog flushed there, out of the ferns, a grouse similar in appearance to the last one mentioned. I took a double shot at him at a long range, and saw him slowly settle into the ferns, not over fifty yards from where I stood. I instantly approached the spot and remained in its vicinity for nearly half an hour, while my dog worked over every yard of the ground around me, but failed to find any trace of the bird. Both of the above cases puzzled me not a little, as my dog had a fine nose and was well-trained to work on grouse. Their unusual appearance I could readily understand, for it was the same antagonistic spirit that caused them to set their feathers up that makes a "Tom Turkey" spread himself and a cat to get her back up when angered, to make themselves look as formidable to their foes as possible; but the failure of my dog to find those birds the second time was a mystery to me, and probably would have remained so until now had I not seen it clearly proved through the columns of your valuable journal that quail are gifted with the power of withholding their scent, and there is no reason to doubt but that other species of gallinaceous birds are also endowed with the same power.

STANSTEAD.

ST. PAUL, Minn., Feb. 11, 1878.

EDITOR FOREST AND STREAM:

As I have noticed various discussions in the FOREST AND STREAM about the drumming of the ruffed grouse, and have found none to correspond with my experience, I will herewith give you my observations regarding the above. Upon carefully approaching the birds, I have found them sitting lengthwise on a log, and when in the act of drumming they would lie down close on to the log, with their head and neck stretched out, flapping or striking their wings against the sides of the log, which, it seemed to me, caused the drumming, and I think my theory is correct, as I have seen them plainly in the act.

Truly, yours, J. P.

Our correspondent, Mr. Joseph Scott, writes us as follows:

Your correspondent, "R. T. M.," in your issue of January 24, calls the attention of correspondents to the fact that the ruffed grouse in the western part of New York will almost always alight on a tree at the end of its flight, while in Connecticut it very seldom does so.

As to the above, I know nothing of the habits of the ruffed grouse in the places mentioned, but I do a little in Muskoka, where it will invariably alight in the trees in the month of September, when the birds are young. Later on, say November, when the young ones are strong on the wing and wild, they will often alight on the ground. I have often flushed them as many as three times before they would alight on the trees.

I noticed last fall that they refused more than I ever saw them before to alight on the trees. What the reason was I don't know, unless it was because the ground was more free from snow than any previous year to my knowledge.

Our Hartford correspondent, "T. S. S.," gives his experience of king partridges in the following words:

I notice recently several references to "king" partridges. A year ago, a friend of mine came home with a small bag of game, and accounted for the fact by saying that he had spent the afternoon chasing a "turkey." Upon being called upon to explain, he said he had seen a partridge as large as a turkey, but could not secure it. The following day I went with him after the phenomenon, and sure enough we found her. She flushed wild, but I marked her course, and on following, Bob pointed her near a fence cover. She gave me a fair shot, and I bagged her. We had no means of weighing her, but I should think she would weigh 2½ lbs.. Was it a "king partridge?"

KING PARTRIDGES.—*Mr. Editor:* Much has already been written on the ruffed grouse question, but "the pen is mightier than the gun," and I think the birds can stand it if you can. I am another of these favored mortals who have seen the "king" partridge, and as I find there are people who give the theory credulity, I will tell you what I know about kings. On one of the islands of Lake Winnipesaukee, in a warm day in March, I passed through a belt of timber, and, coming into the open on the sunny hillside, saw, about 100 yards from me, what had all the appearance in size and style of a cock turkey strutting in the fullness of his pride. Ah! thought I, some lover of solitude has chosen this island on which to enjoy his political views and eat his roast turkey undisputed. While looking about me to discover other signs of civilization, I was soon discovered, and a whizzing of well-known wings announced the sudden disappearance of my supposed gobbler; but as he flew away in a very unkinglike manner, accompanied by his mate, he appeared no larger than the average bird. This was in days before the era of the F. & S., so I did not then know there was a race of kings in the family of *Bonasa umbellus*, although I had heard stories of the mother of invention and the father of all rabbits, etc. Several interesting items in F. AND S., in relation to shooting the ruffed grouse with the rifle, call to mind an incident which happened in the Maine woods where the birds were tame. I was shooting at their heads strictly. One old fellow sat on a limb about forty feet from the ground. My first shot missed, but the bird ducked his head and looked inquiringly over and about him, wondering what was in the air. In the meantime I had ready another cartridge and put on him again. This time he dropped on to the ground. On picking him up, imagine my surprise at being unable to find blood on him or a feather disturbed; but a slight bruise on the side of the head showed where the bullet grazed as it passed, causing instant death. My experience has been that, where the birds were wild, if flushed late in the fall they generally fly a longer distance and alight on tree-tops; and O, shades of departed kings, how many times I have put on them with an ounce and a quarter as they whirled through the foliage; expressed the usual lament that so many wounded birds hide away and die, while they probably were looking around for their supper! M.

Bromfield House, Boston, March 12.

SQUIRRELS AND EMASCULATION.

ROOM OF THE DIRECTOR OF THE MUSEUM.
Buffalo, Feb. 23, 1878.

EDITOR FOREST AND STREAM:

I have read the letters in your very valuable paper with regard to the emasculation of the squirrel, noticed by hunters. It seems to me clear that the greater number of reported cases of emasculation are founded on specimens in which the testes are actually present but temporarily concealed in the body. Where the testes have really been destroyed, I suggested to Prof. Linden that it might be the work of *Œstrus emasculator*, or an allied species of bot-fly. The natural history of these parasites is not well known. As to how many species we have in America, we shall know more when Baron Osten Sacken's Catalogue is published, of which the manuscript is nearly finished, as the author informs me in a recent letter from Heidelberg. But that a fly really emasculates the striped squirrel (*Tamias striatus*) seems certain from Dr. Fitch's observations. The doctor reared the fly from grubs found in the testes, which were completely eaten out. Dr. Fitch suggests that the squirrels endeavor to kill the grubs in the testes of infected individuals, and this action has been mistaken for an unfriendly act of castration. The suggestion that the grubs could not penetrate the outer envelope of the testes seems to me disproved by Dr. Fitch's experiments; besides, insects are well known to penetrate more dense and longer substances. I think we must wait for more facts in the matter. First, we must have truly emasculated red and gray squirrels; secondly, we must find out if this condition is caused by a bot-fly; thirdly, we must find out if this fly is the same as the one found by Dr. Fitch destroying the testes of the striped squirrel. Dr. Fitch seems to have adopted the belief that all the stories of emasculated squirrels were true. We may find, however, that the cases of emasculation are comparatively rare.

In the meantime it is evident that FOREST AND STREAM has added to the numerous obligations which naturalists already owe it, by clearing up many misunderstandings in the present matter.

Very respectfully, A. R. GROTE

BUFFALO, N. Y., Feb. 25, 1878.

EDITOR FOREST AND STREAM:

This controversy has at least exposed the fallacy of the popular, but utterly unsupported, belief that the castration is performed by the attack of the pugnacious red squirrel on the older animals of the same species. Emasculation, however, means *destruction*, not periodical dislocation, by passage of the testes through the inguinal canal, which normally and abnormally may happen in other mammals, man including. Later evidence adduced by examination of duly emasculated squirrels will prove the correctness of Mr. Fitch's observation, based upon the facts before him in the form of the grub of the *Œstrus*, and the appearance from it of the perfectly developed insect. In conclusion, I cannot help but think lightly of the feeble obstruction offered to the progress of the boring larvæ by the protective envelope, *tunica vaginalis*, when thinking of the powers exerted by many boring grubs, to which not even several inches of solid intervening wood offers any impediment whatever, as illustrated by the ravages upon timber through the agency of many species of beetles, such as *Curculio* and *Bostrychus*.

Yours most truly, CHARLES LINDEN.

BALTIMORE, February 23, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I have been much interested in your articles regarding the so-called emasculation of squirrels. During the past two years I resided in a neighborhood where squirrels were numerous enough to be a pest to the farmers, and a merciless warfare was therefore waged against them the year round. I am of the opinion with you that the testicles are not wanting, but only not discernible at certain seasons. At all seasons of the year I found the greater number of squirrels shot—both fox and gray—to be males; and in spring—say from April 1—nearly every one of the full grown males appeared devoid of testes, and the young, until about half grown, entirely so. In the fall I don't remember seeing a single *full grown* male on which the organs were not fully developed. I have frequently seen a number of gray squirrels on one tree, some seemingly engaged in combat, the objective point of attack appearing to be the testicles, but have never observed any wound. Once, last fall, shooting two squirrels engaged in this manner, I found them to be a male and female. This is the only instance I remember of shooting *both* animals whilst so engaged, as I ordinarily hunted them with a rifle. But may it not be that these apparent combats are a part of the amours of squirrels? Respectfully, FREDERICK.

EAST BAY, Mich., Feb. 4, 1878.

EDITOR FOREST AND STREAM:

My first experience on this subject was in the year 1840. In the spring, when young squirrels were making their appearance, I was out hunting, and had sat down to rest and take my lunch. While doing so, seven young gray and black squirrels made their appearance near me on an elm tree, and commenced eating buds. Before I finished my lunch, an old gray squirrel went up the same tree and commenced chasing the young ones, and caught several of them in a very short time, which brought to my mind what I had often heard said, that the red or pine squirrels destroyed the testicle in the black and gray. I killed the entire lot, eight in all, but was careful to take the old one first. The old one I found to be a male, and three of the young ones were males, and had been castrated, the blood still running from the wound. The other four were females. I have seen the same thing take place several times since, but never by a red, and it was always done by old ones upon the young; but I have good reason to, and do believe that the rest do the same thing, from reliable persons of my acquaintance that have seen them do it. I noticed in an article signed "Chill," a question asked, "Why is it the black is the only victim if it is an insect?" I agree with "Chill" in reference to the red, but have seen as many of the gray as the black affected in that way.

I must confess that I am not much of a believer in the insect, as I have never found it in that part of a squirrel. Where I was raised we called it a warble, which I suppose is the same thing, and I never found any such a thing on a young squirrel in the spring, but always on the old or full grown in the fall. W. H. C. MITCHELL.

NEWARK, N. J., March 5, 1878.

EDITOR FOREST AND STREAM:

I have taken young squirrels of different families from the nest up to the time of weaning, and never yet found them injured. I think that the idea that the old ones perform any operation on them is absurd. After the young ones leave their parents, however, all family ties and affection cease, and the son is as apt to be mutilated by the father as by any other squirrel.

From observation of the fights of grays, I am convinced that they emasculate each other. A friend of mine, a thorough naturalist, raised a family of three squirrels by means of a nursing-bottle. One, a buck, at one and a half years of age had testes fully developed and apparent. A family of grays lived unmolested in a tree almost overhanging the naturalist's house, and one day the young buck escaped from the house and ran up the tree. In less than twenty minutes our young specimen returned a mutilated squirrel. Reds are more agile and muscular than the grays, can dodge better, and give a heavy blow or thrust edgewise, and in a short time they drive from a grove almost all grays, and emasculate the unfortunate remainder. My friend, also, had a pair of grays, which reared a family in captivity. I state this, because many deny that squirrels breed in captivity.

I believe there is great diversity in the time or age of maturity in squirrels. I have shot two males of the same family exhibiting the greatest difference, and I think there is no uniform rule. A few years ago I took from the nest three grays not a day old. A cat with kittens received one of them, contrary to all rules, and reared it along with three of her own litter. The kittens had the greatest affection for their foster brother, except at dinner time, when a fierce battle for an available teat invariably took place. However, this young Romulus grew and prospered, and it was not until when he was eighteen months old that I could pronounce him a buck. Others I have seen fully developed when about a year old. I do not think the *Œstrus emasculator* has any more to do with mutilating squirrels than the numerous fleas which inhabit their downy coach. In some parts of America I have found this grub on almost every squirrel, especially reds, in others not at all, yet the number of those emasculated was about the same. In conclusion, I would say that I have seen so many exceptions to Owen and Huxley's rule that I think there is no fixed rule at all. I have had dozens of red in captivity during the breeding season, and dozens during other times; have shot many of these captured ones, and on dissection found as various results as could be imagined. Two male reds, known to be of the same litter, were dissected, and the testes of one was found securely hid under the skin, while those of the other was apparent without dissection. There is, therefore, no general rule, but I am inclined to think that congenital malformations are more numerous in squirrels than any other animals. C. H. CROW.

[We are glad to be able to publish the above communication from Prof. Grote, and we recommend his suggestions to our correspondents. Opinions are all very well, but they are in no sense evidence. What we want in this matter is facts; and not only facts, but facts established by close and accurate observation, not by a hasty jumping at conclusions. Until we can obtain something more definite than mere expressions of opinion, then we shall consider the discussion closed, to be reopened only for the admission of absolute evidence.—ED.]

BIRDS' NESTS IN UNUSUAL PLACES.—*Ames, Iowa, Feb.* 11.—In your issue of Jan. 31 I notice an account of a nest of the common robin built upon the ground. I can add another instance of the kind which came under my observation in the State of Massachusetts some twenty years ago. In this case the nest was placed at the foot of an apple tree, between the swell of two roots, upon the down-hill side of the tree, which stood upon a steep hillside. I discovered the nest when in the process of building, and watched it closely till the young flew away. F. E. L. BEAL.

—We have received from our frequent correspondent, Mr. G. H. Ragsdale, of Gainesville, Cook County, Texas, samples of his bird skins, Painted Bunting (*Plectrophanes pictus*), and Lecontes Sparrow (*Coturniculus leconteí*). The skins are well made, and the prices at which they are sold are reasonable, being for *C. leconteí*, $1 25, and for *P. pictus*, 40 cts. Ornithologists desiring bird skins from Texas will do well to communicate with Mr. Ragsdale.

DEATH OF THE HIPPOPOTAMUS.—It is with regret that we announce that "Baby," who was born in 1876, on the Nile shuffled off his mortal pachyderm on Tuesday, at the Aquarium. His graceful waddle, his open countenance will be seen no more. Dr. Kohn, his mentor, is disconsolate; so is the milkman who supplied the baby hippopotamus with the lacteal fluid by the can.

THE NAUTILUS IN FLORIDA.—It has been doubted by some naturalists whether the Argonaut, or paper Nautilus, occurs on the Florida coast. Two paper shells have been found here this winter, and last winter one was found with the animal entire, besides another empty shell. Its *habitat* is probably in tropic seas, but it is sometimes brought to these shores by storms. In the Indian Ocean I have seen it in calm weather sailing on the surface, as described by old writers, but discredited by closet naturalists of these days. S. C. C.
Halifax Inlet, Fla., Feb. 17, 1878.

THE MILD WEATHER.—*Boston, Feb.* 15—*Editor Forest and Stream:* On Wednesday last, Feb. 13, I saw two American goldfinches flying about my garden. I recognized them first from their song, and on investigating saw them on a clothesline. Their predominant color was clear yellow with black on the wings, and on taking flight they had their usual manner of first falling and then rising, uttering their usual song while flying. I have been much interested in ornithology and oology for some years back, but I never knew this bird, which is always very late, to arrive in the spring, rarely coming before June, and I have found their nests with eggs as late as the 10th of September. The day was pleasant; thermometer about 30 deg. Is not this something rather unusual? H. D.

We think not. This species habitually winters as far north as Connecticut, and in mild seasons, like the one just passed, might well be seen occasionally in Mass. Another correspondent, Mr. Chas. J. Henri, writing from Cincinnati, says:

Robins (*Turdus migratorius*, Linn.,) made their appearance in Avondale, a suburb of this city, on Thursday, Feb. 7. This is some days sooner than usual.

CAZENOVIA, N. Y.—Please record for March 7th to 9th of this remarkable spring as accompaniments of warm sunny days, butterflies, honey bees, grasshoppers, all the early birds, a tadpole and pussy-willows, in silken fur, and crocuses in bloom. It may be that fickle Spring may ring on changes of far less pleasant character, but her favors need not be forgotten. The duration of ice in the lake has been shorter by en weeks than in seven winters. L. W. L.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

SPRING FLOWERS.

SPRING flowers will soon paint our fields and woods, enliven our garden, gladden the hearts of children and cheer the paths of older people. Their freshness, brightness and modest beauty rivet greater appreciation than the more gaudy summer belles, and surely they are by far the most accommodating. Many of them come into blossom and are past before arboreal vegetation is clothed in leaves; hence, though they may occupy the shadiest positions in summer they may have sunlight sufficient in spring. They require little or no nursing in the way of cultivating, staking or watering; merely plant them once, keep rank vegetation in check so that it may not choke them, and let them alone; they will take care of themselves and annually become stronger and more beautiful. In fact, in many gardens there are places so densely shaded with trees as to be unfit for summer flowers. Well, spring beauties are glad of such a home. High, dry, gravelly soils are averse to their tastes; they love to revel in good, free soil, enriched by vegetable mould or decayed leaves, but they are in nowise particular.

Conspicuous among the earliest bloomers are Snowdrops and Crocuses, whose proper places are studded about on the lawns, under trees, near the roots of bushes, and maybe here and there a clump in the garden border. Daffodils and Jonquils soon follow, and may be naturalized in half wild places, or together with Grape Hyacinths, Siberian Blue Squill, Crown Imperial, Guinea-hen Flower and Solomon's Seal, planted in clumps in front of shrubbery or in the borders. Hyacinths and Tulips are mostly used to fill up the flower beds prior to the advent of Pelargoniums, Coleuses and other greenhouse paraphernalia; and about the end of May they are removed to some out-of-the-way place till next October or November, when they are again transposed to the front. This double shifting enervates the bulbs; better plant them in permanent clumps in the mixed border. Some growers advocate planting "Dutch" bulbs so deeply that they will be beyond ordinary digging depth, and thus they may remain unmoved without interfering with the summer inmates. But I do not practice this method myself nor recommend it to others.

Spring Beauty is too tiny and pretty to scatter about. Keep it—also the Violet Oxalis—in little masses in choice shady places, and with a stout peg mark their whereabouts for the summer, otherwise, after they lose their leaves, they may be inadvertently disturbed or lost. European and American Dog-tooth Violets only require a moist, shady nook and good ground, where they can run wild, to exert themselves to rank luxuriance. With them the Ten-o'-clock and Spring Snowflake may also associate and be happy. Lily of the Valley likewise loves a somewhat similar place, and to be left undisturbed; it will take care of itself and increase mightily as well. It will also thrive rankly and flower more profusely when grown in sunny spots.

The May Flower, or Creeping Arbutus, I love to see in the woods, and I leave it there, as it refuses to be comforted in our garden. Twin-leaf, Mandrake and Birthroots enjoy shady locations and good soil, as among bushes where there is an annual accumulation of decaying leaves, or they can be grown to advantage in garden borders or half wild places. Bloodroot—a beautiful white flower—relishes somewhat similar conditions, and likes particularly to ramble in the shady portions of an old rockery or rootery. The creeping Forget-me-not, so productive of pretty white-eyed blue blossoms, prefers to be naturalized along the garden fences, at the foot of old walls, among the bushes, or to share the room with Bluets on a moist bank. It is also an excellent subject in rockeries, rooteries or borders. Hepaticas, both single and double, are perfect gems, hardy as dandelions, and they bear their exquisite blue, red or white flowers in great profusion. Christmas Roses are not so intrinsically beautiful as they are desirable on account of their earliness to blossom, the white flowers often expanding as soon as thaw unlocks the surface of the earth. If the plants be protected with a mulching they often flower and are past before the covering is removed—say in March. The purple-flowered kind is not so pretty as the white, neither does it open quite so early.

Moss Pinks will grow anywhere not in a bog, and though desirable for a place in the garden I never saw them look sweeter or more appropriate than in interlacement with Bluets, Violets, Canada Lilies and other wild flowers on a grassy sward in a New England old country graveyard. For snowy patches few plants can excel the White Arabis or Rock Cress—a free growing but dwarf habited plant equally at home in the border or rockery. After the same fashion is the yellow Rock Alyssum, and the blue or violet Aubrietias, but the latter particularly prefer the rockery and a slight winter covering. The Spring Adonis has pretty yellow blosoms and feathery leaves, as has also the Winter Aconite, likewise a yellow flower and the earlier of the two. European and Asiatic Globe flowers, the one with orange and the other with yellow blossoms, may also associate with them, and they are all desirable garden plants for the border, rockery or shrubbery bed. The single and double flowering Marsh Marigolds (erroneously called Cowslips) are worthy the damp est corner. The Golden Corrydalis and better still the hind called O. nobilis are almost indispensable; they have fern like leaves and yellow flowers that are freely borne from spring all through the summer. In this course they have good company in their relative Dicentra exemia, with pink-purple flowers, but otherwise of somewhat equal size and habit. Next of kin to the last named is the Bleeding Heart, a native of Northern China, and one of the loveliest and most graceful of hardy herbaceous perennials. Stellaria Holostea, a species of Starwort Chickweed is a complete sheet of white in May, and it grows quite freely; it likes a moderately moist soil and just a little shade. The Smooth Lungwort, with its profusion of raceme-like clusters of light blue flowers, is one of our handsomest spring plants, and if grown in the border it should have its place marked as it soon dies down after blossoming. Wood Anemones are modest little beauties, but there is a double-flowering variety which is showier and more suitable as a garden plant. They grow well under ordinary conditions, providing they be not in too sunny places. The shrubby or evergreen Candytufts bloom very profusely and should find room in every garden. They are Europeans, but are among the finest of hardy perennials.

Our Stemless Lady's Slippers, so abundant in moist and sandy woods, are very fine garden plants, and may be successfully transplanted even when in flower-bud. Grown in pots or pans in cool greenhouses they do splendidly. False Solomon's Seal, notwithstanding its commonness, repays a position in a rootery or rockery, or in some natural-like place; its white flowers are so neat and plentiful in spring, and its red berries in the fall. Epimediums bloom freely in spring and feel equally at home in sunny or shady places, in the border or rockery. Two years ago I found a patch of Sedum ternatum in a half-wild place here. It was bursting into flower, but I lifted it and replanted it as a border to a walk underneath the shade of some trees, and more vivid beds of white we could hardly expect to see. Of Columbines we have an immense variety of species and varieties, beginning with the Canada red and ending with the Rocky Mountain Yellow. They grow readily from seeds or division, bloom quite gayly, and are worthy a place in the choicest garden. Tree Pæonias and single and double-flowering Common Pæonias are gorgeous garden plants, and no less conspicuous is the brilliant Oriental Poppy. We do not find the mossy Saxifrages do very satisfactorily, but the large-leaved sorts, as S. crassifolia, cordata, etc., grow and flower splendidly. The Californian Umbrella-leaved Saxifrage bears two-feet-high stems of pretty blossoms, but they are rather transient, scarcely lasting a week. After the flowers, arise the noble leaves which comprise the chief attraction of the plant. It likes moisture, and luxuriates by banks of streams. Stonecrops make a dense carpet of gold, and require a sunny place. The Periwinkle or Myrtle as it is wrongly called, blooms freely and makes perhaps the best living edging for very shady places, and its neat habit and fresh evergreen leaves render it a favorite subject for cemetery planting. Of Native Violets we have a number of species and varieties presenting different shades of blue, yellow and white blossoms, and which make desirable garden plants providing they get a moist, shady nook. The Sweet Violets are barely hardy, but the slightest cold frame protection in the winter time amply rewards us in spring. Pansies are best treated as frame plants, but they also do well in north-facing borders, where they are benefited by a light protection in the way of evergreen branches or some sedge-grass. English Cowslips and Primroses amply repay similar care. In frame quarters I do not know of any plant that proves more satisfactory than the Polyanthus; and who could deny that sweet old favorite, the Wallflower, an equal chance?

The European Heather, Erica carnea, as clumps or belts in shrubbery borders has few equals; it sets its blossom-buds in fall and opens its myriads of purple bells in early spring. In exposed places it likes the protection of a few evergreen branches in winter. Daphne Mazereum is a little shrub not much bigger than a common herbaceous plant, but in earliest spring its branches become clothed with purple, rose-colored flowers, which are soon succeeded by brilliant red berries. It will grow anywhere almost. Another species, D. Cneorum, is a low spreading evergreen that is covered with terminal clusters of handsome rose-pink blossoms in early spring, and they bloom again in the fall. As clumps in the front of shrubbery borders or edgings to Rhododendron beds they are very appropriate. If the young branches be layered every year they will become greatly invigorated, and if need be yield great increase.

WILD RICE.—Applications for wild rice, and inquiries as to the best method of cultivating it, come thick and fast. We will therefore here say to all, that we do not think that a particle of wild rice can now be bad. The little wild rice that is harvested is gathered by the Indians in the fall, on special order, and Mr. Thomas Cantwell, of Brainerd, Minnesota, who was kind enough to secure a small lot last year, was early obliged to announce that he could fill no more orders, the crop being almost a total failure. If there is a good crop next fall, he promises to secure a large quantity.

The fall is the natural season for planting the seed, as wild rice sows itself; but the spring is equally favorable. We have repeatedly, within the past four years, printed instructions for the culture of wild rice; but so long as we can aid the cause of game production, we will continue to repeat them at intervals, in indulgence of the forgetful, and to benefit those who may never have seen them.

For planting, rice should be gathered when "in the milk," or, more properly speaking, before it gets too ripe to shell. It should be stripped off the stalk, and not pounded off; and planted anywhere where there is mud and water. As soon after it is picked as possible, if dry enough to sink, it will take root, increase and multiply, like Canada thistles. Where it is desirable to sow rice on ground not muddy, a strip three or four feet wide can be chopped around the margin of the pond with a hoe. The first rise of water will soak the seed and cause it to sprout and take root.

Mr. Cantwell has described in a contemporary the Indian method of gathering rice. He says:

"Wild rice, so called, is, in the opinion of several observing friends, a member of the oat family, and grows in vast quantities in nearly all the lakes and ponds in the northwestern part of this State. It ripens generally about the first of September, and the annual rice harvest is a sort of jubilee time with the Indians. They make arrangements some time ahead, get their outfit, kettles, pots, pans, squaws, pappooses, guns, dogs, etc., and start in their canoes for some rice lake—the nearer the better, for the 'noble red' abhors work. On arrival at the lake, the squaws and youngsters put up the 'tepees,' or conical shaped pole shelters, covered with anything that is handy, or that they may have with them, while the lordly bucks bask in the sun, and find fault with everything in general.

"Ducks are always plenty about a rice lake, and the head of the family, when he gets hungry, pot-hunts mud-hens along shore.

"When the 'tepees' are finished, the squaws, generally two in each canoe, start out into the rice, and as they move along they grasp handfulls of stalks, which grow high above the water, and deftly bind them together with strips of basswood bark. This causes the grain to ripen quicker; and every bunch tied up belongs to the squaw who tied it up. In a few days, when fully ripe and dry enough to shell out, they move out among the bunches, with a blanket stretched along the bottom of the canoe, bend the bunches over the side of the boat, and pound the rice out with a stout club. When sufficient for the day is gathered, they go ashore, and partially roast the rice, which causes the husk to open, so the rice will drop out. They then winnow it, and the rice is ready to eat."

We wish we could give our readers as satisfactory an answer with regard to the culture of wild celery, which is inquired for.

TEA CULTURE.—The cultivation of tea is still an experiment in the United States. Possibly we may yet succeed in producing tea leaves of a flavor superior to the best of that imported from the Flowery Kingdom. Does not the same sun shine for all? During the past year the Washington Department of Agriculture, at Washington, distributed over 20,000 plants, grown in the greenhouses of the Department. Three hundred pounds of seed have been lately sown, with a view of extensive distribution in the Southern States.

FARMING IN MINNESOTA.

E. F. WARNER, Esq., Supt. of the Am. Express Co, at St. Paul, has purchased several thousand acres of fertile prairie in Minnesota, and will at once enter, in conjunction with other gentlemen, upon one of the most stupendous farming enterprises in the West. What the chances of success are in this pursuit may be gathered from the following very carefully prepared table, which has been most considerately furnished us upon application by a gentleman who has been in Minnesota for twenty-one years, and has not only planted grain over vast areas of prairie, but also numerous colonies of Swedish immigrants who are now well-to-do and prosperous. We may say, literally, that the statement has been obtained by us in response to a query from a subscriber relative to the subject. We shall be most happy to bring any of our readers into personal communication with the gentleman referred to, who has the best facilities in the State for putting them on the road to agricultural success. He remarks respecting the figures given below:

"In making up my estimates of disbursements and returns on improving the land, I have been guided not only by my own experience of fourteen years as a farmer, but by that of some of the most reliable agriculturists in the State, to whom I have submitted my figures. The calculated expenditure is very liberal, and will in all probability fall much below the estimate. On the other hand the presumed yield of 18 bushels per acre is very low on land which in favorable seasons will doubtless produce 25 to 30 bushels per acre, and 85 cents per bushel is a very moderate price at the elevators. In the matter of income no mention is made of stock raising, but several hundred head of horned cattle may be supported on the place without any cost excepting the trifling expenditure of making hay, which can be done at less than $1 per ton."

As Minnesota is a broad country, so also is its farming done on a large scale. Much capital is required to establish a first-class farm, but the reward is more certain than savings-bank investments. Grasshoppers seem to be the only plague to which the country is subject, and their visits are only periodical. We can give information of value to any capitalist who wishes to confer with us on the subject in hand.

DISBURSEMENTS AND RETURNS IN OPENING A FARM.

Ten thousand acres, of which six thousand were gradually brought under cultivation. Price of land, at $2.50 per acre, $25,000, payable in ten equaly early installments, with seven per cent. interest per annum:

FIRST YEAR.

Expenditures:		
Breaking by hired teams of 1,100 acres at $2.50	$ 2,750	
Incidental expenses, haymaking, etc	500	—$3,250

SECOND YEAR.

Expenditures:		
Buildings		6,000
Live stock and implements—		
24 Horses or mules at $150	$3,600	
7 Sulkey plows at $70	490	
7 Seeders at $70	490	
7 Harrows (17 ft) at $25	175	
7 Rollers at $15	105	
7 Self-binding harvesters at $275	1,925	
1 Mower	100	
1 Separator with 10 horse-power engine	1,500	
24 Single harness at $18	432	
6 Wagons (with runners) at $100	600	
Blacksmith tools, iron, steel	300	
Sundry other tools	100	
Furniture, bedding, stoves, etc	300	10,117
Labor (wages and board)—		
1 Foreman and wife, by the year	1,000	
1 Hostler, by the year	420	
6 Men, 8 months, at $30 per month	1,440	
1 Blacksmith, 3 months, at $45 per m	135	
7 Men for 12 days in the spring at $1.50 per day	120	
14 Men for 12 days in the harvest at $2.50 per day	420	
21 Men for 24 days for threshing at $1.50 per day	750	4,297
Sundries—		
1,500 Bushels seed-wheat at $1 per bush	1,500	
360 Bushels seed-oats at 40 cts per bush	120	
Wire for binding 1,100 acres grain at 50 cts. per acre	550	
640 Acres new land broken, per contract $2.50	1,380	
Feed for live stock	1,000	
10 Per cent. of principal for land	2,500	
1 Year's interest on same at 7 per cent	1,750	
1 Year's int. on last year's outlay, $3,250	325	
Incidental expenses	500	9,025—30,039
Total am't expenditures 1st and 2d yr		$33,289

This amount of expenditure, $33,289, bearing 10 per cent. yearly interest, remains as a charge against the farm until paid. Crop during the year 1,000 acres in wheat, supposing to yield 18 bushels per acre, of which 16½ for sale and 1½ for seed the following year. Estimated price of wheat, 85 cents bushel; proceeds of sale accounted for in next year's estimate and used as working capital on the farm. 100 acres of oats for feed of live stock; 1,100 acres of new land broken, of which 560 acres with own and 540 with hired teams.

Assets at end of second year:		*Liabilities at end second year:*	
7,800 acres wild land at $2.50	$19,500 00	On land	$22,500 00
2,200 acres cultiv'd land at $5	11,000 00	On 1st & 2d year's expenses	33,289 00
Buildings	6,000 00		$55,789 00
Live stock and implements, less 10 per cent. for wear and tear	9,105 00	Assets above liabilities	5,116 00
18,000 bush. wheat at 85 cents	15,300 00		
	$60,905 00		$60,905 00

THIRD YEAR.

(2,000 acres in wheat; 200 in oats for live stock; 1,100 acres new land broken with own teams.)

Expenditures:		*Returns:*	
Live stock and implements	$10,117 00	By sale of wheat from 2d year's crop 10,500 bush. at 85 cents	$14,025 00
Labor	7,461 00	By sale of 3d year's crop on 2,000 acres, 33,000 bush. at 85 cts	28,050 00
Wire for binding grain	1,100 00		
Incidental expen's.	2,000 00		
10 per cent. on prin'pal for land.	2,500 00		
1 year's int. on same at 7 per cent	1,575 00		
1 year's int. on 1st and 2d year's ex.	3,328 90		
	$28,084 90		
Cash on hand at end of year	13,990 10		
	$42,075 00		$42,075 00
Assets at end of third year:		*Liabilities at end of third year:*	
6,750 acres wild land at $2 50	$16,750 00	On land	$20,000 00
3,300 acres cultivated land at $5.	16,500 00	On 1st and 2d year's expenses	33,289 00
Buildings	6,000 00		$53,289 00
Live stock and implements, 10 per cent. off	17,299 50	Assets above liabilities	17,250 60
Cash on hand from last year	13,990 10		
	$70,539 60		$70,539 60

FOURTH YEAR.

(3,000 acres in wheat; 300 acres in oats; 1,700 acres new land broken by own teams.)

Expenditures:		*Returns:*	
Live stock and implements	$10,117 00	By sale of 49,500 bush. wheat at 85 cents	$42,075 00
Labor	10,966 00	Cash on hand from previous year	13,990 10
Wire	1,050 00		
Incidental expen's.	2,000 00		
Buildings	6,000 00		
10 per cent. principal on land	2,500 00		
1 yr's. int on same, 7 per cent	1,400 00		
1 year's int. on 1st and 2d year's ex.	3,328 90		
	$37,961 90		
Cash on hand at end of year	18,103 20		
	$56,065 10		$56,065 10
Assets at end of fourth year:		*Liabilities at end of fourth year:*	
5,000 acres wild land at $2.50	$12,500 00	On land	$17,500 00
5,000 acres cultivated do. at $5	25,000 00	On 1st and 2d year's expenses	33,289 00
Buildings	12,000 00		$50,789 00
Live stock and implements, 10 per cent. off	24,557 40	Assets above liabilities	31,371 00
Cash on hank at end of year	18,103 20		
	$82,160 60		$82,160 60

FIFTH YEAR.

(4,500 acres in wheat; 500 acres in oats; 1,000 acres new land broken.)

Expenditures:		*Returns:*	
Live stock and implements, 10 per cent. off	$15,000 00	By sale of 74,250 bush. wheat at 85 cents	$63,112 50
Labor	16,000 00	Cash on hand from previous year	18,103 20
Wire	2,500 00		
Incidental ex	3,000 00		
Buildings	6,000 00		
Pay remaining debt on land	17,500 00		
1 year's int. on same 7 per cent	1,225 00		
Pay on 1st and 2d year's expenses.	10,000 00		
1 year's int. on same 10 per cent	3,328 90		
	$74,553 90		
Cash on hand at end of year	6,661 80		
	$81,215 70		$81,215 70
Assets at end of fifth year:		*Liabilities at end of fifth year:*	
4,000 acr's wild land at $2.50	$10,000 00	Balance due on 1st and 2d year's ex.	$23,289 00
6,000 acres cultivated at $5	30,000 00	Assets above liabilities	76,974 50
Buildings	18,000 00		
Live stock and implements 10 per cent off	35,601 70		
Cash on hand at end of year	6,661 80		
	$100,263 50		$100,263 50

SIXTH YEAR.

(4,500 acres in wheat; 500 acres in oats; 1,000 acres resting and summer-fallowed.)

Expenditures:		*Returns:*	
Labor	$16,000 00	74,250 bush wheat at 85 cents	$63,112 50
Wire and incid. ex.	5,500 00	Cash on hand from previous year	6,661 80
Bal. on 1st and 2d years ex. and int.	25,669 90		
(The cult. area in grain being same as previous yr. no additional stock and impl. is charged)	$47,109 90		
Cash on hand at end of year	23,664 40		
	$69,774 30		$69,774 30
Assets at end of sixth year:		*Liabilities none.*	
0,000 cult., 4,000 wild land	$40,000 00		
Buildings, $18,000; live stock and im. $32,042.53	50,041 53		
Cash on hand	22,604 40		
Value of assets at end of sixth year	$112,645 93		

MATING CANARIES.—The following directions are contributed to the New York *Times:*

"In the first place canaries should never be allowed to mate oftener than twice in any one year. Some canaries will raise as many as four litters if not prevented; but a third mating is always injurious, and often brings on a disease which quite ruins the cock bird as a singer. The canaries while mating should be fed on hard-boiled egg and common oyster crackers well soaked in boiled milk, but, of course, made cool before being fed to the birds. Hemp seed should not be used, as it fattens the birds. A raw piece of beef highly seasoned with Cayenne (red) pepper should be fed them as often as once in each week. The cage should not be moved about if it can be avoided, and should hang in a darkened room. All canaries while mating like privacy. When the eggs are hatched feed the young birds only on the yellow of hard-boiled eggs for two weeks; after that, mix hard, dry crackers with egg and feed. Sometimes the hen canary begins to make her nest before the young birds are able to leave it. At such times put a new nest in the cage, and leave plenty of food for the newcomers, as the mother often leaves them uncared for. Bits of tissue paper, cut into fine pieces, should be thrown around the new nest in order to prevent the hen from pulling the old one in pieces. Cotton should not be used, as it is highly injurious to the feet of canaries; they often get caught in it, and are quite frequently made cripples for life.

J. P.—The following are a few of the best climbing plants, hardy and sure to give satisfaction. Plant them where the can ramble at their own free will, and allow them all the light and freedom possible:

Akebia quinata—Japanese Akebia; *Celastrus scandens*—Bitter sweet; *Menispernum canadence*—Moonseed; *Wistaria sinensis*—Chinese west; *Wistaria sinensis alba*—Chinese west white; *Tecoma radicans*, and the large variety *Grandiflora*—Trumpet flowers; *Clematis flammula*—Sweet-scented Virgin's Bower; and any of the newer varieties of the large flowered sorts; they are all perfectly hardy and desirable; any or all of the *Loniceras*, or honeysuckles; and you can fill up with any of the annual varieties.

Sea and River Fishing.

FISH IN SEASON IN MARCH.

SOUTHERN WATERS.

Pompano, *Trachynotu carolinus.*
Drum (two species). Family *Sciænidæ.*
Kingfish, *Menticirrus nebulosus.*
Sea Bass, *Sciænops ocellatus.*
Sheepshead, *Archosargus probatocephalus.*
Snapper, *Lutjanus caxus.*
Grouper, *Epinephelpus nigritus.*
Trout (black bass), *Centropristis atrarius.*
Striped Bass, or Rockfish, *Roccus lineatus.*
Tailorfish, *Pomatomus saltatrix.*
Black Bass, *Micropterus salmoides*; *M. nigricans.*

☞ The trouting season on Long Island, which opened last year, and previously on the 15th of March, does not open this year until the 1st of April. The law is now uniform throughout the State.

☞ Trout fishing is now open to all persons who are willing to pay $5 for each trout caught. On April 1 it will be different.

FISH IN MARKET—RETAIL PRICES.—Striped bass, 20 cents; large do., 18; smelts, 18; Long Island green do., 20; frozen salmon, 35; green do., $1.25; California 45; mackerel, 15; Southern shad, 35 to 85; native, $2; white perch, 15; Spanish mackerel, 35; green turtle, 15; frost fish, 6; halibut, 12½; haddock, 6; codfish, heads off, 8; do., heads on, 6; blackfish, 15; Newfoundland herring, 6; flounders, 8; do., small, 4; sea bass, 15; eels, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 25; turbot, 25; scallops, $1.50 per gallon; whitefish, 15; salmon trout, 12; hard crabs, $3.50 per 100.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals reported at this port the past week has been forty-one. The number of Bank arrivals numbered twelve, bringing about 500,000 pounds of halibut. The number of George's arrivals for the week has been 25, bringing 875,000 pounds round codfish.—*Cape Ann Advertiser, March* 15.

CONNECTICUT—*Essex, March* 10.—The first lot of striped bass caught in the Connecticut this season were taken here last week, and weighed about 500 pounds.

NEW YORK—*Kingston, March* 13.—Large quantities of suckers and chubs are being taken out of the Esopes at this place every day. OUR HARRY.

Eldred, Sullivan Co., March 11.—Trout fishing here already begun in the Beaver Brook. They are fine fish, and give promise of a good season, so soon as the lawful time for taking them arrives.

VIRGINIA—*Warrenton, March* 15.—Jack and carp fishing, the only angling we have here, has begun. For trout we go to the mountain brooks of the Blue Ridge. I shall soon go to the trout streams in company with "Nicholas Spicer," of the old *Porter's Spirit*, whose real name is D. A. S. Payne.

EARLY COMERS AT WASHINGTON.—We are having a very early spring; mossbunkers came March 6, a month earlier than usual. Alewives and mattowoccas are abundant in the market, and shad have been taken five or six a night for a week or two past. G. B. G.

TENNESSEE—*Nashville, March.*—Fishing season now fairly opened and streams generally in good condition for sport. The reports from Hurricane Creek, in Humphreys county, from Turnbull in Chatham, Buffalo in Dixon, and Harpeth in Williamson, are very favorable for anglers. Many fine trout (bass) and perch have been taken within the last week. A party of gentlemen had some good sport in Mill Creek, a small stream near this city, the other afternoon, taking a number of trout (bass) averaging about three-quarters of a pound each. In Harpeth and the Cumberland rivers suckers in large quantities are caught, there is no sport in taking them, but they are considered good food.

FLORIDA—*Halifax Inlet.*—In the seven winters spent on this coast, I have never seen so much cold and stormy weather as this month has given us. We have had fourteen

clear days and fourteen that were either rainy or cloudy, which is a very large proportion of bad weather for the State. The average temperature at noon has been 60 degs., which is about four degrees lower than usual. I have killed less than half the weight of fish that I did in February, 1877, and the only species that seems as abundant as usual is the sheepshead, and they run small this year. Feb. 18—Wind, west; thermometer at 8 A. M. 60 degs; got thirty-six sheepshead. Feb. 20—Wind southeast; thermometer at 8 A. M. 60 degs.; forty sheepshead. Average of these two days about two pounds only. S. C. C.

INDIANA PICKEREL.—A correspondent at Lima, Lagrange county, Indiana, who signs himself "Backwoods Hoosier," sends us a small Limerick hook with which be caught an eleven pound pickerel through the ice lately, which measured three feet in length. His usual catch per diem varies from five to ten fish ranging from five to ten pounds in weight. He ought to be content with his success.

H. L. LEONARD'S OFFER.—We have made a careful examination of the angler's outfit advertised in our columns this week, and feel justified in saying that any purchaser of either the $5 or $10 list will obtain the full value of his money, besides having the goods selected for him by one experienced in the business. We consider the offer a liberal one, and one which we should advise amateur anglers to avail themselves of.

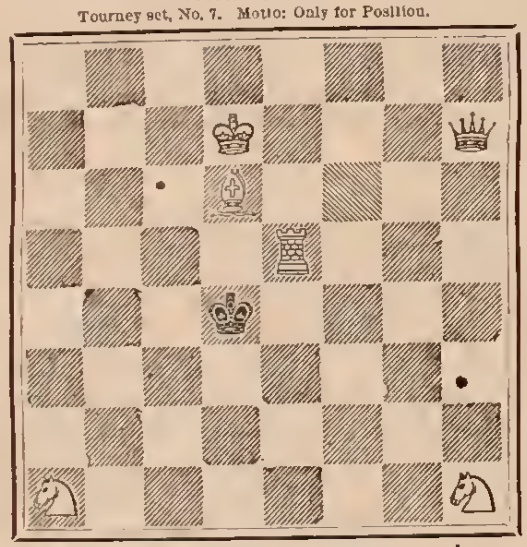
BAMBOO RODS.—Messrs. Abbey & Imbrie, the pioneers of section bamboos, have offered one of their "best round joint, six-section, salmon" rods as a prize for the best salmon-fly casting at the next annual meeting of the New York State Association. Both of the firm are well-known and expert salmon fishermen, and are recognized authority even up in this the highest grade of fishing. We understand that their idea in offering this magnificent prize is to incite our best fly-casters to aspire beyond the beaten paths of trout fishing. Trout have many admirers, and none more ardent than our friends of 48 Maiden Lane; but we are sure that all sportsmen will appreciate the desire to extend the scope and enhance the pleasure of anglers. To those of our readers who are not posted, we ought to say that the section bamboos marked "Abbey & Imbrie's Best" are a superlatively beautiful implement. This grade of salmon rods costs from $75 to $100, according to size and mountings. We have been the fortunate possessor of one of them for six or seven years.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 16.

Tourney set, No. 7. Motto: Only for Position.



White to play and give mate in two moves.

SOLUTIONS TO PROBLEMS—NO. 8.

1—B tks B	1—K P moves
2—K-Kt4	2—Any
3—Q mates	

SOLVER'S TABLE.

The subjoined table contains the solutions received from competing solvers to March 7, 1878, inclusive.

G. R., Phila., Penn., 8; Waldmann, Rocky Hill, N. J., 7; E. H. W., New Haven, Ct., 8; Rev. L. W. Mudge, Princeton, N. J., 7; W. B., Waterbury, Ct., 8; Wm. Mylchrist, Middleton, Ct., 4; R. H. Seymour, Holyoke, Mass., 7; Prof. D. S. Jordan, Irvington, Ind., 4; Prof. C. Jacobus, Matawan, N. J., 4; E. I. Bradford, Webster, Mass., 2; W. D. Willis, Savannah, Tenn., 3; Rook, New York City, 4; Franklin Benner, Astoria, L. I., 4; W. A. Briggs, Montpelier, Vt., 6; Wm. Parker, New Britain, Ct., 6; Rich. Fairley, Chatham, N. B., 2: Geo. Noble, Fishersville, Canada, 1; Chas. C. Hebbard, Cambridge, Mass., 5; G. K. Andrews, Mahonington, Penn., 5; Geo. A. Lee, 1; E. S. Bradford, Webster, Mass., 3; Harry M. Wheelock, Red Wing, Minn., 3; Status, Boston, Mass., 7; Bishop, New York City, 4; Incog., Boston, Mass., 6; A. Taylor, Phila., Penn., 1; F. A. N., New Orleans, La., 7; A. M. J., Galveston Texas, 6; L. A. Gowdy, Bristol, Conn., 6; E. D. Hurlbut, 6; X. Hawkins, Ky, 6; John C. Burritt, New Britain, Conn., 6; F. W. Martindale, Peterboro, Ky, 6; F. Williams, M. D., Hartford, Conn., 6; F. K. Jones, Meriden, Conn., 6; Juno, Springfield, Mass., 6.

The subjoined games are further variations of the Vienna Opening taken from the *Handbuch*:

Game No. 27.—VIENNA OPENING.

White.	Black.	White.	Black.
1—P-K4	1—P-K4	10—Q-Q2	10—Q-R5 ch
2—Kt-Q B3	2—B-Q B4	11—P-K Kt3	11—Q-R6
3—B-Q B4	3—Kt-K B3	12—P-Q4	12—B-R B6
4—P-Q3	4—P-Q B3	13—K R-K B	13—B tks Kt
5—P-K B4	5—P-Q4?	14—Kt tks B	14—B-K7
6—P tks Q P	6—P tks Q P	15—Kt-B	15—Q-K3
7—B-Q Kt5 ch	7—Kt-Q B3	16—B-K2	16—P-K Kt3
8—P tks K P	8—B-K Kt5	17—Kt-K B3	17—P-K Kt3 (a)
9—Kt-K2	9—Kt-K R4	White has the best game.	

NOTES.

(a) A continuation of this variation occurs in a game between Zukertort and Anderssen, *Schach Zeitung*, 1869, p. 265.

Game No. 28.—VIENNA OPENING.

The first four moves are the same as in the preceding game:

White.	Black.	White.	Black.
5—P-K B4	5—P-Q3	12—P tks P	12—P tks P
6—Kt-K B3	6—P-Q Kt4	13—Kt-K B4	13—Q-Q B2
7—B-Q Kt3	7—P-Q R4	14—R-K B	14—Q R-K
8—P Q R4!	8—P-Q Kt5	15—Kt-Kt5	15—P-K R3
9—Kt-K4	9—Q Kt-Q2	16—Kt-R3	16—K-R2 (a)
10—K-K Kt3	10—Castles	17—R-B3 (b)	
11—Q-K2	11—B-Q R3	White has a winning game.	

NOTES.

(a) If 16—Kt tks P [16—K-R; 17—Kt tks R P, 17—P tks Kt; 18—B tks P], then 17—Q tks Kt, 17—Kt-K B3; 18—Kt tks R P, etc.

(b) In a game between Zukertort and Anderssen, the game is continued as follows: 17—Kt tks K P; 18—Q tks Kt, 18—Kt-K B3; 19—Q-R4, 19—P-K5; 20—Kt-Kt5 ch, with the advantage. White might also have played 20—R-K Kt3, 20—P tks ch; 21—K-Q. The *Neue Berliner Schach Zeitung*, 1871, p. 114, further notes if Black plays 17—Kt-K R4, then 18—Kt-Kt5 ch, 18—K-Kt [18—K-Kt3; 19—Kt-R4, and mates]; 19—R-R3, 19—Kt-K B5; 20—B tks Kt, 20—P tks B; 21—Q-R5, 21—Q-K4 [21—Kt-K B3; 22—Kt-R P ch]; 22—Kt tks K B P.

Game No. 29—VIENNA OPENING.

The first two moves are the same as in Game No. 28:

White.	Black.	White.	Black.
3—P-K B4	3—P-Q3 (a)	11—Q Kt-Q	11—P-Q R5
4—Kt-K B3	4—Kt-K B3	12—B-Q R2	12—Castles
5—B-Q B4	5—P-Q B3	13—Kt-K3	13—B-Q R3
6—B P tks P (b)	6—P tks K P	14—Kt-K B5	14—P-Q Kt5
7—Q-K2	7—Q Kt-Q2	15—P tks P	15—Q tks P ch
8—P-Q3	8—P-Q Kt4	16—P-Q B3	16—Q-Q Kt3
9—B-Q Kt3	9—P-Q R4	Black has the best game.	
10—P-Q R3 ?	10—Q-Q Kt3		

NOTES.

(a) In "Book of Paris Congress," 1867, 6—B tks Kt is considered preferable. The position can be resolved into a King's Gambit.

(b) The succeeding moves until the fifteenth are the same as in a game between Steinitz and Anderssen, *Schach Zeitung*, 1870, p. 137. In another game, where 6—P-Q3, 6—Q K2 is played, the *Neue Berliner Schach Zeitung*, 1871, p. 117, remarks: "Anderssen sees the advisibility that, in this opening, Black should give Castling Q R the preference, otherwise White's attack on the K R side would be irresistible.

Game No. 30.—DEBUT DE FANTAISIE.

The following curious and short game, which was played at the *Circle de Echecs* of St. Petersburg, we transfer from the *La Strategie*, 72 and 74 Rue Saint Sauveur, Paris, France. Remove White's Q Kt:

White. Mr. Schiffers.	Black. Amateur.	White. Mr. Schiffers.	Black. Amateur.
1—P-K4	1—P-K R3	5—Kt-K5 ch	5—K-K3
2—Kt-K B3	2—P-Q R3	6—Q-K Kt1 ch	6—K tks Kt
3—B-Q B4	3—P-Q Kt4	7—Q-K R6 ch	7—K-Q3
4—B tks P ch	4—K tks B	8—Q-Q5 ch matea	

Game No. 31.—CENTRE GAMBIT.

In the following game Mr. Thorold gives Miss Rudge, the English lady player, the odds of a Kt. The match now stands eight games won by each, the winner of eleven games being the victor. Removes White's Q Kt:

White. Mr. Thorold.	Black. Miss Rudge.	White. Mr. Thorold.	Black. Miss Rudge.
1—P-K4	1—P-K4	8—Castles Q R	8—P tks P ch
2—P-Q4	2—P tks P	9—K tks P	9—Kt-Q B3
3—Kt-K B3	3—B-Q B4	10—P-K5	10—B-K3
4—B-Q B4	4—P-Q3	11—P tks P	11—B tks B?
5—P-B3	5—P tks P	12—Q tks K Kt P	12—R-Kt
6—Q-Kt3	6—Q-B3	White wins.	
7—B-K Kt5	7—Q-Kt3		

CURSORY JOTTINGS.

—Capt. T. P. Bull, Chess Editor of the Detroit *Free Press*, expresses his views regarding duals: "If duals can be avoided, and they often can by a skillful manipulator, well and good; but we would never recommend the addition of pieces to obviate unimportant duals. The greatest economy of force should always be kept in view, and no man be employed whose bearing on the problem proper is not clear and well defined."

—The Canadian Chess Association has instituted a correspondence tourney under the direction of Mr. J. Shaw, of Montreal, Canada. Twenty-one players will enter the list at an entrance fee of $5 each. Prizes: 1, silver cup, $50; 2, chess men and board, $20; 3, do., $15; 4, chess table, $10; 5, works on chess, $5. Each player to play one game with every other player, and to conduct four games simultaneously.

—Capt. MacKenzie has opened a chess room at No. 101 East 14th st., corner of Union Square. Make him a call.

—We are fully aware that America ranks high in problematical matters, and that our problemists are able to hold their own against the world. However, we are not willing to concede that all problematic genius and skill is centered in this Republic, although chess editors and problemists apparently strongly incline to that opinion. Come, gentlemen, less fanfaronade, and print an occasional recognition of the skill of other problematists.

—The tourney of the St. Louis Chess Club has finally come to an end. In the first class, Messrs. C. W. G. Watts and J. E. Nelson tie for the challenge cup. In the second class, Messrs. Robt. Geggie and Robt. W. Goode tie for the first prize, and Dr. C. N. D. Campbell receives the third. The winner of the challenge cup must hold it two years in order to obtain complete possession.

—The St. Louis *Globe-Democrat* says: "If any composer wants his problem solved or hurst, let him contribute to our column, for we boast of having the best solvers in the land." It is true that these solvers are first-class, yet we are not disposed to concede this honor. We remind Bro. Foster that our solvers are equally good—for instance G. R., Rev. L. W. M., etc., etc.

National Pastimes.

NEW YORK ATHLETIC CLUB.—At the annual meeting held last week, over sixty members present, the Board of Management in their review of the work of the past year reported a season of progress and developement in every department of the club. It was recommended that the present track-master, Jack Goulding, be retained another year; that handicap games be given the coming season as in the past, and that the club establish a series of swimming contests during the summer at hand. The Board holds that the success of the winter games were "conclusive proof that the oldest athletic club in the country had not been idle during the nine years of its existence." During the season members of the club, in open competitions, had won the following prizes: Athletic—First prizes, 28; second prizes, 17; third prizes, 6; boating—first prizes, 4; second prizes, 2. The success of the handicap games of last year will probably lead to making the majority of the spring games of the same character. The project of inviting a team of the London Athletic Club to visit New York the coming season for the purpose of competing with American athletes in a series of games was referred to Messrs. D. H. Knowlton, William B. Curtis and F. J. Hynes as a committee to confer with the Westchester Polo Club. The following officers were elected for the current year: Pres., Fitz J. Hynes; Vice-Pres., Charles H. Pierce; Treas., W. E. Cox; Sec., W. R. Whittemore; Capt., William B. Curtis; First Lieut., Edward Merritt; Second Lieut., Waldo Sprague; Trustees, H. E. Buermeyer, Alfred H. Curtis and R. W. Rathborne.

THE ENGLISH SIX DAYS' WALK.—The contestants who started last Monday in the walking match at Agricultural Hall, Islington, England, were: Bailey, Brown, Corkey, Grover, Hazall, Ide, George Johnson, S. Johnson, Lewis, Martyn, McCarty, McLeary, O'Leary, J. Smith, W. Smith, Smythe and Vaughan. This match is for a purse of £750 offered by Sir John Astley, £500 to the man covering the greatest distance in six days. The chief interest in the match would naturally have centered in the match between O'Leary and Weston, but the latter was declared sick at the time for starting. O'Leary walks in a separate track. The man who covers the most ground wins. No restrictions are made as to gait.

LACROSSE.—The Lacrosse Tournament at Gilmore's Garden last week was participated in by the following clubs: Ravenswood Club—P. Colder (captain), G. Cluff, A. D. Ritchey, W. P. Ritchey, G. D. Wheeler, R. J. S. Graham, R. W. Hopkins, J. Gullersou, J. Smith and J. D. Wilson. New York University—J. A. Atwood (captain), H. R. Baremore, J. E. Capwell, R. B. Dunning, S. A. Eddy, W. K. Gillett, R. H. T. Marrener, E. L. Swaine, C. T. Webster and C. B. Zabriskie. Tuesday the Ravenswoods scored first goal in 12m. 8s. The University club scored a goal in 11m. 42s. The Ravenswoods then scored the third goal and thus won the game. Wednesday evening the Ravenswoods won two more goals and took the prize cup. We had the pleasure of a visit from Mr. W. G. Winans, President of the Ravenswood Lacrosse club.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
March 22	1	52	10	58	10	10
March 23	2	45	11	54	11	04
March 24	3	39	0	23	M	
March 25	4	58	1	18	0	33
March 26	5	42	2	14	1	39
March 27	6	49	3	14	2	43
March 28	7	55	4	23	3	42

NEW YORK BAY REGATTA.—At the meeting of the New York Bay Regatta Committee on Wednesday night, it was decided that the measurement of the competing yachts be on the water-line with the allowance of one-half of the overhang aft for counter stern boats. It was stated that the owners of thirteen yachts had already been heard from. Entries will be received by John W. Sawyer, 85 South street; W. Bishop, 210 South street; Joseph Nobles, 734 Greenwich street; A. L. Kreymeyer, Jersey City; J. D. Brassington, 256 West street, and J. H. Robinson, at the Hoffman House. It has been decided to hold the regatta on Thursday, June 27, and until then the committee resolved to meet weekly to perfect their arrangements.

EASTERN ROWING ASSOCIATION.—The initial regatta of the season will be held at Silver Lake, Plympton, Mass., May 30. The four races will include an amateur single-scull race, open to all oarsmen who come within the meaning of "amateur," as defined by the National Association of Amateur Oarsmen; a pair-oared professional race; a professional scullers' race, and a four-oared working boat race. The prize for the amateur scullers' race will be an elegant silver cup. For the pair-oared race, first prize, $100; second, $50; third, $25; payable in gold. For professional scullers the first prize, $150; second, $100; third, $50; payable in gold. For the four-oared working boats the first prize will be $150; second, $100; third, $50; payable in gold. The second regatta, at the same place, will consist of a professional scullers' race, a contest open to New England scullers, and probably a four-oared shell race. Prizes will be the same as those of the first regatta. A new boat house is to be erected at the lake, similar in design to those on the Harlem River, New York. Entries can be made to Captain J. J. Flynn, No. 38 Essex street, Boston, and will close for amateurs ten days before each race, and for professionals three days previous to each race. Invitations are to be sent to all the prominent oarsmen. The distances are to be three miles, with a turn, in all the races, except the amateur single scull race, which is to be two miles, with a turn.

SHAWMUT BOAT CLUB.—This club is making preparations for the coming season's work. The club is to purchase a steam yacht. Four and six-oared crews will represent the club at the Eastern Rowing Association.

ANALOSTAN BOAT CLUB.—This popular rowing association of Washington has elected the following officers for the ensuing year: L. H. Stevens, President; Colonel S. N. Benjamin, Vice-President; H. S. Nyman, Treasurer; J. H. Goodrich, Corresponding and Financial Secretary; E. S. Maunder, Captain; W. A. McKenney, First Lieutenant; C. L. Burdett, Second Lieutenant.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

Dr. C. A. P., Bath, Maine.—Form sent you.

C. R. S., Richmond, Va.—See to-day's paper for German targe'.

B. S., Cincinnati, O.—Your letter forwarded to Seth Green, whose address is Rochester.

J. S. R., Grand Rapids.—You can get the fulminates of Stephen Mapes, Maiden Lane, New York. All varieties are kept.

G. W. La R., Springfield, Ohio.—We take great pleasure in sending you the form you require. Let us hear from you when organized.

W. T. L., Waco.—Where can I get targets? Ans. For large targets, Dennison & Co., 189 Broadway; for small targets, Conlin, 1,222 Broadway.

A. M., Lake Charles, La.—Where can I get a hand engine and hook and ladder truck? Ans. Write to Buckley & Merritt, 156 South street, city.

GUN.—Have a Parker gun, weighs 7½ pounds. I use 3 drs. powder and there is too much recoil. How shall I load? Ans. Diminish shot; use 1 oz.

J. McC., Monticello.—I see no ad. in your paper of paper boats. Can you give me the address of some manufactory of paper boats? Address Waters & Son, Troy, N. Y.

W. R. K., Lebanon, Ohio.—Have forwarded Maj. Sarasota's series of Florida letters, and also full description of the "Al. Fresco" boat, the most suitable for Florida waters.

N. J. S., Greenfield, Ill.—Do not cross your pointer with a setter. You would get a dropper, which is a miserable thing, having the advantages of neither sire nor dam. Don't.

J. M. M., Montreal.—G. McDonald, of 64 Haymarket, London, makes porpoise skin boots. The alligator hoots can be had of Mahrenholz, of this city. See advertisement in this paper.

G. C. J., Red Oak., Ia.—How much powder will a 10 cal, 40 inch barrel muzzle-loading gun burn with No. 2 duckling Oriental and 1¼ oz. shot? Ans. With your length of barrel 4 drs.

TELEGRAPH, Owatonna, Minn.—Give me heaviest charge for geese that can be used in a 12 gauge breech-loading —— gun, 30 inch barrels, 9 pounds? Ans. Four drachms with perfect safety.

J. G. L., Gardenville, N. Y.—Please send me the price of the book "Camp Life in Florida," and also "The Fishing Tourist," by same author? Ans. "Camp Life," $1.50; "Fishing Tourist," $2.

H. M. L., Rockland, Mass.—Where shall I send for maps of Montana and information in regard to the cost of getting there, the climate, price of land, markets, etc.? Ans. Write to J. P. Power, Land Agent, N. P. R. R., St. Paul, Minn.

HARVARD.—Will you inform me, through the medium of your paper as to what work on the horse of the present day is considered the best? Ans. "Perfect Horse," by Rev. Wm. H. H. Murray. You can get it of Osgood, Boston, we think.

C. F. C., S. Abington, Mass.—The marks you mention on the barrels of your gun—crossed arms with a crown and B. P. under a crown—are tower proof marks used in Birmingham. The name you mention is that of a very good maker.

B., Canton.—1. Can the Berthon's Collapsible boat be obtained in this country? 2. What is its price? 3. What is its weight? Ans. 1. No. 2. From £8 to £12. 3. Write us later for particulars, as we have written to England about the boat.

W. D. Minneapolis.—1. Which gun should I buy? 2. Could I buy a gun cheaper in St. Paul than East? Ans. 1. Respectfully decline answering. 2. Should think the cheaper gun would be bought East, but the quality of guns made in St. Paul is excellent.

H., Danvers, Mass.—Is there a law in Mass. against collecting bird's eggs, or birds except game birds? and how can I find out what birds the law covers? Ans. If you have a certificate from any incorporated Society of Natural History in the State you can collect.

C. M. S., Poughkeepsie, N. Y.—Where can I purchase young deer, and what will they cost? Where can I get books on raising deer? Ans. Better advertise for deer. Buy Judge Caton's "Domesticated Deer," sold by John Wiley & Sons, 15 Astor Place New York.

H. B. S., New Brunswick.—Can you inform me what preparation to put on a new fish-net to keep it from rotting when put in the water? Ans. Steep your net in a solution of sugar of lead and powdered alum dissolved in rain water: half pound of the first and a pound of the alum.

G. C., Girard, Kansas.—There was killed near this place last week a wild green-head duck. The cook at the hotel cleaned it, and in cutting it open found the flesh on the breast to be full of little white worms half an inch long. Did you ever hear of the like? Ans. We have heard of such cases, though they are rare.

E. M. E., Hancock, N. Y.—Which is the best book for fly-trout fishing, the "Gazetteer," or "Fishing Tourist?" Is each one illustrated with different styles of flies, and does it give their names? Ans. The "Gazetteer" contains all the information you want and is illustrated; gives the names of flies in season and tells how to dress them, etc.

HOUSEKEEPER, Berlin, Md.—The red ants are beginning to come again. I am troubled with them every spring. How can I get rid of them? Ans. Sprigs of wintergreen or ground ivy will drive away red ants; for black ants use branches of wormwood. A wide chalk mark around the top, near the edge, will keep ants out of a sugar barrel.

A. L. L. and D. R., Columbus, Ohio.—Please give in pellets the number of shots to the ounce in sizes 7's and 8's of various makers in the United States. Ans. No. 7's, Tatham's, 291 to the ounce; Otis Leroy, 278; Sparks', 317; St. Louis Tower Co., 355; Baltimore, 365. Of No. 8's Tatham, 399; Otis Leroy, 375; Sparks, 515; St. Louis Tower Co., 509; Baltimore, 365.

R. L., Camden, Arkansas.—1. What is meant by a choke-bore? 2. What is the difference between a fine barrel and a common one? Ans. 1. A choke is when a barrel decreases in diameter at the muzzle. This may be done either by gradual taper, or by sudden closing. 2. We send you a paper which will inform you fully as to the difference in fine and poor barrels.

O. A., Minneapolis, Minn.—Where can I buy a good light row boat that would do for hunting, fishing and pleasure boating? One made in sections that you can take apart and pack? Who are the best makers of such boats? Of what material are they made and how heavy? What's the price? Ans. Thos. E. Bond, Cleveland, Ohio; price $10 to to $60, made of iron, weight 70 pounds.

DR. J. W. H., Mexico, Mo. 1.—Can I get a pair of extra barrels fitted to a —— gun No. 12? I want fourteen barrels. What would it cost? 2. What would be the cost of importing a pair of Irish setters? Ans. 1. You could get the barrels of the maker. The cost of barrels is generally half the cost of the gun. 2. About $250. Write us again and we will send you the game club rules.

G. B., New York.—1. I have a breech-loading gun 12 gauge, weight full 7 pounds. The barrels are of the best Belgian material, made modified choke. Would it be advisable to use chilled shot? 2. What is the best domestic powder to use? Ans. 1. You can use chilled shot with perfect safety. 2. There is no difference between the Hazard, Laflin & Rand, and Dupont. All are good.

L. H., Waltham.—1. Is the Kennebec navigable from Augusta to Moosehead Lake, Maine, with a portable boat? 2. What hunting and fishing is to be found there in September? 3. Where can I find a map and guide of this river and lake, and at what price? Ans. 1. It is. 2. Deer and ruffed grouse; brook trout and lake trout. 3. Published by C. A. J. Farrar, Jamaica Plains, Mass. Price $1.

INQUIRER, Washington, D. C.—1. Give me the standing of ——, of London, as a maker of breech-loaders? 2. Is black and tan a Laverack color? I have a red setter pup from a so-called pure Laverack dog (black and tan) and a black and white gyp, English stock. Ans. 1. A good maker. 2. Should not take much to a red pup from a pure Laverack. Black and tan Laveracks are not true to the color of the breed.

J. M. D., Irwin Station, Pa.—1. Is a gun 12 breech and 14 near muzzle called a full choke? 2. Where in N. Y. can I buy cheap canvas shooting coats? 3. Whose make of guns are those breech-loaders—Demascus barrels—which H. C. Squires sells for $60? Ans. 1. Yes, full choke. 2. At Fowler & Fulton's, 300 Broadway, or Mr. Squires, No. 1 Cortlandt st., or Holberton, 117 Fulton st. 3. Made by G. C. Bonehill, of Birmingham.

C. A., Minneapolis.—1. Who makes Express rifles? 2. Where bought in this country? 3. Would an Express shooting 5 drs. of powder recoil more than a Creedmoor rifle? Ans. 1. Henry, of Edinburgh; Rigby, of London, and all leading English rifle makers. 2. New ones of Messrs. Schuyler, Hartley & Graham. Have just seen a splendid second-hand one, as good as new, for sale by Mr. Squires, of No. 1 Cortlandt st., New York. 3. No.

R. S. T., Stayner, Ont., Canada.—When camping in cold weather I find my tent very likely to ignite from the sparks of the camp fire. Could you tell me of any means by which a tent could be made fireproof, or less inflammable, and at the same time not add to its weight or make it less portable? Ans. Four parts borax and three parts Epsom salts mixed with three or four parts warm water to one part of the combined substances. Use immediately after preparation.

W. M. P., St. Louis.—1. What is your opinion of the —— guns? 2. Do any of the above makers choke the left barrel and leave the right cylindrical? 3. I have received a very favorable impression of the —— gun—the $60 one. Is it a good gun? Ans. 1. Respectfully decline answering. 2. Most makers choke both barrels; in fact, unless otherwise ordered, all guns are now choked. You could, from any of the makers, have one barrel cylindrical. 3. An excellent arm.

O. G. K., Tiffin, Ohio.—1. Have a muzzle-loading gun 10 pounds 2½ inches at breech, barrels 28 inches. Would you advise me to have it altered, or to buy a new breech-loader? 2. What do you think of the —— gun? 3. Is the snap the same on the $15 as on the $75 guns? Ans. 1. Would advise you to buy a new breech-loader. Nine times out of ten the change of a muzzle-loader to a breech-loader is as unsatisfactory as it is expensive. 2. A very good gun. 3. Only difference in barrels.

L. R., Troy.—1. What is the inside route to Florida? 2. Where can I get Bishop's "Canoe Cruise?" 3. Is there a hunting hatchet? Ans. 1. Must refer you to former articles in the paper. It would take up too much space to tell it accurately. 2. "Bishop's Cruise" is to be published shortly by Roberts, of Boston. If you wait for the Roberts publication it will give you the fullest details, with map. 3. Address Holberton & Co, 117 Fulton st., who have such small axes for sale, made for camping.

T. P. S.—1. What is a good pattern for breech-loading cylinder, modified and choke-bore guns? 2. How heavy are black bass found? 3. Where can I procure forms of sporting clubs? 4. What is the highest point gold ever reached? Ans. 1. With a cylinder barrel, 40 yards, No. 7 shot, about 110; with a modified choke, 150; with a full choke, 200. 2. Among the largest known from 5½ to 6 pounds; average 2½ pounds. 3. Your name had no address; send it and we will forward you the proper form. 4. 281½.

J. K., Jr.—Please inform me of the weight of the largest salmon you know of being caught in American waters? Ans. We are not personally cognizant of any remarkable weights, but remember to have been told by Adam Ferguson, in 1867, an old resident on the Restigouche River, New Brunswick, of a salmon taken several years previously which weighed 76 pounds. We invite information on this point. Salmon in the Restigouche River used to run eleven pounds per barrels dressed, an average of about 20 pounds.

LAWYER, Philadelphia.—1. Are rebounding locks safer than the ordinary? 2. Will the Remington gun, chambered for brass shells, also use the usual paper ones? 3. Will the Parker gun? 4. Will a small quantity of sand drifted by the wind at the sea shore into a gun, be sufficient to burst it if fired while the sand is still in it? Ans. 1. They are. 2. & 3. Yes. 4. If the sand be wet and packed the bursting of the barrel is quite possible. Guns are burst from wet mud, or even snow, being packed accidentally in the muzzles.

E. M. S., New York.—1. In a double-barreled shot-gun, either breech or muzzle-loader, are not the centres of the barrels equally distant from each other at the breech and at the muzzle? 2. I heard a man who professes to know all about a gun, contend that such a gun was never made. He said the charges from any double-barreled gun would cross each other in a few yards. Ans. 1. They are not. 2. The man who professes to know is right, though in the limit of a few yards he is mistaken. If a double-barreled shot-gun could be made to fire shot at a sufficiently long distance, the shot from each barrel would intersect.

NEMO, JR., Bloomington, Ill.—1. Is there an agent for the sale of the Dittmar powder in Chicago? 2. Is it as reliable as other powder? 3. Does it rack the gun? 4. What is its cost relative to black powder? 5. Does it corrode, or foul the gun? 6. If I use 3 drs. of powder how much Dittmar ought I use? Ans. 1. No agent yet in Chicago, but one will be appointed in a few days, when notice of it will be given in the paper. 2. Perfectly so. 3. It does not. 4. Same, as to bulk. 5. Not at all. Want of fouling is its great advantage. 6. Use same quantity as to bulk.

J. W. B., Pa.—1. Would cardboard wads over shot answer the purpose as well as Eley's? 2. Would not leather be superior? 3. Where can I get punches for cutting them for No. 10 paper shells? 4. Give price of same. 5. Are Eley's No. 10 large enough for No. 10 paper shells? 6. Can No. 9 Eley wads be had anywhere? Ans. 1. Perfectly well. 2. Do not think it would be better than cardboard. 3. Any gun store in New York has them; Krider in Philadelphia has them. 4. Price 50 cents. 5. Yes. 6. Krider in Philadelphia; Fowler & Fulton, Squires, or Holberton, in New York.

LONG ISLAND.—1. When and where will Capt. Bogardus undertake to kill 85 pigeons out of 50 double rises? 2. What copy of the *Herald* contains the acceptance of the challenge by the Captain to accomplish the above feat? 3. Do you think it is a difficult feat to undertake at fast-flying pigeons, and was it ever done? 4. Is Capt. Bogardus the superior as a wing shot to the late John Taylor, or Wm. Seeds better known as the Jersey Boy? Ans. 1. At Deerfoot Park, L. I., to-morrow, 22d of March. 2. In the *Herald* of March 10. 3. Very difficult and never has been done. 4. He is, undoubtedly.

FLY FISHING, Baltimore.—Please describe the "Dobson" bait for black bass and inform me where it can be procured? Ans. "Dobson," so called, are the larvæ of *Sialis lutarius*; will be found under stones in June and July near the banks of rivers whose temperature increases with summer heat. They look like a modified centipede. An artificial imitation can be procured of J. F. Marsters, 125 Nassau street, New York. See recent advertisement in this paper. For full description and uses of the Dobson, see Hallock's "Sportsman's Gazetteer." In the South they are known as Helgramites.

A. C. W., New York.—When is a good time to go snipe shooting in the spring? Where is a good place near the city? and how much money will carry a fellow through from Saturday to Monday? Is there a law prohibiting shooting for three years on Staten Island? Ans. The best snipe ground in vicinity of New York is the Hackensack Meadows, near Secaucus race track, or anywhere back of Jersey city toward Newark. Snipe ought to be around now very soon; four were killed on Friday last. Remember you cannot shoot on Sunday. There is such a law for Staten Island, made by the supervisors.

A. F. H., Coatsville, Pa.—Have a breech-loader No. 12 Webley gun. The inside diametr of the brass shells I use is .708 inch, and barrels, both at muzzle and breech, .722 inch, making difference of .014 inch, or about 1-22 inch. Now, this you see makes quite a shoulder for the shot to strike against after leaving the shell. What is your opinion of the case? Is this state of affairs usual? Ans. Such a case is not unusual. This same difference exists in a great many English guns, as they are made to chamber paper shells. There should not be, however, a shoulder in the gun but a taper in the chamber.

F. C. C., Washington, D. C.—When shot break through or tear through a sheet of paper, that sheet counts penetration. Therefore, your sixteenth sheet is penetrated very distinctly; and, possibly, your gun perforated other sheets, as we see a clear perforation of the sheet in question. Questions. 1. Is a penetration for a W. & C. Scott & Sons' gun, 12 bore, cylinder barrels, at 40 yards, with the same charge as at the Tatham trial through 25 sheets a good penetration? 2. Under conditions above described, viz: 40 yds., 4 drs. powder, 1¼ oz No. 7 soft shot, 384 pellets, would 210 pellets in a 30 inch target be good pattern, or otherwise? Ans. 1. Very good. 2. Excellent.

HWIT, Rawsonville, Vt.—1. Shot a gray eagle, measuring seven feet from tip to tip, and have had him set up. Can I sell him? 2. Why does not Capt. Bogardus accept Dr. Carver's challenge? 3. What gauge is 44-100, and what length is the "Everlasting" straight shell, and why could it not be used for a shot-gun of same size bore? Ans. 1. Not very saleable. Could not mention a price; "bird o' freedom" held very cheap now. Address Wallace, Taxidermist, William street, New York. 2. What no fellow can answer. 3. Forty-one-hundredths of an inch. Do not think any gun is made that you could use the shell in.

A LADY, Baltimore.—How many teeth ought a dog to have? I have a Japanese dog whose teeth are very strange. I don't think he has enough teeth. Ans. An orthodox, normal dog ought to have 42 teeth; 12 incisors, 4 canine and 26 molars, 20 above and 22 below, but the Japanese have arranged matters so with their pet dogs that their little pets have very strange peculiarities of teeth. We have no doubt but that the Japanese dog belonging to our lady correspondent is very intelligent. The wisest dog we ever saw was a Jap. We are very much inclined to think that the St. Chartes and Bleuheims first came from Japan.

INEXPERIENCE, New York.—(Pray repeat the question propounded before and we will do our best to satisfy you.) Question: I do not understand why you say, "one wad will blow out." Does not the powder blow both out? Ans. Certainly the powder blows out the wads, but if only one wad is put over powder the wad has not strength enough to resist the effects of the powder and the shot are scattered wild. Is it possible to believe that a wad could be used so thin that the explosion of the powder would cut through the shot and make both a bad pattern and poor penetration? For this reason better effects are produced with a double wad.

MINNIE R., Petersburg, Va.—We are trying to get up a croquet and archery club. Can you refer us to some good works of instruction, with rules? Ans. The best work on Archery that we know of is entitled "The Book of Archery: Being the Complete History and Practice of the Art, Ancient and Modern, Interspersed with Numerous Interesting Anecdotes, and an Account of the Existing Toxophilite Society." Plates, $8; cloth, price $2.25. Can be purchased of John Wiley, 15 Astor Place, New York. The author is G. A. Hansard. For croquet, address Milton, Bradley & Co., Springfield, Mass., or American News Co., New York.

SUBSCRIBER, Gold Hill, Nevada.—Tell us the best way to measure powder for reloading cartridges. We have always weighed it. Have tried a charger, but could not get it to work so as to reload regular. We have a large number of cartridges to reload, and in weighing the powder we lose considerable time—that is with our style of weighing. Can you tell us of any machine for doing the work other than a common pair of scales? Ans. If you do not weigh you must measure. Why not measure and strike? With a Dixon charger we do not think you would have trouble. Complicated loading-boxes, where twenty or more shells are filled at once, have not, so far, given satisfactory results.

J. M., Boston.—Now is the time to fish for salmon in Nova Scotia. The season is always very early there. The Port Medway, Liverpool, La Have, Indian and Gold Rivers are the principal salmon streams west of Halifax, and are easily reached by daily coaches. 2. There is no way of reaching the Lower St. Lawrence below the Saguenay River except by chaloupe. Some private steamers run down a hundred miles or so. The Gulf Port steamers touch at Gaspe and the English steamers at Father Point. Your really best plan would be to take the Inter-colonial railroad to Rio, of Metis, and charter a chaloupe and canoes there for the south shore. You can charter at Tadousac, mouth of Saguenay, for north shore.

INQUIRER, Huntingdon, Tenn.—1. Does a heavy gun, with same charge of powder and shot, give better penetration than a light gun? If so, why? 2. Will a choke-bore breech-loader give better penetration than a muzzle-loader? 3. In shooting choke-bore breech-loader if buckshot chamber in shell will they not be forced into irregular shape in coming from the muzzle, and thus interfere with accuracy of flight? Ans. 1. It is not certain that it does. Experiments have varied a great deal. Theoretically, greater rigidity of the arm, it is urged, gives better penetration. 2. A choke-bore does give greater penetration. 3. In using buckshot, chamber the shot at muzzle always, otherwise the spherical form of the projectiles would be changed.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY!

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NEW YORK, THURSDAY, MARCH 21, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous contributions will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brie notes of their movements and transactions.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager

THE CATLIN COLLECTION.—The Smithsonian Institution is about to recieve a valuable accession in the famous collection of paintings and Indian implements, weepons and curiosities made by George Catlin in his eight years' study of Indian life and character. The paintings consist of 310 portraits in oil and 200 paintings descriptive of all the phases of Indian life. The collection was exhibited twice in Europe. Upon the second tour while in Brussels the artist became embarrassed financially, and the collection was about to be seized, when Joseph Harrison, of Philadelphia, the engineer and locomotive builder, who developed the first railways in Russia, and who was then stopping in Brussels, bought the interesting collection to prevent its disruption. It has since been in the late Mr. Harrison's galleries at Philadelphia. Catlin died brokenhearted at Jersey City in 1872. His name is indissolubly connected with the most complete existing memorial of a people soon to take their place among the races which have vanished from the face of the earth.

THE QUINTUPLE HERALD.—The last and the previous Sunday editions of the New York *Herald* contained twenty pages of close type, which is equal to two hundred and forty pages of the average monthly magazine size. Of the one hundred and twenty columns, sixty-five are devoted to the advertisements, which are three thousand one hundred and thirty in number. We may here mention that the narrative of "Still Hunting," in the *Herald* of March 3d, was from the pen of the editor of this journal, and contained the long promised account of his trip with the Mounted Revenue Police through the mountains of Virginia and North Carolina, in quest of "Moonlighters" and contraband whisky.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

FIELD TRIALS IN THE EAST.

We call particular attention to a communication from Captain John M. Taylor, of Nottoway County, Virginia. Captain Taylor proposes that field trials be held this year, and that the ground selected shall be either in Delaware, Maryland, or Virginia. In chosing any section of country for such trials, Captain Taylor plainly shows that two things are vital to their success. First, there must be an abundance of birds; and, second, in order that the sportsmen of the Atlantic seaboard may participate in the trials, the expense of travel and transportation of dogs must not be excessive. It is very inconvenient for owners of dogs in Boston, New York, Philadelphia or Baltimore to send their dogs to the West, as was done when the trials were held in Tennessee. Captain Taylor, from a perfect acquaintance with the best grounds for game in Delaware, Maryland and Virginia, is of the opinion that a wide tract of country could be found in one of these States admirably adapted for the purposes of field trials. As Baltimore may be considered the base of operations, perhaps the Baltimore Kennel Club would take the initiative in an undertaking of this character. As far as the FOREST AND STREAM AND ROD AND GUN is concerned, we would give such field trials, if held in the East, our entire support, and would be glad to present a handsome prize; declining, however, having anything to do directly with either the management of the trials, or the judging of the dogs.

We refer our readers to Captain Taylor's letter, which gives, in his usual pleasing style, the leading points in regard to the plan of field trials. There is something quite happy in the idea of a numerous party of sportsmen, with their dogs, floating along a canal in their barges, camping where they pleased, and presenting "fields and pastures new" to their view every day. We suppose that in no country in the world, save in the United States, could such a thing be feasible.

We believe, then, that sportsmen will readily understand the advantages to be derived from having field trials in the East, and we are quite sanguine that Captain Taylor's ideas can be successfully carried out.

WHO SHALL SELECT THE NEXT TEAM?

THE recent action of the late American team, if seriously intended as a preliminary step toward taking into their own hands the selection of the team which is to represent America in the next match for the Centennial trophy, evinces, to say the least, a lack of discretion. It is to be hoped that no such purpose is entertained. If the members of the late team propose simply to imitate the example of the Massachusetts Rifle Association, and submit to the N. R. A. their views in regard to the best method of selecting a national team, their action is proper and commendable. But they have no right to go further. They were selected to shoot a single match. Having won, this gave them the right to hold the trophy for a year, and to name the time for the next competition. Having done this they ceased to exist as a team.

The new team will be chosen by the N. R. A., as they themselves were chosen to succeed the team of 1876. With the manner in which this selection is to be made, they, as a team, have nothing to do, except by offering such advice as their experience may suggest, which advice will undoubtedly have great weight.

Nothing would be more indecorous than for active riflemen, the majority of whom would probably themselves be competitors for places upon the new team, to undertake the management of the competitions in which it is to be selected, even if they were otherwise competent to do so, and the riflemen of America would not submit to it. Besides, they are in no way competent to undertake such an important task. With the exception of the well-merited renown they have gained as riflemen, they are comparatively unknown. They are few in numbers, and without organization, cohesion, responsibility or experience. The idea is so absurd that it is to be hoped that no member of the team will call down upon his head the ridicule which would follow any attempt to carry it out.

The ground upon which it is asserted that this power is claimed is equally ridiculous. If the N. R. A. are a "local institution," pray what are the team who they created? Capt. Jackson, the only member not a resident of New York or Brooklyn, has expressed himself emphatically that all international matches should be conducted at Creedmoor, and by the N. R. A., and he speaks the general sentiment of the public, which the team would do well to heed before taking any further steps in such a delicate matter as this.

—Franklin W. Fish, Esq., popularly known during the past twenty-five years as a writer of humorous and sentimental prose and poetry, will deliver a poem at Everett Hall, 398 Fulton street, Brooklyn, this Thursday evening at 8 o'clock; subject, "The Age of Steal."

—The "Pacific Life," a live sporting paper published at San Francisco, has recently changed hands, and came out about the first of March, much improved in all respects. There is ample field for such a journal on the Pacific Slope, and we heartily wish it success.

Mr. Wright Hawkes, L. L. D., will deliver a lecture this Thursday evening at Chickering Hall before the American Geographical Society upon "The So-called Celtic Monuments of Brittany in France," illustrated with twenty stereopticon views.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May —.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President.
Missouri State Sportsmen's Association.

AMENDED GAME LAW IN MINNESOTA.—The Legislature of Minnesota adjourned a week ago, having passed two amendments to the Game Law; one limiting the season for killing deer to six weeks, which is a good point, and the other, not so popular among the sporting fraternity, imposing a fine of $10 for entering a man's fenced field in pursuit of game without a permit from the owner. We will say freely that we indorse this last measure heartily as applied to the prairie States.

STATEN ISLAND FISH TROUBLES.—The action of the Richmond County Board for the Preservation of Fish seems likely to breed trouble between the fishermen and the members of the New York Excelsior Fishing Club. Fykes with meshes must be 4½ inches, and must be set 110 feet from low-water mark The fishermen declare that they can catch no fish now Members of the club are prepared to arrest any persons violating the law, and in return the fishermen declare that they will bring suit against any of the club catching fish on a Sunday.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship.

Conditions.—Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Teams can furnish their own rifles and ammunition, or use those at the gallery, as they may desire. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Offhand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. Practice—No practice allowed on the day of the match. The match to be governed by the rules of the N. R. A. relating to teams. The referees shall elect an umpire, whose decision in all cases shall be final.

The following teams entered for the match. The shooting commenced on March 18: N. Y. Rifle Club, Centennial Rifle Club, Scotch-American Club, Seppenfeldt Team, Zettler Rifle Club, Hellwig Rifle Club, Newark Rifle Club, Yorkville Rifle Club, Irish-American Rifle Club.

Judges, Col. Gildersleeve and Major Fulton. Referee, T. C. Banks.

Order of shooting: Zettler, Yorkville, on Monday, March 18th; Seppenfeldt, Newark, Tuesday, 19th; Hellwig, Centennial, Wednesday, 20th; Scotch-American, Thursday, 21st; New York and Irish-American, Friday, 22d.

Nine teams, of ten each, have entered for the prizes, and among the number of the respective teams are to be found nearly all the champion off-hand shots in New York, and in the cities within a circle of twenty miles of the metropolis. All the men on the teams have been selected with great care, and some very extraordinary shooting may be expected. The contest commenced on Monday night, the 18th, at Conlin's Gallery, 1,222 Broadway. The Yorkville team led off, and were followed by the celebrated Zettler team, which has in its ranks some of the crack shots from the Bowery galleries. Among the distinguished riflemen present were Col. Gildersleeve, Major Fulton, Col. Sanford, the champion Blydenburgh, the champion Bruce, of 219 fame, the pistol champion Lord, Mr. Duckworth, Mr. O'Donnell, and many others.

The contest will prove one of the most important and interesting short-range matches ever shot in this city, and we are glad to record the fact that off-hand rifle shooting is gaining increased favor among all classes.

To our old friend, Mr. Conlin, belongs the credit of having interested such a large number of first-class riflemen in gallery shooting, and for the thorough manner in which all the preparations and details of this match were carried out.

We think it better for the present not to give the scores. Our reasons are that the targets must be inspected by the judges before the official score can be published. In our next issue we shall certainly give our readers the absolute scores.

THE SHARPSHOOTERS' UNION.

The third biennial Association match of the Sharpshooters' Union of the United States and National Association promises to be the grandest sort of gathering for off-hand shooters. It is to be held at Union Hill, N. J., and will remain in session from the 16th to the 24th of June, inclusive. Mr. George Aery, the President, is making every effort to have this the most popular of any of the meetings thus far held, and in these

endeavors he is ably seconded by the other officers of the Union. The first gathering in Baltimore in 1874 showed that such meetings could become very important agencies in unifying the riflemen of the whole country. The meeting of 1876 was held in connection with the Centennial, at Philadelphia, and with the beautiful surroundings of the Park at Union Hill; and, favored by the prestige which that range already enjoys for first-class work, it is confidently expected that the meeting in June next will exhibit something extra fine in its record of scores made and riflemen engaged.

The shooting programme already offered is a liberal one, though at this early date it is impossible for the committee to positively announce many of the honorary gifts, but report and rumor make the prize list in this respect very bountiful, and the fulfillment is not likely to fall short of the promise.

There are on the Union Hill shooting lawn thirty-four targets, at 200 yards each. These have been divided into two classes: Association Targets, of which there will be four, and the General Prize Targets comprising the remainder. In the first-class are the Targets of Honor and the Stich Targets, two of each, open only to members of the United Sharpshooters' Association, and those presenting proper certificates of membership in either the German or Swiss Sharpshooters' Unions. In addition, the President of the United States, the Governors of the State of New York and New Jersey, and the Mayor of the City of New York may shoot on these targets as honorary guests.

The tickets for the honor and stich targets must be taken together at $10. The honor target is divided into twenty-five rings, three-quarters of an inch apart. The outer rings, one to seventeen, counting inward, are upon a white field, while the inner rings, eighteen to twenty-five, are upon a black surface, making a black centre of twelve inches in diameter. Each shooter fires three shots, and but three. The greatest number of rings in the three shots takes the first prize, the next the second prize, and so on. In case of ties, the manner of distribution will be left to the decision of the shooters interested. The targets have been given the fanciful designation of "Columbia" and "Germania," and upon them will be assigned for distribution all honorary gifts not specially donated to other particular targets, and all contributions of the united rifle clubs will be given to this and the stich targets, the latter getting $1,000 cash. Capt. Aery has succeeded in getting from the intricacies of the Custom-house the valuable set of silver sent by the German Sharpshooters' Union last year, and the New York Schutzen Corps has given a prize of $500 in gold.

The stich targets—"New York" and "San Francisco," respectively by name—are black fields, twelve inches in diameter, upon which will be placed a black bull's-eye, or carton, six inches in diameter, bull's-eye alone counting. The best bull's-eye shot of each competitor is measured from the centre of bull's-eye to centre of shot. The best shot takes the first prize, and so on down the list. In case of ties, the second nearest bull's-eye of each shooter will be taken, and in case of further tie by drawing lots. Each competitor will be entitled to three shots, and the prize purse of $1,000 will be distributed in seventy-five prizes, as follows:

One of $75, one of $63, one of $50, one of $40, one of $30, two of $22, two of $20, five of $18, seven of $14, seven of $13, seven of $12, five of $10, seven of $9, seven of $8, seven of $7, seven of $6, seven of $5.

The general prize targets are open to all comers, but marksmen not members of any of the Union will be required to purchase a festival ticket. The list of general prize targets includes two man targets, two Creedmoor targets, two goblet targets, two public prize targets, and twenty-one bull's-eye targets.

The man target represents the upper portion of a man's body, twenty inches wide. The whole figure is black, and upon it are perpendicular lines half an inch apart, the middle line counting twenty, and the outer lines one. Each shooter may fire two strings of five rounds each, on an entrance ticket, costing $5. The better series is taken except in case of ties, when the score of the whole ticket is considered, and if still a tie, by drawing lots. The targets are designated as "Union Hill" and "Hoboken." The purse will be $1,200, divided into eighty prizes, as follows: $100, $90, $80, $70, $60, $50, $40, $30, $25, $20, $18, two of $16 two of $15, two of $14, three of $13, eight of $11, eight of $10, ten of $9, ten of $8, ten of $7, fourteen of $5.

The Creedmoor targets, styled "Creedmoor" and "Wimbledon" are of the regular third-class type, as per rules of the National Rifle Association of America. Bull's-eye eight inches, counting five; centre, of twenty-six inches diameter, counting four; inner, of forty-six inches diameter, counting three, and the outer, over the remainder of the six by four feet slab, counting two. The rules of the National Rifle Association will be enforced at this target in regard to the rifle, loading, manner of shooting, etc., and the prizes will be awarded according to the regular rules. Each competitor may make one entry, at a fee of $2, and the prize list of $200 will be distributed as follows: $40, $30, $20, $15, two of $10, three of $8, $7, two of $6, three of $5, three of $4, $3, $2.

The Creedmoor targets will be kept open as bull's-eye targets, ten tickets to be sold at $1, and daily distributions of a liberal percentage to take place among those making bull's-eye hits.

The goblet targets are named the "Hudson," "Ohio," and "Mississippi." They are a black oval, with a vertical diameter of seventeen inches, and a cross diameter of eleven inches. In the centre of this figure is placed an inner oval, nine by three inches. With shooting tickets, at ten shots for $1, the inner field counts two, and the outer field one. With tickets at five shots for $1 the value of the shots are doubled, *i. e.*, inner field four, and outer field two. The premium for the first twenty points, made by one shooter, one trade dollar; the next twenty points, another trade dollar; for next forty points, two trade dollars; and for one hundred and twenty points, one silver goblet. A goblet of double value will be given to the first marksman making one hundred and twenty points.

The public prize targets are marked like the target of honor, into twenty-five three-quarter inch rings. Each shooter may obtain one entry ticket at $5, and on it fire three strings of three shots each, the best string only to count except in case of ties, when the whole ticket will be measured, and if still a tie, by drawing lots. Upon these tickets, "Wilhelm Tell" and "Herrmann," will be distributed $1,000, in eighty prizes, as follows: $80, $70, $60, $50, $40, $35, $30, $25, $20, two of $18, two of $15, four of $14, three of $12, eight of $10, eight of $9, ten of $8, ten of $7, ten of $6, and fourteen of $5.

The twenty-one bull's-eye targets may be fired at by all comers as above specified at twenty shots per dollar, without limit to entries. The target is a circular black field, twelve inches in diameter. In the centre of this is a black bull's-eye, 2 2-5th inches diameter, counting three points; a middle disk, 7-5th inches, counting two points, and a shot other ways in the 12-inch disk counts one. The bull's-eye disk is removable, and when hit will be taken off and reserved for measurement for one of the seventy-five prizes of the $1,000 offered on this series of targets as follows: $75, $63, $50, $40, $30, two of $22, two of $20, five of $18, seven of $14, seven of $13, seven of $12, five of $10, seven of $9, seven of $8, seven of $7, seven of $6, seven of $5.

Each day a series of bull's-eye premiums will be distributed as follows: For the first and last bull's-eye, each forenoon and afternoon, one trade dollar; for the most bull's-eyes per day, $6; second most, $5; third most, $5; fourth most, $4; fifth most, $4; sixth and seventh most, $3 each; eighth and ninth most, $2, and for tenth most, $1. For the first and last bull's-eye made at the meeting, $5 gold.

On the bull's-eye targets a series of festival premiums are offered. For the first fifty points made by any shooter, a silver festival medal; for two hundred and fifty points more, a gold festival medal; for every hundred points additional, three trade dollars. He who scores the greatest number of points in the first six hundred shots shall be declared "King of the Festival," and be awarded the king's gold medal and $50 in cash. For the second most points, $50; third, $45; fourth, $40; fifth, $35; sixth, $20; seventh, $15; eighth, $10; ninth, $8; tenth, $8; eleventh, $6; twelfth, $6; thirteenth, $5; fourteenth, $5; fifteenth, $5; sixteenth, $4; seventeenth, $4; eighteenth, $3; nineteenth, $3; twentieth, $3.

The firing will open on Monday, June 17, at 2 P. M., and close at 7 P. M. Each succeeding day of the meeting it will begin at 8 A. M., and close at 7 P. M., with an intermission from 12 to 1 P. M. On Saturday the firing and the meeting will close at 3 P. M. A cannon shot will announce the several hours named.

The meeting offers a perfect wilderness of temptation to lovers of off-hand shooting, armed with any class of rifles. The old style hair-trigger weapons will have plenty of earnest patrons, and the modern breech-loader will have opportunities to show its asserted superiority. The Creedmoor men may meet their friends, if not acquaintances, of the Schutzen Bund, and strive in generous rivalry. The FOREST AND STREAM AND ROD AND GUN has exerted its influence to sustain this competitive system, and in offering a medal for off-hand shooting has hoped to bring into the healthful acquaintance of match-shooting our German and American rifle friends. We number thousands of each class among our readers, and it is our earnest wish to see the different styles of shooting intelligently tested, side by side, and in this connection a word on the old ring target is in place.

The Creedmoor target, with its arbitrary divisions, grew out of the exigencies of military practice, where a ready means of signalling was called for, requiring a correspondingly simple system of sub-divisions on the target face; but the finer discriminations are lost, nominal ties are frequent, whereas actual equalities of merit may be very rare. The notion of such coarse marking grew up at a time when it was considered fair to put any sort of a weapon into soldiers' hands. That time has passed, and the problem now pressing for solution on our rifle ranges is the establishment of a system of marking, combining the utmost simplicity with the greatest accuracy, without such cumbersome details as to make it slow in operation. The ring target seems to offer a means for exact measurement and a careful comparison of shots. Whether it will work well at the long ranges and under the severe usage of the heavy practice, such as that held at Creedmoor, remains to be seen; but the problem is solvable, and none will deny that some change can be made to advantage in our present copy of the Wimbledon system.

For the convenience of our readers and riflemen generally, we add a list of the general rules and regulations which will govern the Union matches:

1. Only off-hand shooting is allowed; no shooter is permitted to rest any part of his body against or upon any support.
2. No shooter is allowed to place the butt of the rifle, when aiming, under the coat, vest or suspender.
3. Any fire-arm is allowed, which carries not less than thirty round balls to the pound.
4. Spectacles and simple glasses in the rear sight (globe sight), or upon the stock of the rifle may be used, but must be produced for inspection by the Shooting Committee, when demanded:
5. Only simple supports or gun-holders are permitted.
6. Offences against these rules, when committed in shooting at the Association targets, will be punished by the loss of the shooting ticket, at the other targets with the loss of the shot, and, when repeated, with a fine of one dollar ($1) in each case.
7. Any one shooting for and in the name of another person, shall lose all claims to prizes, premiums and entry money, and shall be excluded from the shooting-house during the festival.
8. On buying the ticket, every shooter must see that his name and surname, place of residence, name of the rifle club of which he is a member, and the number of his festival ticket are correctly entered.
9. Every shooter on entering any stand of the bull's-eye targets shall deliver to the warner, before shooting, his ticket and mark; the warner registers with a punch the number of points shot, just below the registration of the shot. Every shooter, after having made twenty shots on his ticket, is required to give such ticket to the secretary of the bull's-eye targets for registering purpose. Any shooter neglecting such registering has to bear his own loss.
10. Every shooter, after having hit the 2 2-5th inch bull's-eye on the bull's-eye targets, must enter in the warner's book his name and the number of his festival ticket.
11. The warner alone has a right to pull the bell. All tickets must be delivered to the warner before shooting.
12. Every shooter must satisfy himself that the result of his shots is correctly entered; errors must be at once corrected by the Shooting Committee; no claim on the ground of error is allowed, when deferred to a later period.
13. The cap must not be put on or the cartridge put into the chamber before the shooter gets himself ready to fire: in so doing he must point the muzzle toward the targets; in the shooting-house the rifle must be carried, under all circumstances, perpendicularly, the muzzle toward the ceiling.
14. All manipulations with the rifle, alterations, aiming for the purpose of regulating the sights, must be done on the stand, the muzzle pointing toward the targets.
15. The rifles must be placed one after the other in the rifle stand, and must be taken off in the same order for firing; the shooter must leave the stand without delay as soon as his shot is marked; nobody is allowed to interfere with a shooter when aiming.
16. Any shooter offending against these rules (13, 14 and 15) will be fined one dollar ($1), and if he repeats the offense he will be excluded from the shooting-house for the rest of the day.
17. A shooter, who doubts that his shot was correctly marked, has the right, on depositing one dollar ($1) to demand a committee of three (3) shooters to be appointed by the Shooting Master, and one of whom must be a member of the Shooting Committee, to inspect the target. If the committee finds the marking correct, the shooter forfeits his dollar for the benefit of the fund for fines.
18. Every shot counts which goes off on the stand after the rifle has been brought to the shoulder.
19. If the rifle misses fire, the shooter can make himself ready a second time; on missing again he must remove the cap or extract the cartridge and leave the stand, the ticket being returned to him; on coming back he must place his rifle last in the row.
20. All differences concerning the shooting are settled by the Shooting Committee; nobody is allowed to enter the target stand while the shooting is going on, without the permission of the shooting-master, and then only in company of two members of the Shooting Committee.
21. Burning out of the barrel and exploding of caps must be done on the shooting stand; nobody is allowed to fire a shot except during shooting time
22. It is prohibited under all circumstances to offer or furnish the markers, warners or secretaries, refreshments while in service, or to enter into a conversation with them.
23. Any attempt to bribe any marker, warner or other servant, or to forge a shooting ticket, will be punished both by expulsion from the Union, thereby losing all claims on prizes, premiums or entries, and dishonorable expulsion from the Shooting Park.
24. Nobody is allowed to have more than one pound (1 lb.) of powder on the loading table, which must be kept in some closed receptacle; larger quantities must be deposited in the magazine.
25. Nobody is allowed to use more than one rifle on targets of the same class.
26. Smoking in the shooting-house and shooting outside the range is forbidden under penalty of one dollar ($1).
27. The Shooting Master shall appoint six (6) shooters belonging to other rifle clubs, as additional members of the Shooting Committee.
28. The measurement of the best bull's-eye shot is to be done by a proper gauge.
29. Nobody is allowed to shoot on the main targets without a member of the Shooting Committee being present.
30. At the distribution of prizes, parties claiming a prize must produce the shooting ticket, and surrender the coupon of it as a receipt.
31. In all cases the decision of the Shooting Committee is final.

THE FIRST WIMBLEDON CONTEST.—In overhauling some old files of English papers, I have stumbled upon the accounts of the first rifle contest at Wimbledon. They are quite interesting in themselves, and furnish opportunity for comparison with later progress and new methods. The date was Monday, July 2, 1860, and the occasion was made memorable by the presence of Queen Victoria, who fired the first shot from a Whitworth rifle, which had been trained on at a distance of 400 yards, scoring a bull's-eye. The Queen also made a little speech, and the Prince Consort made another, in which he touched the key-note of the whole matter of rifle practice, using these words: "I appreciate the value and importance of encouraging the volunteers in their endeavors to acquire that skill in the use of their weapon on which their whole efficiency depends." The English government and people have never faltered in supporting this sentiment, and the result is a volunteer force in constant readiness to meet any emergency. With the exception of New York, no State in the Union has yet realized what was so clear to the English nearly twenty years ago. The contests continued for a whole week, and one match was carried over into the succeeding week. There were twenty targets, and the contestants included twenty Swiss. The targets at short-range were six feet by three, with an eight-inch bull's-eye; those at long range, six feet square, with a bull's-eye two feet square. The bull's-eye counted three, centre two, and outer one. Positions are not stated, except that at long-range the shooting was with a rest. There was no restriction as to trigger pull, but the military used the long Enfield rifle, being about four pounds pull. In the all-comers' match, the only breech-loaders mentioned were those of Westley Richards. Some, if not all the Swiss, had shaded front sights and used a hair trigger. The shooting seems to have been most inferior to that of late years, but it must be borne in mind that the targets were smaller, and the method of scoring very much against high scores.

At 200 yards, 5 rounds, possible 15, seven prizes, the first prize was taken by a Swiss with a score of 12; the fourth, fifth, sixth and seventh were also taken by Swiss.

At 300 yards, 5 rounds, possible 15, seven prizes, the first was taken by a volunteer with a score of 9; the third and fifth were taken by Swiss.

At 500 yards, 5 rounds, possible 15, seven prizes, the first was won by a volunteer with a score of 7. In another match at same distance, for Swiss only, the winning score was 9. In a third match the winning score was 7.

At 600 yards, 5 rounds, possible 15, the winning score was 6.

At 1,000 yards, with a rest, 5 rounds, possible 15, the first prize, £50, given by the Duke of Wellington, was taken on a score of 3 by Lieut. Archibald; and the second prize was taken by a Swiss on the same score.

At 800 and 1,000 yards, 5 rounds each, possible 30, the first prize was taken by a Swiss with a score of 10.

At 800, 900 and 1,000 yards, 10 rounds each, possible 90, the first prize, £100, presented by the Prince Consort, was taken by Lieut. Lacy on a score of 22; the third prize was won by a Swiss on a score of 18. At same distances the Queen's prize of £250 was won by a volunteer with a score of 24.

The postponed match was for a prize of £30, offered by Miss Burdett Coutts, and was at 400 yards, rounds 10, possible 30. Four men tied at 13, and it was finally won by a Swiss who scored four in the next two shots, making his total 17 out of a possible 30.

None of the rifles now used by British marksmen are mentioned, and it must be conceded that not only the marksmen, but the riflemakers have made great strides in advance. In this country, notwithstanding rifle practice is of recent date, the pupil has outstripped its teacher in many respects. It only remains to extend the system to the militia of all our States. While the main support of such a system must perhaps come from the States themselves, it would seem that the general government ought to be aroused to the importance of this matter, and extend its aid to some extent. R.

THE MARTINI RIFLE.

EDITOR FOREST AND STREAM: PROVIDENCE, Feb. 22, 1878.

I have taken special interest in all the able letters about rifles, called forth from various parties by the results of the international match. The articles of foreign writers have been copied and commented on till there is little more to say. I read with great pleasure one from the pen of such a practical man as is Mr. Ferris of Utica. I have read, too, with interest, the article signed "W. D. P.," of St. Louis, in a late number, which states fully what I have held all along—that with a proper cartridge and a change of sights, our American breech-loading match rifles were adapted to all the requirements of the frontier. Several persons in this city have had their long-range Martini rifles fitted with the Remington combination—rear sight put on the barrel just forward of the receiver, where it is out of the way, and a Beach combination front sight, fitted to go in in place of the wind-gauge front sight, and so have a gun for long-range or off-hand shooting without carrying or expense of owning two rifles. The combination rear sight can be used with the pin-head disc in wind-gauge sight for off-hand practice, and affords absolute safety from the rear sight striking the face in firing 100 to 105 grains powder off-hand. I must say, in passing to "W. D. P.," that if he had had the pleasure of owning and using an American-made Martini, he would admit that the rifling could be as readily and thoroughly inspected as any of those he names. The whole secret is in keeping the block polished and resting the butt on the ground; another, looking through from muzzle with-breech open in this manner all imperfections near the breech are magnified, and in mine, which I have used now three years, and have fired, as my bills for bullets show, over 6,000 times, I can see the least particle of dust or dirt, and locate it at once. Now, I wish to ask a few questions about the Express principle, and would say that I have faith in what our British cousins call the Henry rifling, and believe it does give better results with heavy charges than our common grooving; yet my experiments at the target lead me to think that the Express rifle, with its large charge and light bullet, is not so accurate a weapon as our rifles with the heavier ball, or rather with our proportionate weights of powder and lead. I have a .40-cal., 30-inch barrel, Martini rifle, made by P. T. C., chambered for a shell holding 70 to 74 grains powder. I have bullets that weigh 300 grains and 385 grains, respectively. With 72 grs. powder and the 385 grain bullet, I have repeatedly put ten consecutive shots, at a distance of 125 yards, inside a 3-inch circle. With the same charge of powder and the 300-grain bullet, I have seldom put ten consecutive shots so close that less than an 8-inch circle would inclose them, while with 62 to 64 grains of powder the 300-grain bullet would make nearly, if not quite, as good a pattern as the heavy one. In regard to the trajectory of the lighter bullets, they will average only about four inches higher at 125 yards than the 385-grain bullet, the powder being the same in each case.

Now, will some of our sportsmen who have tried like experiments give us their experience in FOREST AND STREAM. All our long-range marksmen know that the charge of powder cannot be increased beyond a certain limit, except at the expense of accuracy. AMATEUR.

A NEW SCORE CARD.—Dennison & Co., of Boston, publishers of rifle targets, etc., offer, through the N. R. A., a prize of $50 for the best combined score card for long and short range, if practicable, or $25 each for the best one adapted to long or short range, the blanks to be submitted to a committee of the N. R. A., and the award to be decided by such committee. Competition open until April 4; all forms to be sent to this office. Competitors will inclose their forms with a *nom de plume*, accompanied by a sealed envelope with this *nom de plume* on the outside and the real name within.

HANDSOME PRIZES OFFERED BY THE SHARPS RIFLE COMPANY.—The following correspondence explains the two money prizes offered by the Sharps Rifle Company, and the conditions necessary to win them:

BRIDGEPORT, Conn., March 14, 1878.

To GEO. S. SCHERMERHORN, ESQ., Secretary National Rifle Association, New York:

The Sharps Rifle Company offer gold prizes, open to the world. To the marksman first making 220 or more out of 225, with a Sharps rifle, during the year 1878, $150; to the marksman making the highest score, with a Sharps rifle, during the year 1878, $100.

CONDITIONS.—Fifteen shots at each 800, 900 and 1,000 yards. No one person can take both prizes. Coaching allowed, but competitors must otherwise observe rules same as governed competitions for positions on International Team for 1877 at Creedmoor. Score must be made in a public match by a member of any rifle club or association organized prior to March 1, 1878, and in which not less than six competitors shall complete their scores, whose testimony as to the making of the winning score will be required, with such additional evidence as circumstances may seem to warrant.

Yours truly, SHARPS RIFLE COMPANY,
E. G. Westcott, Treas.

NEW HAVEN.—Wallace Gunn, of Bridgeport, won in the all-comer's match at the New Haven rifle range, on March 9, making 33 out of a possible 35 at 500 yards, using the fine Sharps' rifle recently presented to Captain S. C. Kingman.

TARGET WITH A STEVENS' PISTOL.—Mr. E D. Castelow, of West Meriden, Conn., sends us a very remarkable target made by him with a Stevens' pistol, barrel 6 inch, .22 cal. The pistol was shot at a rest, distance 210 yards. One is a bull's-eye, and the rest are not far from it. Of course shots at a rest do not show quite as much the skill of the shooter as the excellence of the arm. With only a six-inch barrel the Stevens' pistol must be a wonderfully accurate arm.

THE MATCH AT CREEDMOOR, JR.—This match, which was concluded on Saturday, as follows:

Dr Dudley, first prize	47	47	47	46	47	46	49	46	46	47	—468
C Blydenburgh, second prize	48	45	45	45	46	45	48	47	45	48	—461
F H Holton, third prize	46	45	46	45	48	45	45	48	46	47	—460
J W Todd	46	46	45	45	46	46	45	45	47	46	—457
D F Davids	45	44	44	45	44	44	44	43	43	43	—439
H F Clark	37	41	46	40	46	42	40	42	37	44	—112

There were sixteen entries in the match, but the above were all who concluded their scores within the specified time.

SEPPENFELDT RIFLE TEAM.—104 *Bowery, March* 15.—175 feet, off hand; bull's eye, 2½ inches; Creedmoor target; possible 50. Score:

N W Bock	46	Jas Dwyer	43
J Garrison	46	Ch Laing	42
A Grueneberg	45	O Decker	42
E Story	41	Wm Guttenberg	41
E Holzman	44	A Kahny	41
W Seppenfeldt	44	G Mander	42
C Roesh	44	J Jones	48
A H Anderson	44	Th Brossard	40
D Sullivan	43	H Rothenberg	37
G Strassner	43	J Roesh	36

BLYDENBURGH VS. GERMAN.—A match between these two clubs of Syracuse, N. Y., March 14, resulted in the following score:

Blydenburg Club.

W Brown	9	10	9	10	8	12	7	8	9	9—91
J Van Duyn	8	5	8	4	8	8	5	5	8	4—88
W H Wood	11	11	7	10	8	7	10	10	10	8—92
J W White	10	8	9	11	9	6	8	9	9	7—86
T A Ford, Jr	7	8	6	8	7	8	8	7	6	7—72
F Howard	11	11	8	4	6	7	7	7	9	8—78
L C Watkeys	4	11	8	6	10	8	6	9	11	11—79
C G Brown	6	7	8	6	10	6	8	8	9	8—76
J P Rule	5	9	9	6	7	8	9	9	10	6—78
Total										—690

German Club.

N B Nickerson	8	7	10	7	6	9	5	7	8	7—74
F Singer	10	5	8	8	7	12	9	11	9	9—88
O Zischang	8	11	9	7	6	9	9	6	7	6—78
F Snelder	7	6	7	10	6	10	4	12	9	3—74
J B Brilbeck	9	8	7	6	9	8	8	8	9	7—79
J Gloeber	9	4	2	7	11	9	6	8	6	12—74
J Grassman	8	9	6	7	5	9	8	7	9	5—73
G C Young	12	8	6	7	7	12	11	10	7	10—90
A Altman	7	8	5	7	6	8	9	7	7	8—67
Total										—697

GREENVILLE SPORTSMAN'S ASSOCIATION.—A new target has been adopted. It consists of a four-inch bull's-eye, thirteen-inch centre, twenty-six inch inner, and outer twenty-four by thirty-six inches—just one-half the size of the Creedmoor one hundred yards target. A trial shoot at 100 yards resulted in the following score:

D McGanghey	5	4	5	4	3	3	4	4	8	4—39
A W Walters	4	4	4	5	4	4	4	2	3	4—38
E A Leavy	4	3	4	4	4	4	4	4	3	3—37
Sam Bell	4	3	3	4	4	4	2	4	4	3—37
Fred Sackett	3	4	5	3	3	4	4	4	4	3—37
L H Ale	2	3	5	4	4	4	5	5	3	2—36
A M Raw	3	4	3	4	4	3	4	3	3	2—33
F G Chorpenning	3	3	3	4	4	2	4	3	3	3—32
S I Snyder	4	3	3	3	3	3	4	3	4	2—32
E M Birchfield	2	4	2	4	4	5	2	2	3	4—32
J L Kragle	4	3	4	3	4	4	0	4	2	2—30
Jas McLaughlin	3	3	2	3	3	4	3	2	3	3—29
H Bridge	3	3	3	3	4	4	3	0	0	3—26
George Moore	4	3	3	0	w					

EASTON RIFLE ASSOCIATION.—The riflemen of Easton, Pa., have obtained permission to use the fair grounds at that place on Monday of each week, each member of the Rifle Association paying therefor a yearly subscription of $2.50.

PENNSYLVANIA—*Philadelphia, March* 16.—Captain John J. Wright's rifle team; first target match, 400 yards range:

Capt John J Wright	5	4	4	5	5	5	5	4	8	5—45
Harry C Clark	5	5	5	3	4	5	3	4	5	5—44
William J Burns	4	5	8	5	4	5	3	4	5	4—43
George A Clarkson	5	5	5	4	3	4	5	4	4	8—42
Charles H Dou	5	5	4	4	5	5	4	3	3	4—40
James J Parker	3	4	4	3	5	4	3	5	8	3-37

Captain Wright deserves the credit of having organized this team, and the hope may now be entertained that Philadelphia, somewhat backward as to rifle matters, will soon come to the front. There are many strong amateurs in Philadelphia, as to the science of rifle shooting. Some of the best articles in the FOREST AND STREAM AND ROD AND GUN have been due to the pen of a Philadelphia gentleman.

TEXAS—*Waco.*—Lane's gallery, March 2:

W T Lane	5	4	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5—97
C C McCulloch	5	5	4	5	5	5	4	5	4	5	5	4	5	5	5	4	5	4	5	5—94
J Marshall	5	4	4	5	5	5	5	5	4	4	5	5	5	4	4	5	5	5	4	4—92
E Early	5	5	5	5	4	5	5	4	4	5	4	5	5	4	5	4	4	5	4	5—92
R B Parrott	5	5	4	4	4	5	4	5	4	4	5	5	4	4	4	5	4	5	5	5—90

RIFLE SIGHT.—A new Vernier long-range sight has recently been invented by Capt. S. C. Kingman, of Bridgeport, Conn. By its use the cup or peep can be instantly moved the whole length of the slide and still have the benefit of the Vernier scale.

—Dr. Carver, of California, has promised to be in Logansport, Indiana, next May and exhibit his glass-ball shooting with rifle.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7 Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gas of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb Secretary.

FIELD TRIALS AT THE EAST.

BELLEFONTE, Nottoway Co., Va., March 15, 1878.

I WROTE you a letter last year on the propriety of holding field trials somewhere in the East. Hitherto the State of Tennessee is the only one in the Union that has any claim to having inaugurated dog field trials in America. A field trial is the only real way of testing a dog's merits, as it is held in the field, and the birds shot, on just the same plan as in the ordinary field sports over a dog, with this proviso, that the dogs and handlers of dogs must conform to certain laws, which are mutually agreed on beforehand by the owners of entries. There are so many good dogs now everywhere, especially in New York, Boston, Philadelphia, and Baltimore, that a section of country I am sure could be found within easy access at comparatively moderate fares, to and from the before-mentioned cities. This is all important, and a great desideratum with owners of dogs who wish to enter their animals in a field trial. To talk plainly, how long would it take to carry out these trials, and what would be the total cost to owners and spectators? These questions should be answered distinctly, as the great complaints hitherto made have been, "The distance is too far, and the pleasure does not justify the expense." In my opinion the section of country to hold these trials is in some part of either the States of Maryland, Delaware or Virginia.

As this is only an initiatory letter at present, I would kindly call on the Baltimore Kennel Club to make positive inquiries from their numerous friends as to birds on the eastern shore of Maryland.

I am informed by the Secretary of the Old Dominion Steamship Co., W. H. Stanford Eyre, that there is excellent shooting all along their line, which runs from Lewes, Del., to Snow Hill, on the border of the Virginia State line. The Old Dominion Steamship Co. is prepared to give every facility and accommodation to sportsmen or anglers with their dogs or boats. Should the Baltimore Kennel Club conclude to hold a series of field trials either in the States of Virginia, Maryland or Delaware, the Old Dominion Steamship Co. propose to take sportsmen, trainers, their dogs and appliances at an extremely moderate rate. From New York to Lewes, Del., takes only about twelve hours. The country bordering on the line of the roads from Lewes, and in fact generally down through the Peninsula, affords fine sport with both rod and gun. As it has only been recently opened up, it is known to but a comparatively few people. The angler will find sheepshead, bluefish and weakfish at the mouth of the Chesapeake Bay off Lewes, and generally down the beach to the Capes of Virginia. The marshes around Lewes contain many English snipe, and in the covers down toward the cape many red foxes are found. There is a good hotel at Lewes conducted by M. Frederick. In and around Rehoboth Bay, five miles from Lewes, snipe and wild fowl are abundant. Georgetown and the surrounding country afford fine quail shooting, as the country is a series of open plains, bordered by thickets, and some swamps, which latter protect the birds to some extent and prevent their too rapid destruction. The people are kind and generous in extending the privilege of their lands to true sportsmen. The brick hotel at Georgetown is well kept and moderate in its charges. The proprietor himself is a sportsman, and understands the ways and needs of the fraternity. Working down the road from Georgetown, Millsboro, Dagsboro, Frankford, Selbyville and their surroundings are about the same character of country. Frankford is near the head of Indian River, on which fine wild fowl shooting can be obtained.

Berlin is a capital base or headquarters for sportsmen, as besides the excellent shooting immediately surrounding it all parts of this section of the State can easily be reached from there. The Wicomico road opens communication with the Chesapeake side of the Peninsula. At Snowhill and vicinity there is fine woodcock and quail shooting in the season, and the marsh and flats from Snowhill down toward Stockton and Franklin is the home of immense numbers of English snipe during their migrations. At Chincoteague and the sounds and bays along the beach all varieties of snipe, duck, brant and geese are found in great numbers. At all of these principal points good hotels are located, and as conveyances can be had cheaply, very large tracts of country can be shot over each day.

Having said so much of the Eastern Shore of Maryland, I beg to offer another suggestion: I would like to comment on what has been hitherto the great drawback to the successful issue of field trials, and that has been the scarcity of birds; not that there has not been a goodly number of quail but in a totally insufficient quantity. Where is the section of country within easy distance of the large northern cities where quail can be found to test successfully 30 to 40 dogs. If the birds fail everything fails, and in placing a new recreation before the field sportsmen of America, it behooves the managers of field trials to be sure that there are plenty of birds.

In this part of Virginia and also along the James River and Kanawha Canal the planters and farmers have seeded probably more wheat than at any time since the war, and together with the unprecedentedly mild and open winters there is every probability of birds being very plentiful, but as a writer very justly remarks, "Where birds are plentiful accommodation is scarce." In order to have both birds and accommodation, the only feasible plan would be for the committee to hire three passenger canal boats on the James River and Kanawha Canal, and to fit them up suitably; one boat could serve as a sleeping boat, another as a boat where repasts could be obtained, and the third as the dog boat. Under careful management this could be carried out with success, as the boats would be under the command of a superintendent, and they could be stopped anywhere and at any time, thus having always fresh ground for fresh dogs. It is indespensable to have a good caterer with polite assistants, and the "colored pusson is the gemman." It might appear to the managers of the field trials that this arrangement would be very expensive and uncomfortable; but on the contrary, no other plan could be more economical or attended with less annoyance. These boats would accommodate 100 sportsmen, attendants and their dogs, move along at lunch time, changing position from time to time, travel at night, etc., as might be found expedient. I merely throw out these ways and means as practicable, as several sporting friends of mine have traveled in this *al fresco* way and killed large amounts of game. Sportsmen and their dogs could come by the Old Dominion Line of steamers from New York to Richmond and return, including meals and state-room, for the moderate fare of $20. Their dogs would be properly cared for and carried without expense of any kind. Perhaps it may be thought too early in the day to mention the names of gentlemen who would interest themselves in this matter, but as it is never too early to start a good thing, I would therefore suggest that the Baltimore Kennel Club ascertain the positive quantity of birds to be found in these different localities, and not to be satisfied with the usual answer, "There are plenty of birds," but to look and see for themselves whether the facts are as stated. The gentlemen who are more cognizant with these routes and in their own sections are Mr. Von Culin, of Delaware City, who lives adjacent to the line of route by Georgetown, Selbyville and Berlin, and Mr. Chas. Palmer, the President of the Virginia Game Protection Association of Richmond; and from what I know of the members of the Baltimore Kennel Club

Club they are both willing and able to take care of their own State. These trials we must have in one of these three States, as there are numbers of gentlemen who would only be too glad to have the opportunity to enter their dogs, providing the time taken up was not excessive, nor the outlay too great. In another letter I will treat on the rules and regulations on which dogs are now judged by at field trials. On my return from Europe, where I expect to see the working of dogs at the Horseheath field trials, I trust to be able to compare their trials with our own. I shall be pleased to give such observations to the public; at present I am totally opposed to the laws and rules on "points" governing trials now in vogue.

I would like to say one word again to the Baltimore Poultry Association. Would it not be a good plan for the owners of homing pigeons to carry along a few of their crack birds in connection with the dog field trials, as where there is no telegram—and I believe there is none on the James and Kanawha Canal. Even should there be telegraphic communication, it would be grand sport to throw up a couple or so of "homers" and carry the news of the winners of the field trials to Baltimore, and they could have a race on their own account. Judging pigeons—especially carriers—in a coup, is all very proper; but the combination of beauty, feathers, good breeding and characteristic marks, with the instinct carried out of flying long distances in the shortest possible time, is what is required; or, in other words, it is pace and style that win. I am aware the birds would require considerable training. The way I would start about it would be this: Put one of my best "homers" in a bag; give the bag to the conductor or reliable baggage master—one that takes an interest in these matters—and plenty of them can be found; let such a conductor start on his regular train, which runs daily from Baltimore to Richmond, and instruct him to fly the bird five miles out, according to his homing qualities, noting especially time and distance. This could be carried out in the same manner, from time to time, until the bird was thrown up from Richmond. As these birds are expensive, I am aware there is some difficulty to be overcome. It is possible the birds might be shot. However, the papers would gladly make an item about them, and request people not to molest the birds.

I could write more fully on this matter, but at present I only want to throw out a hint to those most interested.

JNO. M. TAYLOR.

For Forest and Stream and Rod and Gun.

COLORS OF SETTERS.

ALTHOUGH afraid that the readers of your paper are almost tired of hearing any more arguments on the different colors of setters, yet I trust I can explain a few points more fully, as my friendly adversary, Mr. E. Smith, has had the same privilege, though this shall be the last on my part.

We agree on all important points, excepting the practicability and preference of the red color for field work. Mr. E. Smith admits that he appreciates the solid white color in cover shooting, but as the covers in Maine are so thick that even a white dog could not be seen far away, "he would nevertheless put a bell on the dog." Yet, a dog more or less white can surely be seen at a far greater distance, and much more readily at any distance, than a red dog, no matter how dense the cover might be. Now, as a rule, the covers in New Jersey, New York, Pennsylvania and Connecticut are not so thick but that a white dog may be kept in sight in ordinary hunting. While hunting the alder covers of Litchfield county, Conn., four years ago, in company with "Old Smeedy," who knew every cow path for twenty miles around, we one day hunted with a party of gentlemen, using only red setters. The advantages of our more or less white dogs over the red ones were very striking. The owners of the excellent red dogs freely admitted this. There would be a constant whistling and calling, in spite of bells, when the red dogs were on a point or almost within reach. We, however, had none or hardly any trouble in keeping our dogs in sight. This holds good, in the same proportion, for all cover and upland shooting.

Mr. E. Smith does not approve of letting a dog range off further than two hundred yards each side of him. This I admit is fully far enough under ordinary conditions. I shall, however, explain why I prefer a dog which is not afraid to range half a mile under certain circumstances. Most of my shooting is done before 8 or 9 A. M., as I then have to go to the city. Our marshes are extensive. As a rule, birds are found only in certain spots, which are often far apart. This being the case, everybody must admit that a dog which will go from one place to another, without waiting for his master to follow, and upon finding birds point them till they can be flushed and shot at, is of great advantage, and this holds good almost wherever snipe are found in the East. I would like to mention one instance: One day last October a brother of mine hunted my white and red setter Dash. He had killed four or five birds on the Penhorn meadows, and upon arriving at the road near the bridge the old dog went down the road on his usual trip to an excellent piece of snipe ground, while my brother waited. In about ten minutes the dog stopped, and to all appearances pointed. We have measured the distance, and it is fully half a mile from where my brother watched to the pointing dog. A red dog could not be seen on these grounds at such a distance, and my brother would have been deprived of the rare pleasure of killing four snipe over a single point. The good old "sniper" never stirred while the first, then a double, and the fourth and last bird were killed over his staunch point. We have, however, many excellent snipe grounds, where it is difficult to keep a dog in sight, especially a red one, at two hundred, or even one hundred, yards distance.

I cannot agree with Mr. Smith that the sportsman will have many more shots when hunting a red dog than one that has a more contrasting color to all surroundings. In fact, in my experience I have never noticed it, although I admit it might, in some cases, make a little difference in favor of the red color. However, success depends almost entirely on the skill of the hunter and the good field qualities of his dog. We do not meet with many plovers, curlews or other large shore birds on our meadows, but on one occasion we killed eight out of nine large yellow legs, calling the flock back four or five times in full view of two white dogs, retrieving, till only one was left to tell the sad story. Bitterns, rails, sand pipers or herons we rarely molest when snipe hunting, *for our dogs' sake*, excepting we meet with new specimens. In such duck shooting as we meet with while snipe hunting the color is also of little importance. I have, on one or two occasions, seen my dogs stiffly pointing on a duck, and also oftener had them standing in full view of ducks, without losing my shots on account of it.

Mr. Smith, I have probably expressed only personal and local views, as one color might be preferable for our locality and purpose and not for another. However, I argue that it is of far greater importance to have a dog kept easily in sight than not, and run the chance of having a few more shots at bitterns, sand-pipers, etc., which chances are undoubtedly outbalanced by those which are lost by not having the dogs in sight. It is very certain that much game is found, pointed, flushed, by dogs, and lost, of which the sportsman is not aware.

JUSTUS VON LENGERKE.

New York, March 11.

MASSACHUSETTS KENNEL CLUB.

We give the number of entries for the special prizes with a list of the additional specials. Everthing points to the certainty that the Boston Show will be a superb one. Total number of entries, 830, with over 700 dogs:

SPECIAL PRIZE LIST—ENTRIES.

Class A—For the best kennel of English Setters, either native or imported, to consist of not less than five, and to be owned by exhibitor—3 entries.

Class B—For the best kennel of Irish setters, either native or imported, to consist of not less than five, and to be owned by exhibitor—3 entries.

Class C—For the best kennel of Gordon setters, either native or imported, to consist of not less than five, and to be owned by exhibitor—7 entries.

Class D—For the best kennel of pointers, either native or imported, to consist of not less than five, and to be owned by exhibitor—5 entries.

Class E—For the best kennel of water spaniels, to consist of not less than four, and to be owned by exhibitor—1 entry.

Class F—For the best English setter stud dog, either native or imported, to be shown with two of his get—5 entries.

Class G—For the best Irish setter stud dog, either native or imported, to be shown with two of his get—2 entries.

Class H—For the best Gordon setter stud dog, either native or imported, to be shown with two of his get—2 entries.

Class I—For the best pointer stud dog, either native or imported, to be shown with two of his get—1 entry.

Class J—For the best English setter brood bitch, either native or imported, to be shown with two of her progeny—3 entries.

Class K—For the best Irish setter brood bitch, either native or imported, to be shown with two of her progeny—3 entries.

Class L—For the best Gordon setter brood bitch, either native or imported, to be shown with two of her progeny—5 entries.

Class M—For the best pointer brood bitch, either native or imported, to be shown with two of her progeny—8 entries.

Class N—For the best display of foxhounds, to comprise not less than two couples, to be owned by exhibitor—2 entries.

Class O—For the best mastiff, dog or bitch—9 entries.

Class P—For the best St. Bernard, dog or bitch—6 entries.

Class Q—For the best pug, dog or bitch—4 entries.

Class R—For the best pair, dog and bitch, of Irish setters, imported or native, to be owned by exhibitor—4 entries.

Class S—For the English setter, dog or bitch, either native or imported, that has the best and handsomest head—22 entries.

ADDITIONAL SPECIAL PRIZES.

Class T—For the best setter of any breed, dog or bitch, imported or native, in the show; a silver cup, presented and manufactured by Messrs. Shreve, Crump & Low, Boston, Mass., value, $225—9 entries.

Class U—For the best field field spaniel, dog or bitch, either clumber or cocker; Baird's History of North American Birds, by S. F. Baird, T. M. Brewer and R. Ridgway. Illustrated by sixty-four beautifully colored plates and five hundred and ninety-three wood-cuts, 3 volumes, presented by Messrs. Little, Brown & Co., Boston, Mass., value $45—2 entries.

Class V—For the best brace of beagles in the show; a handsomely mounted Stag's Head, presented by Arthur J. Colburn, Esq., Boston, Mass., value, $25—1 entry.

Class W—For the best pointer of any weight, dog or bitch, either native or imported, in the show; a fine breech-loading double gun, presented and manufactured by Messrs. Parker Bros., Meriden, Conn., value, $300—21 entries.

Class X—For the best native setter puppy of any breed, dog or bitch, in the show; a fine shooting suit, made and presented by Messrs. Lucas & Co., Boston, Mass., value $80—3 entries.

Class Y—For the best skye terrier, dog or bitch in the show; a silver cup presented by The Massachusetts Kennel Club, value, $25—2 entries.

Class Z—For the best Blenheim or King Charles spaniel, dog or bitch, in the show; a silver cup presented by The Massachusetts Kennel Club, value, $25—2 entries.

KATHLEEN IN BOSTON.—We cut the following from our English exchange, the *Sporting Gazette*, of March 2:

"That very handsome and highly bred all red Irish setter, Palmerston the Second, has passed into the kennels of Mr. John M. Niall, Killaloe, Ireland. Like his progenitors, both on sire and dam's side, He, too, though little more than a puppy, has already won many prizes in 'hot company.' He has been lately bred to owner's Sal, one of whose last litter (Kathleen) by Jenkins' Derg, has just been forwarded from Liverpool per steamship 'Bulgerian,' to compete for the puppy prize at Boston Kennel Club show, to be held on the 26th to the 29th March. Such pluck deserves to be rewarded by the youngster winning."

Would Mr. Niall let us have young Palmerston's pedigree?—ED. F. AND S.

DEATH OF ROBINSON'S JACK.—Mr. Walter Humphreys informs us of the death of this well known dog. Jack was a red Irish setter, and twelve years old when dead. Among his numerous get were the following dogs: Eugene Schorb's "Jocco" and "Flora;" Scott Rodman's "Flora;" Henry Sandford's "Don;" Dr. N. Salters' "Dash;" Hugh McLaughlin's "Dash;" Hamilton Thompson's old "Belle," and a host of others. The last named bitch was the dam of the celebrated prize winning dog "Duke," belonging to the late Hamilton Thompson. Jack was firm and true as steel in the field, and was famous for his docility and perfect training. His remains were buried in the middle of Mr. Humphreys' garden here, with all the honors due him.

WHY? OH! WHY?—[This is not our own; we are utterly incapable of such a thing.]—Why is a doctor like a well-trained setter? Because he is always ready to come to heel and charge. [This was perpetrated in Baltimore by E. S.]

Game Bag and Gun.

GAME IN SEASON IN MARCH.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocets, etc., coming under the group *Limicolæ*, or Shore Birds.

VERMONT—*Rutland, March* 14.—Parties out fox hunting recently killed nine foxes in one day in West Hartford.

NEW YORK.—*Greenwood Lake, March 11th.*—The return of the migratory birds is uncommonly early this season, as you will see by the following items and dates from my note-book: Feb. 27th, blue birds [*Sialia sialis*]; March 1st, black-birds [*Agelaus phœniceus*]; large flock of crows seen flying high and heading north; March 3d, woodcock seen near "Ravine" by A— R—; March 5th, robins [*Turdus migratorius*]; March 6th, this evening heard "Peper" frogs for the first time (the old fishermen say that after the "pepers" have "peped" three nights, the catfish will bite, so dig your worms); March 8th, more woodcock seen on west side of lake, near "Bahcock's Cove;" March 9th, heard meadow larks [*Sturnella magna*] whistling their summer note, and very acutely felt a wasp, whose "business end" was in "A No. 1" condition; squelched him instanter.

GREENWOOD.

Kingston, March 13.—Zeke Catalin, a hunter of Denning, shot a large bear near the Peak of Moose Mountain in that town on Monday, 11th.

OUR HARRY.

Saratoga, March 15.—Sportsmen report that black ducks have already made their appearance in the marshes around Saratoga Lake and Long Lake in Ballston.

A BOY'S EXPERIENCE AT MORICHES.—"Jack Curlew," of Brooklyn, sends us a charmingly *naive* account of his first experience in duck-shooting at Moriches. After a series of misadventures, which we assure our young friend are absolutely indispensable in the apprenticeship of a mighty shooter of ducks, the party arrived at their destination. The first day, having killed one duck, he tells us, with rare ingenuousness:

"I had no way of getting him, as my boat was a long distance off and the wind blowing off shore; he would drift out of sight before I could reach him. At that moment I noticed a sail-boat coming in my direction; I waited until it was within hail, and asked the man if he would get it for me, which he did, but forgot to bring it ashore. As I had no way of reaching him, I blessed him in an emphatic manner and continued my tramp."

One duck was bagged, however, before his return, and, rowing over to the house, he found his comrade, H., who had had worse luck than he, not having seen a duck. The next day's hunt was equally unsatisfactory:

"Our total bag consisted of one quail and a pigeon, which I succeeded in bagging among some corn. Next day we concluded to leave, so that is our experience at Moriches, of which I have had enough."

DUCKS AT GOOD GROUND.—A city correspondent writes: I have just returned from a short trip to Wm. Lane's Good Ground, L. I. Had two days' shooting; killed forty broad bills, fifteen red-heads, and three brant. Old gunners say there never have been as many ducks in the bay at any one time as now. The new inlet is working nicely. F. M. T.

ADIRONDACK VIEWS.—The Sloe Bros., of Poughkeepsie, who enjoy a wide reputation for the excellence of their work, publish admirable photographs of two oil paintings by Pierce, of Syracuse. One, which we think the better of the two, is a view of Hathorn's "Forest Cottage Camp;" the other is a view on Smith's Lake. Both pictures will be of interest to those familiar with the scenes.

—Wild geese and brant were never more plentiful than recently in Manahawken Bay. The writer visited the bay on Saturday last, and learned from a well-known Barnegat Bay man that night shooting and firelighting has been indulged in almost every night since the new moon. Guns can be heard at all hours of the night, and the consequence is that not a fowl is to be seen in that part of the bay. The law-breakers are supposed to belong on a vessel from Tuckerton and another boat from the head of Barnegat Bay, but no names are mentioned yet.

PENNSYLVANIA—*Drums, March* 13.—Prospects for Bob Whites are good for next fall. We are cursed with Sunday hunting and fishing; more game killed on Sunday than all the week-days put together, and too much game killed out of season.

POIR.

SHARON SPORTSMAN'S ASSOCIATION.—The officers for the ensuing year are: Pres., Thomas E. Blunt; Sec., C. E. Tribby; Treas., E. R. Ohl. The Association has now fifty members in good standing.

MINNESOTA—*St. Paul, March* 10.—Ducks and English snipe remained here until Christmas, and the former at least, with geese, are long ago back by the hundred. In many places the farmers are already hard at work putting in their spring crop—fully four to six weeks earlier than usual. The ice on Lake Pepin is gone, and last Thursday, the 7th inst., the first steamer passed the lake, 20 days earlier than any previous year in the memory of the oldest inhabitant.

We have for the last 24 hours had a rainstorm, which still continues; and may it last a long while, for water is much wanted in the country.

J. S.

A Shakopee correspondent says:

"The next crop of pheasants and prairie chickens will be an abundant one, owing, no doubt, to the unprecedented heat last summer preventing the killing of a large number of these favorite birds. The strangely mild winter so far has also helped

them along, as I have noticed very large flocks of prairie chickens budding on bright mornings in the timber lining the banks of our Minnesota River. The woods at this date are chuck full of [Woodchucks?—Ed.] pheasants, and even the gray and black squirrels are getting quite numerous. Two years ago not a specimen of the latter could be found in our part of the State. Quail are not yet as abundant as I have seen them in old Pennsylvania; the rigor of this northern climate seems to retard their increase. Very often, in past years, have I found a little covy frozen under some wood pile or brush heap. The black bears and deer which were quite plenty in this region as late as ten years ago are now almost extinct; the former driven farther West and North to the plum and crab thickets, and the latter slowly, but surely, exterminated before his relentless and bloodthirsty enemy—the Norwegian and his dogs and snow shoes! B.

Lake City Sportsman's Club.—This club has held nine meetings during the past year; ten trap shooting contests have taken place; Major Van Vliet holds the champion badge, and James McCroden was last winner of the Dilley badge, which is now in the possession of the club. Officers elected for the ensuing year: Pres., L. S. Van Vliet; Vice-Pres., C. H. Freeman; Sec., D. C. Estes; Treas., F. Rueckert; Managing Committee, G. F. Benson, chairman; J. McCroden, Nate Patton, C. H. Freeman, Charles Wise, C. W. Smyth and S. M. Simpson.

California.—Sylvester Scott, who lives near Coverdale, killed last year thirteen bears. Seven of them were killed in a two weeks' hunt in December.

Wild Pigeons.—Pigeons are in the beech woods of Sullivan County, Pa., in immense numbers, working on the beech, which is a heavy crop. They will nest probably near Thorndale, Sullivan County. Parties wishing further information can address "Nick," Wolf Run P. O., Lycoming County, Pa.

That Chicken Tangle.—To the prairie chicken problem, published March 7, there have come several solutions. For the enlightenment of all, and as a recognition of their attention, we give here the correct answer as furnished by the correspondent who contributed the problem: A's chickens were fifty cents each; B's were thirty-three and one-third cents each. The average price was then forty-one and one-third cents, which, multiplied by the total number sixty, comes to $25. But when B, in the simplicity of his soul—How our city street hucksters would bleed him!—sells five chickens for $2, he receives only forty cents apiece for them, or $24 for the whole, and that dollar has disappeared with as much mystery as Heller himself could throw about the operation.

Dittmar and Black Powder Mixed.—The right-hand barrel of my Geo. Bury (cylinder) averages 121 in a 30-inch circle, at 40 yards, off-hand shooting, with 3¼ drs. of the mixed powder (5 oz. Hazzard's sea shooting to 1 oz. Dittmar.) I get an average of 149, also an average of six pellets of No. 7 chilled (Sparks) shot, in a 2-inch bull's-eye, at 40 yards. If any of your readers have met with "bad luck" shooting at glass balls, especially from a Bogardus trap, let them try for a 7½ lb., No. 12 gun (cylinder or choke), 3¼ drs. of the mixed powder, with two pink-edge wads over it, and 1⅛ oz. No. 7 chilled shot. Don't use a mallet. C. F. S.

Philadelphia, Feb. 23.

William Seeds, "The Jersey Boy."—A Jersey City correspondent recalls some of the feats of William Seeds, who acquired considerable fame some years ago by his exploits with the shot gun. The youth and remarkable skill displayed by the farmer boy in his matches with older and more experienced opponents, won for him among his admirers the *soubriquet* of "The Jersey Boy." In his Hippodrome match with John Taylor, Sandford and others, his scores were sometimes wonderful, when we remember that his weapon was the old-fashioned muzzle-loader, and the odds of find and trap-matches against him. We must, however, question our correspondent's estimate of his superiority to Capt. Bogardus.

A Gold Medal.—Messrs. Nichols & Lefever, the celebrated gun builders of Syracuse, were the recipients of the gold medal at the St. Louis bench show. The fine qualities of the Nichols & Lefever arms are well-known, and we may be pretty certain that this new honor will stimulate our Syracuse friends to even greater perfection in the construction and finish of their guns.

Bears.—This is the kind of fun they have in Bethel:

Bethel, Maine, March 9, 1878.

Mr. Jedediah Richardson, of Rumford, a farmer who occasionally goes out cariboo and moose hunting and trout fishing about the lakes, has had another of his famous lucky exploits; this time with bears. Uncle Jed. was fishing through the ice at the South Arm of Lake Mollychunkemunk, and while thus engaged he heard his old dog, Bone, barking furiously a little way up the mountains, on the south side. He knew by the peculiar tone that the dog had some large game, and immediately started for the spot. Arriving at a thicket of evergreens, he was summarily embraced by a large bear, making his gun useless; but he had a small ax in his hand, and by dropping his gun he dexterously used the hatchet and brushed the bear off. At this time the dog was a little farther off engaged with some other object. The bear, however, was not to be rudely shoved aside, but gallantly made another assault, and was the second time driven back. The bear continued to press the conflict, and Uncle Jed. after awhile found he was getting the worst of it, and called lustily for old Bone, and the dog came to the rescue, and by vigorous movements about the rear end of the battle, attracted the attention of the bear until Uncle Jed. recovered his gun, when he made short work of the beast. But imagine his surprise when, in picking up his hat which had fallen off, he found three cubs snugly stowed away, and nestling up together to keep warm. The great black, beautiful pelt of the old mother, and the three living cubs, made Uncle Jed. a good day's work, and a good load to lug twenty-five miles home. J. G. R.

CHILLED AND SOFT SHOT.

Editor Forest and Stream: New York, March 19, 1878.

The prominence which has lately been given to the use of our improved chilled shot has induced some persons to imagine that it has absorbed an interest in the manufacture of soft shot. We desire to assure your readers that, while giving all the attention necessary to insure for our chilled shot the confidence of all who use it, we shall continue in the manufacture of our "Patent Finish Drop Shot" the same care which has given to it a world-wide reputation for superior excellence.

We are, respectfully, Tatham Brothers.

CHILLED SHOT.

It has been proved by experience that *ordinary shot is jammed out of shape before leaving the gun*, that a great many pellets fall short of the mark or fly out of range. It also flattens on entering an object, lessening its penetration. To obviate these difficulties use "Improved Chilled Shot," which is hard enough to retain its spherical form, and so makes a *better pattern* and has *much greater penetration.*

Squirrel shooters often find the ordinary shot flattened just beneath the skin, and it frequently requires a number of loads where a single charge of chilled shot would kill, and it is an undisputed fact among duck shooters that soft shot flattens on the feathers, and sometimes on a wing bone. Chilled shot would break the wing and pierce the feathers, finding a vital spot. For woodcock and all brush shooting it is more advantageous, as it cuts the bushes, and flies with more accuracy than soft shot.

There is much said about the best kinds of powder, and but little about the best shot, when it is, at least, equally important. The query among sportsmen, therefore, should be, what kind of shot is most perfect when it leaves the gun? This can be learned by firing into a large bag of bran or some other soft substance, preserving the shot for examination. The strongest powder and strongest shooting gun will show the best result in favor of chilled shot, by crowding the soft shot more in the gun barrel.

The chilled and soft shot being of the same diameter, the number of pellets is alike *by measure*, but *by weight* the chilled shot will be found to be a little lighter, say eight pellets to the ounce in No. 7.

Number.	12	11	10	9	8	7
Standard diameters	5-100	6-100	7-100	8-100	9-100	10-100
	6	5	4	3	2	1
Standard diameters	11-100	12-100	13-100	14-100	15-100	16-100
	12	11	10	9	8	7
No pellets in an oz. avoirdupois.	2,385	1,380	868	585	409	299
	6	5	4	3	2	1
No. pellets in an oz. avoirdupois.	223	172	138	109	88	?3

Tatham & Brothers, New York.

PIGEON MATCHES.

Connecticut—*Saugatuck, March* 16.—Match between Mr. James Knox Polk, son of the late president, and Mr. E. S. Wheeler, on the grounds of the former. Bogardus' trap, distance twenty-one yards. Fifty balls were shot, the contestants each breaking 23 out of 25. The time occupied was about half an hour. Considerable attention is paid here to this amusement.

No More Pigeon Shooting in Rhode Island.—The Rhode Island Senate passed, March 5th, the following bill relegating pigeon shooting to the domain of the unlawful:

"Whoever shall keep or use any bird, fowl or other animal as a target, or to be shot at either for amusement or as a test of skill in marksmanship, and whoever shall rent any building, shed, yard, ground or premises belonging to him or under his control for the purpose of shooting any bird, fowl or other animal as aforesaid, or shall suffer or permit the use of any building, shed, room, yard, ground or premises belonging to him or under his control for either or any of the purposes aforesaid shall, for every such offense, be punished by a fine not exceeding $50; and whoever shall be a party to or be present as a spectator at such shooting of any bird, fowl or other animal shall be punished by a fine not exceeding $10."

[The real secret of this legislation, we opine, is jealousy, lest birds shot within the limits of the State should die out of bounds.—Ed.]

New York—*Croton Landing.*—Glass balls, 21 yards rise. First match: C. Acly, 10 out of 16; C. H. Warring, 14 out of 16. Second match: Chas. Tallcott, 20 out of 20; C. H. Warring, 16 out of 20. C. H. W.

Brooklyn Gun Club.—*Dexter Park, L. I.*—Regular monthly shoot for champion medal at double birds, seven pairs each from ground traps, handicapped rise, 100 yards boundary:

Eddy	21 yds	11 11 10 11 11 10 01	11
Wynn	21 "	11 11 00 11 11 10 11	11
Atkins	21 "	11 11 11 00 11 01 00	9
Woods	18 "	11 11 10 01 10 11 00	9
Gildersleeve	21 "	00 10 11 11 11 00 10	8
Wisner	19 "	00 10 10 11 11 10 10	8
Broadway	18 "	11 10 00 10 11 10 10	8

Ties.

Eddy.......... 10 11 11—5 Wynn.......... 11 10 10—4

Same Day.—Contest for champion trophy at five "five trap shoot," shot for at ten birds each, from five H and T traps, handicapped rise, 80 yards boundary:

Wynn	27 yds	1 1 1 0 1 1 1 1 1 1	9
Woods	27 "	1 1 1 1 0 1 1 1 1 1	9
Eddy	27 "	0 1 1 0 1 1 1 1 1 1	8
Gildersleeve	29 "	0 1 1 1 1 1 1 1 1 0	8
Atkins	27 "	1 1 1 * 1 1 0 1 0 1	7
Wisner	27 "	0 0 1 1 1 1 0 1 1 1	7
Broadway	28 "	0 1 1 1 0 1 0 1 1 1	7
C Williams	29 "	0 1 1 1 1 1 0 1 0 0	6

Ties.

Wynn.......... 1 1 1—3 Woods.......... 0 1 1—2

* Fell dead out of bounds.

Jersey City Heights Gun Club.—At the opening of the new club grounds last Monday classified sweepstakes were shot. The first had four entries, 5 balls each, 18 yards rise. Eugene Bogardus, the thirteen year old son of Captain A. H. Bogardus, at 12 yards, won first money. Fifteen came to the score on the second sweep, the conditions being the same as in the first. W. Sheppard, M. Buttles and young Bogardus, the latter at 15 yards, broke all their balls and divided first. F. M. Thompson and Dr. Burdett broke four balls each and divided second. G. Hurlbut third. The next event was a match of 25 balls each between Eugene Bogardus and Henry Langstaff, the boys being about the same age. Each shot at 10 yards rise, and used the same gun, a 20-gauge, weighing about 5½ lbs. Both broke 20 balls, and Langstaff declined to shoot off the tie, because of not feeling well. A sweepstakes had twenty-three entries. Each shot at 10 balls, 18 yards. G. H. Herbert broke 9, William Hughes and E. Madison broke 8, and divided second. J. S. Dustin and A. Heritage scored seven. Captain Bogardus then essayed the feat of breaking 300 balls within twenty-one minutes. Two traps were used, and three guns of the following weight and calibre: No. 10 gauge, 10 lbs.; No. 12 gauge, 7¼ lbs., and No. 20, 5½ lbs. The Captain succeeded in breaking 301 balls in the brief time of 20m. 3½s., missing 13 in the 314.

Captain Bogardus at Deerfoot Park.—Captain Bogardus, on Friday afternoon next, will shoot to kill 85 out of 100 double birds. Match to take place at Deerfoot Driving Park, Brooklyn.

Midway Shooting Club—*Matawan, N. J., March* 14.—Monthly shoot for gold badge; handicap; 1¼ ozs. shot, 80 yards boundary:

Stephen Lamberson	25 yds	1 1 1 1 0 1 1 1 1 0	8
William J Conover	24	1 1 1 1 1 1 0 0 1 1	8
Harl Haight	24	1 1 0 0 1 1 1 1 1 1	8
George Walte	23	0 0 1 1 1 1 1 0 1 1	7
Wm Magee	22	1 1 0 0 1 1 0 1 1 1	7
James Ivins	22	0 1 1 0 1 1 1 0 1 1	7
Elias Vandeveer	24	0 1 0 1 1 1 1 1 0 1	7
Hezekiah Warn	23	1 1 1 1 0 0 1 1 0 1	7
R V Disbrow	22	1 1 1 0 1 0 1 0 1 1	7
James Vanbrackle	24	1 0 1 0 1 0 0 1 1 1	6
John Anthony	22	1 1 1 1 1 1 0 0 0 1	7
Frank E Dyer	23	1 1 0 1 1 1 0 0 0 w	
James Lamberson	23	1 0 1 1 0 1 0 1 1 w	
Henry Garden	22	0 1 1 0 1 0 w	
Richard Worrell	22	1 0 1 0 0 w	
Charles Applegate	23	1 1 1 0 0 w	

Ties on eight.

Lamberson...25 yds ..1 1 0 1 1—4 Haight......24 yds......1 1 1 1 1—5
J Conover....24 ...1 1 1 1 0—4

Philadelphia, March 10.—Following is the score of the third of a series of matches for championship of Semper Felix Club; 21 yards rise; shot from new B. trap and behind screen.

Dr C T Smith	0 0 1 1 0 1 1 0 1 1 1 1 0 1 1 1 0 1 0 0 1 1 0 1 1 1 0 1 0 1	19
Henry Wright	1 1 0 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 0	24
Dr M A Wood	1 0 1 0 1 1 0 0 1 0 0 1 1 0 1 1 0 1 1 0 0 0 0 1 0 1 1 1 0 1	16
R N Wallace	1 1 1 0 0 1 1 0 0 0 1 0 0 1 0	7
J Barnewitz	0 1 1 0 0 1 1 0 1 0 1 1 0 1 1	9
Geo H Summers	1 0 0 0 0 0 1 1 0 1 0 0 1 1 0	8
P Barnewitz	0 0 0 0 1 0 1 0 1 0 0 1 0 0 1	5

There were not balls enough for all to shoot full score.

Dr. C. T. Smith, Capt. Geo. H. Summers, Sec.

P. S.—From what sort of traps do these other clubs shoot?

[P. Huber and Ira Paine, of this city, and Wright of Cincinnati, have other traps. See advertisements in this paper. —Ed.]

Esperance—Distance 21 yards:

W Settle	1 1 1 0 1	8
J Chapman	1 0 0 1 1 0 1 1 0 1 0 0 0 1 1 1 1 1 1 0 0 0 1	13
J L Hemck	1 1	2
F Chapman	1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 0 1 0	19
W Night	1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0	23
Dr Norwood	1 0 0 1 1 1 1 1 0 1 1 0 1 1 1 0 1 0 0 0 1 0 1 1	16
J Baxter	1 0 0 1 1 0 0 0 0 0 0 0 1 0 1 0	5

Texas.—*Waco, March* 13.—Ninth match of the Waco Gun Club for the Ragland cup:

H Thompson	1 1 1 0 1 1 1 0 1 1	8
W S Almond	1 1 1 1 1 1 1 1 1 1	10
W T Lane	1 1 1 1 1 1 1 0 1 1	9
S A Garland	1 1 1 1 1 1 1 0 1 1	9
G B Gerald	1 1 0 1 1 1 1 1 0 1	8
E McCall	1 1 1 1 1 1 1 1 1 1	10
C C McCulloch	1 1 1 0 1 1 1 1 1 1	9
J Thompson	1 1 1 1 1 1 1 1 1 1	10
E Early	1 1 1 1 1 1 0 1 1 1	9
C M Downs	1 1 1 1 1 1 0 1 1 1	9
W E Cresap	1 1 1 1 1 1 0 1 1 1	9

Ties on ten.

Almond..........1 1 1 0 1—4 Thompson..........1 1 1 1 1—5
McCall..........1 1 1 0 1—4

Same Day.

G B Gerald	1 1 1 0 1—4	H M Thompson	1 1 1 0 0—3
W T Lane	1 1 1 1 1—5	J Thompson	1 1 1 1 1—5
E Early	1 1 1 0 1—4	C C McCulloch	1 1 1 1 0—4
W E Cresap	1 1 0 1 1—4	W S Almond	1 1 1 1 1—5
S A Garland	1 1 1 1 1—5	E McCall	1 1 1 1 1—5
C M Downs	1 1 1 1 0—4	C A Worsing	1 0 1 1 1—4
Total	26	Total	28

Captain Gerald's side won on the tie.

Same Day.

Lane	1 1 1 1 1—5	Almond	1 1 1 1 1—5
Early	1 1 1 1 1—5	McCulloch	1 1 1 1 0—4
Total	10	Total	9

Tie on five.

Lane..........1 1 1 1 1—5 Early..........1 0 1 1 1—4

Waco.

Michigan State Medal Association.—The last shoot, March 6, at Hamtramck, resulted in the following score, Mr. Eldridge, who had won the score, still retaining it:

J V D Eldridge	1 1 1 1 1 1 1 1 1 0	10
E H Gillman	1 1 0 1 1 1 1 0 1 1 w	
Goff Stenton	1 1 1 1 0 1 0 w	
E S Barber	1 1 1 1 1 0 0 1 1 1 w	
Cook Cousins	1 0 w	

The sweepstakes following were won, respectively, by Gillman and Cook, and a miss and out by Eldridge on seven birds.

Pacific and Detroit Clubs.—A series of matches, shot March 8, resulted in these scores:

Fifteen birds.

C Brown (Pacific)	0 1 0 0 1 1 1 1 0 1 1 0 0 0 1	8
C A Mack (Detroit)	1 1 1 0 1 1 1 1 1 0 1 0 1 1 1	12

Five birds.

T N Bermingham......1 1 0 1 1—4 Jas Minahan..........0 0 1 0 0—1

Five birds.

C Brown	1 1 1 0 1—4	C A Mack	1 1 1 1 1—5
L Horn	1 1 1 1 1—5	— Slocum	1 1 1 0 1—4

Three birds.

E Reidy	1 0 0—1	Jas Minahan	0 0 1—1
T N Bermingham	0 1 1—2		

Montreal, P. Q., *March* 10.—Match between teams of three each; 21 yards rise, 80 yards boundary:

Bonneville	1 0 1 1—3	A Hurn	0 1 1 1—3
C King	1 1 1 0—3	E M Wally	1 1 1 1—4
W A Campbell	0 1 0 0—1	P E Normando	1 1 0 1—3
Total	7	Total	10

Match between teams; 15 yards rise:

A Bonneville	1 1 1 1 1—5	E M Wally	0 1 0 0 1—2
C King	1 1 1 1 1—5	A Hurn	0 0 1 1 1—3
P E Normando	1 1 1 0 1—4	W A Campbell	0 1 0 1 1—3
Total	14	Total	8

Match between teams; 15 yards rise:

A Bonneville	1 1 1 0 1 1 0 1 1 0	7	
P E Normando	1 1 1 0 0 1 1 1 0 1	7	
E M Wally	0 1 0 0 1 1 0 0 0 1	4	18
C King	0 1 1 1 1 1 1 1 1 0	8	
A Hurn	1 0 0 0 0 0 1 0 0 1	3	
W A Campbell	1 1 0 0 1 1 0 0 1 0	5	16

THE OLDEST PRESERVED MEAT IN THE WORLD.—Happening to drive in a sledge along the base of one of the monstrous ice cliffs that overhang the estuary of the River Lena, a Russian trader came upon a pack of wolves devouring the frozen flesh of a mammoth. The latter must have been in an almost perfect state of preservation when first exposed by the breaking away of the cliff, as the snow was littered by fragments of skin, to which in some instances small pieces of flesh still adhered. Considering that countless ages have rolled by since animals of the mammoth species could possibly have existed in Siberia, there seems small doubt of the frozen flesh in question (if it were really what it was alleged to be) being the oldest preserved meat in the world. If the story is as true in its details as the traveller would have us believe it to be, his supposition that other mammoths are imbedded there in an equally good state of preservation may turn out to be correct, and we may yet live to see the gourmands of Paris indulging their appetite with *filet de mammouth* warranted "fresh from Siberia," after having been stowed away in Nature's ice cellar for a few score thousand years. So little has been explored of the ice beds of Polar Siberia that, for aught we know to the contrary, a grain of truth may exist in the opinion of the same enthusiastic discoverer of that "accumulations of antedeluvian animals frozen alive during the sudden transition of the climate of Siberia from equatorial heat to Arctic cold lie imbedded in the ice strata of the North Siberian coast." Until, however, some of the meat has been sent to Europe and has been pronounced genuine by Professor Owen, or some other eminent authority, we must be permitted to place the discovery of "meat mines" in the same category as that to which people usually assign the stories that have made Baron Munchausen's name immortal.—*London Globe.*

SERMONS IN STONES.—The rude representations cut on rocks near the Lacs des Merveilles, Switzerland, have long been a puzzle to archæologists. Some have believed that they were the work of the soldiers of Hannibal. (What busy people these soldiers must have been from first to last.) The most satisfactory explanation of the origin of these figures has just been given by M. Chiquet. He says that at certain seasons of the year shepherds could find near the rocks some herbage for their sheep and goats. To while away the weary hours the shepherds amused themselves in cutting figures which have cost days of owlish study to savans, who are more inclined to look for mysterious and remote authors of such things, than to accept an obvious and common-sense view.

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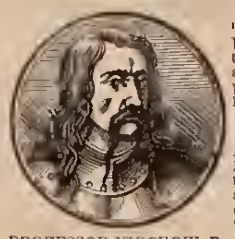

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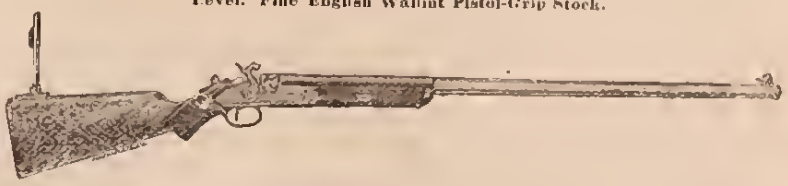

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BY

KIT KILLBIRD.

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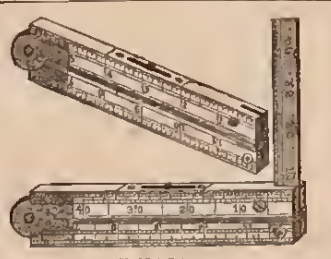

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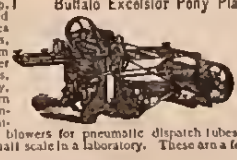

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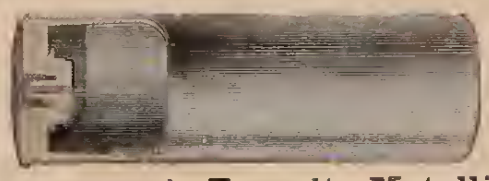

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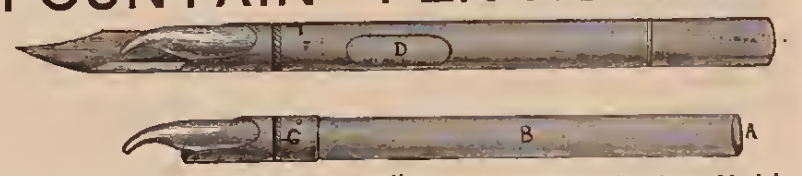

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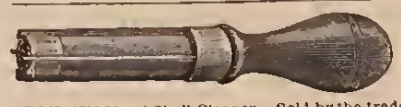

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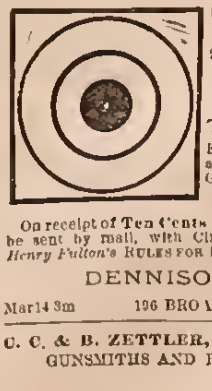

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Specification forming part of Letters Patent No. **196,379,** dated October 23, 1877; application filed September 22, 1877.

To all whom it may concern:

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The figure is a side view of one of my improved balls, part being broken away to show the construction.

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A represents the ball, which is make of glass, is smooth upon the outer side, and has a neck upon one side for placing it upon the trap.

The ball A is filled with feathers B or other light material, as shown in the figure, which, when the ball A is broken by the shot, will be scattered through the air, showing that the ball was broken by the shot, and producing an effect similar to that produced when a bird is struck by shot, and enabling the marksman to see the effect of his shot, the smoke having time to disappear before the feathers can possibly reach the ground.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A hollow glass ball for trap-shooting, filled with feathers or other light material, substantially as herein shown and described.

IRA A. PAINE.

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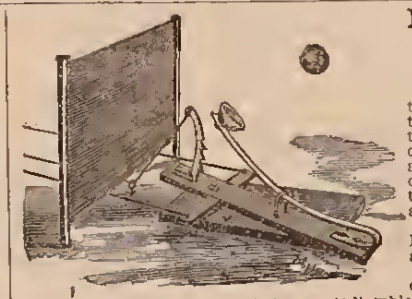
SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 1 P. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 199 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. ABRY, President.

J. H. BEHRENS, Cor. Sec., 37 Bowery, New York



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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MARCH 28, 1878.

Volume 10.—No. 8. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

Marooning.

FROM KEY WEST TO CEDAR KEYS.

I BECAME tired of commanding the household brigade, would not give a farthing for a sail on a river or placid lake, and as I longed for a sniff of salt air and life, *al fresco*, I determined on a cruise from Key West to Cedar Keys. As the success and comfort of a boat cruise depends to a great extent upon the boat and outfit, I am disposed to give others the benefit of my experience. I required a boat that was transportable by steamer and railroad; one that would sail in a heavy dew (that is to say when the dew was about ten inches deep on the marine meadows), a boat that would row and pole easily; and as I proposed taking wind and water as I found it, I deemed it necessary to provide myself with a staunch, able and sea-worthy boat. I made a model and A. G. Chappell, of this city, constructed a craft to meet my requirements—and I may remark that if any of your readers intend visiting Florida and require boats of any description, that I can recommend Mr. A. G. Chappell as a first-class builder and a reliable man. My boat was named the Doni. She is sixteen feet long, six feet beam; clean entrance and run; somewhat flat on floor and rather wall-sided midships—in other words she possesses good bearings. Having subjected her to the most severe tests, I cannot improve on the model. Deck sheer from stem to stern six inches; convexity of deck midships from side to side four inches. At forward part of cockpit she is eighteen inches between carlines and floor. To protect the cockpit in sea way, I use three moveable bracketted pieces of wood. The centre one fitting on on the centre of the forward combing; the others on the side comings, one foot from the afterpart of the cockpit. The after pieces have an inch hole in each, and the centre one terminates in a rounded end, which fits into the holes of the side peices. By this arrangement I secure a substantial frame elevated at the after part and centre one foot above the combing. Over this frame I place a canvas tarpaulin, which is fastened to each side of the boat, and through the medium of which I dispense with the necessity of shipping seas. I provided a 10-ounce duck tarpaulin twelve feet long, which was thrown over the boom at nights and fastened on each side of the boat; the front of the tent was closed with two half aprons attached to each side, and fastened in the centre and to screw eyes in the deck. When my tent was in position and boom in place supported by truss and throat halliards, I had six feet of room between boom and floor of cockpit.

In the after part of the boat under deck is a locker measuring two feet fore and aft. In front of this was a moveable box arrangement, furnishing a locker and seat on each side, as high as under surface of deck; in the centre was a depressed portion to enable me to reach after-locker. The after-locker furnished stowage for boat compass, ammunition, clothing and other plunder. The box on one side received pots and pans, the other, with central portion, enabled me to carry firewood for two days' consumption. On one side of the cockpit under the deck I had a rack for gun and rifle, and on opposite side a similar arrangement for rods and maps. Below and on face of racks I fastened boards eight inches wide, inside of which was stowage for many things. I tacked a width of canvas to the inner face of the combing on each side forming curtains which protected contents from rain or spray.

Cruising among mangrove islands and marshy places, makes it difficult at times to find a suitable camping place, and I always carry a stove, and cook and sleep on my boat. I have a two-hole Ætna stove, and carry a light wooden box in which it fits snugly. When not in use the box is placed abaft the trunk, furnishing a seat, and if required, moveable ballast. When wanted for cooking, the lid of the box is placed on the after part of the boat, and the stove on it. The box furnished stowage for stove, pipe, frying-pan, etc.

In addition to the *impedimenta* mentioned I carried a barrel of pilot bread packed in starch boxes, three five-gallon kegs for fresh water; 16 pounds breakfast bacon; 18 pounds lard, 6 pounds ground coffee in tin box, 8 pounds sugar, 6 cans condensed milk, half bushel Irish potatoes, 1 peck onions, 1 gallon of kerosene oil in bottles (stowed under floor), salt, pepper, matches, pots, plates, cups, knives, ax, shovel, pail, boat compass, tabacco, nails, screws, tacks, saw, palm, needles, gimblet, hammer, oyster knife, charts, tackle, ammunition, mattress, blankets, pillow, and other plunder. By economizing space and careful stowage I had ample room to work my boat. When my canvas tent was erected I would stow stove-box and water-kegs on deck, which would give me a clear cock pit and two feet under deck on each side of the trunk. I occupied the space to the right of the central line, and my fifteenth amendment the other side. In addition, I carried a grains, crab-net and oars on deck, and a sixteen-foot light pushing pole lashed under the boom. I have been somewhat minute with reference to fit-out and stowage, for when a party range beyond the reach of stores and mechanics they must be prepared for an emergency. In many places a light spruce pushing pole will be found very useful.

I left Jacksonville on Thursday, the 29th of October, by the lumber train, and reached Baldwin at 3 P. M. Thursday morning I was *en route* for Cedar Keys by the Fernandina and Cedar Keys Railroad. Reached Cedar Keys at 6 P. M., and on arrival proceeded to the Island House, kept by Dr. MacIlvaine, and to others I will say, go and do likewise. The Doctor has made many improvements in the house, and guests will be pleased with the table.

Friday morning I unloaded the Doni and placed her on the deck of the steamer Cochrane, bound for Key West. Miller and Henderson and Capt. James McKay, of Tampa, have placed on the route between Cedar Keys and Key West two staunch steamships, the T. J. Cochrane and the Lizzie Henderson. These vessels are new, staunch and sea-worthy, have ample power, and are comfortably fitted up for passengers. The officers are experienced on the coast, and are gentlemanly and obliging. These vessels leave Cedar Keys on Tuesdays and Fridays at 4 P. M. To Florida visitors who wish to extend their trip beyond the beaten track, and enjoy the balmy air of and a short voyage on the Gulf we would say take a trip on the Cochrane or Henderson to Key West and return.

I left Cedar Keys on Friday at 4 P. M., and reached Key West on Sunday at 9 A. M. Key West is a pleasant city of about 12,000 inhabitants. The principal occupations of the residents are cigar making, fishing and sponging. The citizens are remarkable for their hospitality and attention to strangers. The climate during the winter months is pleasant, and frost is unknown. There is one large and airy hotel, where fair food and accommodations can be obtained for $3 per day or $60 per month. We were informed that several excellent private boarding-houses exist, where good accommodations can be obtained at from $10 to $15 per week. I arrived at the conclusion that prices for everything ranged higher than in Jacksonville. The gunnist will find no use for his weapon in the neighborhood, and the piscator will be forced to visit the reefs to enjoy his favorite sport. On my arrival I met several old acquaintances and made many new ones, and all endeavored to make my brief stay of twenty-four hours as pleasant as possible. In my wanderings about town I noticed in many gardens cocoa nuts, sopodillas and other tropical fruits; but, as an old Rosarian, I was charmed with an arched trellis twenty feet long and ten feet wide, covered with a large plant of Mareschal Niull rose. The tips of its long and luxuriant shoots were clothed with blooms—such blooms as I never expected to see on my favorite rose. The external layer of petals were mottled with pink, and the inside ones were of the deepest yellow. I stood at the fence entranced with the beauty of the golden flowers which I coveted, and nothing but the fear of the lock-up prevented me from violating one of the commandments. In my wanderings I noticed geraniums, pelargoniums, verbenas and salvias in bloom; and the beautiful bougainvillea growing apparently uncared for, and covered with floral beauty.

Monday morning found me moving at 4 A. M., and by 9 A.M. the Doni was rigged, water kegs filled, plunder stowed, and the crew, consisting of "Al Fresco" and Fifteenth Amendment Aaron, were under way for the main land sixty miles distant. At this point we cannot refrain from referring to the kindness extended to "Al Fresco" by Captain Philbrick, Dr Harris, the editor of the *Key of the Gulf*, Captain Smart, and others of the good people of the beautiful island of Key West. The day was pleasant and warm, the wind dead ahead. We left the westerly keys on the port hand, and at night anchored under the lee of Hurricane Key, twenty-five miles from starting point. With the exception of Becachica channel, over the entire distance the water was shallow, varying from two to six feet. At many places bars will obstruct the movements of a boat, but by keeping a good lookout passes will be discovered and no difficulty will be experienced in navigating a boat of light draft. At bedtime weather looked threatening, and I felt in my old barometric bones that I would have to fight an old-fashioned nor'-easter on the morrow. But, as I had weathered many such on many oceans, I turned in and slept as becometh a marooner.

Tuesday I was up at 5 A. M., cooked breakfast, stowed plunder, and was ready to start at daylight. During the night wind had increased to a gale, with severe rain squalls; but, as there appeared nothing very attractive about a mangrove island, I resolved upon attempting the passage over the Bay of Florida. Up anchor and left the protection of the island; wind blowing a gale; heavy sea with *quantum suf* of rain. Beat until 1 P. M.; made about six miles, and as I was not disposed to spend the night at sea with a gentleman of the colored persuasion, who knew nothing about sailing a boat, I put about and anchored under Spanish Key.

Wednesday, repeated the dose of early rising; wind blowing a gale; heavy rain squalls; high, choppy sea; rapid tide running at right angles, with wind piling up the water irregularly, and rendering the motions of a small boat anything but pleasant or enjoyable. Left anchorage at daylight and attempted to cross the bay; weather more threatening, squally with heavy rain; every wave broke over the noble little craft, but she proved to be able and sea-worthy. At 11 A. M. I had made about six miles against a head wind and sea, and I deemed it best to beat a retreat, and came to anchor under Bay Honda Key, thirty miles from Cape Sable, my objective point. After coming to an anchor, I cooked dinner, and before stowing stove, threw ashes and cinders overboard, and several cat-fish showed themselves on the surface to ascertain what was the matter. Taking the hint, I rigged pole and commenced fishing. This species is more slender than those of northern waters; the skin is very white and the fins long; spines long, slender and barbed. I captured several before one came in contact with the knuckle of index finger of right hand, and one of the spines entered about half an inch. I instantly removed the unpleasant appendage, and an intense burning pain succeeded. In a very short time my hand commenced swelling, and I suffered much from pain. Old Aaron had several plugs of knock-me-down tobacco, and I resolved upon applying a sailor's remedy. I carefully separated a number of the leaves from a plug, moistened them in salt water, and applied to the hand. I passed a restless night in consequence of pain. In the morning my hand was swollen and stiff, and several days elapsed before the swelling disappeared. As I write, two months after the reception of the injury, the knuckle is tender to the touch. From all I can learn, they are more poisonous than their relations in northern waters. *Memo.*—When you catch a Gulf cat-fish hit him on the head with a shillelah before removing him from the hook.

The Florida Keys extend from the Tortugas to the Miami river. They vary in size from small to very large islands. Some are covered with mangrove bushes, and others with pines and cabbage palms. During severe hurricanes nearly all are subject to overflow. Under the mangroves at some of the islands snapper, grouper and large craw-fish can be captured. Under ordinary circumstances, a cruise among these keys is pleasant. With the exception of Bay Honda channel, the water is shallow, and by working to the northward and eastward until lower Matacombe Key is reached no difficulty will be experienced in reaching the main land fifteen miles east of Cape Sable. By taking this course a harbor can be made at any time under one of the keys. An accurate survey has been made of this region by the government, and five large charts have been published, the expense of the set being $7.50. These charts show all the islands, surfs, channels and bars. My object was to reach Cape Sable by the shortest road, and I resolved not to take the longest way round.

Thursday—Up early, breakfast cooked, and dishes polished with waste paper. From Bay Honda Key to Cape Sable, thirty miles; gale still blowing, and dead ahead, with heavy sea; occasional showers of rain; no lee or protection unless I made for Sandy Key, eight miles to the west of my course; hand swollen and somewhat painful. Becoming annoyed at my back-track proceedings, I resolved upon making the mainland. Daylight saw the anchor on deck, and the Doni in Bay Honda channel. The ball opened and dancing commenced. We lacked the music of a brass band, but the whistling of the wind against the halliards supplied the want, and the Doni danced a fandango. I shall refrain from minutely describing the motions of the boat and crew, and how the brine was distributed. After the channel was crossed, the wind hauled more to the eastward, the rain ceased, and Old Sol winked at us occasionally. Sea was heavy, but we were at last enabled to lug a cruise to Cape Sable, under the lee of which we arrived at half-past one, thankful that the humpy surface of Bay Honda was in the rear. With a free sheet we bore to the northward, within a stone-throw of the shore.

From the best information obtainable, at a point about twenty-two miles east of Cape Sable, and southwest of Key Largo, will be found the Hallalahachee River, which is reported as being navigable for small boats, and by which White Water Bay can be reached at its easterly end. I found one party who had attempted to enter it, but the tide was low, and his boat grounded on the mud flats. This whole section is a *terra incognito*, and is worthy of the notice of boatists, and the time may come when Al Fresco will unravel the mystery that surrounds it. I have questioned many old coasters, fishermen and spongers, regarding the lower portion of the peninsula, and I find that they are ignorant as regards everything inside of the coast line. They are acquainted with the headlands, a few islands and channels, but the rest is a blank.

Correctly speaking, there are three capes—East, Middle and North Cape. At East Cape Sable a stake will be noticed; twenty yards inland from this, an earthwork, the remains of Fort Poinkett, and fifty yards back of this a well with good water. About half a mile to the westward of the middle cape is a clump of about one dozen large trees, and thirty yards from the beach a well of excellent water. If mariners cannot find the wells, potable water can be obtained by digging a well two or three feet deep, in a low place a hundred or more yards from the beach. At one time a noble grove of royal palms existed in this locality, but all were destroyed by the hurricane of '74. One stump, about fifteen feet high, is still standing as a sentinel over the departed glory of what was once a truly royal grove. The middle cape is easily distinguished by the existence of a small prairie (described by Vignolles in 1823 as the "Yamasee Old Field"), in the front a few mangrove bushes, and in the rear some cabbage palms. From information received, a lagoon exists within half a mile of the beach, emptying into Cape Sable Creek. During the winter months this is a favorite resort for ducks, and the surrounding country is stocked with deer and turkey. Unless the wind is from southward and westward a landing can be made on the beach, as there is no swell or undertow as on the Atlantic. About a month before my visit Dr. Harris' men were proceeding from Rogers River to Key West, and noticed a man on the cape making signals. They took him on board, and found that he was a Dutchman, and had been three days without food. It was ascertained that he had purchased a yawl-boat at Key West, and had started for Cedar Keys. He was caught in a gale, and boat was wrecked on the Cape. He remarked that

he had been hunting for a farm-house for three days, but could not find one. A few years since a Key Wester located on Cape Sable and engaged in the culture of cabbages and pineapples. He prospered, but one day a hurricane came along and washed his family and improvements inland. For the benefit of cruisers, I may remark that aerial whirligigs never occur during the winter months, and the only cause of complaint will be too frequent calms.

To the north of the middle cape I sighted and entered Cape Sable (a navigable stream) with the intention of camping. I landed on a sand bank, but such landing was made a few weeks too soon, for I was greeted by a cloud of sand flies, and myriads of insects, which immediately instituted phlebotomizing operations. When entering the creek a small schooner belonging to Dr. R. Harris, of Key West, was seen working to the northward, and I followed. She entered and anchored for the night in Shark River, and I made fast to her stern. The entrance to Shark River can be easily found, for on its southern side there is a projecting point, densely covered with tall mangroves. In this connection I have a shark yarn to spin, but as it is too fishy for this issue I will keep it for the next.

AL. FRESCO.

For Forest and Stream and Rod and Gun.

A SUMMER VISIT TO THE GULF OF ST. LAWRENCE.

THE securely sheltered and romantic harbor of Gaspe is situated on the easternmost promontory of the Province of Quebec. A weekly steamer from Montreal calls here regularly during the season of open navigation, and a jolting old cart, called for courtesy's sake a mail coach, filled the intermediate gaps of postal communication. There was a time when Gaspe had the monopoly of the vast trade in fish, which then abounded in incredible masses at the mouth of the great St. Lawrence. There was a time when sails of various sized fishing and trading craft could be counted by the hundreds, riding safely at their anchors on the glassy surface of this picturesque bay, but these glories are now only memories of the past, never to be revived, and buried from the hour when the steel tape of the intercolonial road monopolized the bulk of the trade between Quebec and Halifax. The noise and hustle once animating Gaspe are gone, the lazily-winged seagull dips her pointed pinions with a restored sense of security into the green water of this fairy nook, now but seldom ruffled by the cleaving stroke of the oarsman, and the cormorant has no pursuers to fear, as he wings his way each morning and night to and fro the steep rock of Perce which houses his hungry brood. A few trading schooners, an accidental fishing smack, and the weekly arrival of the mail steamer alone impart some liveliness to the scene, so much more charming to him who flies from the noise of the great cities to these calm, ocean realms, where nature alone rules supreme.

The steamer had delayed just long enough at Perce to afford us a passing glimpse of its famous rock, with its feathered inhabitants, and enters toward afternoon the undulating *embouchere* of the Dartmouth, St. Johns and York rivers, which bury here their fresh crystal floods into the bosom of their great parent. It is, no doubt, owing to their agency, continued throughout ages, and aided formerly by a powerful ally—ice—that the bay resembles somewhat the huge terminal funnel of a great glacier, which would have found sufficient slope for onward movement from the mountains beyond, which, even now, after all these denuding influences, still tower up toward the clouds. The history of the dim past is written here with imperishable characters upon the hard rock, jutting out seaward upon the honey-combed coasts, and the flat-topped hills facing the shore. They tell us of the great changes which they have witnessed; how there was a time when massive walls of moving glaciers extended beyond the green waters which now separate Nova Scotia from it; how, again, this frigid barrier slowly sank beneath the level of the ocean, and slowly emerged from its watery grave, with its memoirs written upon the surface of its hard rock by the tracing pencil of living ice, such as is recorded still in the mountainous gorges of the Switzen Alps. The eye, as the steamer moves ahead from point to point, never grows weary of reading the pages of this stony library of nature. It views huge, deep groovings, sculpturing the coast line, which soon will recede whenever overhanging rocks are undermined, still more by the yet active wearing power of the breakers and drift ice. The little town at the foot of this ancient glacial gorge is reached at last. It is scattered picturesquely about the sloping hills of the bay, which is here hardly a mile wide. The houses are unostentatious, clean and neat, and the residence of Mons. Le Boutillier alone, surveying from its imposing eminence the little dwellings beneath it, gives evidence of what wealth may do when combined with taste. There are only a few craft lying at the wharfs and midstream. They are owned by this gentleman, who controls the fishing interests of this whole section of the Dominion, and who, by means of his sagacity and activity, has become a sort of an aquatic patriarch over hundreds of families, who look to him exclusively as the great absorbent and transformer of their finny gains into the necessities and comforts of their clean and frugal homes. Beyond these and the graceful contour of the government surveying steamer, "Lady Head," taking in needed supply of coal, nothing indicates any communication with the busy world beyond. The place, however, is gradually becoming a summer resort of the tourist, since his Excellency Lord Dufferin has the fishing privileges of the York river, which, as a devoted sportsman, he annually visits with his numerous retinue. His precepts are followed by Mr. Fred Curtis of Boston, who is known on these shores wherever a salmon will take the fly, and who never fails to reap the cream of sport of the lovely Dartmouth, of which he is the lessee. It is through the kindness of this gentleman that we enjoy while at Gaspe commodious quarters and a well furnished table.

We had thus far in vain searched the coast from the Bay des Chaleurs for the breeding grounds of the swarms of birds which left us with early spring for their northern breeding grounds. We encountered only here and there scattered colonies of gulls, cormorants, gannets, and puffins, which burrow into the soft, yielding covering of the earth-like promontories and islands all along the sea cost. Our baggage is still bulky from the great amount of unused ammunition, which has awaited in vain a fair field for expenditure. The marshes and flats near the sea shore present here in August an even more lonely aspect than along the line of the Chesapeake Bay, where the visitor may look for a fair bag of godwit and rail; and Gaspe, though renowned for fishing, offers no inducements to sea-shore or marsh fowl, as the land rises steep and abrupt. The notorious island of Anticost, however, is only sixty miles distant, and to its lonely, desolate shores the imagination strains its gaze, and enlivens them with the lost tribes which have winged their way to the undisturbed solitudes of their northern breeding grounds.

There is now, fortunately, a semi-monthly mail schooner leaving for Anticost and the southern coast of Labrador, called here the north shore; but we arrive, unfortunately, just twelve hours too late, and thus lose our chances in her for a passage. The disappointment, however, is reversed on learning that Mons. Le Boutillier himself is on the point of leaving in his own vessel for an inspection of his several fishing stations on Anticosti and Labrador, thereby following in the wake of the departed mail boat, and making withal a more extended round of visits. We share with him the cabin of his clean and neat vessel, and also in virtue of his social hospitality many little unmentionable luxuries, not included in the regular bill of fare, which limits the prescribed liquids to coffee and tea. The wind and tide are fair, a soft summer breeze swells the sails of the white winged craft, the bold promontory of Ships Head is rounded, and soon fades in the misty horizon, while the good southwest wind carries us, toward noon, in front of Griffin cove, a little fishing settlement thirty miles north of Gaspe.

C. D.

Fish Culture.

SALMON IN THE MISSISSIPPI.

The Secretary of the American Fish Cultural Association has received the following letter from W. W. McDowell, Esq., of Memphis, which sets at rest the question as to whether the *Salmo quinnat* are now in the Father of Waters. The introduction of the salmon in the Mississippi is mainly due, then, to Mr. McDowell, and all fish culturists will doubtless unite with us in congratulating this gentleman on this important event, which is entirely due to him. Now let a law be passed—if such does not exist—prohibiting the catching of salmon in the Mississippi or its tributaries for the next three years. A close season until 1880 is what is wanted.

As to these salmon being ripe in February and March, as stated by Mr. McDowell, circumstances may have changed somewhat the habits of the fish. We shall await the opinion of Professor Baird in regard to this:

MEMPHIS, TENN., March 11, 1878.

To the Secretary of American Fish Cultural Association:

DEAR SIR—Your letter of inquiry of the 12th ult. is received and read, and I take pleasure in responding.

Early in December, 1875, I applied to Professor Spencer F. Baird to plant some young California salmon in Wolf River, near Memphis. Professor J. W. Milner replied that he had a large quantity at the U. S. Hatching House in Michigan, but had no money to pay for their distribution, and that if I would pay the expense of sending them he would send them at once. The fish arrived here on the 26th December, 1875, and I paid the expense—$105. The fish were placed in Wolf River about two miles from its mouth. This river empties into the Mississippi River, in the northern part of the City of Memphis. When the fish were placed in the river the Mississippi River was higher than the mouth of Wolf, and if the young fry proceeded up stream as soon as they were placed in the river, they went down the river to its mouth.

Last spring our fishermen reported a few salmon here, but I did not see any. But within the last thirty days I have seen a good many at our fish market. They are caught every day near the mouth of Wolf River. They weigh from one half pound to two pounds.

I bought one that weighed one and a half pounds. It measured nearly 18 inches in length, and was 9 inches around the body. It had spots upon its sides, which reminded me very much of the spots upon a rattlesnake. I never saw a California salmon, unless these are, and therefore I cannot say whether they are or not. I have arranged, however, to send one to Professor Baird, which will settle the matter. I am inclined to the opinion that they are the same fish placed in Wolf River, because, if they were only passing here, they would not be caught here every day for thirty days.

One of them which I bought was almost ripe for spawning; and if the California salmon only spawn in the fall, this fact would throw doubt upon my view of their origin.

One thing is certain: I never saw their like before.

Yours, truly, W. W. McDOWELL,

THE SALMON IN THE HUDSON.—In our last issue we gave some brief account of a salmon said to have been found in the North River near Peekskill. Our correspondent is good enough to give us full particulars. We think there can be no doubt but that the fish caught was a salmon:

EDITOR FOREST AND STREAM:

Your letter of the 15th asking for further particulars in regard to the salmon lately captured in the Hudson near our village is received. In reply would say, first, that it was taken in a seine not *sieve* as printed. It was caught by Henry Conklin and sold to Messrs. Bedell & Crook, fish dealers, and it was while in possession of said firm that I saw and examined it. They thought it a female which had finished spawning, and were confirmed in their belief on dressing the fish. It presented all the characteristics of the *salmo salar* in the spawning season, including the peculiar cartilaginous hook growing from the lower jaw. Judging from its size the fish should have weighed from twelve to fifteen pounds, but as I said before, it was in very poor condition, the flesh being soft and flabby and the color not so rich and deep as in a fresh run salmon. It had been purchased before I saw it by the pastor of one of our churches, who tells me that he did not know of what species the fish was when he bought it, but that it proved fine eating, with a decided trout flavor. Have made arrangements to secure for you any smaller one of this kind that may be taken; but they are rarer now than they were a year ago. I hear that the fishermen, not knowing the fish, have been in the habit of throwing away the smaller ones, but do not think they will do so in the future. Hoping it may not be many years before the capture of this noble fish in our beautiful Hudson will be a frequent occurrence, I remain yours, very truly, S. H. M.

Peekskill, N. Y., March, 22.

SALMON FRY.—Mr. E. G. Blackford has had, rather on exhibition than on sale, a number of small salmon consigned to him from Peoria, Illinois. These fish were hatched from the eggs of the California salmon in 1875, and are some six inches long, weighing about ¼ pound each. These fish are the overstock of certain ponds in Peoria, Ill. It seems a pity to waste the fish, as they are not good to eat, being tasteless and poor.

SALMO QUINNAT.—Mr. A. F. Clapp, whose excellent articles in the Sunbury *Gazette* on fish culture and the laws governing game in the various States have excited so much interest, informs us that the *Salmo quinnat* deposited this spring, in the Sinnemahoning (one of the largest tributaries of the Susquehanna), are doing quite well.

CALIFORNIA TROUT IN THE EAST.—The following letter from Seth Green, Esq., furnishes interesting and gratifying news. We believe this is the first instance where spawn have been taken from California mountain trout in the East. Possibly we are to enjoy a new sensation one of these days in new varieties of hybrids, which will afford pleasure to the palate and sport to the angler:

ROCHESTER, N. Y., March 19, 1878.

Mr. Editor—Two years ago the California Fish Commissioners sent us some California mountain trout spawn. We raised quite a good percentage of them, and now they are in a thriving condition in one of our ponds, at the New York State Hatching Establishment, Caledonia. On the 14th of March they commenced spawning. We have crossed a few hundred of them with our native brook trout, and should think the hybrids would make a good fish for our waters; but time will tell.

The California trout are a hardier fish than ours, and more easily raised.

We have made other crosses this season, of the results of which more will be said another time. Yours, SETH GREEN.

WHITE TROUT—LUDLOW TROUT PONDS.—*Editor Forest and Stream:* It is a common thing in every trout hatching season to find an endless variety of deformed trout, such as double-headers and crooked backs, etc. But this season nature has taken a fancy to try something new, or at least it is new to me. I have now in our hatching house about 30,000 brook trout fry of this year's hatching, and among them I have two (2) trout that are white, or a very light cream color; they are perfect in form. They were hatched about the first of January and commenced feeding the 12th of February, and they are growing and doing as well as the rest. Have you ever seen or heard of any white brook trout before? I would like to hear. B. FREEBURG, Supt.

Ludlow, McKean Co., Pa., March 20.

We never have seen or heard of white brook trout. Will our fish-breeders be kind enough to report. We have seen light pink and cream-colored goldfish (carp).—ED.

—Fifty thousand salmon trout were placed in Greenwood Lake on the 22d inst.

UNITED STATES COMMISSION.—The navy of the United States Fish Commission, consisting of a small fleet of scows, fitted up for the purpose of hatching shad at Avoca, near the mouth of the Roanoke River, Albemarle Sound, took their departure from Baltimore in tow of tugs last week. The steam apparatus devised by Major Ferguson, the Maryland Commissioner, is employed.

—One of our Nashville, Tenn., correspondents has been shown a young jack, the product of some eggs (of the Virginia species of jack) deposited some months ago in the reservoir by Major G. F. Akers, of this city.

WISCONSIN.—Alfred Palmer, Fish Commissioner of Wisconsin, writes us as follows:

"We shall plant in the public waters of Wisconsin this year about ten millions of white fish, three millions of lake trout, and two hundred thousand brook trout."

Natural History.

UNA AND THE LION.—An unusual fancy that of Mrs. M. E. Lincoln, a Boston lady, who has for her household pets two magnificent African lions. Well behaved lions they are too; perform their mistress' bidding with unswerving obedience, but always with becoming dignity; go through a variety of tricks, and conduct themselves, in all respects, as civilized lions should do. Before the Boston police interfered, these pets had the free range of the whole house and the garden. Now they are confined to one room, with a run in the yard. Our ideals of pets are these two great, good-natured brutes. But we must confess we fear that some day their lion nature may arouse. Mrs. Lincoln has done a great thing for us in showing the influence of woman's kindness over the fiercest brute creation. Nothing excites in us greater indignation than the sight of the poor, scared beasts of the menageries shrinking and cringing before the hot irons of their keeper. We shall study with interest Mrs. Lincoln's experiment, of which she has kindly written us, as follows:

54 HOWARD ST., BOSTON, March 16, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I have two African lions, male and female, named respectively "Willie" and "Marthy." I originally possessed four cub lions, but lost two in raising them when they were quite young. "Willie" was born in Houston street, N. Y., June 4th, 1876, and "Marthy" was one of another litter, born three days later, corner Eighth avenue and Forty-ninth street, New York City.

From the day they were born I have had sole charge of them. I at first brought them up on a child's nursing bottle, but they have long since changed from milk to fresh, raw meat, which they eat from my naked hand. They are now twenty-one months old, and good judges pronounce them the handsomest pair of lions ever raised in this country, and probably the only pair of African lions ever raised in America.

"Willie" weighs about two hundred and fifty pounds, and

is a noble looking king of the forest, and will be a large specimen of the rare black-maned lion.

As a general thing, a lioness is most fierce and ferocious looking; but "Marthy" seems to be an exception to the general rule, as she has a fine looking face, although her eyes look a trifle roughish.

They have become very much attached to me, and are as well pleased to see me, after a few hours absence, as children. They are quite affectionate, and love to be petted, although they take but little notice of strangers. They have never shown any disposition to do me an injury of any kind.

Yours, respectfully, M. E. LINCOLN.

ZOOLOGICAL SOCIETY OF CINCINNATI.—The Report of the Zoological Society of Cincinnati for the year 1877 is an evidence of the success of such an institution when conducted with the ability shown by the managers of this society. The total receipts of the Garden for the past year were $6,186.93 in excess of those for 1876. This is an indication that the Gardens are gaining increasing popularity as a pleasure resort. The success of the present efficient manager, Mr. H. P. Ingalls, and his assistant, Mr. Frank J. Thompson, in their care of the specimens under their charge, is a subject of much congratulation among the trustees. The total number of specimens in the Garden, Dec. 31, 1877, was 885, of which were mammals, 317; aves, 528; reptilia, 38.

In Cincinnati, as in New York, the sea lions are the great objects of interest, and curious crowds are always to be found about their pond. In the report we find this very curious incident:

"The successful rearing of a pair of lion whelps by a female leopard, who acts as foster mother to them, is one of the most interesting features of the entire menagerie. About three weeks after their birth the mother ceased to take any notice of them. A Newfoundland slut was immediately procured, which nursed them for a short time, after which they were transferred to the cage of the female leopard and young. She instantly took them in charge, and since has evinced the same love and care for them as for her own whelp. They are still under her motherly protection, and are growing to be fine, hearty specimens, constantly playing and tumbling about the den with their foster sister."

THE LINNEAN SOCIETY OF NEW YORK.—There was organized in this city, on the evening of March 7, under the above name, a society which promises in the future to do good work for American science. That this is true no one will doubt who reads the names of the ten founders, all of whom are well known to workers in their several departments, while several of them have a reputation which is more than merely local. The object of this society is the promotion of the study of Natural History in its widest sense, and we do not hesitate to predict for it a future of great usefulness. The strength of the organization will be seen in the following list of original members: John Burroughs, Harrold Herrick, H. B. Bailey, of Cambridge, Ernest Ingersoll, Fred H. Hoadly, M. D., E. P. Bicknell, Will C. Osborn, Franklin Benner, C. Hart Merriam, Newbold P. Lawrence. The officers of the society are: Pres., C. H. Merriam; Vice-Pres., H. Herrick; Sec'y, E. Ingersoll; Treas., H. B. Bailey. At a second meeting a constitution and by-laws were adopted, after which Mr. E. P. Bicknell read an extremely interesting paper on the "Winter Fauna of Riverdale-on-the-Hudson and Vicinity." We tender this band of young and vigorous workers our best wishes for their success.

A LARGE AMBLYSTOMA.—A correspondent sends us the following note, and desires to be informed on the points mentioned. In reply we may say that the so-called "lizard" was apparently not a lizard at all, but one of the *Urodela*, or Tailed Batrachians, an order belonging to the class *Amphibia*, which includes frogs, toads, newts, sirens, etc. The description applies so well to *Amblystoma punctatum* that there is little doubt that the animal belonged to that species. It was, however, an unusually large specimen. Lizards always have a rough, harsh and scaly skin, while the *Urodela* is always soft and tender. Our correspondent's note reads as follows:

"On March 7, while having an old hot-bed dug out, a very large specimen of the lizard tribe was unearthed by the spade. I would have forwarded it to you for examination, but found it almost impossible to touch or manipulate it in any way, as it was so tender and soft that its skin abraded and burst at the slightest touch. I inclose accurate measurements and description of the reptile, and would like to know what it is and if commonly found so large in this latitude. Total length, 8¾ inches; length of head, 1 inch; breadth of head, ¾ inch; length of body between front and hind legs, 2¾ inches; length of tail back of hind legs, 3½ inches; front legs, ¾ inch long, 4 toes; hind legs, 1 inch long, 5 toes; color on upper side of head, back, tail and sides, bright bluish black, interspersed with thirty bright yellow spots ¼ inch in diameter, two similar colored, but smaller, spots on each leg; color of sides, lighter shades of blue, verging upon white on belly, and speckled with minute white spots; sides were marked with transverse indentatrums running regularly from near head to nearly the end of tail; weight, about ¼ lb.

ANOTHER LITTLE AUK.—Upon reading "A Little Auk on Shore" in a late number, I was reminded of one that I found under very similar circumstances about three months ago. I was spending a few days, gunning, at Chatham, Mass., in the latter part of November. Upon my return from a ducking trip late one afternoon, while passing through a field just outside of the village, a white object in the grass struck my eye. Upon coming nearer I found it to be the breast of an odd-looking bird, still warm, but dead. It proved to be a little auk, and upon my return to the city I had it set up. The field was over half a mile from the water, and the cape is, I believe, at this point, from ten to fifteen miles wide.

Boston, Feb. 23, 1878. HUNTER.

EARLY SNIPE.—A correspondent, Mr. James Chubb, writing from Cleveland, Ohio, under date March 11, says:

"Was out shooting on Saturday and bagged two Wilson snipe, and think it early and unusual for this place. On looking over my register, which I have kept for years, dating back as far as 1849, I see in that year, or rather '48, I bagged two snipe Dec. 29, and in the spring following, March 25, bagged seventeen more. This was a very mild winter indeed The last snipe this season I killed Nov. 20. On March 14, 1850, I killed five snipe; March 17, 1851, two snipe; March 14, 1853, nine snipe; March 17, 1859, twelve snipe; so you find this year is earlier than any year here that snipe have been shot at all. My sons killed a brace a few years since, I believe March 12, but my experience for thirty years shooting has been that a snipe has not been shot here as early as the present brace. I don't mean I've only shot thirty years, as I have shot over half a century, and am able to-day to travel and bag as many head of game as any young man if he doesn't keep his eyes open and embrace every opportunity."

Like all other birds, snipe appear to be coming on much in advance of their usual time. We killed one in Connecticut, March 16, which is considerably earlier than we have ever observed them there before, and they were reported from Massachusetts nearly a week before that date.

MEDFORD NOTES.—*Medford, Mass., Feb.* 23.—Fox hunting prevailed in the neighborhood this week. One that had thrice eluded the hounds during the past two weeks was at last "brought to bag" on Penn Hill, Jan. 10. Early the next day an "old setter" was started in the "backwoods," and after a fine run of ten hours was shot on Bear Hill, in Stoneham, several miles from his usual runs * * * Not until this week did I learn that the snow bunting (*Plectrophanes nivalis*), had been with us this winter. A small flock was seen on College Hill Jan. 13, but being rather shy and rather disposed to flight, only one bird was secured. I think they have been unusually rare this winter, for this is the only instance of the *nivalis* being seen in this vicinity. MEMOIR.

WHAT ANIMAL KILLS AND EATS A FOX?—*Weston, Vt., March* 11, 1878.—I think I can explain the mystery of the mutilated fox found by the Clinton fox hunters. When bitch foxes are caught in a steel trap during the period of heat they are frequently badly bitten, and sometimes killed outright, by dog foxes. Dog foxes are never so treated, nor are bitches, except in season. Why these things are thus is what no fellow can find out. I have caught, by steel trap, between two and three thousand foxes in the past thirty years, and have had many foxes badly bitten and a few killed, as above mentioned. Once I caught the dog fox in the act of killing, having nearly severed the head. I shot him "on the spot." It is very common for foxes to rob a steel trap of animals caught therein by gnawing off the captured leg. The fox never devours his prey on the spot where caught, but drags it some distance away. Bitches are in "season" from December to February, according to age; the oldest are earliest. If there was snow on the ground the hunters ought to have found tracks of the destroyer. CORP'L LOT WARFIELD.

ORNITHOLOGY.—We have received from the Smithonian Institution the very valuable report of Professor Robert Ridgway, on the Ornithology of the Route of the Geological Exploration of the Fortieth Parallel. It forms a most interesting addition to the other special reports which have resulted from Professor Hayden's survey.

THE ENGLISH SPARROWS IN GEORGIA.—The English sparrows have now spread themselves as far south as Georgia, as will appear from the following letter, dated

MYRTLE GROVE, Bryan Co., March 17, 1878.

MR. EDITOR:

The English sparrows have reached us. I saw one early last week, and yesterday a friend of mine saw another. There can be no doubt about this, as we both watched the birds for some time, and noticed the plumage and movements carefully. These birds were seen on the rice fields, about fifteen miles from Savannah.

GEO. LYMAN APPLETON.

PHILADELPHIA ZOOLOGICAL GARDENS.—The bill recently introduced into the Legislature to close the Philadelphia Zoological Garden on the Sabbath has been defeated.

SNAKE FASCINATION.

ST. JOSEPH, Mich., Feb. 25, 1878.

Many and marvelous are the cases I have heard related of snakes charming persons, birds and small animals. In most discussions some believe, some doubt, and most think if they do it at all, they do it with the eye. Writers on natural history, as far as I know, do not believe they have any such power. The best evidence to any one is his own senses, the only difficulty being that senses do not clearly apprehend the facts and phenomena as they actually exist. To establish any point in natural history is only to clearly apprehend facts as they are. If all the writers on science saw things as they really are, there would be absolutely no disagreement.

That there is a power of fascination, charming, perhaps mesmerism), possessed by snakes is to me a fact, and although it is a snake story, still I write what I know. Snakes can charm—they can fascinate; of that I have had ample experience. At the age of about eighteen, in the town of Lyme, Conn., where I was brought up, my father had a shad fishery on the Connecticut River. One morning in April I was sent to carry a fish to my sister, about two miles distant. Part way there I took a wood road through a rocky and bushy place, where the timber had been cut. Carrying the fish on a little cane stick on my shoulder, my attention was arrested by hearing a rattling in the dry leaves a rod or more from me. Stopping, I looked, and saw a large black snake (*Coluber constrictor*), five to six feet in length. Some two or three inches of the end of the tail was in rapid vibration or quivering, which made the noise by rattling the dry leaves. I had seen small striped snakes do something like it, and thought nothing of it. I stood to look at it with my stick on my shoulder, not conscious of any danger, having seen and killed, of such snakes, perhaps hundreds. In a few moments the vibration was so rapid that I could only see it without any form. It was like a splint or straw in a strong wind, fastened at one end, so rapid was its motion. Soon after looking at it, the vibrating portion began to show all the prismatic colors with such beauty of combination that no language can describe it. Seemingly, they went through a million of combinations and mingling of colors, changes and recombinations with every tint of shade, instantly. I stood enchanted at the most beautiful sight I ever beheld, unconscious of danger! Did I say enchanted?—charmed—fascinated!

There I stood, lost in ecstacy, without motion—how long I do not know. My eyes at first seemed a little blurred or dimmed. There was a pleasant, dizzy sensation in my forehead. The first I knew I felt myself falling to the ground. The partial falling frightened me, and in saving the fall, it turned my eyes from the snake. I felt dizzy—eyes blurred—muscles and nerves unsteady. In my fright at my condition I went for that snake with my staff. He stood ground, and raised up two feet or more at me with forked tongue. I struck without hitting several times. The snake ran, stopped, raised up at me again. I made several strokes, but could not hit him, although raised right in front of me. He ran again, and raised his head, with forked tongue almost in my face. At last, the third attack, I hit him and then killed him. Before getting through the woods I heard another rattling the leaves—I did not look him up.

I made experiments with four others of the same kind of snakes the same summer—none less than five to six feet in length. I had learned to look but a few moments at a time after the first adventure. As soon as the prismatic colors began to appear beautiful I turned my eyes. The last one attempting to charm me, I called two of my brothers who were near. We all witnessed the snake's mode, one at a time. To first arrest the eye they rattle the leaves to make a noise. You turn and look, and instantly the tail begins a rapid vibration, that destroys distinct appearance of any form. Soon the colors begin to appear and commingle so beautifully that you have no desire to look away or turn your eyes. The longer you look the more beautiful they become, and the more desire to look at them. We looked at the snake alternately, and then would turn each other away. When we all looked away he stopped. Let any of us move, he rattled the leaves; if we looked at him he began to charm till we looked off. He knew instantly when we turned our eyes from him.

Our experiment continued a half hour, till we were well and fully satisfied of snakes' powers to fascinate, and their mode. I have tried to give as clear an idea of the fact as I can. But no description can be given so that, unseen, it can be comprehended—it must be seen. The mode I give—the tail is used, and not the eyes. If the serpent of Eden produced the exquisite combination of colors in that fruit that there is in the charmer's tail—well, Eve, I forgive you. LUTRON.

WHO CAN EXPLAIN IT?

NEW YORK, Feb. 27, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

A relative of mine purchased a farm on Long Island last summer, and when he took possession found thereon among the belongings a couple of drakes and one duck. It appeared that the duck had stolen her nest and was sitting under the barn, and in due time, to my relative's surprise, she led forth twenty-five young and lively ducklings. How she covered so many eggs was a mystery; but the problem that suggested itself to my mind was this: If a duck only lays one egg per day (and I do not know that they ever lay more), it must have taken this individual fowl twenty-five days to produce her nestful of eggs, which, of course, would make a difference of that number of days in the age of the first and last egg. Please to recollect this happened in July, the hottest period of the year, and usually an egg becomes stale in three or four days in summer, and is spoiled in a week or so. Now, my first query is, "How were the first eggs preserved from spoiling?" and my second is, "How did the last laid egg hatch at the same time that the first laid did?" for they all came out on the same day. I am aware that ordinarily, in putting eggs under a fowl, they all usually hatch within a day or so of each other; but, in such cases, the eggs are not brooded by the fowl previously, as must have happened in this case. The duck must have sat upon the eggs in the nest some time during each day until the whole twenty-five were laid. I should like some one who is posted on such matters to give an opinion.

Yours truly, INQUIRER.

[The difference in time between the laying of egg No. 1 and egg No. 25 would not necessarily make any difference in the time of hatching, provided the bird only remained on the nest each day long enough to deposit an egg. Why egg No. 1 did not spoil before incubation commenced is another and more difficult question.—ED.]

CIRCULAR RELATING TO COLLECTIONS OF LIVING REPTILES.—The Smithsonian Institution is at present engaged in the preparation, for exhibition in the National Museum, of a series of plaster casts of American reptiles taken from the living or recently dead specimens, and carefully colored from nature. For this purpose it respectfully invites contributions of the following objects:

First—Specimens of any of the turtles and terrapins found in your vicinity, with information as to whether the collection embraces all the species known; and, if not, whether others may be looked for hereafter.

Second—The largest procurable specimens of serpents, with the exception of the poisonous kinds (such as rattlesnakes, copperheads and moccasins), in reference to the transmission of which farther and special correspondence is requested.

Third—The various kinds of salamanders, water-lizards or ground-puppies, to include the large hell-bender of the western waters, the mud-pup or water-lizard of the northern lakes or *Menobranchus*, the congo eel or ground puppy (*Siren* and *Amphiuma*) of the Southern rice fields, etc., as well as the smaller kinds found in damp places under stones and logs. A series of the frogs will also be acceptable.

All these animals should be suitably boxed and transmitted, as far as possible, alive; or, if dead, packed in ice, so as to insure their coming in good condition. The serpents require no special precautions in the way of packing; if of nearly the same size several may be sent together. If the disproportion be very great, there is, however, danger that the larger may devour the smaller. No rattlesnakes, copperheads or moccasins should be transmitted. The turtles should be wrapped or sewed up in some kind of cloth so as to prevent friction. They should not be sent loose with the softer objects. Serpents require no moisture; frogs and salamanders should be packed with wet moss.

Among the turtles should be included the soft-shell species, the true terrapins, the land tortoises, etc.

Single specimens of any living reptiles, as well as larger numbers, including duplicates, will always be gladly received, and due acknowledgment made for the same. The largest procurable representatives of each species is desirable. Transmissions may be made by any express company, freight to be paid in Washington.

JOSEPH HENRY, Secretary S. I.

SMITHSONIAN INSTITUTION, *Washington, Feb.* 1, 1878.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING MARCH 23, 1878.—One black-eared marmoset, *Hapale penicillata*, and one spella monkey, *Cebus apella*, presented by Mr. W. R. Tice, Brooklyn; two Stanley cranes, *Tetrapteryx paradisea*, *Hab.* South Africa; two white-headed doves, *Columba leucocephala*, *Hab.* Hayti; two wild cats, *Lynx rufus*; three lions, *Felis leo*, bred in the menagerie.

W. A. CONKLIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN, FAIRMOUNT PARK, MARCH 19, 1878.—One zebu, *Bos indicus*, born in the garden; one Cuban chameleon, presented; one tree boa, *Epicrates angulifer*, presented; two Angora goats, *Capra hircus*, born in the garden; two woodchucks, *Arctomys monax*, presented; one raccoon, *Procyon lotor*, presented. ARTHUR E. BROWN, Gen'l Supt.

—A few gentlemen wishing to join a first-class shooting and fishing association can hear of a favorable opportunity by addressing GAME, this office.—[*Ad*

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

SOUTH-EAST TEXAS--FORESTS, PRAIRIE, GAME AND MINERAL WATERS —A TERRA INCOGNITA.

HOUSTON, March 16, 1878.

EDITOR FOREST AND STREAM:

Having just returned from a trip of some ten days in Southeast Texas, I offer some notes on the country and people.

I took the Texas and New Orleans Railroad at Houston and rode through to Orange, on the Sabine, 106 miles east of my starting point. Though on a railroad, it is a *terra incognita*. It is indeed a wilderness, with a village here and there at wide distances, and an exceedingly sparse population between. Though I have lived in Texas twenty years, and twelve of these in Houston, I had little idea of such a wilderness at my doors. It is alternate forest and prairie, pierced by great rivers and numerous creeks and bayous. The country is almost a dead level. Away from the streams, the forests are principally the long-leaf pine, straight as the masts of a ship, and yielding from two to three saw-logs to a tree. This long-leaf pine is the best pine in the world. It differs from the short-leaf as a full-blooded horse does from a "scrub." It is nearly all heart—great-hearted, like all great men or things. Of late it has been discovered to be a very fine material for railroad ties: our oak lasts about three and a half years, while the long-leaf pine tie is good for ten to fifteen years. Indeed, it seems to me that it is almost impossible for it to decay, so heavily is it charged with its fat resin. The Texas railroads are now excluding oak and taking to the long-leaf pine. Southeast Texas is a world of this pine. Here is work for thousands of saw-mills.

In the wide valleys of the streams the forests are white oak, gums of various sorts, gigantic cypresses, holtus, beech, birch, myrtles, wild peach and magnolias. The railroad passes through a forest of magnolias, on the Trinity. It is fifteen to twenty miles in length and two to three in width. This makes a lumber as beautiful as satin-wood, and much more compact and heavy. The wild peach attains fifty to sixty feet in height. It is a very solid and fine-grained wood. These are only some of the forest trees. There are a great many other sorts too numerous to mention.

THE SOIL.

On the prairies it is a dark, sandy loam, in its timbered valleys it is alluvial, and rankly deeply rich. The prairies cannot be made productive without drainage, and often this cannot be had without cutting extensive ditches. Perhaps from Houston to Orange there are not a dozen farms on the prairies. Even along the streams they are few and far between. Here is a country capable of supporting and enriching millions, and yet how few to enjoy it!

THE BOTTOMLESS LAKE.

Near the San Jacinto, a circular lake of an acre or two, was pointed out to me by an old citizen, who assured me that it had no bottom—at least, that no human being had ever been able to find it, though sounded with several hundred feet of line. It is clear as crystal, and as we passed I saw the fishes splashing upon its surface. Is this a volcanic fissure? I inquired of many about this lake afterwards, and all said it was bottomless. It has no stream flowing in or out.

GAME.

The whole country is alive with it—the prairies, with grouse, plover, snipes, curlews, ducks and geese; its forests, with squirrels, possums, coons, wild cats, catamounts that have no tails, wolves, bears and panthers. Turkeys and deer are everywhere. A sportsman could glut himself almost anywhere along this road in a short time. Do not think that I am exaggerating; it beats any country for game that I ever saw. 'Gators are abundant even on the prairies in wet weather. If some of you New York sportsmen will come out next fall or winter I will insure you such sport as you never dreamed of. The "roughness" you will have to put up with will make it all the more enjoyable.

ORANGE.

This is the terminus of the Texas and N. O. RR., the Texas people having built it to the Louisiana line, and the Louisiana people having done nothing to build it to New Orleans, as they promised. Had too much confounded politics in Louisiana. Orange has about 2,000 people. It is the great lumbering mart of Texas. It ships daily several hundred thousand feet of lumber, and as many shingles, besides railroad ties. The logs are floated down the Sabine River in rafts. This river is a big stream. At Orange it is from thirty to eighty feet in depth. Were it not for the bar at its mouth, and a few miles in Sabine Lake, through which it passes, the Great Eastern could ride to Orange, and that place would be not only the great lumbering mart of Texas, but also one of the greatest in the world.

The people here are intelligent, bright and active. Many of them are Michiganders and Pennsylvanians, who have come to embark in the lumber business. I talked with a number of them, and they were all pleased. The Michiganders say there is no such lumber region in Michigan as this.

There is no agriculture about Orange—none whatever. There are a few country people, but they depend on cattle and logs. Orange gets all her vegetables from Houston, and nearly everything else that she eats. The people pray for an influx of farmers. It is a grand rice country, but good drainage would generally be required for any other crop. The orange flourishes, and there is hardly a yard that is not stocked with bearing trees.

BEAUMONT.

This town is twenty-four miles west of Orange, on the Neches. Next to Orange, it is the great lumber mart of Texas. Its exit to market is by the railroad and by vessels down the Neches, to the Gulf. It has about 1,200 people, nearly all engaged in the lumber business. Here, also, are a number of Michiganders. Southeast Texas looks like it was going to become a new Michigan. Everybody seems prosperous, and there does not appear to be any "contraction" here. The lower half of the country of which Beaumont is the capital, is a great prairie extending to the Gulf, which is filled with cattle and horses. The stockmen are nearly all rich, many branding from 1,000 to 3,000 calves a year. They are mostly of French extraction, very hospitable and pleasant, dress well for stockmen and would be good readers if they did not live so remote from anything to read. They live at wide distances on the prairie. The grass on the prairie is rank but coarse, and I do not consider it half as good a stock country as beyond the Colorado. Still the woods, even in winter, are filled with succulent vegetation. In winter they stay in the woods unless driven out by high water, and in summer they take to the prairies, where the musquito and the gallinipper flourish not. You don't know what a gallinipper is, I reckon. He is the great grand-daddy of all musquitoes. They say he is sometimes as big as a humming-bird; and when he bites—he bites! I have occasionally been attacked by a swarm of them. I tell you they make a fellow fight and run. Their domicile is marshes and low forests. There is very little agriculture in the country, so little that even Beaumont gets its vegetables from Houston. Yet it is a good agricultural country.

Four or five miles south of the town in a prairie is a cluster of mineral wells, within a few feet of each other. They are five or six feet deep, the water nearly reaching the surface, but never overflowing. The principal one is nearly of the color of milk, and is in a constant state of tumultuous ebullition, which is not water boiling up, but currents of gas escaping from below. This water is so sour that it sets the teeth on edge. It emits a strong sulphurous odor. The other wells have water of the same sort, only varying in strength. Gas issues from the ground all about them, and one can get a gas-light any time by inserting a hollow reed in the ground and applying a lighted match. There are no houses here—nothing but a great prairie. The people say that the water will cure the worst cases of dyspepsia and dropsy in a short time. Some enterprising man will some day make his fortune here.

SOUR LAKE.

Sixteen miles west of Beaumont is Sour Lake Station. I left the railroad here and rode eight miles north to Sour Lake. I think this is the most remarkable place in the world. The lake is a pond of about two acres of clear water, and on and near its edges are twenty-six wells, nearly all differing in character. All are in a state of ebullition or agitation from escaping gas. The lake is also filled with bursting bubbles. Some of these wells are precisely like the sour wells of Beaumont. Some act as a cathartic in a few minutes, and others in as short a time act powerfully on the kidneys. Some are covered with crude petroleum, or a substance very like it, and these have a very strong taste of tar. There is one fine spring of chalybeate. The bottom of the lake is hard asphaltum. It is destitute of life as far as I could see, except a very minute, red, wiggling worm.

I stopped at the place two days, and saw numerous gas-lights made by applying matches to the gas jets issuing from the ground. Near the lake is a bed of hard asphalt like that in Trinidad, only it is not so pure, at least on the surface. I should think petroleum would be obtained here in great quantity. It was attempted some time ago. The shaft had been sunk about 40 feet, when the fellow concluded he would apply a match to the hole. A great explosion instantly followed, knocking the man senseless, but not killing him. He then gave up the job. Some scientific man ought to visit the place and let us know what it is.

A BEAR THAT KILLS TWO MEN AND A DOG.

A day or two before I arrived at the lake and old Indian, John Scott, chief of the Coushattas, who lives in that region, and his grandson were killed by a bear a mile or two off. The bear was gobbling up a favorite dog of theirs, and the young man rushed up to help the dog. Bruin, having slain the latter, turned upon the young man, seized him in his arms, hurled him to the ground and fatally wounded him by biting him in the small of the back. The old man came up at this juncture and rushed upon Bruin with his knife. The bear rose upon his hind-legs, clasped the old chief to his bosom, took his head in his mouth and crushed it like an egg-shell. A white man came up just then and killed him. Who will say after this that a Texas bear is not a good fighter?

HEALTH.

The people look as hearty as any I ever saw. Drink cistern water and do not live in the heavily timbered valleys, and all is right. The eternal breezes from the Gulf keep the air pure.

N. A. T.

Houston, Texas, March 12, 1878.

FORESTS, BIRDS, INSECTS, CROPS.—The testimony of Dr. Testelin, before the French Senate in the discussion of a bill for the protection of small birds, showed that in certain portions of France the annual crops were half destroyed by worms. These sections are those deprived of trees, like the Beauce, and hence deserted by small birds. On the other hand, the finely-wooded Bocage has plenty of birds, and the farmers do not complain of the ravages of insects. This is a new feature of the forestry question, which is now assuming importance in several European countries, and which in this country may yet engage the serious attention which our legislators are slow to give to it.

A FLOWER'S MISSION.—The following, from the Schenectady *Union*, may appear somewhat apocryphal, but we doubt not the ladies of the New York Flower Mission could tell many a marvelous story of the floral gifts their hands dispense:

"A growing flower was given to a sick girl. In trying to take care of it the family made changes in their way of living. First they cleaned a window that more light might come to its leaves; then they would open the window that fresh air might help the plant to grow. Next the clean window made the rest of the room look so untidy that they used to wash the floors and walls and arrange the furniture more neatly. This led the father of the family to mend a broken chair or two which kept him at home several evenings. After the work was done he stayed at home instead of spending his leisure hours at the tavern, and the money thus saved went to buy comforts for them all. As the home grew attractive the whole family loved it better than ever before and grew healthier and happier with their flowers. Thus the little plant brought a blessing."

—The quantity of food which a plant obtains from one and the same soil is in proportion to its absorbent root surface. Of two species of plants which require the same quantity, and a similar relation of mineral food, the one with double extent of root surface takes up double the quantity of food. Thus it is manifested that root-spreading plants are soil-feeders; that leaf-spreading plants are air-feeders; that is, they chiefly feed upon the air and soil respectively.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, as of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Boston Kennel Club Show, Boston, Mass., March 26, 27, 28 and 29. Dr. E. J. Forster, Secretary.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb Secretary.

MASSACHUSETTS KENNEL CLUB—THE BOSTON BENCH SHOW.

BOSTON, March 26, 1878.

THE building in Central Court is admirably adapted to the peculiar wants of a dog show. Fairly spacious as to rooms for the display of the dogs, three whole stories were used, and to each story had been partitioned off a separate enclosure away from the crowd, so that on all the stories dogs were judged at the same time. The advantage of judging dogs as soon as possible is quite manifest. A three or four days' show of the dogs by no means improves their condition, and then public curiosity must be satisfied as speedily as possible. Down stairs, then, were placed the champions of the bench shows with other sporting dogs; on the second story were found the surplus of sporting dogs, together with the spaniels, the cockers, the Irish water dogs, and the Chesapeake Bay dogs, and on the highest story—the third flight—were the mastiffs, the New Foundlands, the collies, belle terriers, the stag hounds, the Pomeranians, the pugs, skyes, toy dogs, with the fox hounds, with greyhounds. In this upper story, too, were grouped the sportsmen's guns, rods and vestments. Messrs. W. Read & Sons had a fine collection of Scott guns, and conspicuous was the Bogardus gun, with its two barrels, which had been in the 5,000 ball match. Mr. W. B. Schaefer made an exhibit of guns of his own make, which were faultless as to style and finish. The Messrs. Parker Brothers had a show case with a choice selection of their well known arms, while the hunting suits of Messrs. C. W. S. Simmons & Sons occupied a conspicuous position. This story was also ornamented with numerous pictures of dogs, fish and game, executed by the best artistic talent in the country.

The arrangement for the comfort of the dogs was excellent. The stalls were roomy and were filled with fresh straw, and ventilation was admirable. The boxes were arranged so that there was ample room for passage way, and there being three stories, with convenient stairs, though there was present during the first day (Tuesday) a very large attendance, there was no unnecessary crowding. Somehow or other dog shows are mostly held in dark buildings, so that it is hard to see. In Boston the light was excellent.

One thing which is worth while mentioning, is that pedigrees were not allowed to be put on kennels until after the dogs were judged. By eleven o'clock, everything being in excellent style, thanks to Mr. Lincoln, the superintendent, numbers on boxes corresponding for once with the dogs as printed on the catalogues, judging commenced. The judges were Mr. John Davidson, for the setters and pointers; Dr. L. H. Twaddell, for the fox terriers, spaniels, Chesapeake Bay dogs, hounds and part of non-sporting dogs, and Mr. T. H. Scott for classes 30 to 43 (bull dogs, bull terriers, and pet and non-sporting dogs).

Certainly the excitement commences at once in a bench show when the cracks, the champions, are pitted against one another. Here there were four first rate ones entered, though Drake, Mr. Luther Adams' fine white and black, did not compete, as Mr. Adams is a member of the club. Mr. Carleton's Dash, with Mr. P. H. Morris' Lark and Czar, and Mr. Bryson's immensely fine Gladstone, now had it out for the blue ribbon. The ex-premier, as good on the bench as when he won the puppy stakes in Nashville, was in fine form, and Gladstone took the prize, Lark coming in for a very high commendation, and Dash and Czar for highly commended. It was a long and careful deliberation on the part of the judge, and the awards were given after no end of examination. The champion English setter bitches now came on trial. Mr. Charles' Rose, a handsome white and black ticked animal, was adjudged the first, the same owner getting a v. h. c. for Nina, with Mr. L. H. Smith's Chip.

Now came an exciting event—the judging of the champion Irish setter dog. Here there were two dogs. No. 12 was Berkley, the pride of the St. Louis Kennel Club, with Dr. Jarvis' Elcho. These dogs had it out in St. Louis, when Elcho got the blue. Both dogs were in good order, but Berkley is just a little the fresher and truer to form, and there never was a more delicate point raised than between the excellence of the two. It may be said, to Mr. Davidson's credit, that he reversed his decision in St. Louis, as Berkley was a shade better in condition, and the St. Louis Kennel Club has now the right to sport the blue. In champion Irish setter bitches there

were three dogs shown to the judges—Biddy, Fanny and Moya. Again West had the best on the East, and the handsome Biddy, of the St. Louis Kennel, took the first prize. Now came on the Gordons, with four champion dogs. For the prizes in class 3 there were four good ones, to wit: Kent, Dinks, Grouse and Rupert. Here was another very close thing. There was no end of comparing of pointers here. At last Mr. W. J. Farmer, with Rupert, a 4½ year old, real black and tan, without a false color on him, and true to make, got the first prize, his three competitors coming off each with a very high commendation. The gordon bitches, being next in order, showed up some three. Here was a mate bitch to Mr. Farmer's Rupert, if anything, better than the dog. The judge saw the same strain in Fan, belonging also to Mr. Farmer, so that this gentleman carried off for dog and bitch first prizes. Mr. Tileston's Lou had a V. H. C., and Dr. Wright's Gipsy a H. C. We may remark that in future we shall look to Toledo for a fine race of true Gordons, for it is there that Rupert and Fan belong. Now came the sensation in many senses of the term—class 4, champion pointer dogs. Eight dogs passed under the judge's eye. Here were some mighty good ones. Fosco, belonging to Mr. Shelton, of Auburndale, though a good one, was not as fine as either Mr. Orgill's Flake or Rush. Mr. Sterling's Sleaford had most things in his favor, but they all paled before Sensation, and to Sensation the first prize was properly given, though Mr. Orgill got two of the three syllables awarded, as did Mr. Strong's Pete.

Such a pretty string of pointer bitches we rarely saw. Of five shown, Mr. Edmund Orgill's Rose, a beauty in lemon and white, with the daintiest of make and form, thoroughbred all the way through, took the prize. Never was an award better made. Of the merits of Buff and Gipsy, we may state that they mad many points in their favor, but, if anything, we should have given Buff the second place, relegating Gipsy and Kit to an H. C. only.

Class 5 was that of imported English setter dogs. Here was a big lot of dogs. Some good, some middling, and quite a number down right poor. You can buy no end of dogs in England, but there are as many poor ones there (for the money) as any where else. Lelaps, the winner, however, a black, white and tan, deserved fully the blue, as did Mr. T. H. Scott's Pound a second prize. Of imported English setter bitches, Diana, owned by Mr. F. Sumner, was a good winner. Quite a likely lot were class 5, composed of imported English setter dog puppies. Mr. L. H. Smith's Temple Bar, a lemon Belton of 8 months, deserved the first prize. Of the bitch setpuppies imported, Mr. L. H. Smith, of Strathroy, was again the victor with a pretty dog, Lass o' Lowrie. If an offspring of Paris and Pearl is not handsome, we wonder what could be.

Now came perhaps the most important event of the first day—the judging of the Native English Setter Dogs. In this class the No. 6 were the real working dogs. Now, this series of dogs must show, at least as far as appearances go, what we have been working for for so many years. Of course, as has been said over and over again, it is not the handsomest dog which is always the best performer, but, as in animals, it is perfection of physical form which brings out their best physical qualities. If we breed from handsome, well made, properly proportioned stock we ought to get animals with good noses and fine limbs. It may be taken as certain that, through many years of careful selection, the instincts of the dog have kept abreast with his finer make or build. Now, in this Class 6 there were no end of prime animals. It was a pick among fifty odd dogs. The judging room, spacious enough, was crowded with fine dog. No easy task was it to discriminate among so many. It took most an hour and a half for the judge to decide. When the award of the first prize was given to the No. 80, Mr. G. A. Thayer's Dan'l Webster, there was almost applause in the room. Dan'l Webster is as noble a dog as there is in the show. He is white, with a little red, as handsome as can be, and is a superb performer in the field. The dog has in him the blood of a Rake and Rachel—the great expounder's own dogs. We take pleasure in recording this fact—that, amid so many competitors, many of them first-class dogs, the award caused no jealousies. Mr. D. V. Waters' Grouse had the red ribbon, the second prize. This, too, was a very just award. Grouse is a prime animal, and a fitting second to Webster. In this class the V. H. C.'s and H. C.'s were liberally distributed, to the amount of twenty-eight. Again, we must impress upon our readers the great excellence of this lot of dogs, which alone would have made the Boston Bench Show attractive. It is worth while stating that nine-tenths of these dogs are from New England States.

Want of space prevents our giving further details of the show on the first day. We can only add the following dogs as winners in the various classes:

Class 13—Chesapeake Bay Dogs—First prize, 407, Baltimore Kennel Club, Baltimore, Md, Rob, sedge, 6 years; brother to Dr Keenor's Rose. Second prize, 405, C P Keeler, Cambridge, Mass, Russia, brown, 14 mos; Hammond stock by Borland's Tray—Hammond's Ruby; full pedigree.

Bitches—First prize, 408, Gard G Hammond, New London, Conn, Rose, sedge, 5 yrs; Rabb—Ruby. Second prize, 409, same owner, Ruby, sedge, 2 yrs; Rabb—Rose. V H C, 410, same owner, Ruth, sedge; puppy.

Class 14—Irish Water Spaniels, Dogs or Bitches—First prize, 413, J H Whitman, Chicago, Ill, King of the River, liver, 2½ yrs; Mike—Liffey. Second prize, 414, same owner, Liffey, liver, 3½ yrs; Doctor—Bridget.

Class 15—Clumber Spaniels, Dogs or Bitches—First prize, 427, Lawrence V Pool, Beverly, Mass, Romey, lemon and white, 3 yrs; from imported stock. Second prize, 429, Fred Seaver, Jamaica Plain, Mass, Fannie, orange and white, 11 yrs; Hart's Shot—Fan.

Class 16—Cocker Spaniels, Dogs or Bitches—First prize, 433, E W Davis, Providence, R I, Fanchon II, liver and white, 3 yrs; imported; also in Class U. V H C, 434, Lemuel Willey, Baltimore, Md, Queen, black, 7 yrs; imported.

Class 17—Field Spaniels, Dogs or Bitches—First prize, 446, Charles McCrossin, Boston, Fido, white and liver, 3 yrs. Second prize, 444, L C Massey, Boston, Dan, black, white and licked, 3 yrs; imported.

In judging of the foxhounds, Dr. Twaddell very properly took into consideration the kind of dog wanted in the New England States for fox-hunting. Now, if speedy, well drawn dogs, such as are used in Pennsylvania or Maryland, were put on the trail of a fox in New Hampshire, with the rocks and stones that abound there, the dogs could not follow reynard. A fast dog is not what is wanted. Types and standards, then, of foxhounds in the United States must be varied. In New England the dog is not expected to kill the fox, it is the man who does it. To eyes somewhat accustomed to English or Southern foxhounds, the New England dog would appear strange. But, for stony New England, where foxes are followed on the snow and vulpecide is not a sin, just such dogs as were shown at Boston are the best; and quite wisely, with a full understanding of the case, Dr. Twaddell's judgments were given.

Class 18—Foxhounds, in couples—First prize, 452, Charles Brown, North Somerville, Mass, Bugler and Piper, pied, 2½ yrs, and 4 yrs 9 mos. Second prize, 453, L P Bartlett, Arlington, Mass, Lion and Jack, yellow and white and black and white; also in Class N. V H C, 455, H W Jordan, Boston, Fan and Sam, black and tan, 6 yrs. H C, 454, L P Bartlett, Arlington, Mass, Hunter and Fannie, black, mottled and white; also in Class N.

Class 30—Bull Dogs, Dogs or Bitches—First prize, 552, Geo G Haven, New York, Duke, white and brindle, 8 yrs; full pedigree. Second prize, 549, Al Watts, Boston, Billy, white and mottled, 2 yrs; imported from England.

Class 31—Bull Terriers, Dogs or Bitches—First prize, 574, James G Lathrop, Boston, Steel, brindle, 20 mos; by Duffy's dog. Second prize, 568, Jerome F Hale, Boston, Daisy, white, 8 yrs; Brown's Ben—Ftood's Nellie. V H C, 559, Thatcher Goddard, Boston, Topsy, brindle and white, 3 yrs 7 mos; full pedigree. H C, 567, Matthew Gay, Boston, Nell, brindle, 2 yrs; with 7 pups.

Class 39—First prize, 581, Miss Chickering, Boston, Punch, fawn, 4 yrs; Champion—Lena; full pedigree; also in Class Q. Second prize, 580, H L Daggett, Boston, Dandy, fawn, 3 yrs. V H C, Miss Mary D Wagstaff, Babylon, L I, Sambo, fawn, 4½ yrs; by imported Toby out of Topsy, winner of second extra at New York. H C, 578, A H Stebbins, Boston, Donna, 8 mos; Colburn's Polo—imported Countess; full pedigree.

Class 34—First prize, 595, N Gunning, Boston, Ida, black and tan, 4½ yrs. Second prize, 591, William Vanson, Boston, Pinkey, black and tan, 16 mos; from imported stock. V H C, 598, James A Bowtelle, Providence, R I, Pinkum, black and tan, 1 yr; full pedigree.

Class 35—Skye Terriers, Dogs or Bitches—First prize, 607, George M Gale, Boston, Flossie, blue, 3 yrs 4 mos.

Class 38—Yorkshire Terriers, Dogs or Bitches—First prize, 634, Henry Kisterman, New York, Beauty, blue and tan, 16 mos; full pedigree. Second prize, 631, same owner, Bright, blue and tan, 1½ yrs; full pedigree. V H C, 632, same owner, Charley, blue and tan, 1½ yrs; full pedigree; 633, same owner, Dandy, blue and tan, 1½ yrs; full pedigree.

Class 39—Toy Terriers (not exceeding 5 lbs weight) Dogs or Bitches—First prize (divided), 636, W C Cross, Boston, Flossie, blue and tan, 3 yrs 3 mos; 638, Henry Kisterman, New York, Dandy, silver, 16 mos; full pedigree.

Class 40—Blenheim, King Charles or Japanese Spaniels, Dogs or Bitches—First prize, 642, S K Hindley, Worcester, Mass, Charlie, black and tan, 2 yrs 9 mos; Bertie—Garwood's Fannie. Second prize, 641, same owner, Lady, black and tan, 2 yrs 9 mos; Garwood's Hylus—his Daisy.

The Boston Bench Show has not a single drawback. All classes of dogs were very fully represented, and the management of the whole business as perfect as possible, reflecting great credit on the officers of the Massachusetts Kennel Club.

ENTRIES OF THE FIRST ANNUAL EXHIBITION OF THE MASSACHUSETTS KENNEL CLUB BENCH SHOW OF DOGS, HELD AT CENTRAL COURT, BOSTON, MASS., MARCH 26, 27, 28 AND 29, 1878.

The following are the numbers of entries in each class of the Boston Bench Show.

DIVISION FIRST.—SPORTING DOGS.

Champion English Setter Dogs	5
Champion English Setter Bitches	6
Champion Irish Setter Dogs	2
Champion Irish Setter Bitches	4
Champion Gordon Setter Dogs	5
Champion Gordon Setter Bitches	4
Champion Pointer Dogs	10
Champion Pointer Bitches	5

ENGLISH SETTERS.

Imported English Setter Dogs	16
Imported English Setter Bitches	6
Imported English Setter Dog Puppies	4
Imported English Setter Bitch Puppies	5
Native English Setter Dogs	55
Native English Setter Bitches	25
Native English Setter Dog Puppies	16
Native English Setter Bitch Puppies	5

IRISH SETTERS.

Imported Irish Setter Dogs	25
Imported Irish Setter Bitches	9
Imported Irish Setter Dog Puppies	5
Imported Irish Setter Bitch Puppies	5
Native Irish Setter Dogs	19
Native Irish Setter Bitches	8
Native Irish Setter Dog Puppies	8
Native Irish Setter Bitch Puppies	3

GORDON SETTERS.

Gordon Setter Dogs	24
Gordon Setter Bitches	21
Gordon Setter Dog Puppies	9
Gordon Setter Bitch Puppies	5

POINTERS.

Pointer Dogs	35
Pointer Bitches	9
Pointer Dogs, under 50 lbs weight	13
Pointer Bitches, do.	12
Pointer Dog Puppies	16
Pointer Bitch Puppies	14
Chesapeake Bay Dogs	3
Chesapeake Bay Bitches	4
Irish Water Spaniels	15
Clumber Spaniels	5
Cocker Spaniels	12
Field Spaniels	8
Fox Hounds	9
Beagles	4
Dachshunds	3
Fox Terriers	9
Greyhounds	5
Scotch Deer Hounds	5

DIVISION TWO.—NON-SPORTING DOGS.

Mastiffs	21
St. Bernards	15
Newfoundlands	7
Siberian, or Ulm Dogs	3
Dalmatians, or Coach Dogs	3
Shepherd Dogs, or Collies. Dogs	7
Shepherd Dogs, or Collies. Bitches	5
Bull Dogs	6
Bull Terriers	23
Pugs	12
Black and Tan Terriers, exceeding 11 lbs. weight	2
Black and Tan Terriers, not exceeding 11 lbs weight	18
Skye Terriers	14
Scotch Terriers	7
Dandie Dinmont Terriers	3
Yorkshire Terriers	8
Toy Terriers	9
Blenheim, King Charles, or Japanese Spaniels	5
Italian Greyhounds	5
Poodles	8
Miscellaneous	12
Trick Dogs	5

DIVISION THREE.—SPECIAL CLASSES.

Best Kennel English Setters	3
Best Kennel Irish Setters	2
Best Kennel Gordon Setters	2
Best Kennel Pointers	5
Best Kennel Water Spaniels	3
Best English Setter Stud Dogs	5
Best Irish Setter Dogs	1
Best Gordon Setter Stud Dogs	1
Best Pointer Stud Dogs	2
Best English Setter Brood Bitches	5
Best Irish Setter Brood Bitches	3
Best Gordon Setter Brood Bitches	5
Pointer Brood Bitches	8
Fox Hounds	2
Mastiffs	9
St Bernards	6
Pugs	4
Best Pair Irish Setters	4
English Setters	23
Best Setters of Any Breed	11
Best Field Spaniels	2
Best Brace of Beagles	1
Best Pointer of Any Weight	21
Best Native Setter Puppy of Any Strain	4
Best Skye Terrier	3
Best Blenheim or King Charles Spaniel	1

FOX HUNTING IN TENNESSEE.

NASHVILLE, TENN., Feb. 23, 1878.

EDITOR FOREST AND STREAM:

Fox hunting is a favorite sport of the gentry in this State, and, although their packs of hounds and their horses are not so good nor well kept as before the war, still the love of the sport is so great that it makes up for the disadvantages. Last week quite a grand chase came off. Twenty-five or thirty couples of pretty fair hounds were gotten together, and a large number of gentlemen and some few ladies turned out to follow them. Soon after meeting a fine red fox was unearthed, the dogs let on, and away they went at a break-neck speed over a beautiful country after him. Unfortunately, after a run of two or three miles, rain began to come down in torrents, which had such a dampening effect upon the huntsmen and so demoralized the hounds that Reynard was enabled to get away from them. Under more auspicious circumstances, however, it is no uncommon thing to kill two or three foxes in a morning's hunt. Near the Hermitage, the old homestead of Andrew Jackson, a great many foxes are to be found, and good dogs to chase them.

The trout (bass) fishing has fairly begun. The rivers and creeks have become clearer since the fine, bright weather set in, although it is still quite cool. Some fine fish have already been taken. Col. G. F. Akers, a noted angler of this city, showed me, a few days ago, some beautiful specimens of bass caught in Buffalo, a stream in Humphreys County, the largest scaling five pounds. They were caught with minnow bait. The fish, as yet, lie very deep and in sluggish water. A large quantity of fish is brought to this market from the Northwestern lakes and Pensacola. In passing some of our fishmonger's stalls a stranger would scarcely believe himself more than five hundred miles away from the natural elements of the salmon, lake trout, shad red snapper and the pompano. They are brought here in refrigerated cars and are as fresh and in as good condition as when caught. J. D. H.

SHOOTING FOXES IN NEW HAMPSHIRE.—The above heading may be objectionable to some of the readers of the FOREST AND STREAM, particularly to those living in the Southern States, many of whom deem it most unpardonable and unsportsmanlike to shoot a fox. Any one, however, who is familiar with the rough nature of the country in New Hampshire will acknowledge that the only successful methods of destroying them are by trapping and shooting, and considering the damage they do to both game and poultry, it is conceded that any means (except poisoning) are justifiable by which their numbers may be diminished.

I have had no experience in trapping foxes, but have shot about fifty during the last four years, only hunting them during the winter months, when there has been from one to three feet of snow on the ground, and no other shooting to be had; consequently I have learned something of their habits when followed by a dog.

The man who shoots the largest number of foxes is he who has the most patience. A neighbor of mine, who kills about twenty-five every winter, starts early in the morning, and as soon as the dogs strike a track, places himself at some particular point where, from former experience, he thinks the fox will cross, and there he remains until dark, unless he gets a shot before that time. I have stood in a corner of a certain pasture and killed three at different times. One cold, windy afternoon I started one, when the thermometer stood within one or two degrees of zero, near the above locality, and after waiting three hours was rewarded by getting the fox, although it was so cold that I could hardly handle my gun. Very often when hunting foxes among second-growth timber or in a white birch swamp, where they are frequently started, it is well to follow after the dogs as closely as possible, until the fox is started, as they often run once or twice through the cover in which they are found. By so doing I have killed as many, if not more, than by waiting at a particular point, often getting a shot in less than five minutes from the time they were started.

The dog which seems to be best adapted to this purpose is a small black and tan hound, weighing from thirty to thirty-five pounds. I have never found of what particular breed they are, but know that they do their work well. There are several of these dogs in my neighborhood, and nearly all

of them are slow running, have hard feet and good, clear voices. The great advantage, however, is their size, as generally, when a fox is first started, he waits until he sees the dog which is after him, and they do not seem to much fear these little fellow.

I have owned one of these dogs for six years, and although he is in his thirteenth year, during the past winter he followed as well and nearly as long as when I first got him. If an estimate of the number of red foxes killed every year in New Hampshire could be made, the average would amount to a good many hundreds, as within a radius of six or seven miles of my home from fifty to one hundred are killed every year, and within that distance there are not more than eight or ten men who keep hounds. I have been told by a fur dealer in Concord, New Hampshire, that one year he bought over 700 fox skins, nearly all of them having been killed in the northern portion of the State. C. M. S.

Dunbarton, N. H., March 13, 1878.

THE PORTRAIT OF PARIS.—Our editorial rooms have been graced with many fine portraits of distinguished dogs, but we give a most prominent place to a picture of Mr. L. H. Smith's famous blue belton, Paris, painted by Mr. Pranishnikoff. This artist, whose work frequently illustrates the pages of the Messrs. Harper's publications, made most of the drawings of the dogs in the New York Bench Show, which appeared in *Harper's Weekly* last year. The portrait of Paris is a superb picture in every way, and follows closely all the fine bred peculiarities of this choice animal. That small, fine and narrow head, full of thought, which distinguishes the Llewellin stock, is admirably portrayed. The texture of the hair, the long feather, even the peculiar fleckings are brought out. It is a work in which not only the form is complete, but the silky covering of the animal has been carefully worked out. Sportsmen are very hypercritical as to the painted semblances of their favorites. The slightest divergencies of shape or marking bring forth unfavorable comments, which are, perhaps, rather of a practical than artistic character. Mr. Pranishnikoff's picture seems to have given the most complete satisfaction, and we are inclined to think that the portrait of Paris, as exhibited in our office, will be the means of extending numerous orders to this most clever artist.

TO OUR FRIENDS WANTING TO PURCHASE DOGS IN ENGLAND.—We would call particular attention to the fact that our well-known correspondent, Captain John M Taylor, of Bellefonte, Nottoway County, Va., will leave shortly for England and the Continent, and is prepared to purchase, while abroad, any variety of dog which may be wanted. Captain Taylor's thorough acquaintance with dogs is too well known to be commented upon, as some of the finest breeds of dogs in the United States have been procured from England through his instrumentality. We take great pleasure in endorsing Captain Taylor, believing that all purchases of dogs, etc., made by him will be executed with the utmost judgment and in good faith. All letters addressed to Captain Taylor may be sent to this office, as he will be in New York toward the close of the month.

ELK RIDGE FOX-HUNTING CLUB.—This newly organized club of Baltimore held its first meet at Furnace Creek, five miles from that city, Saturday, March 16, and after an exciting chase captured a brush. The party numbered thirty. JACK SNIPE.

COURSING AT DENVER.—Those interested in canine matters, in Denver, Col., are talking of organizing a coursing club in that city. At the first race the other day the contest was between O. Forrest's "Nelson" and P. Hart's "Fly." The game a jack-rabbit, and the prize $100. Fly made seven points to Nelson's four, and thus won the match.

[*Apres*—What became of the jack rabbit?]

TEACHING DOGS TRICKS—*Baltimore, Md.*—In your Answers to Correspondents you state that "you do not know what it costs to teach dogs to play tricks." I can tell you what it cost me. I have an orange and white setter, and to amuse my children (among them the retrieving baby sketched some time since in your columns), I trained him to shut the door. Unfortunately, he discovered that jumping against the other side of a door would open it. He jumped against the yard gate, succeeded in getting out, and it cost me five dollars reward, besides advertising, two dollars; new collar, one dollar; and new gate to shut when jumped against, three dollars—total, eleven dollars, not to mention tribulations and anguish of suspense during the three days that the dog was gone. E. S.

DOGS POISONED BY STRICHNINE.—E. T. Whitmore, of Putnam, Conn., says: "I saved a valuable pointer dog that had eaten a moderate dose of the poison, and had it down until his jaws were set, and had hard convulsions, by injecting morphine into his hind quarters. The quantity injected was nearly two grains, at different times. It will save them when too late to do anything else for them.

NATIONAL AMERICAN KENNEL CLUB.—By virtue of authority conferred by Article 5 of the constitution and by-laws, I hereby call a special meeting of said club at New York, May 18 next, at 12 M. The secretary will give the members the requisite notice of objects of meeting. Notice of the place of meeting will be given hereafter and be posted in the Hippodrome during bench show of Westminster Kennel Club E. H. LATHROP, Pres't N. A. K. C.

Springfield, Mass., March 20, 1878.

—Mr. T. Tunstead's fawn and white greyhound bitch Winnemucca has been sent to Mr. C. Dixon, of Whitehaven, England, to try conclusions with the greyhounds of that country. There are a great many fine greyhounds in California, many of which entered for a coursing meeting, which took place at Merced, March 20.

FIRST-CLASS IRISH STOCK.—Mr. J. K. Millner, of rifle fame, informs us that his red setter Aileen, who won the Centennial prize, has raised a fine litter of puppies. The sire is Rattle, a grand dog., by Beau, out of Venus, being a brother of Bruno, the No. 6,178 of the Kennel Club stud book. Mr. Millner's address is Cherbury, Blackrock, Dublin.

NAMES CLAIMED.—Mr. W. H. Bernard, of Wilmington, N. C., March 19, 1878, claims the name "Duke of Gordon" for his black-and-tan pup, out of E. P. Welsh's Kate, by Alex. McComas' Mack.

—Mr. O. Totten, of Paris, Ontario, claims the name of Huntress for his orange and white setter bitch pup, out of Mr. B. Capron's Blanche by Bute, he by Carlowitz—Rose, she by Rufus—Rose. This pup is own sister to Princess, claimed in last issue.

—Solon W. Paul, St. Louis, Mo., claims the name of Zete for his red Irish setter bitch pup, out of John W. Munson's Kate by Sting II., litter brother to Loo II.

SALES.—Mr H. B. Vondersmith, of Lancaster, has sold his Gordon bitch, Jennie, and his red Irish setter pups out of Biddie.

PURCHASE.—Mr. H. B. Vondersmith has purchased of Mr. L. H. Smith, of Strathroy, his Lavernck bitch Victress, the full sister of Countess. Victress will whelp, having been served by Lincoln, about March 22.

WHELPS.—B. A. Shapley's, Utica, N. Y., field-trial setter Bess—Bergundthal's Rake-Fanny—whelped on the 16th eight, five dogs and three bitches, by Burges' champion Rob Roy.

—Leta, belonging to Mr. W. Vie, of St. Louis, has whelped with seven puppies by G. N. Champion's dog France. Leta won first premium at Syracuse in 1877.

VISITS.—Dr. E. L. Tindeau's prize Dachshund bitch, Mein Gretchen, has visited Mr. T. B. Allen's Duke. These two dogs are as well-bred dachs as can be found in this country, and the pups should be fine.

Detroit, Mich.—S. F. Whitman's blue belton Nell visited Burges' Druid on the 19th inst. Druid, with Queen Mab, won first prize in brace stakes at late St. Louis, for being best brace of imported English setters in the show, beating Leicester and Paris, was V. H. C. in champion class, and 2d in open class, he was also a field trial winner in England.

Game Bag and Gun.

GAME IN SEASON IN MARCH.

Hares, brown and gray. Wild duck, geese, brant, etc.

FOR FLORIDA.

Deer, Wild Turkey, Woodcock, Quail, Snipe, Ducks and Wild Fowl.

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocets etc., coming under the group *Limicolæ*, or Shore Birds.

NEW YORK—*Buffalo, March* 20.—The first snipe of the season was shot at Batavia, near Buffalo, by Mr. P. Tompkins, on March 15. Buffalo sportsmen return without success in their search after snipe. We noticed on the Niagara the arrival of widgeon, pin-tail, blue-bill, red-head and teal. The old-wives have been there since the middle of January in several flocks, estimated by many hundreds. Vegetation is much advanced, but the arrival of spring birds is but little ahead of the general time. O.

Good Ground, L. I., March 23.—Under above date, Mr. Orville Wilcox writes that the new inlet is a success, and the duck-shooting at present good.

Greenwood Lake, March 25.—Game prospects are very favorable. Woodcock are plenty, and large numbers of quail have safely wintered. GREENWOOD.

ADIRONDACK PANTHERS.—The party who have been with Mr. Marks, at the hatchery near the Fulton chain of lakes, have, during the past winter, killed five panthers. The first killed was a female and two cubs, which the guides had followed ten days before overtaking. As the panther is destructive to deer, the hunters are protecting their own interests by exterminating them.

WILD PIGEONS.—There were shipped from Sheffield Station, P. & E. R. R., 18th inst., 1,200 dead pigeons, making 40 bbls., and 3,000 live birds to New York. The pigeons are nesting in that vicinity, those which have been keeping in Forest County all winter having been reinforced by Western flights, and they now number millions. Netters are after them also by the hundreds from all the surrounding States, some having followed the birds from Missouri. A. F. C.

"Nick" writes: "The pigeons have left Sullivan and Bradford counties. Are now in Warren counties. To find them take P. and E. RR. to Sheffield, between Kane and Warren. Roost fifteen miles distant.

—Reported in considerable numbers about Kingston, N. Y.

WASHINGTON, D. C., March 15, 1878.

Although it is but the Ides of March, we are having the most delightful spring weather, and the migratory birds have already made their appearance on their journey to more Northern latitudes. A few jacksnipe have been killed, and if this favorable weather continues, they will be abundant in a week or two. The best sport we have now is on the Potomac, where the duck-shooting is good and everything favorable for the enjoyment thereof, though the ducks are not so plentiful as they were in former years. The constant warfare made upon them, and the big guns—about which I have already written—have caused the steady decrease, year after year, in the number of water-fowl frequenting this river.

I fear many readers of FOREST AND STREAM would think me guilty of exaggeration were I to mention instances where I have seen the surface of the water of the Potomac and its bordering creeks covered with ducks to the extent of many acres. Indeed, so plentiful were they that a thousand or more arising from portions of the flats on account of a sudden fright would throw a great shadow over the water as they passed, and the whistling produced by their wings might be compared to a violent wind storm. The eastern branch of the Potomac, upon which the Washington Navy Yard is located, about half a mile from the junction of that river with the main stream, had extensive flats which, twenty years ago, I have seen literally black with ducks. Higher up the branch, about a mile above the Navy Yard, are the extensive marshes near Beming's Bridge, the famous resort for ortolan and reed birds in early autumn, which I have described in previous letters. These marshes were filled with marine plants and grasses, upon which the ducks fed, and, in their flights to and from the feeding-ground, hundreds were killed by sportsmen. Big guns were unknown upon the river then, and trapping the birds was never thought of. Many times have I seen a dozen or more sportsmen upon the old wooden bridge which spanned the Eastern branch, just above the Navy Yard, during the morning and evening flight of the ducks, when it was an easy matter to kill half a dozen or more in less than half an hour. The old bridge has long since rotted away, and been replaced by a substantial iron structure of improved pattern. Washington has grown to be a great city, and the banks of the river on both sides are now thickly settled; hence the ducks no longer cover the waters of the Eastern branch.

Those unaccustomed to shooting, who have, no doubt, so frequently read and heard of the abundance of water-fowl in this vicinity, may well inquire why more of them are not killed. When one comes to consider the remarkable keenness of sight and acuteness of hearing possessed by these birds, their rapidity of flight and expertness in diving, the protection afforded them by their thick covering, through which shot from an ordinary gun will not penetrate unless the sportsman is within sixty yards of the birds, it will be seen that it is not an easy matter to kill them. It takes an expert shot to drop them when flying, even though the birds are within fifty yards. Many ducks fly at the rate of more than sixty miles an hour, which is twice the speed attained by some other birds, and should one merely winged drop in the water, he will be very apt to save himself by diving and swimming off beneath the surface, for some species of ducks, like swan and geese, seem to have sufficient sagacity to keep beyond range of the sportsman's gun when on the water—swan especially will swim before a boat, but always keep a safe distance ahead, and it is not often that a sportsman, in such skiffs as we have, can overtake them or compel them to rise on wing. R. F. B.

SOUTH CAROLINA—*Charleston, March* 23.—Very little hunting of any kind has been done in this section for the last three weeks, the warm weather having driven the ducks farther North. One or two small bags of partridges have been brought in. Hunters report birds scarce and wild. A crack shot in the upper portion of the county, about three weeks ago, brought home twenty-one turkeys in four mornings. This is good shooting, but fortunately there are very few such sportsmen in this section. Have been out after foxes three times within the last three weeks, but did not start one, although hitherto they have been quite plentiful in exactly the same country we hunted over. It is with considerable pleasure that I note the general observance of our game law, especially in regard to deer hunting. Y.

TENNESSEE.—The Murfreesboro' *News* says: During the season just closed one firm in this place shipped 40,000 robins, 10,000 chickens, 5,000 geese and 10,000 dozens of eggs. The shipments were made to all parts of the United States.

ALABAMA—*Mobile, March* 15.—This is one of the best points in the South for a sportsman to spend a few weeks in pursuit of game and recreation. In winter from the first of November to the last of January the "flats" at head waters of our bay abound in all varieties of waterfowl, and splendid duck shooting can be had in from two to three miles of the city, and deer, turkey, quail and the brown bear can be found within a short distance of the city, by boat up the Alabama or Bigbee Rivers, or by the Alabama Grand Trunk R. R. or M. & M. R. R. Perhaps this may appear strange to you in having game so near and in such varieties and so little known to new visitors. Will give you the result of a half-day's shoot a few days since: Dr. T. S. S., B. H. G. and myself were out at 6 A. M. upon what are termed the "Plains" in the southern suburbs of the city, and at 1½ o'clock P. M. were at our homes, and upon examination of our Holabird & Thomson coats counted out forty-two Wilson snipe, one teal, one rail, and one rabbit, and this in the city limits, not once going out of them. What think you of this for a game point? We have a game law here for the protection of game, but in the absence of a club or two to see them enforced I fear that our game will not remain with us as it should. There is a club now organizing which I hope will be completed soon and prove all that we desire. BLACK GEORGE.

MISSISSIPPI—*Corinth, March* 19.—Weather magnificent; warm and clear. No snipe; turkeys gobbling, but none gobbled up to date. Was out after quail a few days before the season closed, with three friends. It was awfully hot, and we did the poorest shooting on record. Bagged 35 quail. Shot enough to have killed 75. GUYON.

MICHIGAN—*Detroit, March* 23.—W. Edwards, Marquette, Mich.; Wm. Hall, Toledo, Ohio, and E. H. Gillman, of this city, returned last evening from a two-day's duck hunt at Hall's ranch, near Rockwood. They had poor success, bagging only 108. DRUID.

WISCONSIN—*Menomonie, March* 21.—Wild geese put in appearance on the Dunnville hunting grounds about March 14th, and ducks in small numbers about the 18th, but this morning they appeared more plentiful about Nine Mile Slough, and shooting will soon be fair. Wild pigeons came to-day.

MINNESOTA—*Worthington.*—The winter here has been a wonderfully open one, many of the farmers having been plowing during nearly every month. Ours is a great game region in the season, as your columns of old, and the editorial recollection now can testify. The wild fowl have put in an appearance—ducks and geese—and fishing has been going on in Okabena Lakes for several weeks. Several wolves have been seen near Capt. Heath's homestead in Elk Township. The mild and dry winter makes us hope for famous sport when the grouse come in season. R. E. D.

KANSAS—*Rosedale, March* 17.—Ducks are scarce about here as yet; expect good sport when they come. At the last annual meeting of the Rosedale Game Protective Club, the following officers were elected for the ensuing year: J. H. White, Prest; J. Sullivan, Vice-Prest.; Wm. Bowen, Secy.; Benj. Rees, Treas.; T. D. James, Capt. HAM.

CANADA, *Montreal, March* 25.—We shall begin our spring shooting as early as the end of March. The golden-eye, or whistler, have already made their appearance two weeks ago, and are now followed by the black duck and the Canada goose. A large number of these birds are bagged every year at the Lachine Rapids, which are only a short distance from Montreal. It was there our lamented friend "Royal" was taken with a cold, which, it is said, brought him to an untimely death. I recently called on Vital Barrette, who was "Royal's" guide in most all his shooting expeditions. I found him overhauling boats, decoys, etc. He has not forgotten his old friend, whom he calls "Monsieur Jim." *On a bien tue des canards ensemble. Panore garcon.* He speaks disparagingly of the prospects for this season. The ducks, he says, are getting scarcer every year. There was a time, not long ago, when fifty ducks were considered only an ordinary day's shooting, and it was not an uncommon thing to bag as many as one hundred between 6 and 12 A. M. The mode of decoying, as practiced here, is one which is full of danger and hardship. It requires no small amount of endurance to stand it for one day only. The blind, which is made of ice, is usually three feet high and about four and a half feet square. It is placed close to an opening or channel where the decoys can be laid out to good advantage. The sportsman, attired in a white suit, conceal himself within the blind, and shoots either kneeling or sitting down. In cold weather it is no easy matter to keep warm in such a position. The boat, which, of course, is indispensable, is kept within hailing distance, and convenient for service as required. I would not advise sportsmen to venture out without having first secured the services of a good guide, in which case I can promise them very good sport. ROYAL II.

OLD-SQUAW SHOOTING AT THIMBLE ISLANDS—*New Haven, Conn., March* 12.—I have taken your paper for the last four or five years, and not seeing anything about old squaw shooting at Thimble Islands, or anywhere else, thought perhaps I might write a few lines that would interest some of your readers.

Owing to unfavorable reports that the birds were mighty scarce, I did not go this season until a week ago last Friday, when, not being able to stand it any longer, I called on my friend Mac, who is always ready to go where there is any shooting and plenty of roast oysters after it. Landlord's orders, when he sees me driving up with him: "Here, John; catch up a couple of bushels of those best oysters, and tell James to put two loaves of that rye bread to one side till we get back!"

A telegram sent the day before was the cause of Jake's standing on the front steps waiting for us, a gun one side of him, and two baskets of decoys on the other. We decided before starting that we would all shoot from one rock, each taking a different position and dividing the decoys between us. In this way only one boat is needed, and Mac says he is more sociable when lunch time comes. But the best way when two or more go is to each take a different rock (no trouble to find them, as there are 365, one for every day in the year, that comprise what is called Thimble Islands), a quarter to a half mile apart. In this way any duck coming to one set of stools and not being killed seems to think he ain't wanted in that party, and will point straight for any other stool he may see. Then, too, if a duck does not see one set of decoys he may see one of the other sets. I have seen old squaws circle round and come back to decoys from which they had just been shot at. They are, without doubt, thick-headed, and any one who has shot them knows what their bodies are.

As Mac cannot handle a pair of oars with as much skill as he can a knife and fork, he was given a seat in the stern sheets, Jake and myself doing the rowing. Now, why is it that these fellows who can't pull an oar always weigh so much? Golly! how that boat did settle by the stern! Well, most any boat would, with 185 lbs. of man and mountain howitzer (my private name publicly expressed for a 10 bore 11 lbs B. L.) A half hour's row brought us to our destination. Jake and I had just got the decoys set and hardly under cover when we heard Mac's howitzer, both barrels, and with this expression: "Confound this gun! it always takes a shot or two to straighten out the barrel, and I guess it always will." I told him the gun was all right, but that he had forgotten to put in the shot.

The first duck scored was by Jake's 12 bore 30 inch, and was a broad-bill, the only one that has been shot at the Islands this year, which goes to show how scarce they are. Last year Mr. Beatty, of Stony Creek, who is a first-class duck shot, used to kill his thirty and forty pairs in a day's shoot. Mac followed up Jake, making a double shot. Your humble servant brought up the rear by taking an old squaw in the rear, the only part that can be penetrated with any shot smaller than No. 3. I use a full choke 12 bore gun, 30 inch barrels, 4 drs. powder, 1¼ oz. No. 3 shot.

After shooting about an hour, which resulted in eight old squaws and one broad-bill, it commenced to rain, and Jake proposed that we go over to Pot Island (the largest of the group) and take a look at the large hotel which Mr. Wm. H. Barnes, of Stony Creek, is putting up in addition to the old one. To this we agreed, and found there a large, three-story building, the first floor devoted to a parlor 30x28, and a dining room capable of seating 100 guests; the second and third floors to the largest sleeping rooms of any house on the shore. Mr. Barnes informed us that he was going to have a duck-boat sent him, and if it suited he intended to have others built, and that he intended to have the finest lot of boats on the Sound—in fact he was going to be able next fall to take care of the coot shooters both afloat and ashore, and I know he will, as he never does things by halves. OLD INNYAN.

JERSEY CITY HEIGHTS GUN CLUB.—In our last issue want of space prevented our giving this club as full a notice as we should have wished. This club, composed of gentlemen who reside in New York, Jersey City and Brooklyn, has the advantage of being in close proximity to the metropolis. In ten minutes time, by the Courtland or Deshrosses street ferry, at an expense of ten cents, you are landed at Marion. The club ground, which is inclosed, has a commodious gun-house, and on the premises traps and glass balls, with a person to attend them, can always be found. It is just the place where a gentleman can try his gun at glass balls, or can find out the penetration or pattern of his new fire-arm. The President of the club is Dr. Burdett, Mr. P. W. Levering is the Secretary, and our well-known correspondent, G. B. Eaton, Esq. ("Jacobstaff"), is one of the directors. The programme last week was well carried out, and we have every reason to suppose that the Jersey City Heights Gun Club will be highly popular among our leading sportsmen.

THE ECLIPSE LOADER.—This invention consists of a block, perforated with holes, the size of the shells, two trays, also perforated, a pointed implement, a board with plungers, and five boards of different thicknesses. The shells are inserted in the block, which is placed upon one of the trays so that the caps in the shells are over the holes in the trays, preventing explosion. The different thicknesses of board resting in the other tray form the required charge. The tray being slid upon the block to a certain point, the spaces in the block between the shells form a bottom for the tray. The holes in the tray are now filled with powder, and the tray moved forward until the holes are opposite those in the block, when the powder falls into the shells. The tray being removed, the wads are picked up with the pointed tool and inserted in the shells. When all are inserted, they are rounded with the board with plungers. The shot is loaded in the same way as powder, the boards in the tray being readjusted for the proper charge. This loader works fast, is simple, cheap and a saving of labor. It is the invention of Mr. Edwin Schenck, of Baltimore, Md.

FOR THE PARIS EXPOSITION.—Capt. Bogardus has shot 55,000 shots with both barrels of his famous Scott gun. With the exception that the choke is somewhat worn the Captain still puts his trust in the old gun. It is now to have a post of honor in the exhibit of Messrs. Wm. Reed & Son, of Boston, at the Paris Exposition.

THE AMERICAN POWDER CO.—These well-known manufacturers of powder, through their agent in Chicago, Mr. E. B. Rambo, have a just reason for complaint, which we are only too glad to bring before the notice of our readers. It seems that certain dealers when called on for the powder known as the "Dead Shot," and manufactured by the American Powder Co., have substituted other makes of powder with the request to "try it," or adding, "if what we send you does not suit we will ship your order." It is against such unfair dealing as this that the Chicago agent of the American Powder Co. complains. The injury done is rather to the consumers than to the manufacturers, because the purchaser gets a powder he does not like, of the effects of which he is ignorant, and general disatisfaction arises between the buyer and seller. Such methods of dealing are as unbusiness like as possible, and are sure to recoil on the perpetrators. All that the American Powder Co. desires is that when an order is given for their make of powder it shall be filled. The genuine brand of the American Powder Co., the "Dead Shot," must be insisted on when a purchase is made.—*See Advertisement.*

—The bill before the Rhode Island Legislature against pigeon-shooting has passed only one branch of the Legislature—the Senate. It has not passed the House, and probably will not.

RUFFED GROUSE IN THE SOUTH.

MR. EDITOR: LAWTONVILLE, Georgia, Feb. 14, 1878.

Perhaps there is no bird in the whole South about which so very little is known as that species of grouse known everywhere as "pheasants" That they were called pheasants by the first English settlers in Virginia there can be no doubt; for a reference to the letters and to the contemporary books of that period, establish the fact that our forefathers, however brave and chivalrous, were not adepts in the nomenclature of natural history. That men directly from England, who had been familiar—at least many of them—with pheasants, should call a grouse a pheasant, seems simply unaccountable. We see from this that men lose their heads in a new country. However that may be, they called them pheasants, and the name is the only one by which they are known from the spice thickets of Indiana to the mountains of North Georgia and Alabama. That they are the genuine grouse there can be no doubt; yet they are smaller by some ounces than the grouse of New York, Maine, or Canada.

They lie splendidly to the dog in autumn, but they take to the trees later in the season on being flushed, and are shot while watching the dog from their fatal elevation. They are far superior to the pinnated grouse of the prairies in respect to their eating qualities, their flesh resembling that of the quail.

On a dark, damp morning in the year 1850, the writer of this paper took his first lesson in pheasant shooting in the hills of the Big Eagle, the home of this beautiful bird: the Big Eagle is in Kentucky. There, Jack —, than whom a better rifle shot never trod the "dark and bloody ground," was my friend and guide, and we left his humble home at daylight on the morning aforesaid.

Skirting the river and running at right angles with it, were numerous oak and hickory ridges. Going up one of these, my guide seated himself at the foot of a large oak, and pulling a corn-cob pipe from his pocket, filled it with "home made" tobacco, and sat dreamily smoking.

The gay and festive squirrel pursued his investigations after acorns at our feet; the saucy tom-tit flitted around us, emitting his querulous notes at the invasion of his territory; a solemn old owl perched in the branches of the tree above our heads, at intervals gave a melancholy hoot, accompanying it with bursts of Sardonic laughter at our hallucination on the pheasant question. Presently all became still, when a low, booming noise, like distant thunder, broke upon the soft, spring air.

"Listen," said Jack, as he raised his full six and a half feet aloft, "pheasants, by gum!"

Could that loud noise which I heard booming from the woods around us, be pheasants? Yes, it most certainly was; for the cock pheasants, in the spring of the year, get upon a log and drum by the hour. Sometimes two, or three, or even half a dozen, will be found on the same log, seeming to vie with each other as to which can drum loudest.

Whether this is intended as a call to the female, or as a challenge to mortal combat, I do not know; all I know is that they seem to like it, and that they drum *con amore*. Alas! that this love of martial music is the cause of the death of the brave drummer.

For, behold Jack and myself as we creep cautiously toward the noise. On and on, until through an opening in the bushes, we spy, not one, but three cocks strutting in all their pride and glory on a large, mossy log.

"Now," says Jack, raising his heavy rifle to his face, "I'll shoot the head off'n that furdest one and you kin try your scatter gun on the other two."

A whip-like crack rang through the woods, and with a convulsive leap that showed that the head had been shot "off'n him" the furthest cock pheasant tumbled off the log. The other two towered up above the bushes, but two great puffs of feathers, streaming down the wind, showed that the "scatter gun," though in the hands of a boy, had done its work right well.

"Well, by gum," said Jack, "if that don't beat my time."

And, truly, it was a wonderful thing to that veteran rifleman, to see those strong, swift birds cut down so deftly while on the wing; and I don't believe that I could do it now, although a far better shot than I was then, but in those days I shot instinctively, and sometimes shot splendidly. The Kentuckian, if a rifleman, rarely shoots on the wing, and has a supreme contempt for shot-guns. He stalks his game, and, if small, shoots its head off; if large, shoots it through the heart, and never misses. His rifle is death, and when he looks down its long barrel, there is "mest in the pot."

There is a solemn stillness and repose for about an hour, then the same thing is repeated, until at night, Jack has bagged nine pheasants, "scatter gun" eight—and a noble record, too, let me tell you. To those who never shot this bird it seems that, large as it is, you ought never to miss; but when you shoot among oak and hickory thickets, most of whose leaves are still hanging on the trees, when you see a streak of brown careening through the boughs like a mere glimpse, you are a crack shot, indeed, if you can kill half your birds; besides, they are extremely tenacious of life, and the smaller numbers of shot seem merely to accelerate their flight.

But my limits warn me that I must close this pleasant theme. I thought that I would like to write a little concerning a bird which, alas like too many other of our game birds, will soon be extinct. Pointers, breech-loaders and steam have done their work upon the pheasant as upon nobler game, and unless severe, restrictive laws can be passed and *enforced*, there soon will be no game except in the traditions of the past. J. W. ST. CLAIR.

MORE ABOUT CHILLED SHOT.

EDITOR FOREST AND STREAM:

I did not intend, nor write my last communication as "A reply to Mr. Knowlton," and was surprised to find it so headed. To have replied to his article on chilled shot, in your issue of Feb. 7, would have opened a discussion which would occupy so much space that eventually you would be compelled to refuse its publication, and which would be of little interest to the majority of readers.

While correcting some slight errors made by other correspondents I merely took advantage of the opportunity to give Mr. K. the credit he deserved for calling attention to some advantages for chilled shot, not previously claimed for it, purposely avoiding criticising points most open to criticism. My position being similar to his there could be no intention of such an "implication" as Mr. K's P. S. in your issue of the 14th suggests, and it affords me pleasure to find that our views on that subject are the same. I write over my own signature that my identity may be certain among business acquaintances and numbers of sportsmen with whom I have passed many pleasant hours in the field, and to them I leave the validity of my opinions on sporting matters. Mr. K. says, "If the range of shot is sufficient to reach the bird there is little fear but penetration will be sufficient to kill it." This assertion might reasonably lead us to suppose the old saying correct about getting salt on the bird's tail; and also, that a spent ball, if it hits, will kill as quickly as any other.

As he claims that "Long range is of much more service than penetration," and kindly informs us "that heavy bodies with similar motive power have a much longer range than lighter ones," why not use lead instead of iron for cannon balls? What Mr. K. says about chilled shot having been made in England is true, but it is equally true that its successful makers there are said to most jealously guard the secret of its manufacture; and when he says that any American manufacturer can make it he makes a mistake in speaking for so many. I know of some manufacturers who acknowledge that they are unable to make it, and still they do not condemn it. If "it may be a matter of policy to ascertain that an article possesses the qualities claimed for it before staking one's reputation on its manufacture," would it not be politic not to condemn an article until the desired information had been ascertained? Especially when in his previous communication Mr. K. seemed to acknowledge that it possessed much merit and, which he still concedes, may after "discussion and trial" shine forth in all its beauty, when he, with all other sportsmen, will of necessity speak its praise with voice and gun. "Theory and practice are, in shooting as in most other matters, quite different things" and the sportsmen of America are now doing what their English cousins did before them, convincing themselves of the practical results of using chilled shot; and with them judgment will be unbiased and virtue and truth prevail. Many now using it in the field and at the trap speak in the highest terms of "Improved Chilled Shot." CHAS. RICHARDS.

N. Y., March 18, 1878.

FOR SALE.

"Hammerless Guns," self-cocking; 5 guns, "Anson & Deeley's" patent, manufactured by Wesley, Richards & Co., Birmingham, medium choke, 12 gauge, 7½ lbs., with leather case and all gear for cleaning and refilling cartridges complete. The simplicity and strength of lock-action as well as their perfect safety are fast making these guns favorites. Call or address E. Remington & Sons, 281 Broadway, N. Y. P. O. Box 3,994.

PIGEON MATCHES.

PAINE AND BOGARDUS.—A match at Philadelphia, March 15, between Paine and Bogardus, to break the most glass balls in one minute, was won by the former by a score of 18 to 16.

BOGARDUS AT DEERFOOT PARK.—Capt. Bogardus made an attempt at Deerfoot Park, L. I., last Friday to kill 85 out of 100 pigeons, 50 double rises. In addition to the difficulty of the task set before him the Captain was disappointed in not having the gun which he desired for the occasion; and the wind not blowing the smoke away in time the shooter often could not see the second birds. The birds were a lot of remarkably fast flyers, and it was the common remark of the veteran pigeon shooters, who were present in full force, that the birds had never been equalled in this country. One of the birds was found 127 yards from the trap with 10 pellets of shot in its body. There were very few birds which were not believed to have been hit, while six fell dead out of bounds. The following is the summary:

RECAPITULATION.

Brooklyn Driving Park, Parkville, L. I., March 22.—100 double birds; ground traps; 21 yards rise; 100 yards boundry; 1⅛ oz. of shot; Long Island rules.

Score.—10 10 11 10 11 01 00 10 01 11 01 10 00 11 10 11 00 11 10 01 11 10 11 01 10 11 11 10 00 10 11 11 11 00 00 01 11 10 00 11 11 11 10 10 11 11 10 00 11 11.

Total, 100; killed, 63; missed, 37.
Referee, Dr. Talbot, New York.
Time, One hour and thirty minutes.

LYNN (MASS.) CENTRAL SHOOTING CLUB.—This club organized in December last, and numbers on its roll some eighty-three active members. The following are the officers of the club: President, E. W. Webster; Vice-President, W. O. Haskell; Secretary, Frank Holbrook; Treasurer, S. T. Downs. Executive Committee—E. W. Webster, W. O. Has-

kell, R. E. Hilliard, L. D. Milliken and J. M. Hoyt. The next monthly meeting will be held on Fast Day.

EXCELSIOR SHOOTING CLUB.—Monthly pigeon shoot at Brooklyn Driving Park, Parkville, L. I., March 20. Score:

O Huber	1 1 1 0—4	I Heiser 1 0 1 0 1—3
N B Watts	1 1 1 0 1—4	P McGill * 1 1 * 0—2
W Hampfmuller	1 1 1 1 0—4	Albert Rand 1 1 0 0 *—2
Hedemann	1 0 1 1 1—4	Th Obrig (30 yds) 1 0 1 0 0—2
F Beringer	1 1 0 1 0—3	N Weber 0 0 w

Huber and Watts tied again on two birds each; the shoot off at glass balls was won by Huber.

MISSOURI—*St. Joseph, March* 1.—N. E. Barnes and B. F. Buzard for the champion badge; H and T traps; 28 yards rise:

Barnes . 1 1 0 0 0 1 0 1 1 0 1 1 1 1 1—10
Buzard 1 1 1 1 0 1 0 0 1 1 1 0 1 1 0—10

Ties.

Barnes 0 1 1 1 1—4 Buzard 1 1 0 1 1—4

Ties.

Barnes 1 1 1 1 1—5 Buzard 1 0 0 0 1—2

H. C.

LONG ISLAND—*Flatlands, March* 16.—Eighteen yards, 80 yards boundary; score:

H L Wyckoff 1 0 6 1 1 0 1 0 0 1 1 1 1 1 0 1 1 1 1 0 0—13
L H Smith 0 1 1 0 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1—17

PROSPECT GUN CLUB, *Brooklyn.*—The following gentlemen have formed a gun club with the above name; Albert F. Apel, President; Benjamin Blakeney, Dr. Fuchland and Capt. Hansen, Secretaries. The regular shooting meetings come off every second and fourth Thursday in the month, and the last glass ball match of the club took place at Bay Ridge, L. I., last week. The match was at twenty-eight balls, and it was finished with the following score:

Albert Apel 21 D Fuchland 17
Capt Hansen 19

Mr. Apel thus winning the match.

POUGHKEEPSIE, *March* 23.—Trap used was one of Capt. Thomas' invention; 4 balls each, 3 matches:

	First.	Second.	Third.
Frank Lee	0 0 1 0	1 1 1 1	1 0 1 1— 8
Augustus Hefner	0 0 1 0	1 1 1 1	0 0 0 1— 6
A Von Der Liudon	0 0 0 1	1 1 0 1	1 1 0 0— 6
Frank Van Wagner	0 1 0 0	1 1 1 1	1 1 1 1— 9
C H Young	1 1 0 1	1 1 0 1	1 1 1 1—10
J V W Doty	1 1 0 1	1 1 0 1	0 1 1 1— 9

COHOES, *March* 23.—First match; glass balls:

A Paul 1 1 1 1 1 1 1 0 1 1—9
H Mills 0 0 0 0 1 1 1 0 1 1—5

Second match, glass balls:

A Paul 0 1 1 1 1 1 0 1 1 1—8
H Tanner 1 1 1 0 0 0 1 0 1 1—6

Third match, pigeons:

A Paul 0 0 1 1 1—3 J Tubbs 0 1 0 1 0—2

Fourth match; to kill 8 out of 12 birds:

A Paal 1 1 0 1 1 1 1 1 1 1 0 1—10

W. J. W.

GREENPOINT SHOOTING CLUB.—Regular monthly shoot at Monterverds & Eagleston's New Shooting Park, Columbusville, L. I., March 20:

Bulwinkle	1 1 1 1 0 1 1—6	Reineker 1 0 0 1 0 1 0—3
Permenter	1 1 0 1 1 1 1—6	Crumbeck 0 1 1 1 1 0 1—5
F Passey	1 1 1 0 1 0 1—5	Sprigatter 1 0 1 1 0 0 1—4
Santler	1 0 0 1 1 0 1—4	Keibe 1 1 0 0 1 0 1—4
C Passey	0 1 1 0 0 1 1—5	

Ties on six.

Bulwinkle 1 1 1—3 Permenter 1 1 0—2

Sweepstakes at double birds:

Bulwinkle 11 11 01—5 Permenter 11 11 11—6

ACQUACKANONK SPORTING CLUB.—Match at club grounds, Passaic, N. J., March 23, 18 yards rise:

John M Gill 1 0 1 1 1 0 1 1 1 1—8 E C Belle 1 1 0 1 1 1 0 1 0 1—7

Same day and distance:

Wm Belle 1 0 1 1 0 0—3 J P Williams 0 0 1 1 0 1—3

Ties on three.

J P Williams 1 0 0 0 1 1—3 Wm Belle 1 0 0 0 0 1—2

Same day:

John M Gill 1 1 0 1 1 1—5 E C Belle 1 0 1 1 1 1—5

Ties on five.

John M Gill 1 1 1 1 1 0—5 E C Belle 1 1 1 0 0 1—4

SOUTH ORANGE (N. J.) CLUB.—Match at 18 yards:

S B Tillou 0 1 1 1 1 1 1 0 0 1 1 0 0 1 1 1—11
M W Crowell 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—15
M Williams 0 1 0 0 0 1 1 1 0 1 1 0 1 0 0 0— 7
C A Borst 1 1 0 0 1 1 1 1 1 0 1 1 1 1 1 0—12
W Decker 1 1 0 1 1 1 0 1 1 1 1 1 0 1 0 1—12
D Turrell 0 0 1 1 1 1 1 1 1 1 1 1 0 1 1 0—12
W Crommelin 0 0 1 1 1 0 1 0 1 0 1 0 1 0 1 0— 8
W Condit 0 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1—12
A Meeker 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 —14
H Condit 1 0 0 1 1 1 1 1 0 1 1 1 1 1 0 0—11

Match at 15 single and 5 pairs of balls:

F J Brown 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1—13 11 01 11 11 11—9—22
S C Hoffman 0 1 1 1 0 1 0 1 1 1 0 0 1 1 1—10 10 11 10 10 11—7—17

JERSEY CITY HEIGHTS GUN CLUB.—Regular semi-monthly competition for the twenty-ball gold badge, on the club grounds, Marion, N. J., March 23:

A Heritage 16 yds 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
J B Burdett 16 1 0 1 1 1 0 1 0 1 1 1 0 w
Wm Hughes 18 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—19
J J Toffee 16 1 1 0 0 1 1 0 0 1 0 1 1 1 1 1 1 0 1 0 0—12
P W Levering 12 0 0 0 1 0 0 0 1 0 1 0 0 1 1 1 0 0 1 0 1— 8
J Q Bird 14 1 1 0 0 0 0 0 1 1 1 0 0 1 0 0 1 1 0 1 1—10
Jno Headden, Jr 14 0 0 0 0 1 0 1 1 0 0 1 1 1 0 1 0 0 1 1 1—10
Jno Van Gelder 16 1 1 1 1 0 1 0 0 1 1 0 1 1 1 1 0 1 0 1 1—14
Geo B Eaton 16 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1—18
F M Thompson 21 1 1 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1 0 1 0—14
C F Yerrington 17 1 1 1 0 0 1 1 0 0 1 0 1 1 1 1 1 1 1 1 1—15
F Commins 16 0 1 1 1 1 1 1 1 1 0 1 0 0 1 0 1 1 1 0 0 1—13

The shooting was done under Bogardus' rules, three of his traps ten yards apart. The trap pulled depending upon a die cast by the puller, who sits three yards back of shooter. The badge was first won by Dr. Yerrington, 13 out of 20; then by F. M. Thomson, 15 out of 20; now by Al. Heritage, whose score can hardly be equalled. The winner of the badge goes back three yards at next competition. JACOBSTAFF.

BOWLING GREEN (KY.) ROD AND GUN CLUB.—Match for club medal, March 21; 15 balls each, Bogardus' rules, 18 yards rise:

W D Baker	12	Ben Pitt	8
A Baker	10	H K Thomas, Jr	10
J B Cooke	8	Graham Philips	4
G W Cooke	9	T P Smith	13
J O Burge	10	H L Underwood	12
Ben Cullen	11	W B Baker	9
Joe Hobson	11	John Vogle, Jr	5
W H Philips	12		

ROSEDALE GAME PROTECTIVE CLUB—*Rosedale, Kansas, March* 17.—The last regular monthly match for the club medal:

T D Jones	9	J Hines	8
J H White	4	D S Mathise	7
B Rees	7	J Sullivan	1
W Bowen	6	H Msiates	7

A GOOD SCORE.—The following is a score made last week by Mr. O. C. Wilkins, of Meadville, Pa.; Bogardus' trap, 18 yards rise, 100 glass balls:

O C Wilkins—1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1
1 1 1 1 1 1 1 1—95.

—The Louisville Gun Club have adopted the uniform rule of making the 12-bore gun their standard in pigeons and ball matches, handicapping the 10-bore two yards farther. This is the correct rule in our judgment.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

New Publications.

WEBSTER AND HAYNE.—The Petersons have published a complete edition of Webster and Hayne's speeches, as delivered in the United States Senate, January, 1830, on the Resolution of Mr. Foot; with Daniel Webster's Speech in the United States Senate, March 7, 1850, on the Slavery Compromise. We are glad to see these speeches in such form, and bespeak for the publishers a merited success in their publication. Sent on receipt of seventy-five cents by T. B. Peterson & Brothers, Philadelphia, Pa.

BOSTON BOOK BULLETIN.—Those who wish to keep informed of the American literature of the day will find the "Boston Book Bulletin," published by D. Lathrop & Co., a most valuable *resume*. The plan of the "Bulletin" is to present a complete list of all American books. The reviews are by well-known and competent critics, and other original articles in prose and verse from eminent writers. The classification employed is that known as the "Amherst College System," where it was first devised and put in use by the acting librarian, Mr. Melvil Dewey.

—We have received the "Bulletin of the National Association of Wool Manufacturers" for the year 1877. It contains an essay on the "Tariff Policy of England and the United States;" a paper by Mr. G. W. Bond, on the "Origin of the Merino Sheep."

THE SEMI-TROPICAL.—This magazine, published monthly by Henry W. Reed, Jacksonville, Fla., contains a variety of matter pertaining to agriculture, horticulture, immigration and the home topics of that State. It is ably edited by Harrison Reed, and promises to grow more valuable both to Florida people and those who are looking to Florida as a future home.

THE ART OF HOUSE PAINTING.—This is a useful little manual, comprising the record of the experiences and observations of a practical worker in the art—Mr. John Stephens. The object of the book is to give such practical instruction as shall assist the amateur or the professional painter in his everyday work. Published by John Wiley & Sons, 15 Astor Place, New York; price 75 cents.

THE AQUARIUM GUIDE.—This is an admirable handbook for visitors to the Aquarium, and will prove of interest and value to those who have not the privilege of spending an afternoon or evening studying the marine wonders displayed by the Reiche Bros. The Guide is excellently illustrated, and contains many pleasing descriptions of the animals and fishes which make up the collection.

HARPER'S.—The March number of *Harper's* opens with a sketch of men and things at the Capital, entitled, "State and Society at Washington." Edward Abbott has a timely paper descriptive of the charms for the summer tourist and rest seeker of "Grand Monon and Quoddy Bay." The picturesque coast scenery affords abundant scope for interesting writing, and Mr. Abbott has done it excellent justice. Another subject of timeliness is that discussed by Mr. C. F. Thwing in "Summer Schools," a method of instruction growing in popular favor and importance. The biographical sketch is of Quentin Matsys, the Antwerp blacksmith-painter. The historical article this month is a valuable paper by Mr. Barnet Phillips, on "Some Unpublished Letters of Washington," which possess both historical and Literary value. "Fret-Sawings and Wood-Carving" will be welcomed by the young and old devotees of that fascinating art. In fiction the number is as strong as usual, and the other departments full of interest.

—The article entitled "The Home of the Harpy Eagle," is certainly the most interesting of those in the March *Naturalist*. In it the author, Dr. Felix S. Oswald, introduces us to new scenes and to a bird about which hardly anything is known. We are carried to the lofty table-lands of Mexico, where, from "the back-bone of the American Continent" and at an elevation of 12,000 feet above sea level, we can view at the same time the Atlantic and Pacific Oceans, and where, although among the Alpine surroundings of the *tierra fria*, we are within sight and easy reach of the luxuriant life and tropical vegetation of the *tierra caliente*. The interesting description of *Harpyia destructor* and the graphic account of its habits are both new and attractive, and will be sure to delight every lover of nature.

Prof. Riley's article, "On the Transformation of the Red Mites," which is extracted from an advance copy of the U. S. Entomological Commission's report, will prove very valuable to the farmer. The red mite is one of the most effective enemies of the Western locust (*Caloptenus*), and has accomplished more toward the destruction of this pest than all the engines which man has been able to devise.

This number contains the usual Book Notices, General Notes and Scientific Miscellany, all of which are interesting.

—Knowing that our cigarettes are second to none, and learning that the red label has led many fastidious persons to suppose cigarettes put up in so attractive a style to be but an ordinary article, has induced the manufacturers to prepare an elegant new and less showy label, hoping thereby to induce some of the many cigarette smokers who are prejudiced against Vanity Fair cigarettes to give them a trial, which will convince them of their superior excellence. The old label is not abandoned by this change. Connoisseurs may always depend on finding both Vanity Fair cigarettes and tobacco fully up to standard. WM. S. KIMBALL & CO.—[*Adv.*

—See advertisement of Trout Ponds for sale at Westport, Conn.—[*Adv.*

Send for one of the New Recoil Pads (price $2.00), sold by C. L. Ritzmann, 943 Broadway.—*See adv. elsewhere.*

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

W. V. T., Norfolk, Va.—Epsom summer meeting commences June 4; the Derby is run on the second day, June 6.

L. W. C., New York.—You will see Bart Haight's name mentioned in a pigeon shoot at Matawan, N. J., reported in F. and S. March 14.

F. J. M., Brooklyn.—Please tell me what game I can shoot at S. Oyster Bay in the month of May? Ans. May is a close month for game.

D. O. K., New York.—It would be impossible for us to look up the pedigree. Better write to the Sec. of the Kennel Club, care of London *Field*, 346 Strand, London.

H. S. K., Burlington, Vt.—For bicycles write to the *American Bicycle Journal*, Boston, Mass. Bogardus and Carver shot three matches; one at pigeons and two at glass balls.

R. J. G., Dunkirk.—The question as to the excellence of one rifle over another, or one shot-gun, when compared with another, we must respectfully decline answering.

J. A. P., Cleveland, O.—I have a 7¼ pound 12 bore gauge Smith & Wesson's breech-loading gun. Is it heavy enough, and will it stand the charge for ducks? Ans. You require a 10 gauge gun.

A. T., Boston.—I wish to import a pair of beagles. What would they cost? Ans. We should say about £30. Better address Capt. John Taylor, at this office, in regard to it. See advertisement.

C. T. S., Phila.—The load you propose for your gun—Damascus steel 12 bore 28 inch, 7 pounds 11 oz.—with Hazard's Ducking powder No. 4 1¼ oz. No. 8 and 3½ drs. powder is just right for glass ball shooting.

J. S. T., Oriskany.—We know of no book devoted especially to instruction in building, hunting and fishing boats. You will find in the "Sportsman's Gazetteer" descriptions of all the varieties of such boats.

J. L. T., Owatoma, Mich.—Have a setter pup whose mouth is completely filled with warts. What must be done? Ans. Must be destroyed by escharotics carefully applied, such as nitrate of silver or caustic potash.

F. J. M., Lockport.—1. Which is the most popular foresight at Creedmoor—solid head, open head, or bar and slit? 2. What kind do the most expert riflemen use at long range? Ans. 1. Solid head. 2. Both the solid and open head.

A. A. F., Sing Sing.—Our reply to you in these columns regarding supervisors' authority has been endorsed by the President of the New York Association for the Protection of Game. We still hold to the decision already expressed.

A. E. B., Phila., Zoo.—I have an English bull pup, a dog fourteen months old, with an unpleasant habit of making water under the influence of pain and pleasure. Can he be broken of this habit? Ans. Time alone will cure him.

G. F. G., Amesburg.—The pad you send us is excellent as to penetration, but unless you used two or over of 7 chilled shot we do not see how you could have placed R. B. 300, or L. B. 410 in the target. Give us again the quantity of shot used by you.

S. R. F., Washington.—A favorite dog seems affected with paralysis of the hind legs and hind part of the body. She has been placed on a milk diet. Ans. Age, habits of the animal and previous disease, if any, are essential; opinion otherwise useless.

SUBSCRIBER, Wilmington, Del.—Please advise me who are the importers of Bamboo cane suitable to make fishing poles? Also where are green heart, lancewood and other woods suitable for pole making to be had? Ans. Address John H. Terhune, 111 Elm street, New York.

MIXED POWDER, Boston.—Have a quantity of gunpowder, coarse and fine, but not much difference in the grain; it is all one kind—Oriental powder. Can I use it for common shooting without any very bad effects? Ans. Yes. It will make no difference so the finest is not meal powder.

H. D., Boston.—1. I want a good shooting gun and reliable. What make and bore of gun would you recommend? 2. What would be the cost of such a gun? Ans. 1. Must respectfully decline naming maker, but would advise for birds from quail to ducks a No. 10. 2. Cost from $50 up to $150.

SUBSCRIBER.—What is the latest and best map of the Adirondack region? Where can I get it, and at what cost? Ans. Wallace's map, included in his Adirondack Guide, is the best. We sell the Guide and map for $2. The map alone can be bought at Colton's, 172 William st., N. Y., for 75c.

R. T. G., Philadelphia.—Please give me the address of the gentleman who raises brook trout in the Ramapo Valley near Paterson, or Hohokus. He has a place called Crystal Springs, or a similar name, and did advertise the grounds as a picnic resort. Ans. We cannot recall the name. Let the gentleman speak.

J. L., Jersey City.—Where can I have a few days' trout fishing on Long Island? State the usual charges for such privileges. Ans. Go to Edward H. Seaman, Ridgewood, Long Island. Will guarantee a string of good sized fish for three dollars per dozen. Usual charge is one dollar per pound for fish taken.

J. H.—The coming bench show would furnish you with the best opportunities of getting the kind of dog you want. As to construction of kennel that would depend on what kind of one you required. About $10, with a judicious carpenter to do the work, would be ample. The kennel register would give you all information.

P. S. C., Chicago.—1. Is —— a good gunmaker, or how does it compare with ——? 2. What ought I to pay for a gun by the first maker? 3. What would be the proper charge for a gun of the above make of 9½ pounds, 10 gauge? Ans. 1. Good makers and compare favorably with one another. 2. $50. 3. 4 drs. powder, 1¼ oz. shot.

J. H., Manchester.—Where can I get the information in regard to the concrete ball? Ans. Concrete ball made by Kay & Co., of Newark. The trouble seems to be in their liability to breakage when transported. Their solubility is in the way of durability, we think. Size and form of concrete ball about the same as the ordinary glass balls.

W. L. J., Lebanon, Ill.—1. When does the recoil of a firearm take place, the instant the powder is ignited, or the moment it passes from the muzzle? 2. Do the Creedmoor rifles produce any great recoil? Ans. 1. The recoil takes place at the moment of ignition of powder. 2. Some recoil, but not excessive. (For recoil see the paper for many weeks.)

ROB ROY and NAUTILUS, Gilsey House.—Please give the respective merits in sailing of the Nautilus and the new Shadow canoe. Ans. The Shadow is quite equal to the Nautilus on the wind, while before the wind her speed is at least one-third greater. She is much the stiffer of the two, and decidedly the better sea boat whether under sail or paddle.

W. F. J., Richmond.—1. What would you think of a combination of vaseline and beeswax as a lubricant for rifle balls? Ans. We think it would not be stiff enough for warm weather. We prefer wax and tallow. Ques. 2. Give us the best authority on offhand shooting. Ans. Full instructions may be found in Wingate's Manual, or in "Hallock's Gazetteer."

VANE AT CREEDMOOR.—Please give us some idea of the vane at Creedmoor. Ans. Height from the ground, 28 feet; diameter of clock face, 5 feet 6 inches; height from ground to bottom of clock face, 12 feet; length of rod, 12 feet; length of vane wood work, 7 feet 6 inches; width, 14 inches; rod, 4 feet 6 inches to point; height of tripod, 24 feet; 12 feet between the legs.

DEXTER, Albany.—Tell me the difference between draw and choke-boring? They both have the same effect, I believe. Ans. Draw-boring is when the barrels are decidedly tapered. The effect on the barrel is to lead the barrel along a certain length. They present no advantages over choke-boring and we think are not quite as effective as guns which are choked.

F. A. C., Norfolk.—I have a setter dog one year old and have been much annoyed by his hair falling out. It does not fall out of its own accord, but if he brushes against anything it comes out readily. He seems in good health and spirits. Can you tell me what the matter is and the remedy? Ans. Regular food and plenty of exercise, with the use of a stiff brush.

LAPIS, St. Johns, B. S.—Can a six year old dog that has had mange for the last three years be cured? Numerous remedies have been tried, but to no purpose. Ans. Chronic mange of such long standing is very difficult to cure, but if the dog is kept on proper diet, given a clean bed and plenty of exercise, persistence in the application of proper remedies will generally effect a cure.

H. V., Woodbridge, N. J.—1. I wish to spay a mastiff bitch pup. Advise me when it should be done? 2. Will it stunt her growth? 3. Who could do it? Ans. 1. From four to five months old is a good time. 2. If spaying deprives in a certain way muscular strength, in bulk there is not any appreciable difference. 3. We should suppose a surgeon in your neighborhood would be glad to do it.

J. H. P., Taunton.—In a pond which has not been fished since it was stocked five years ago with black bass, and where pickerel are very plenty, which will be the best, bait or a fly? Or would a spoon be good? Ans. It depends upon the weather, the time of day, season of the year, stage of water, natural food supply and a dozen other conditions. All your baits are good. Better try them all. The result will decide.

W. B. S., Cincinnati.—I have a space 45x66 feet set apart for a dog kennel. I will keep two dogs. Would you recommend sodding it, or would you cover it with gravel? Ans. We should advise a dry soil, and make with a slight slope, or slope down on both sides to a gutter. No harm in having the ground sodded if in a warm climate, but in your latitude would advise gravel, so that soil could be changed at times.

C. R. T., Painesville, Ohio.—1. When will Capt. Bogardus' new book be out? I know it is advertised, but the booksellers in Cleveland say that it is not yet out from the publisher's hands. 2. How many pellets would you call a good pattern in a target 12x18 at 50 yards, No. 8 shot? Ans. 1. The book is out and can be had at this office, price $2, and mailed to you. 2. About 110. Still hard to state as your target is not standard.

C. F., 136th St., New York.—Where can I go to, a convenient distance from New York, to try my gun? Ans. No better place or more convenient than the grounds of the Jersey City Heights Gun Club at Marion. From the city, foot of Cortlandt st., to Marion, it is about fifteen minutes, at a cost of ten cents. Balls, traps and man always in attendance. We take great pleasure in recommending the Jersey City Heights Gun Club.

E. A. P., Lakeville, Mass.—My pointer when two years old had the distemper and it left him with a twitching of the muscles of the head. Upon the left side the muscles above the eye have shrunken away, which makes head one sided. Twitching incessantly and about eighty throbs per minute; dog is in good flesh and appears perfectly healthy. Ans. The dog cannot be cured. You may try ½ gr. of nux vomica twice a day for a month and note effects.

C. M., Dauphin, Pa.—Where can I purchase the McClellan saddle? Can it be bought in Texas? What is the origin of the Texas cattle? Ans. The McClellan saddle can be bought in this city, but it would be better for you to fit out at Austin, or San Antonio, where the most suitable saddles can be bought. The best Texan saddle is made at New Braunfels. Twenty cattle brought from France in 1692 by the missionaries are said to be the ancestors of the Texas cattle.

C. C. H., Indianapolis, Ind.—I am expecting to coast the North Shore of Lake Superior from about Fort William east to Sault Ste. Marie the coming season. Can you tell me where I can get a reliable map of the North Shore upon a scale sufficiently large to be of use on such a trip? How can I ascertain times of sailing of the Canadian steamers for the upper lake? Ans. Write to Barlow Cumberland, agent of Collingwood steamers, 35 Yonge street, Toronto, Canada, for map and dates of sailing.

P. H., Bloomsburg.—1. How would you commence the study of Botany? 2. My dog, setter, will roll in all the filth he can find. How can I cure him? He is one year old. 3. Have a Genez muzzle-loading gun 10 bore, weight 9¾ pounds. What is a proper load? Ans. 1. Send to Orange Judd & Co., N. Y., for "Gray's Hand and Field Book of Botany." Price $2 50 and $1. 2. Hard to cure, as it is a natural instinct. Speak to him and inflict slight punishment. 3. 4 drs. powder, 1¼ oz. shot.

H. S. M., Albany.—A spaniel of mine, seven months old, has been up till now in good health. To-day he will not eat and does not seem to have any life in him. He lies around the house listless, shivering and shaking at times. A lump has grown between his eyes which has increased to the size of a walnut. Have given him quinine. What is the matter? Ans. Description insufficient. The lump or tumor may have some connection with the brain and in this way account for the symptoms.

A. S. T., Oriskany.—1. What time do bass spawn, and how long do they watch the bed after spawning? 2. Where can I find good bass fishing without going too far from Oneida county? What hooks and bait, flies, artificial bait, or worms? Ans. 1. They begin to spawn about the middle of May and watch the beds for eight or ten days, or until the fry are hatched. 2. You will find all your questions fully answered in "Hallock's Sportsman's Gazetteer;" for sale at this office; 900 pages; price $3.

SPORTSMAN, Newburg.—1. Are the wind fish and chub the same fish and if so do they take the fly like the trout? What time is the best to teach them? also what is the best fly to use? 2. Is there any trout fishing near Black Lake, Sullivan county, N. Y.? Ans. 1. We do not know the wind fish. Chub will often take a fly and afford fair sport. 2. Yes. For principal trouting localities in Sullivan county see Hallock's "Sportsman's Gazetteer." Chub begin to bite in April. They take the same hook as the trout.

AMATEUR, Clearfield, Pa.—In the article of "Nauticus" on boat building, published in F. AND S. of August 2, 1873, is not the word stern used wrongfully for the word stem several times in succession, beginning with "The dimensions, etc.," immediately above diagram No. 1? Ans. Yes; and attention was afterward called to the fact through the paper. The writer was instructed to substitute the word bow thereafter, as it is quite impossible to distinguish stem and stern as written in ordinary manuscript.

F. D. P., Attica, N. Y.—Which is the best time to stock a creek Via Tonawanda? It is small but the water is good. What kind of fish would you advise? How far above a dam would you put the fish? Ans. Send full description of your water, size of pond, height of dam, number and size of tributary streams, contour of country adjacent, kind of trees on banks of stream and ponds to Seth Green, Rochester, N. Y. State character of bottom, whether gravelly or muddy, the kind of fish now and formerly in the water and the temperature of water.

J. L. W., North Manchester.—My pointer pup, 8 mos. old, has been confined in a pen or to a kennel for six weeks; fed twice a day on boiled Indian pudding, meat and bones from table; has a good appetite, and is in good condition every way with the exception of his eyes: Three months ago his eyes commenced running. The inside of the under lid and the fleshy part in the corners of eyes appear to be inflamed and swollen. Ans. Wash the eyes with warm water two or three times a day, and give plenty of exercise and no meat for a month.

A. B. C., Boston.—How can pickerel be got rid of from a pond of fifty acres which it is desired to stock with other fish? Where may Prussian carp be obtained for breeding? Ans. You cannot get rid of the pickerel without liming the pond, which process will not only kill the pickerel, but everything else vegetable and scaly in it. The best thing to do is to put in black bass and sunfish, the latter for food for the larger fish. Mr. T. B. Ferguson, the Fish Commissioner of Maryland, will be able to obtain Prussian carp for you. Mr. Ferguson's address is Baltimore.

A. H. C., Canandaigua.—1. What substance is used with plumbago for a permanent coating for the hulls of yachts and the mode of applying it? If varnish is used what quality that will stand under water? 2. What work is published giving information on rigging boats, names of ropes, in fact general information on the subject, together with sailing? Ans. 1. Dissolve 16 pounds orange shellac in 4½ gallons alcohol. 2. Buy "Alston's Seamanship," Wiley & Sons, 15 Astor Place, N. Y. Brady's "Kedge Anchor" is excellent, if you can obtain a copy; but it is out of print.

J. R., Minneapolis, Mich.—1. What is the penetration and accuracy of the —— rifle? 2. Would you advise me to use a ——, or a ——? 3. What is the cost of each? 4. Had I better get a shot-gun here, or send East for it? 5. How are the guns which Mr. Squires advertises? 6 What cal. gun shall I use for general shooting? Ans. 1. Both are excellent. 2. Decline answering. 3. The first rifle costs $55 to $60, the second $35. 4. Generally, arms can be purchased cheaper East. 5. Personal examination of Mr. Squires' guns has convinced us of their excellence. 6. No. 10.

C. A. R., Taunton.—1. Can white perch be taken with a fly, and if so what are the best colors to use? 2. Have the American widgeon, the wood duck, the green and the blue-winged teal and the scarp-duck ever been domesticated enough to breed from them? Please give me the address of some one who keeps them. Ans. 1. White perch are bottom fish and do not take the fly. For several chapters on white perch, modes of capture and localities for fishing see "Hallock's Sportsman's Gazetteer." 2. Some of them have. Address J. H. Batty, New Utrecht, Long Island.

HERVIT, Rawsonville.—1. Will an 11 pound 32 inch .44 rifle, with a 28 inch slight gain twist, be sufficient to handle either an Express or 1¼ inch Creedmoor ball? 2. Would it be more apt to tear the patch than an even twist? 3. Which would be the better place for a gun maker to locate, Ind., Ill., or Texas? 4. What is the address of Mr. F. Yamada, N. Y., teacher of Japanese? 5. How are bullets for muzzle-loaders, which are patched with paper, "driven home" without tearing the patch? Ans. 1. It will. 2. Would not. 3. Believe Texas would be the better place to locate. 4. Mr Yamada's address is No. 97 Front st., N. Y. 5. The bullets enter easily into the barrel and the paper is not disturbed.

G., Mayville, N. Y.—A controversy has arisen as to what certain birds are. Without killing any I send you a description thinking you can tell what they are. In size they are about like a blue bird; back and wings smooth, catbird color, breast and belly between a dun and yellow growing whiter toward the tail. Head heavily crested, black streak from bill up past eye, with fine white streak under it. Wings, white streak on back, fiery red on tip. End of tail bright yellow. Here now in flocks, sitting quite tame on trees half a day at a time in stormy days. Ans. No doubt cedar birds; also called cherry birds, waxwing, etc. (*Ampelis cedrorum.*)

H. C., Mullersberg, Pa.—Some weeks ago a dog passed through our town said to have had hydrophobia. He bit several dogs, among them a pointer. After the pointer was bitten he was used to line a bitch and immediately thereafter he took hydrophobia. Will there be any danger of his progeny being subject to the same disease? Would you advise the tearing of the puppies? Ans. Kill the progeny at once. You would be culpable did you act otherwise. [The editors beg to state that on the receipt of this communication a letter was immediately written to H. C. embodying this advice. It is a common error to say a dog has hydrophobia It is the unfortunate human being who has hydrophobia; the dog has rabies.]

F. N. S. B., New York.—Is there any place within fifteen miles of New York where there is best good snipe shooting? 2. Is the action of the breech-loading guns of the —— as strong as that of the ——? 3. I have a first-class muzzle-loading English gun made by Lang. It cost $150. Would you advise it being made into a breech-loader? If so, where is the best place to go to have it done, and about what ought it to cost me? 4. What is the best thing to remove rust from a gun? 5. In what part of the Adirondacks is the best quail and partridge shooting? Ans. 1. Hackensack Meadows and Rockaway Beach. 2. Respectfully decline answering. 3. Would not advise the alteration. 4. Oil and a scratch-brush. 5. No quail, but ruffed grouse in the Midway Range.

J. W. J., Brooklyn.—1. I am going to Texas. Would a repeating rifle be better than a single shot for general shooting? 2. If so which would you advise me to take, a —— or ——? 3. Would a —— rifle be a good single rifle for general shooting? 4. What cal. would you advise? 5. Would a double barrel gun, one barrel rifle and one shot be a good one for general shooting? 6. Would you advise me to take a saddle from here, or could I get one there cheaper than I could take one from here? Ans. 1. We think a magazine gun is the gun of the future. 2. Both equally good rifles. 3. It would. 4. .44. 5. Yes, under certain circumstances, though we are not advocates of a barrel made-up shotgun and rifle. You can get no end of good saddles adapted to Texas at San Antonio, or Houston.

S. W. C., Bowling Green, Ky.—You will greatly oblige me by referring me to the best practical work upon artificial fish culture. I wish to familiarize myself with all the methods and manipulations of the art, as well as to master the principles of science. You will know what I need. Ans. There are no American works on fish culture excepting Stone's "Domesticated Trout," a very valuable work on that branch, and Norris' "American Fish Culture" which is much more comprehensive, but having been published ten years ago is now somewhat out of date under the revelation of later discoveries and experiments. Seth Green has printed a pamphlet of 150 pages on shad culture. The pages of FOREST AND STREAM contain more on the general subject than all other publications put together; for our leading naturalists and fish growers have contributed what they know relative to bass, carp, shad, salmon, perch, eels, graylings, gold fish and the great variety of food fishes.

H. C., St. Joseph, Mo.—Mr. B. was at the score waiting for his bird and gave the cautionary signal to the puller, "Are you ready?" He received no reply and turned around to see what was the delay, but just as he turned the puller threw the trap and, being excited, Mr. B. turned and fired at the bird, but missed it; referee declared no bird. He appeals from the decision. Our rules read: "Should the shooter be in any way baffled by his opponent, or by any other party, he can claim another bird, with the sanction of the referee." * * * "The puller shall, in all cases, pull fairly and without delay. If the referee shall be satisfied that the trap was not pulled fairly, and without resort to any kind of baffling device, he shall order the bird to be scored for the shooter, though not killed within bounds." Ans. Our decision is that the bird was lost. If the shooter had not fired at the bird he would have been entitled to another bird under the plea of having been baulked. He accepted the bird by firing at it.

H. J. Mc., St. Paul, Minn. Please prescribe for my setter dog, age 2 years; slight cough for some time, lately discharges a greyish, mucous-like fluid from the nostrils; nose hot and tender, and hurts him to sneeze. Eye dull and heavy, movements languid; appears to be stiff across the kidneys. Appetite fair, coat healthy, condition good. Food, oat and corn meal mush and scraps from table, with now and then some raw meat. Thought he had distemper and gave him a dose of syrup of buckthorn and occasionally some sulphur in his water, or in milk. I have kept him tied up during the winter in a good kennel and gave him exercise frequently. Ans. The dog probably has an aggravated catarrh, or the epizootic disease after having his bowels moved by castor oil. Give 2 grs. of quinine four times a day. Cleanse his nostrils and inject a strong solution of chlorate of potash three times a day. Keep warm and dry. Fumigation of the dog's nose with burning tar and feathers may do good instead of the potash wash.

AVIS, Utica.—1. What is your theory that shells too short for a breech-loading gun will make it recoil? 2. What would be the effect of using a shell too long for the chamber of a gun? 3. Are paper shells more liable to produce recoil than corresponding brass ones? 4. In loading in the shell chamber of a gun due to using too short shells? If not what are the principal causes? 5. What pattern ought a wire cartridge to make under these conditions: 1¼ oz. No. 8 shot, 3½ drs. powder, 12 bore 7½ pound gun, 30 inch target at 40 yards? 6. What is Messrs. W. and C. Scott & Son's stamp on their guns? 7. Is there any real advantage to be derived in using chilled shot for ordinary shooting, and are No. 12 and dust shot made of chilled shot? Ans. 1. We do not think recoil would be appreciable unless the chamber had a shoulder. No theory. 2. Then you would have recoil. 3. No. 4. Can't see how a short shell can lead the chamber. 5. About 280. 6. Mark is a turret with a flag in a circle. 7 See our columns for answer to this which otherwise would take a page of explanation. All sizes of chilled shot are made by the Tatham.

S. H., Jonesboro', Tenn.—Why is the South called Dixie's land? Ans. We saw not long ago in the New Orleans *Delta* a communication which gave one explanation as follows: "I do not wish to spoil a pretty delusion, but the real truth is that Dixie is an indigenous Northern negro refrain, as common to the writer as the lamp-posts in New York city seventy years ago. And no one ever heard of Dixie's land being other than Manhattan Island until about the time of the late war, when it was erroneously supposed to refer to the South from its connection with pathetic negro allegory. When slavery existed in New York one Dixie owned a large tract of land on Manhattan Island and a large number of slaves. The increase of the slaves and the increase of the abolition sentiment caused an emigration of the slaves to more thorough and secure slave sections; and the negroes who were thus sent off naturally looked back to their old homes, where they had lived in clover, with feelings of regret, as they could not imagine any place like Dixie's. In those days negro singing and minstrelsy were in their infancy and any subject that could be wrought into a ballad was eagerly picked up. This was the case with Dixie."

C. H., Rowley, Mass.—1. Will you please inform me in what State the best hunting and trapping is found—beavers, otters, deer and fishers for example? 2. Also partridges, quail, grouse and woodcock. 3. Please tell me the market price of beavers and otter skins? 4. What are the prices of the different sizes Newhouse traps? 5. What is the best kind of rifle? 6. What is the best kind of revolvers for long ranges? 7. Also tell me the best kind of dogs for large game? Ans. 1. Arkansas, Missouri and Mississippi in the South; Wisconsin and Montana in the West; Virginia in the Middle States; Maine and Vermont in the East. 2. Grouse, quail and woodcock are widely distributed. The grouse is not found south of Virginia, and the quail is not found in numbers north of Massachusetts. 3 Beaver (northern) skins $2 to $3; $1 to $2; southern, 50c. to $1. Otter, northern and eastern, $5 to $6; western and middle $3 to $4; southern, $1 to $3. 4. Newhouse traps are numbered 2 to 6, the later being the largest. The set can be bought for $20, if we are not mistaken. Our price list is mislaid. 5. Depends upon the kind of shooting to be done. (See Hallock's "Sportsman's Gazetteer.") 6. The regular army Smith & Wesson are the best shooters. 7. Hounds for deer and bear-dogs for bears.

A. B. C., Norristown.—1. Does a 31 inch .44 barrel rifle burn 100 grs. of powder with more advantage than a 32 inch barrel .44? 2. If so are not 34 inch Creedmoor rifles superior in points of range to all shorter barreled Creedmoors that use the same charge? 3. Cannot a Creedmoor rifle be used for offhand match shooting with as good results as a mid, or short range rifle? 4. Will a Creedmoor rifle and shell loaded with 50 or 60 grs. powder and 550 grs. lead, and the space filled with wads and sawdust, shoot as well as a 40 or 50 rifle? 5. What are the objections to using a Creedmoor for offhand match shooting? Is it the length, weight or balance? 6. I can only afford to buy one rifle, and if you do not know of any good reason to the contrary had I not better buy a Creedmoor for all purposes? 7. Will not the 24 inch —— shoot further and more accurately than the —— 32 inch? 8. Can you give me the name and address of a good rifleman who uses the Creedmoor rifles for offhand match shooting? Ans. 1. There is no difference. 2. No. 3. Certainly it can. 4. It will. 5. There is no objection. The best shooting made by many Creedmoor riflemen in off hand matches is made with a Creedmoor long range. 6. If for match shooting buy the Creedmoor. If for all purposes, in the woods, or for game would prefer a shorter rifle. 7. It will not. 8. Address Major Fulton, care of Fowler & Fulton, Broadway, N. Y.

FOREST AND STREAM ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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To Correspondents.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

AN ALLEGED CASE OF CRUELTY.

IT is a duty of the FOREST AND STREAM AND ROD AND GUN to its numerous constituents, to take cognizance of all communications addressed to us. Sometimes the topics presented are not of an agreeable character, especially when a conflict arises between sportsmen and associations for the prevention of cruelty to animals. Thoroughly as we may indorse such societies, giving them full credit for having induced a broader humanitarianism, we are forced to declare that in their actions they often transcend the dictates of justice and common sense. Their fault is that over-refining of feeling, which Huxley designates as "the cursed sentimentality of the present age."

A case in point, to which we call attention, is as follows In the discussion of this subject we will try to be as moderate as possible, giving both sides of the question: A gentleman in Boston, well known and respected, while quietly walking in the street with his setter, a timid and inoffensive animal, was called upon to protect his dog from being throttled by a large, vicious, cross-bred dog, weighing some 125 pounds. The owner of the setter finding that he could not drive off the big dog with his cane, used his pen-knife, cutting the assailing dog once while he had the setter by the throat, and cutting him a second time after he had driven him off. For this act—cutting the dog a second time—the owner was criminally prosecuted by the Massachusetts Society for the Prevention of Cruelty to Animals, and was fined forty dollars. Desirous of being fully informed, we wrote to the Secretary of the Boston Society, and were favored with an immediate reply. The secretary of the society states that the defendant in the case "did not stop when he had separated the dogs, and the danger had ended, but had followed the St. Bernard *about one hundred and fifty feet*, and then again used the knife upon him. It was this which seemed to us without justification." [The italics are our own.]

We cannot agree with the secretary. From what we can understand of the case, the larger dog was a vicious brute, and should have been exterminated on the spot. Suppose the aggressor in this case had been a panther, could he not have been killed? Of course the character of the individual who used the knife, and his motives in such a case, ought to go for a great deal. The second wound might have been inflicted when, in the opinion of the person who used the knife, the larger dog was in the act of returning in order to inflict further injuries. In his judgment, the smaller and weaker dog was in constant peril while the larger dog was within sight. About one hundred and fifty feet could be traversed by a dog or a man in a very brief period of time. A man having a vicious dog, and not taking care of him in the street, is likely to have his dog killed. Common sense dictates that such a dog should be gotten rid of in case he makes an attack. The owner of the vicious animal, had he been killed on the spot, could not have reclaimed damages, and a cross between a St. Bernard and a Newfoundland, when his anger is provoked, is about as dangerous an animal as can be met with. If the person whose dog had been punished, or even killed by a vicious dog, on one day, was to return the next day, or in a week's time, and then inflict injury on the aggressive dog, then, perhaps, something like deliberation could be shown; but in the heat of the moment, that a person used a knife twice, at necessarily very short intervals, we believe was perfectly justifiable.

The secretary writes: "The fact that the Court adjudged Mr. ——— guilty, and fined him forty dollars, and that after appealing from the decision at the time, he subsequently paid the fine, are facts which should be conclusive that the act was not defensible." We by no means consider that this is in the least a conclusive argument. Persons may not be desirous of continuing litigation, and though the decisions of a bumptious justice may be in direct opposition to common sense, it is sometimes wiser to leave a disagreeable matter as it is. A man dreading notoriety, or a poor man, may be mulcted forty dollars in the most unjustifiable way, and have neither the inclination, time nor means to carry his case to a higher and wiser tribunal.

The secretary writes us: "I am told the knife had four blades, and the largest was used in the attack." The knife, we beg to remark, might have been a gardener's pruning knife, or a Bowie knife, or one with twenty blades, and a cork-screw to boot, and the character of the instrument would not have altered the case. We are only sorry that Mr. ——— did not use a pistol or a bludgeon, so that the larger dog had been killed on the spot.

To conclude, we are of the opinion that the decision of the Boston Justice was in opposition to equity and common sense, and that even if a fine had been inflicted, which we do not allow, the penalty of forty dollars was exorbitant.

Such a judgment inclines too much in favor of a powerful association, and to the prejudice of individual rights, and just such a case as this, urged by the Society for the Prevention of Cruelty to Animals, tends to bring them into discredit.

We are equally positive that the stigma of cruelty cannot be affixed on the defendant. He did exactly what anybody else would have done under the circumstances, when the life of a valuable and inoffensive dog was imperilled.

A NOVEL MONSTER.

FOR the past few years we have had quite a surfeit of the sea serpent, and people have become somewhat tired, not only of the animal itself, but also of the veracious (?) mariners who would persist in seeing it and in making all sorts of affidavits concerning its appearance and habits. It is fortunate, therefore, that, just at this time, news is received of an animal which, if all accounts be true, is no less wonderful than the sailors' old stand-by, and which has this advantage over its marine rival—that it inhabits the bowels of the earth instead of the depths of the sea. The Pawnees have a saying to the effect that you cannot follow the trail of a fish through the water, or a wild goose through the air, but to track a horse on the prairie, or to trace out the burrow of a mole in the ground, is easy enough. Happily, the new monster of which we write, does not confine himself wholly to subterranean depths, but occasionally visits the regions of light; and fortunately, also, his dimensions are such that when he burrows near the surface of the ground his excavations are easily discoverable, and, indeed, are on such a large scale that they remain for years little altered by exposure to atmospheric influences.

It is unfortunate that the habitat and range of the Minhocao, as the creature is called, so far as at present ascertained, is in the southern province of Brazil, among the high table-lands, where the rivers Uraguay and Parana take their rise; unfortunate, we say, because the scene of its labors is so far from scientific centres that considerable time must necessarily elapse before material for a complete biography of the animal can be procured; because, too, the carping sceptics of the present day will no doubt attempt to discredit the announcement of its discovery, and by their ingenious arguments may succeed in deceiving even the very elect. But we shall hope for better things, trusting that before long such authentic details may be received as will put the existence of the Minhocao among the accepted facts of science.

In a recent communication to the *Zoologische Garten*, Herr Fritz Muller gives an account of our monster, which is there termed a gigantic earth-worm, and is spoken of as being 150 feet in length and fifteen in breadth, and is said to be covered with a coat of mail. The letter gives the particulars of several occurrences of the Minhocao, but we are forced to acknowledge that, so far as heard from, the animal itself has not yet been seen by any person except the natives, although his works have been examined by more than one European. The creature is variously described as "of gigantic size, nearly one metre in thickness, not very long, with a snout like a pig;" "as big as a house;" "an enormous worm-like, black animal, about twenty-five metres long, and with two horns on its head;" its skin is said to be as thick as the bark of a pine tree, and formed of large and hard scales, like those of an armadillo. We gather, too, that it is an animal fond of moisture, living in swamps and morasses, from which it emerges only during, or just previous to, rainy weather. During its excursions it appears to proceed just beneath the surface of the ground, forming trenches like those made by our moles. If a huge pine happens to stand in its way it just uproots the tree and goes on; it also plunges over cliffs into rivers, and in fact seems quite at home in all situations.

Whether there is really any basis of fact at the bottom of all these stories it is hard to say, but from the circumstantial manner of the narration and the number of cases given, it certainly seems likely that it has some foundation. Granting that where there is so much smoke there must be some fire, the description given is altogether too meagre for us to venture any conjecture as to what the creature may possibly be. The probabilities would seem to be in favor of its bearing some relationship to the Post Tertiary Edentates which once flourished in such wonderful abundance and variety in South America. The largest armadilloes of the present day are only about four feet in length, and should the Minhocao turn out to belong to this group he would prove a most interesting addition to it. It is well known that many of the armadilloes are burrowers, and pass a considerable part of their lives beneath the surface of the earth. The little *Chlamydophorus* is especially subterranean in habit, and might make somewhat such traces as those referred to, differing, indeed, only in size. We shall await further news on this subject with no little anxiety.

SALMON IN THE COLUMBIA RIVER.

THERE is now upon the calendar of the Senate a bill for the protection of the salmon fisheries of the Columbia River, recently introduced by Mr. Mitchell, of Oregon, who will call it up soon for reference, but before having it referred will address the Senate upon the importance of legislation in this direction. The bill has a lengthy preamble, declaring that in consequence of a general disregard by the fishermen of proper regulations and conditions necessary to protect the annual spawn of the fish, and in consequence of the pollution of the waters of the various rivers and shore-lines of the bays of the Atlantic coast, by saw mills, manufacturing establishments, and the drainage of towns and cities, the supply of salmon in the rivers of the Atlantic sea-coast has so largely decreased as to be now of little consequence, greatly to the detriment of commerce; and that there is danger of the supply of salmon in the Columbia River and its tributaries, now so plentiful, suffering a similar decrease within a few years, unless suitable laws and regulations are made and enforced to insure the requisite purity of the waters of said rivers, and the annual deposit of fish spawn therein. It then provides that it shall not be lawful to catch or fish for salmon in the waters of the Columbia river or its tributaries, by any means whatever, in any year from the 26th day of July to the first day of October; such period being the best portion of the spawning season in that river. The penalty for a violation of this section is a fine of not less than $1,000 nor more than $1,500 for the first offence, and for any subsequent offence the same fine and imprisonment, at the discretion of the Court, not exceeding twelve months.

The second section of the bill makes it unlawful to catch or fish for salmon in that river or its tributaries from the first day of April to the 26th day of July of each year with gill nets the meshes of which are less than 8¼ inches diagonally, or with seines the meshes of which are less than 5 inches diagonally when extended, or with wires or traps the slats of which are less than three inches apart on the pocket or seine pond. And during said closed season, from July 26th to Oct. 1st, there shall be an opening at least three feet square through the pocket of the trap to let the salmon pass freely through. Any person or persons violating the provisions of this section or encouraging its violation by purchasing salmon knowingly so unlawfully caught shall be fined not less than $500 nor more than $1,000 for the first offence, and for any subsequent offence shall be fined not less than $1,000, to which may be added imprisonment for not more than twelve months, at the discretion of the Court. The act, however, is not to be so construed as to prevent any person from taking salmon for the purpose of securing the spawn or of propagation of the same in said river or its tributaries. It is also made unlawful for any person to deposit sawdust from any sawmill, or refuse of waste liquid, hair, lime-water, tan-water from any hide or leather tannery, or poisonous waste liquid, or compound mineral, or chemical liquids, or substance from any woolen or cotton factory, or dyeing or chemical or gas works or establishment, into the river or any of its tributaries, from the first day of July to the thirty-first day of December of any year; and every person guilty of violating any of the provisions of this section shall, on conviction, be fined not less than $500 dollars for each and every such violation.

The remaining sections of the bill confer jurisdiction upon the U. S. District Courts of the State of Oregon, and the Territories of Washington and Idaho. Any person who shall first inform the U. S. Attorney (and through whose information a conviction shall afterward take place) of a violation of the provisions of this act shall be entitled to half of the fine which the person contravening the law shall be compelled to pay. The money collected for violations of the act are to be paid over to the Secretary of the Treasury, and be disbursed, under his direction, by the Commissioner of Fish and Fisheries in the protection of salmon spawn and in maintaining establishments for the propagation of salmon in the Columbia River. In default of payment or giving proper security for the payment of any fine the offender shall be committed to the county jail until such fine and costs are paid or secured to be paid, or until he shall have been imprisoned one day for every two dollars of such fine and costs.

Washington, D. C. R. F. B.

GRAZING LANDS IN TEXAS AND COLORADO.

SOME time in January a gentleman casually inserted an advertisement in our columns (paying fifty cents per line for the privilege of using the editorial page), inquiring for a sheep ranche in Colorado or Texas, and proposing a partnership in the purchase. Although that was nearly three months ago, we are even now receiving from that one advertisement proposals and letters of inquiry—some to purchase and some to sell; so that it is evident that there is an active interest taken in agriculture and grazing, which must soon lead to an activity in trade and immigration. There is no doubt that thousands of merchants who have met with disaster within the past five years are turning their attention to other branches of business. Agriculture, stock-raising and grazing offer the safest investments, the surest returns, and, in the long run, the largest profits. In our last week's issue we showed, by tabular statements, based on facts, what can be done in Minnesota. The same estimates will apply to Texas; at the same time its more genial climate affords various sources of income to the farmer not found in Minnesota. In our Texas letter, which we print to-day, may be found some statements which will surprise Northern readers, and possibly enable them to reach a decision which they would otherwise be unable to do. However, in order to aid those of our readers who look to us for information and advice, we will furnish what the advertisement referred to has elicited, as follows:

F. S. H., of Boston, knows of one excellent ranche, unstocked, and one well stocked, in Texas.

W. H. D., of Ashtabula, Ohio, has 950 acres in the heart of the grazing country, on the Government road, 14 miles west of San Antonio, crossed by the Medio Creek, and holding a beautiful lake of three acres. On the banks of the creek is a very fine stone quarry of lime rock, for which there is a good demand in San Antonio. Will sell the tract for $5,000 cash, or part cash and payment at 10 per cent.

T. D. C., Philadelphia, has 2,214 acres in Burleson County, Texas, and another tract of 13,142 acres in Robertson County, low for cash.

H. W. M., of New Rochelle, N. Y., has 4,428 acres (one league) of mesquite prairie land, in Wichita County. The Big Wichita, a brackish river, runs through it, and it is watered by fresh streams; also a ranchero, three miles away, has 5,000 head of cattle, and Wade Hampton has a ranche beyond.

J. C. C., New York, has some fine grazing land in Texas.

J. L., of Galveston, offers fine grazing lands in Texas, a large live-oak grove, surrounded by 200 acres prairie, 65 miles east of San Antonio and 160 miles west of Galveston; outbuildings, hedges, fences, running water, etc. Price $7,000 for the whole, or $4,000 for the prairie alone, with all improvements. Half cash; balance in twelve months, or the last payment discounted at 10 per cent. for cash.

J. G. K., of Boston, has a claim to two lots of 640 acres each, to be located in any lands in Texas not taken up. Price not stated.

J. E. S., of Rockport, Mass., has 700 acres of land in Colorado, nearly all fenced, outbuildings, an unfailing creek of pure water. Twice as much additional grazing land, which belongs to a bankrupt estate, adjoins this, and can be bought cheap; about twenty miles from Denver, and near railroad station. Terms not stated.

J. J. L., Pueblo, Col., has a finely located range for cattle or sheep. Price $3,000. Took it for debt. Is considered dirt cheap.

B. L., of Hartford, Conn., has a fine range with a splendid lot of sheep on it. Will sell the whole or part.

D. L. D., of St. Louis, will sell a range in Ellis County, Kansas, on K. P. R. R., 160 acres grazing and 40 acres broken, for $2,800, or the range alone for $1,400. Breeding stock to sell low; clear water; also range of 200 acres, distant 20 miles from Hays City. Cause of sale, ill health.

B. E. W., of Cheyenne, Wy. T., has a sheep range, twelve miles distant, with buildings, corrals and good Mexican sheep for sale.

S. S., of Grassy Cove, Tennessee, has some table lands in East Tennessee (excellent for sheep), twelve miles from Cincinnati Railroad. Price $1 per acre, or $10 with improvements.

J. B., of New Jersey, has $1,000 cash to put into the sheep business.

W. C., Cerro Gordo, California, wants a partner with $3,000 to go into cattle and horse-raising business in the Big Horn and Yellowstone Country, Montana.

F. A. W., of Vergenness, Vt., wants to buy a good range in Colorado or Texas.

H. R., of Brooklyn, wants a partner to go to Colorado. Will put in $3,000.

[We will furnish addresses to parties wishing to communicate.—ED. F. and S.]

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

—We regret to learn that Mr. Jerome Marble, of Worcester, was knocked down by a horse on the 12th instant, while crossing Barclay street, and had two ribs broken. He has been confined ever since, but hopes to be able to return home this week.

PROFESSOR HAYDEN'S OPINION.—We have been much complimented by the following unsolicited letter from Professor Hayden, dated

U. S. GEOLOGICAL AND GEOGRAPHICAL SURVEY, Washington, D. C., March 20.

Dear Mr. Hallock: I have read with care your "Sportsman's Gazetteer," and thank you most cordially for so interesting and instructive a work. It contains much information with which I was not previously familiar. Very sincerely yours, F. V. HAYDEN.

THE RESOURCES OF TEXAS.—We call attention to our Texas letter, written by the author of that valuable new work advertised in our columns, entitled "The Coming Empire; or, Two Thousand Miles in Texas." We shall publish future letters from the same source, and we advise those who are interested in the development of the Lone Star State, or in grain and wool growing and cattle and sheep raising, to look out for them.

By the way, the Missouri, Kansas and Texas Railway Company publish a physical map of the State, showing the lumber, grain, sugar, cotton, grazing and mineral districts of the State, which we presume can be obtained by addressing their principal offices at New York, St. Louis and Sedalia, Missouri. It is extremely valuable to an intending settler.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowanes.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President.
Missouri State Sportsmen's Association.

A HOME FOR MESSINA QUAIL.—Apropos of the recent remarks on migratory quail which have appeared in these columns, our friend "Greenwood," of Greenwood Lake, writes as follows:

"I was very much interested in Judge Evert's letter and your editorial suggestions on the importance of the migratory quail, and sincerely hope some of our liberal-hearted (and pursed) sportsmen will take measures for their introduction to this country. And I will take this opportunity to state that, should any of your readers desire to make the experiment who do not possess suitable land and cover for the birds, I will willingly give the quail a home and all the attention and protection in my power here at Greenwood Lake, if it is not considered too near the sea-board for the experiment. They could have here the range of over two hundred acres of well situated game protected cover, on which unauthorized hunting is strictly prohibited, and they should receive intelligent care and attention, and every effort would be made to acclimatize and localize them, if possible. Of course, in making this offer, I should not lay any claim to the ownership of the birds, which would remain the property of, and subject to the disposal of, the party importing the birds, to whom every courtesy and facility would be extended, my object being merely to encourage the importation by tendering game protected cover for the experiment.

"Very few ducks as yet have been seen about the lake this spring and, no geese. No game in season, and musk-rats our only shooting."

SPORTSMEN'S PROTECTIVE CLUBS.—Our friends all over the country are sending us copies of their by-laws, etc., in response to our late appeal, and we are disbursing them as fast as they come; thus we are enabled to build up new clubs and extend the usefulness of protecting men and protective measures wherever game exists or can be made to abound.

The State Sportsmen's Association of Pennsylvania has recently elected the following officers: Robt. Dalzell, Pittsburg, Pres't; D. W. Seiler, Harrisburg, 1st Vice-Pres't; J. B. Reno, New Brighton, 2d Vice-Pres't; B. W. Richards, Phila., 3d Vice-Pres't; F. S. Blunt, Sharon, 4th Vice-Pres't; B. F. Dorrance, Wilkesbarre, Rec. Sec'y; A. M. Whisler, New Brighton, Cor. Sec'y; J. A. Harper, Pittsburg, Treas.; with strong committees on game laws and fish culture. This is a very strong organization, and is doing good.

The Fur, Fin and Feather Club, of Titusville, Pa., is a new organization with the following officers: J. H. Brownson, Pres't; H. Holladay, Vice-Pres't; H. G. Davis, Sec'y and Treas.; H. T. Thompson, Game Constable; with an Executive Committee who mean business. The number of members is forty-six. Every protective club should have a game constable and pay him a good salary.

The officers elect of the Halifax, N. S., Game Protective Society are: Pres't, Robert Morrow, Esq., re-elected; Vice-Pres'ts, M. B. Daly and E. G. Stayner, re-elected; Council, C. M. Barry, Fitz Cochran, Louis P. Fairbanks, F. H. D. Veith, J. W. Jackson (New Glasgow), Hon. L. G. Power, Andrew King, Thomas Egan, Peter Jack, Andrew McKinlay, Lt.-Col. Clerke and Andrew Down; Treas., M. B. Almon, Esq.; Sec., Arthur E. Harrington, Esq.

—The Sportsmen's Club of California now numbers 267 members. It was established two years ago by R. L. Ogden, Esq.

SCOTTSBURGH (N. Y.) SPORTSMAN'S ASSOCIATION.—This association, formed in August, 1877, now has a membership of forty, with the following officers: Pres., E. L. McFetridge; Vice-Pres., J. M. Slyker; Treasurer., Doc. D. H. Foster; Sec., B. F. Shepard. The club has done much for the protection of game, and by abstaining from shooting and by wintering several birds, have succeeded in materially increasing the stock of quail in the vicinity. They have also ordered brook trout for the streams, and are in other ways working for the increase of fish and game. E. L. McF.

—The waters of Oneida Lake are being depleted of fish by the flagrant violations of the fish laws. If the reports that reach us are correct, that game constable needs propping up, or propping out—one or the other.

PIGEON SLAUGHTER.—Professor H. B. Roney, President of the East Saginaw Club, Michigan, stated in a recent address that from three nestings in Newaygo, Oceana, and Grand Traverse counties, in 1875, there were shipped to outside markets 1,000 tons, or 2,000,000 pounds of young "squabs," while not less than 200,000 dozen, or 2,400,000 live birds were entrapped and shipped to all parts of the United States and England.

The Rifle.

THE FOREST AND STREAM AND ROD AND GUN TOURNAMENT

For the Short-Range Championship.

On Monday night, the 18th March, at Mr. Conlin's gallery, No. 1,222 Broadway, New York, this very interesting event in rifle shooting, for prizes in the FOREST AND STREAM AND ROD AND GUN Tournament commenced under the following conditions: Teams—Each team shall consist of ten men. The teams participating must be composed of members of the various clubs which they represent. Rifles—Limited to ten pounds in weight; minimum pull of trigger, three pounds; 22-100 cal. Number of Shots—Ten by each competitor. Sighting Shots—Two shots will be allowed each competitor. Position—Off-hand. Targets—200-yards targets, according to the regulations of the N. R. A. reduced in proportion to the range at the gallery. The match to be governed by the rules of the N. R. A. relating to teams.

The following nine teams competed, having shot in the following order: Zettler and Yorkville Teams, on Monday, March 18th; Seppenfeldt and Newark Teams, Tuesday, 19th; Hellwig and Centennial Teams, Wednesday, 20th; Scotch-American Team, Thursday, 21st; and the New York and Irish-America Teams on Friday, 22d.

The prizes were: 1st—The FOREST AND STREAM AND ROD AND GUN badge; 2d—The Union Metallic Co.'s badge, presented by the Union Metallic Cartridge Co., of Bridgeport; 3d—The Shepard badge, presented by N. M. Shepard, Esq.; 4th—Ballard rifle, presented by Messrs. Schoverling & Daly; 5th—Revolver, gilt and pearl-handled, presented by the Messrs. Remington; 6th, 7th, 8th and 9th—A prize of $2.50 in gold to the highest score in each team not winning one of the above prizes, given by Mr. J. Conlin.

It was optional with the third and fourth teams to select from the third, fourth and fifth prizes. The excitement in the many distinct rifle circles which abound in New York and the vicinity was very great, and quite as much practice was carried on and as careful inquiry was made into the shooting antecedents of the gentlemen who were to make up the teams as at any leading Creedmoor match. It is beginning to be very thoroughly understood that it is in gallery practice that experts are fashioned, and that when good scores are made in a 100-feet gallery, it is quite certain that any one thus creditably acquitting himself will be pretty sure to roll up a handsome total at Creedmoor. In fact, some of our most expert marksmen are quite ready to insist that it is even more difficult to plant successive balls in the 1½-inch bull's-eye in the rifle gallery than at the larger target in the field. Though gallery practice under inclosure may prevent effects of wind and atmospheric disturbances, still some of the conditions as to light, though fixed, are not as favorable as in the open air. Nevertheless, those who shoot, as it is said before, with skill in a gallery, are sure to lead in open-air contests.

One most important feature of this team practice, which the FOREST AND STREAM AND ROD AND GUN has been endeavoring for some time to present, is the contrasting of the skill of our German friends with those of our native-born citizens. The rifle tournament which has just been so pleasantly terminated, we are pleased to state, has brought into competition exactly both these elements. Representative German and American riflemen met at Conlin's Gallery, and the victory was gallantly won by the Zettler team, the New York team being second, though the question of supremacy may not yet be settled. Still, just such trials must have the excellent effect of stimulating our riflemen to further efforts, which can only increase the good will and fellowship which must exist between riflemen of all nationalities. We had hoped that a team of Swiss riflemen, well known for their skill, would have entered the list, but we were disappointed. We trust, however, that at the coming Schuetzenfest, on June 24 of this year, where we have offered a handsome prize, there will be found, facing the targets, teams composed of Germans, Swiss and Americans. Our own pride in American riflemen can be in no way hurt by their having been beaten for the first place in this team match, as the victors, the Zettler Club, are composed of veterans who are thoroughly familiar with the rifle, and who were the winners of the prize offered by us in January last at the Union Hill Schuetzen Park.

On Monday night the rifle gallery was crowded by the lead-

ing riflemen, but, thanks to Mr. Conlin's good management and thorough system, the matches were continued every night without stop, hindrance or dispute. The method of marking was as thorough and complete as possible, a duplicate target having always been made and kept, which recorded each shot, which duplicate target was attached to the real target. All the targets were placed under the charge of T. C. Banks, Esq., of the FOREST AND STREAM AND ROD AND GUN, and were every day placed in the custody of one of the editors of the paper, when they were sealed up, to be afterward opened by the judges, Col. G. W. Wingate and Major Henry Fulton, in the presence of the referee, Mr. T. C. Banks. We now give the scores of the teams in order of merit:

Zettler's Team—Capt M L Riggs.

T Kleisrath	5	5	5	4	4	4	4	3	5	4—43
M Dorrler	4	4	5	4	5	4	4	5	5	5—45
D Miller	5	4	4	5	5	5	5	5	5	4—47
Chas Judson	5	4	5	4	4	4	4	4	4	4—42
Wm Klein	4	5	4	5	4	5	5	5	5	4—46
M B Engel	5	5	5	5	5	5	5	4	4	5—48
B Zettler	5	5	4	5	4	5	4	5	5	4—46
C Zettler	5	5	5	4	4	5	5	4	5	4—46
M L Riggs	5	4	5	5	5	4	5	5	4	4—46
P Fenning	5	5	4	4	4	5	4	5	5	4—45—454

New York Team—Capt C E Blydenburgh.

Dr Dudley	4	3	5	4	5	5	5	5	5	5—46
F B Holton	4	4	5	5	5	5	4	5	5	4—48
D Banks	4	5	5	5	4	5	5	4	4	5—46
S W Sibley	4	4	4	4	5	4	3	4	5	4—41
J S Conlin	5	5	5	4	5	4	4	4	4	4—44
C E Blydenburgh	5	5	4	5	5	5	5	5	4	5—48
Fred Alder	5	4	5	4	4	4	4	4	5	4—38
A J Howlett	5	4	0	3	4	5	5	3	4	4—42
J B Blydenburgh	5	5	5	4	4	5	4	4	5	4—45
N O Donnell	4	5	4	5	3	4	4	5	4	4—42—443

Hellwig Team—Capt Philip Klein.

L Vogel	4	4	4	5	4	4	5	5	4	5—44
L Dreyer	4	4	5	4	4	4	5	4	4	5—43
A Knoepfh	4	5	4	5	4	5	4	4	5	4—44
W Hahn, Jr	4	4	5	5	4	4	5	4	5	4—44
A G Hellwig	4	4	4	5	5	5	4	4	5	4—44
R Weidman	5	5	4	4	5	5	3	5	5	0—41
P Klein	4	5	5	4	4	5	4	5	4	5—45
R Faber	4	4	5	5	4	5	4	5	5	4—44
F Kessler	5	5	4	4	5	5	5	4	4	4—45
P Meyer	5	5	5	4	4	5	5	5	5	5—48—442

Scotch-American—Capt David Vannett.

L C Bruce	5	5	5	2	5	5	4	5	4	5—45
D Vannett	4	4	5	5	4	5	4	5	4	4—44
D Cameron	5	2	4	4	2	5	3	4	4	4—41
A Pyle	4	5	5	5	4	5	5	4	4	5—46
Capt Lindsay	5	4	5	4	4	5	4	4	5	4—44
D McPherson	3	4	4	5	5	4	4	5	5	4—43
Jas Ross	5	4	4	4	3	5	5	5	4	5—44
Jas Spana	5	4	4	4	4	4	5	4	5	5—44
Jos Ross	3	4	3	4	5	4	5	4	5	4—41
W Robertson	4	4	4	5	5	5	5	4	5	4—45—437

Newark—Capt W C Gardner.

A S Fowle	4	4	4	0	4	4	5	4	5	4—38
Vic Hesse, Jr	4	5	5	4	5	5	5	2	4	5—44
A Seltz	3	5	5	4	2	4	4	5	4	4—40
W P McLeod	4	4	5	4	5	4	4	4	4	4—42
J F Hill	5	5	5	4	4	4	4	3	4	5—43
J L Toblin	5	5	5	5	5	4	5	4	5	5—48
F G Brown	3	4	5	4	5	5	4	5	4	4—43
J Bayer	4	5	4	4	5	5	4	5	2	4—42
W C Gardner	4	4	5	4	5	4	4	3	4	5—42
W Hayes	5	5	4	4	4	4	5	5	5	5—46—428

Seppenfeldt—Capt W Seppenfeldt.

D Sullivan	4	5	4	4	3	3	4	4	3	4—38
F Shackell	5	5	4	5	4	4	4	4	4	5—44
N W Bock	4	5	4	4	4	5	3	4	4	5—42
J W Adams	4	3	4	5	5	5	3	4	5	4—42
A Keller	5	5	4	5	4	5	4	5	5	5—47
G Strassner, Jr	5	4	4	4	4	4	5	3	4	5—42
Isaac Garrison	4	5	5	4	5	3	5	3	3	4—41
E Holtzmann	5	4	4	4	5	4	4	4	5	5—41
W Seppenfeldt	5	4	5	5	4	4	4	5	4	5—45
F A Geenburgh	4	4	4	4	4	4	5	4	4	5—43—427

Centennial—Capt B S Brown.

W Marshall	3	5	5	4	3	4	4	5	4	5—42
B S Brown	5	4	5	3	5	4	5	5	5	5—46
J F Murch	5	5	3	4	4	4	5	5	3	5—43
J D Redpath	5	5	5	5	5	5	5	5	5	4—49
J J Jewesson	2	4	4	4	5	4	5	4	4	5—41
W R Brown	3	4	4	4	3	4	4	4	4	3—37
J Q Adams	4	4	5	5	4	4	5	4	4	5—44
L C Chatfield	4	4	4	5	5	4	3	5	4	4—42
A E Long	4	4	4	5	4	4	4	5	4	5—43
A Otes	5	4	4	3	4	4	2	4	3	3—36—423

Irish American—Capt F F Millen.

J J O Clark	4	4	4	5	4	5	5	5	5	5—46
Capt J Cavanagh	5	4	5	4	4	4	5	4	4	5—44
G W Lenton	4	5	3	4	5	4	4	5	4	4—43
Wilson McDonald	5	3	4	4	4	5	4	5	5	5—43
Capt J Boles	4	5	4	5	4	5	4	4	4	5—44
S P Kneeland	4	4	4	5	5	3	3	4	3	4—39
Dr M M Maltby	4	4	5	4	5	4	4	5	4	4—43
J E Irwin	4	4	4	5	4	4	5	3	2	3—38
J Haggerty	5	3	3	5	5	4	4	3	4	3—38
Gen F F Millen	3	4	4	5	5	4	5	4	4	4—42—420

Yorkville Team—Capt M F Ratty.

A Smart	0	0	4	5	4	5	3	3	2	4—30
J Paulding	4	4	5	3	5	5	5	4	5	5—45
P McMorrow	4	3	4	5	5	3	4	4	5	4—41
G See	5	5	4	4	5	4	4	5	5	4—45
T Woods	4	5	4	3	4	3	4	3	5	4—39
F Kasse'	4	5	4	4	5	4	5	4	5	4—44
E Gellfos	4	4	5	3	4	4	4	3	5	4—40
J R Grohman	5	5	5	4	4	4	4	4	5	5—45
O Kelz	4	4	4	5	5	4	4	5	5	5—45
Capt M F Ratty	4	5	4	4	5	4	4	5	5	5—45—419

The following is the resume of the match:

Zettler	454	Seppenfeldt	427
New York	443	Centennial	423
Hellwig	442	Irish-American	420
Scotch-American	437	Yorkville	419
Newark	428		

Awards for individual highest scores: Mr. A. Keller, Seppenfeldts, 47; Mr. J. D. Redpath, Centennials, 49; Mr. J. J. C. Clark, Irish-American, 46; O. Kelz, Yorkvilles, 45.

It may be stated that in judging the targets, Col. Wingate and Maj. Fulton were never at variance, and in no case was it necessary to call on the judgment of Mr. T. C. Banks, the referee. Of course that certain peculiar accident, which always does turn up when least expected, actually did take place. When the fourth man on the New York team was shooting, the main-spring of the rifle snapped and another spring had to be substituted. This change made the rifle a very much heavier pull, which might have disconcerted the shooters. As it was, however, this bit of real bad luck also effected the Irish-American team, who used the same rifle. The FOREST AND STREAM AND ROD AND GUN take particular pleasure in returning their thanks to Mr. Conlin for the great attention he has given to this match, and are glad to express the obligations they feel to the Union Metallic Cartridge Co. of Bridgeport, to Messrs. Schoverling & Daly, to the Messrs. Remington, and to N. M. Shepard, Esq., for the handsome prizes contributed by them.

Saturday evening the courtesy of the Sturtevant House having been extended to them by the proprietors, the Messrs. Lelands, the members of the competing teams, with a number of other gentlemen, gathered for the distribution of the prizes, Col. Schermerhorn presiding, Mr. J. N Meeker, of the New York Club, secretary. The FOREST AND STREAM AND ROD AND GUN medal was presented by Mr. Banks, and received with a few well-chosen and modest words by Mr. Sherman, of the Zettler Club. Mr. Sherman in his expression of the good feeling and generous rivalry existing between the Zettler Club and their competitors, gave the keynote to the tone of the whole meeting, which was boisterously reiterated in the rousing cheers which followed the reception of each award. Dr. Dudley, of the New York Club, received the Union Metallic Cartridge Co. medal with a neat speech. Major Fulton, with a few remarks, urging that to be a successful rifleman it is first necessary to be a *man* with manly attributes well developed and enervating influences suppressed, then presented to Mr. Hellwig, of the Hellwig Club, the third prize. Mr. Bruce, on behalf of the Scottish-American team, received the prize awarded to that club. The Newark team were conspicuous for their absence, Mr. Conlin humorously explaining that the news of their victory had not yet reached Jersey. Their prize was accordingly entrusted to the keeping of this journal and has since been received by that club. Of those who had won individual honors, only Mr. Keller, of the Seppenfeldt team, was present to accept his award with becoming modesty. A series of votes of thanks then followed, in which recognition was made of Mr. Conlin's courteous conduct of the gallery during the match, and also of the proprietor of the Sturtevant House, the very satisfactory labors of the judges, and the generosity of the donors of the prizes.

NEW HAVEN RIFLE ASSOCIATION.—The regular monthly meeting of the New Haven Rifle Association for competition will be held at Quinnipiac range, Wednesday, April 3. The annual meeting of the association for the election of officers will be held at the office of Col. S. R. Smith, No. 347 State street, at 7:30 o'clock on Friday evening, April 5.

—Mr. Conlin's prize shooting match will close this week. There are a few prizes still left, for which tickets may be procured. There are forty prizes, but no one can win but one prize.

SEPPENFELDT RIFLE CLUB, 104 Bowery—*Friday, March* 22.—175 feet, off-hand; bull's-eye, 2½ inches; Creedmoor target, possible 50.

A Gruneberg	47	G Strassner	43
John W Adams	45	Alb Keller	44
A H Anderson	45	M Heuman	43
W Seppenfeldt	45	E Story, Jr	43
N W Boch	44	Max Kern	43
Er Bolzman	44	Cr Shackell	43
Wm Guttenberg	44	Ch Laing	42
T Garrison	44	A Kanny	41
E T Mander	44	H Rothenberg	38

CR. SHACKELL, Sec.

THE SHARPSHOOTERS' UNION.—The extra prize list of the Sharpshooters' Union is filling up to very attractive dimensions. In addition to the donations already noted in the FOREST AND STREAM of last week, the Columbia Rifle Association have given a gold watch, valued at $75; Gus Lauter, of the same association, a Ballard rifle, valued at $50; the Independent Schutzen Corps, a watch, value $300; John F. Rodman, five barrels of old ale, value $100; H. D. Busch, a breech loading rifle, value $100; August Emmisch, 500 cigars, valued at $50, and the Jersey Schutzen Corps, $150 cash.

HACKENSACK RIFLE ASSOCIATION.—Monthly meeting for diamond badge, March 22; short-range:

W Holberton	5	5	4	4	4	4	4	4	4	4—42
E Ackerman	3	5	4	5	3	4	4	5	3	4—40
H L Bruns	3	5	3	4	5	4	4	5	4	3—40
Van Strachitz	4	3	4	4	4	4	3	3	4	2—35
B S Earle	3	5	3	5	4	4	3	3	3	2—35
A H Banta	3	4	4	3	4	3	3	0	3	4—31

MAYNARD RIFLE CLUB AND THE MAYNARD RIFLE.—With your permission I would like to give your readers some account of the performance of the Maynard rifle, manufactured by the Massachusetts Arms Co., which has come under my own observation. Last September we organized a long-range rifle club, under the name of the Wheeling Rifle Club. We experimented with Remington, Sharps and Ballard rifles. Nearly every member thought of no other rifle but Sharps or Remington for long-range shooting, and when I ordered the first Creedmoor rifle which ever came to this State, and it was seen to be a Maynard, I was asked by every one: "Why did you get that? I never heard of it." My only reply was, I had used one and become attached to it. In my practice at 800 yards, on our range on Nov. 7, 1877, I made sixteen bull's-eyes out of twenty shots, scoring 96 in a possible 100. One week later, on the same range, in thirty successive shots I got twenty-eight bull's-eyes, making a score of 148 in a possible 150. This, I believe, is better work than was done by either of the sixteen men shooting in the last international match. I have seen ten successive shots at 1,000 yards grouped into a space of less than one-fourth of the area of the bull's-eye. It has also made a string of eight inches at 220 yards with ordinary sights. Mr. H. W. S. Cleveland, of Chicago, who is recognized as a good authority on rifles, I suppose, has written a letter of several large pages to a gentleman here, which is mainly devoted to giving his experience of the Maynard rifle. He speaks of using a .40-cal., 20-in. barrel, for off-hand shooting, and says he has penetrated seventeen inches of white cedar with it. Also, in speaking of its accuracy he relates firing three shots at 1,000 yards, in which a 3, a 4 and a 5 was scored with this rifle, which is not intended for use at over 500 yards. He mentions also that a string of ten bull's-eyes at 200 yards is not unusual with it. Major Henry Fulton, who had never used the Maynard until last fall, told me that he had fired ten successive shots at 800 yards with a Maynard Creedmoor, which were grouped so closely in the bull's-eye that he could cover them with the palm of his hand. (He is not supposed to have a larger hand than other persons.) Our club, after seeing how very accurate a shooter the Maynard was, changed its name, and now we propose to shoot under the name of the Maynard Rifle Club of Wheeling. The Ballard rifle was sent here after our organization, and public trials of it were made, but no good was ever done here with it, and no rifles were sold. In off-hand practice I have fired five successive shots, with .40-cal. barrel, at 100 yards, into a four-inch bull's-eye, and scored 46 on two occasions with it at that distance, in ten shots, after forty shots had been fired without cleaning. My great admiration for the Maynard, and my desire to see it given a fair show, has induced me to write the above; and as the Maynard Creedmoor is only something over a year old I hope to see it make a name during the next summer, and put itself into the popular accepted list of first-class rifles.

Wheeling, W. Va. CHAS. E. DWIGHT.

MAYNARD RIFLE CLUB—*Wheeling, W. Va., March* 18, 1878.—The following scores were made last week in a regular competition for the "off-hand" team of the M. R. C.

McVay	4	5	4	4	5	4	4	5	4	3—42
Stanton	4	4	4	3	4	4	5	5	4	5—42
Carroll	4	4	4	4	5	4	4	5	4	4—42
Dwight	4	4	4	4	5	4	4	4	4	4—41
Worthen	4	5	3	3	4	3	3	4	4	5—39

Average 41 1-5.

MINNESOTA—*Minneapolis, March* 21.—The rifle club at Minneapolis made the following handsome score at 500 yards. Wind strong, blowing from the right:

Hoblitt.....Sharps	5	4	5	5	4	3	5	5	2	—41
Quam.....Rem	4	5	5	5	4	5	5	5	5	—49
Libby.....Sharps	3	5	5	2	5	3	5	5	4	5—42
Slotten.....Rem	5	5	5	4	5	5	5	5	5	5—49
Westcott....Sharps	4	3	5	4	4	2	4	4	5	5—40

Mr. Slotten's score, 49 out of a 50, is a remarkable score.

UTAH RIFLE ASSOCIATION.—At an adjourned meeting of the Utah Rifle Association, held at Salt Lake City, March 14, the following business was transacted:

The committee reported the by-laws of the Association, in the hands of the printers, would be in readiness for distribution in the course of a few days. The finance committee, consisting of Messrs. John and James Sharp and John Groesbeck, was empowered as a special committee to secure prizes for competition at the spring meeting of the association. G. A. Mears and John Sharp were appointed a committee to designate some one person to represent the association at the coming riflemen's association, to be held in New York city in May next. H. Spiers and J. H. Tatey were appointed a committee to report upon the advisability of securing another range for the association, the Arsenal Hill range being deemed not suitable for long-range rifle practice. F. D. EVANS, Sec.

CALIFORNIA—*San Francisco, March* 10.—At San Bruno, yesterday, the match between Messrs. Klose, LeBreton and Maher, of the National Guard, and Messrs. Hook, Ladd and Warren, of the Union Guard, took place. The match was forty shots each at 200 and 500 yards, and resulted in a victory for the latter team by twenty points. Following is the score:

	200 yds.	500 yds.		200 yds.	500 yds.
Hook	154	170	Klose	160	150
Ladd	161	158	LeBreton	161	159
Warren	162	167—952	Maher	159	163—962

L. L.

San Francisco.—Our first shooting since the rainy season set in took place at Bay View on the 10th of this month. The following are the scores:

	200	500	T'l		200	500	T'l
Lieut J Robertson	45	41	86	M A McElhinny	42	39	81
Capt H J Burns	43	41	84	W W Perkins	38	41	79
Corp W F Leeman	40	43	83	H F Bacchus	38	38	76
Priv F G Blinn	40	43	83				

Lieut. Robertson having won the medal three times it now becomes his individual property.

After the match for the company medal, a side match of forty shots at 200 yards took place between Capt. Burns, Lieut. Robertson, Corp. Leeman and Corp. Carson, with the following result:

Lieut J Robertson	5	5	5	5	4	4	5	4	4	4—45
	4	5	4	4	5	4	3	5	5	4—43
	4	5	4	4	4	4	4	4	4	4—41
	5	4	5	4	4	4	4	5	4	4—43—172
Capt H J Burns	4	5	5	5	4	4	4	4	4	4—43
	4	4	5	4	4	4	4	4	4	4—41
	4	4	4	4	4	4	5	4	4	4—41
	4	5	4	4	4	4	4	4	4	4—41—166
Corp F E Carson	4	3	4	4	4	4	5	5	3	4—40
	4	5	3	4	5	4	4	4	4	4—41
	3	5	3	4	3	4	5	5	4	3—39
	4	4	4	5	4	5	4	5	5	4—44—164
Corp W F Leeman	4	4	4	4	4	4	4	4	4	4—40
	4	4	4	4	3	5	4	5	4	4—41
	3	4	4	5	4	4	4	4	4	4—40
	4	4	4	5	4	5	4	4	4	4—42—163

The late storm washed away our target and bulk-head, and of course we have not been able to go along with our regular matches. We have got everything again in first-class running order, so I expect to be able to send you our scores every time we shoot. J. R.

DR. CARVER'S FEAT OF RIFLE SHOOTING.—A San Francisco correspondent writes us: "On the 22d of last month I witnessed Dr. Carver perform his feat of breaking 750 out of 1,000 glass balls, thrown into the air, with a Ballard parlor rifle. The thrower stood about 20 feet distant, and threw the balls from 15 to 25 feet into the air. His aim was to throw the balls exactly perpendicular, in which he showed almost as much skill as the Doctor did in hitting them. The most of Carver's misses occurred when the ball failed to ascend vertically, and described an arc instead of a point of rest at the conclusion of its upward flight; but Dr. Carver also hit a number of balls, not only on the curve, but also after it had ceased, and the ball began its perpendicular descent. He succeeded in breaking 885 in 1,000, and at the conclusion of the match amused himself and the lookers-on by shooting holes through copper cents and half-dollar pieces. One over-confident individual, who handed over a half eagle to be shot at with his heavy Winchester, had the satisfaction of seeing (or rather hearing) the gold coin whirled off into space at the first fire. Dr. Carver is certainly a wonderful shot with the rifle, and it is doubtful if he finds his match in this peculiar branch of fancy shooting. Being myself an expert in its use, I can fully appreciate the wonderful quickness and precision shown in the shooting, as seen at Oakland Park, and I fully believe that not one riflemen in 10,000 can attain to a like degree of skill with any amount of practice. With the shotgun, I fancy, he will meet with his peers.

THE NEW SCORE CARD.—The time of the competition for the new score card, for which a prize was offered in our last has been extended to April 20. All forms, prepared as before specified, are to be sent to Major Henry Fulton, 300 Broadway.

"PERRY'S GREEN-BOOK" FOR RIFLEMEN.—The great success Mr. Perry has achieved with his improved system of score book for the use of riflemen, with the silicate slate added, has induced him to publish a second edition. The best commendation of the "Perry Green-book" is that the majority of the marksmen use it. The book is considerably improved over the first edition, some suggestions of Sir Henry Halford's having been adopted. We can recommend Perry's score book, from personal experience, as being the most handy score book we know of.

AN AUXILIARY RIFLE.—How to convert a shot-gun into a rifle is a problem which has long sought a solution. Whether to carry into the field a shot-gun or a rifle, so as to be prepared for any kind of game, is a question often asked. Now if some method could be devised, some plan of simple arrangement, when, in a few seconds, the barrel of a shot-gun could be turned into a rifle, such an arrangement would be pretty certain to fill a very much required want. That such a plan has been hit upon, there can be no doubt. By means of the auxiliary barrel, in a few seconds of time, just as readily as a shell can be placed in the chamber of a breech-loader, a rifle tube can be inserted into the barrel of the gun, and a capital rifle is at the disposal of the sportsman. There are no screws to fix, no nuts to fix into place, no delicate adjustment to be made. All you do, as has been stated, is to chamber your rifle barrel in your gun, and that is the end of it. A rifle barrel can be put in the gun and taken out in certainly twenty seconds. It must be remembered that the Auxiliary Rifle is no pop-gun. It can be furnished by the manufacturers of calibres, that would be efficacious for all kinds of four-footed game. There can be no wear nor strain on the gun barrel, as the whole method of fitting the rifle into the gun rests on the same principle as in the introduction of a metallic shell. Particular attention is called to the advertisement.

UPSET OF BULLETS.

EDITOR FOREST AND STREAM:

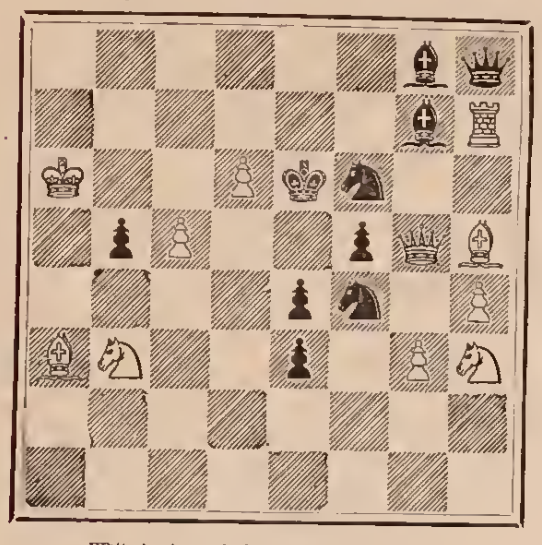
In response to Major Fulton's query—"If the bullet is upset enough to fill the grooves at once, how can it be shortened still more?"—please allow me to say that the bearing surface of a bullet is from one-third to two-thirds its length; the balance of the bullet is tapering more or less. This bearing surface fills the grooves at the beginning of the force; whatever shortening, if any, takes place after that, must be derived from the compressibility of the metal and the taper of the bullet. Yours, hastily, F. HYDE.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 11.

Tourney set, No. 7. Motto: Only for Position.



White to play and give mate in three moves.

SOLUTIONS TO PROBLEMS—NO. 9.

1—Q-K K2	1—B-Kt5	1—	1—B-Kt3
2—Q-Q B6	2—Any	2—Q tks Kt	2—K B P1 (a)
3—Q tka Q P mate		3—Q tks B mate	

NOTES.

(a) 1—	1—	1—	1—K B P1
2—	2—B tks Kt	2—Q-Kt3 ch	2—Any
3—Q-Kt7 mate		3—Q mates	

The following games are further translations of the Vienna Opening as found in the *Handbuch*:

Game No. 32.—VIENNA OPENING.

White.	Black.	White.	Black.
1—P-K4	1—P-K4	7—P-Q B3	7—B-Q B4
2—Kt-Q B3	2—Kt-K B3	8—Kt-Kt3	8—B-K3
3—Kt-K B3	3—B-Q Kt5 (a)	9—P tka B P	9—Kt P tka P
4—Kt-Q5 (b)	4—Kt tka Kt	10—P-Q3	10—P tka Q P
5—P tks Kt	5—P-K5	Even game.	
6—Kt-Q4	6—P-Q B3		

NOTES.

(a) If 3—Kt-Q B3, then 4—B-Q B4, 4—B Q Kt4, and the opening is the same as in the Two Knights' Defence. If 4—P-K B4 (?), 4—P tks B P, and we have an irregular defence to the King Knight's Counter Gambit.

(b) Also, 4—Kt-K5, 4—Q K2; 5—P-K B4, 5—P-Q3; 6—Kt-K B3, 6—B tks Q Kt; 7—Q P tks B, 7—Kt tka K P; 8—B-K2, 8—Castles; 9—Castles, obtaining, however, no advantage.

Game No. 33.—VIENNA OPENING.

The first two moves are the same as in the preceding game:

White.	Black.	White.	Black.
3—B-Q B4	3—Kt tks K P? (a)	6—P-Q4	6—Kt tks P
4—B tka P ch	4—K tks B	7—Kt-K B3	
5—Kt tks Kt	5—Kt-Q B3	White has the best game.	

NOTES.

(a) If 3—B-Q B4; 4—Kt-K B3, or if 4—P Q3, or 4—P-K B4, we have ariations previously published. If 3—P Q Kt4?; 4—B tks P, 4—P-Q B3, which appeared in the Vienna *Zeitung*, 1855, p. 128. White plays 5—B-Q R4 or B K2. This Evans' Gambit by the second player, is weak.

Game No. 34—VIENNA OPENING.

The first two moves are the same as in Game No. 32:

White.	Black.	White.	Black.
3—P-K B4	3—P Q4	11—Castles Q R	11—B tks Q Kt
4—P tka Q P	4—P-K5 (a)	12—Q tks B	12—B tks B
5—P-Q3	5—B-Q Kt5	13—Q R-K	13—Q-K4
6—P tks K P	6—Kt tks K P	14—Kt tks B	14—Q tka Q P
7—Q-Q4	7—Q-Q2	15—Q tka Q B P	15—Q tka K Kt P
8—B-K3	8—Castles	16—K R-K Kt	16—Q-Q B3
9—B-Q2	9—Kt tks B	The game is even.	
10—Q tks Kt	10—B-K Kt5		

NOTES.

(a) This variation is taken from the notes in the *Schach Zeitung*, 1860, p. 68, to a game between Hampe and Pitschell. The game may also be equalized as follows: 4—Kt tks Q P; 5—Kt tks Kt, 5—Q tka Kt; 6—P tks P, 6—Kt-Q B3; 7—Kt-K B3, 7—B-K Kt5; 8—B-K2, 8—Kt tks K P.

Game No. 35.—VIENNA OPENING.

The following game is identical with the move in Game No. 34 to the 4th move:

White.	Black.	White.	Black.
4—P tks KP	4—Kt tks K P	7—Kt P tks Kt	7—Kt-Q B3
5—Kt-K B3	5—B-K Kt5 (a)	8—P-Q4	8—K B3
6—P-Q3	6—Kt tks Kt	The game is even.	

NOTES.

(a) The defence can also continue here by: 5—B-K Kt4; 6—Q-K2, 6—B tks Kt; 7—Q P tks B, 7—Castles, and Black possibly has the advantage, which, however, Lowenthal, 1867, p. 7, doubts.

SPECIAL NOTICE.

We also commence this week the publication of variations from the *Handbuch* in the PETROFF DEFENCE, and it is our intention to add still another opening from this incomparable chess work next week. These variations are well worth preserving as a reference.

Game No. 36.—PETROFF DEFENCE.

This game is also translated from the *Handbuch*:

White.	Black.	White.	Black.
1—P-K4	1—P K4	8—B-K3	8—P-Q5
2—Kt-K B3	2—Kt-K B3	9—B-K B4	9—P-Q6
3—P-Q4	3—Kt tka K P (a)	10—B-K3	10—B tks B
4—B-Q3	4—P-Q4	11—P tks B	11—B-Q R3
5—P tks Q P (b)	5—Kt-Q B3	12—Kt-Q2	12—Q-Q4
6—B-Q Kt5 (c)	6—B-Q B4	Black has the best game.	
7—B tka Kt ch	7—P tks Kt		

NOTES.

(a) It appears less advantageous to take P with: and if 4—P K5, then 4—Kt-K5: 5—Q K2, 5—B-Q Kt5 ch; 6—K-Q, 6—P-Q5; 7—P tks P, 7—P-K B4; 8—P tks P, 8—Q tks P; 9—Kt tks P.

(b) If White capture 5—Kt tka P, then Black continues with: 5—P-Q B4; 6—P tka P, 6—Kt tks P

(c) Or 6—Castles, 6—B-K B4; 7—P-Q B4, 7—B-K3, and the game is even.

Game No. 37—KNIGHT'S DEFENCE

Between the Globe Chess Club, of Boston, and the Newton Chess Association, at the room of the G. C. C., March 6, 1878:

White. Globe. Snow, McIntyre, McMullen.	Black. Newton. Batea, Sargent, Hunt.	White. Globe. Snow, McIntyre, McMullen.	Black. Newton. Batea, Sargent, Hunt.
1—P-K4	1—P-K4	18—Q-Kt3	18—Q-K3
2—Kt-K B3	2—Kt-Q B3	19—Kt-Q B5	19—Q-B3
3—B-B4	3—Kt-K B3	20—Kt-K4	20—Q-K3
4—Kt-Kt5	4—P-Q4	21—P-K B4	21—Q tks Q R P
5—P tks P	5—Kt tks P	22—Kt tks B	22—P tks Kt
6—Kt-tks K B P	6—K tka Kt	23—P tka P	23—K-R2
7—Q-K B3 ch	7—Q-B3	24—B-Q4	24—P-Kt4
8—B tka Kt ch	8—B-K3	25—P tks P	25—Q-Q4
9—B tks Kt	9—P tks B	26—P Q B3	26—B-K3
10—Q tks P	10—B-Q3	27—B-K B6	27—R-Q Kt sq
11—Kt-B3	11—Q-Kt3	28—P-Q4	28—R tks P
12—P-Q4	12—B-K B4	29—Q-Q3 ch	29—B-B4
13—Q-K B3	13—K R-K B sq	30—Q tks B ch	30—Q tks Q
14—Kt-K4	14—K-Kt sq	31—R tks Q	31—K-K Kt3
15—Castles	15—Q R-K sq	32—P-K Kt4	32—R tks B
16—B-K3	16—P-Q R3	33—R tks R ch	33—K tks R
17—Q R-K sq	17—P-K R3	34—P-Q7	34—Resigns

A NEW CHESS BOARD.—Mr. F. E. Brenzinge, No. 83 Chambers st., New York, has just introduced a new pocket chess board. We unhesitatingly recommend it as the best article for the price ($1.25) in the market.

Rational Pastimes.

SNOW SHOE CLUBS.—The pastime of snow shoeing is a favorite sport among our Canadian cousins. For some reason, whether it be that from our want of familiarity with it we do not appreciate this invigorating and health-giving sport, or that the snow, which is as necessary for snow-shoe tramps as Hamlet, etc., is an uncertain factor in our calculations, we have paid little or no attention to it in this country. This is to be regretted, because the list of our winter out-of-door recreations is too limited, and when the snow comes it coops us up in the house instead of inviting us to cheery tramps over the hills. The following account of the Cornwall, P. Q., Snow-Shoe Club will show how they do it in Canada.

Accompanying the letter is a photograph of the club at one of their winter *rendezvous*. The Canadian scenery, trees bending beneath their weight of snow, cottages half hidden in their fleecy covering, and the members of the club in picturesque costume, combine to make a most pleasing picture.

Our columns are ever open for the presentation of any pastime giving health and manly development. We share the hope of our correspondent that we may some day be able to devote a space in this journal to the pleasures of the snow fields:

The Cornwall Snow-Shoe Club was organized in the winter of 1876-77, with a roll of fifty members. At present we are increased to nearly double that number, most of whom join in the weekly tramps. These tramps extend to distances varying from four to fifteen miles and return, depending a great deal on the condition of the snow and weather. The costume of the club consists of a steel-gray blanket-coat, unlined, scarlet sash, blue tuques and stockings, which combine to present a very pretty picture, as the members step off in Indian file over the crisp, frozen snow, under a bright midwinter moon, across fields, through the woods, jumping fences, leaping ditches, and scrambling through farm yards, intent on making a "bee-line" for the desired destination. Many a song, with full chorus, enlivens our tramps, echoing over the hillside and startling the sleepy cottager, as snatches of the music, weird and mysterious, are borne upon the frosty air. The present winter has not been a favorable one for show-shoeing. However, the club has given several concerts in the neighboring villages, which passed off very pleasantly and successfully.

Snow-shoeing, as a pastime, seems to be almost entirely a Canadian institution. We would be happy to hear that some of our American cousins, who live in the northern latitudes, would follow our example and organize snow-shoe clubs. We enjoy the fun; why should not you? I hope to see, at not a far distant date, a small corner of the FOREST AND STREAM devoted to snow-shoeing. G. H. W.

O'LEARY WINS THE RACE.—Another triumph is scored for American pedestrianism by the feat which O'Leary has just accomplished at the international walking match in London. The telegraph kept us on this side fully informed of the progress of the contest, and America's chances for the prize formed the theme of conversation in athletic circles. The Irish-American champion had a long and a hard walk for that purse, and we wish him all possible enjoyment of his reward.

The contest began on Monday at 1 o'clock A. M. At the end of 24 hours the contest was practically between the four following competitors:

	O'Leary.	Vaughan.	Brown.	Corkey.
Tuesday, 3 P. M.	160	153	153	159
Wed., 11 A. M.	231	222	224	distanced.
Thurs., " "	318	307	298	
" 12 P. M.	373	359	337	
Friday, " "	457	441	415½	
Sat., " "	490	468	443	
" 1 "	493	470	447	
" 2 "	497	473	447	
" 3 "	501	478	452	
" 4 "	505	483	458	
" 5 "	508	487	463	
" 6 "	512	493	468	
" 7 "	516	497	472	

Vaughan completed 500 miles at 7:38 o'clock and then retired. O'Leary walked until 8:10 o'clock, when he had completed 520 miles and two laps, which is 440 yards further than the best performance on record. Brown walked till 8:30 o'clock, scoring 477 miles and two laps. Ide also walked till 8:30, scoring 465 and four laps. O'Leary was then declared winner amid the playing of national airs and boundless excitement and enthusiasm.

HARLEM ATHLETIC CLUB.—At the annual meeting of the H. A. C., last Thursday evening, the following officers were elected: President, J. D. Rihlet; Vice-President, C. W. Horton; Recording Secretary, W. I. K. Kendrick; Corresponding Secretary, J. S. Nelson; Treasurer, E. W. Molson; Captain, R. Morgan; First Lieutenant, T. H. Armstrong; Second Lieutenant, F. J. Mott; Trustees, J. B. Arnold, W. H. See, Jr., T. B. Bates, E. C. Kuster, F. Renshaw and W. M. Nelson. The report of the captain of the club shows that 113 medals had been won by members of the club during the past year, sixty-one of which were for first honors. The entertainment to the ladies will be given on April 9. A children's class will be formed, to meet on Wednesdays and Saturdays for instruction in calisthenic exercises, for which a fee of fifty cents a month will be charged.

NEW YORK ATHLETIC CLUB.—The opening athletic games of the season will take place on the grounds of the New York Athletic Club, Mott Haven, on Saturday, April 6, at five o'clock P. M. Entries will close on April 2, and must be addressed to William R. Whitmore, Secretary, box 3,101 New York Post Office.

CRICKET.—The grand match at cricket between the Australian team—now en route for San Francisco—and the Middlesex Eleven, of London, is announced to take place at Lords on June 20. They will have to close up all their American games by the first week in May, as they are engaged to play in Nottingham on May 20.

—The entries for the N. Y. A. C. games, April 6, close April 2. The secretary's address is Wm. R. Whitmore, P. O. Box 3101.

—Christopher Rice, at Rutland, Vt., the other day walked 50 miles in 9h. 16m. 22s.

Sea and River Fishing.

FISH IN SEASON IN MARCH.

SOUTHERN WATERS.

Pompano, *Trachynotus carolinus.*	Grouper, *Epinephelpus nigritus.*
Drum (two species). Family *Sciænidæ.*	Trout (black bass), *Centropristis atrarius.*
Kingfish, *Menticirrus nebulosus.*	Striped Bass, or Rockfish, *Roccus lineatus.*
Sea Bass, *Sciænops ocellatus.*	Tautoglin, *Tomatomus saltatrix.*
Sheepshead, *Archosargus probatocephalus.*	Black Bass, *Micropterus salmoides: M. nigricans.*
Snapper, *Lutjanus caxus.*	

☞ The trouting season on Long Island, which opened last year, and previously on the 15th of March, does not open this year until the 1st of April. The law is now uniform throughout the State.

"Deacon Jones, we will go a fishing, silent and circumspect, and no running to the beat notes."—*Professor Williams.*

The season has arrived when the angler feels the first symtoms of the trout fever, a disease that gains strength with the warm weather and almost incapacitates him for work. Unerring signs are the overhauling of flies and rods; putting the latter together and exercising it to the great danger of fragile objects within reach; the haunting of fishing tackle shops and there discoursing upon previous experiences and exploits. There is no cure known but for the patient to go as soon as the law allows to some cool stream and there wade, whip and exult. This early spring weather has brought on the "fever" very suddenly, and with great severity. The robins are singing away on the bare apple trees; bluebirds are building, frogs are croaking, snipe are rising over the meadows and marshes, and shad are in the rivers. As soon as the 1st

of April comes the streams will have to suffer and be thrashed. Some few graceless poachers have already sneaked off before their more honest brethren and are bragging of the trout they have caught, but public sentiment has changed very much lately, and now gentlemen do not do such things.

It is to be regretted that there is so little free trout fishing near New York. To be sure there are plenty of places where anglers can buy trout for $1 per pound with the privilege of catching them, but it is expensive and not satisfactory. They do say though, that some celebrated anglers in New York will allow themselves to be tempted into buying a big trout or two, just to fill up the creel and improve the appearance of their catch; but that may be one of those Long Island stories. There were once a good many streams not far from the city where a good angler could have fair fishing, but the wretched habit of keeping all the fingerlings for the basket has depleted them, and the trout are so scarce that it is not worth while to go after them.

June will now soon be upon us, and then we will have the cream of the sport. Nothing can equal a lovely June day on a pleasant trout stream. The woods are fragrant with the wild grape, the ground studded with violets and hundreds of different wild flowers, the banks lined with the beautiful laurel in full blossom, and the wood-robin, the sweetest of our song birds, can be heard in every direction. Fortunate is the man who knows of such pleasant places and can enjoy them. Imagine yourself there some quiet afternoon, with pipe alight and a fresh leader and cast of flies just put on. You see ahead of you your favorite pool, and here and there a dimple on the waters that makes your fingers tingle, for you know that the big trout are there. Cautiously you approach, step by step, and at last drop your coachman like a flake of snow, just where it ought to go. There is a bulge in the water and you strike. Wizz! goes the reel. The pliant rod does its duty, and after a few moments the speckled beauty is in your net. So you go on until the sun is down and the whippoorwill takes the place of the wood-robin. Then you trudge back to your tavern, after a good day's sport, a happy and contented man. W. H.

Fish in Market—Retail Prices.—About three hundred shad have been taken in the North River the past week. Our quotations are as follows: Striped bass, 20 cents; large do., 15; smelts, 15; 20; frozen salmon, 35; green do., $1.25; California 40; mackerel, large, 25; mackerel, small, 10; Southern shad, 60; native, $1; white perch, 15; Spanish mackerel, 35; green turtle, 15; Terrapin, $18; frost fish, 8; halibut, 12; haddock, 6; codfish, heads off, 8; black-fish, 15; Newfoundland herring, 6; flounders, 10; do., small, 6; eels, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 20; turbot, 25; scallops, $1.50 per gallon; soft clams, per 100, 80; do., large, 60; whitefish, 15; salmon trout, 10.

Massachusetts—*Lynnfield.*—Humphries' Pond, at Lynnfield, is closed for ten years, under lease to private parties, who intend to stock it with all the varieties of good food fishes they can procure. Humphries' Pond, or Suntaug Lake, is one of the finest sheets of water in the State, and, we believe, the only one over the regulated size that is owned entirely under riparian rights. Of late years trespassing during the summer months has become an unbearable nuisance, and fishing good only in name, so that the owners have leased the pond, and it is now closed for all purposes except by special permit from lessees. C. T. J.

New Bedford, March 23.—In this vicinity the spring fishing season is at least one month earlier than usual; large quantities of alewives, perch, bass, cod, etc., are now taken in our waters. I never saw fish sold at so low a price at this time of year. Concha.

Movements of the Fishing Fleet.—The past week the whole number of arrivals reported are 22, against 41 the previous week and 65 the week before that. The receipts of fresh halibut for the week have been 430,000 lbs. The Georges vessels brought in 350,000 lbs. round codfish.—*Cape Ann Advertiser, March* 22.

Tennessee—*Nashville, March* 21.—For the past week the weather has been most favorable for fishing, and great numbers of persons have been out to all the different streams in the immediate vicinity. The best takes have been in Mill Creek by a gentleman who is generally successful. One afternoon he brought home five nice trout (bass), and the next time eight, one or two of the latter scaling one and a half pounds. Several parties have left town for the Harpeth River. A large number of shad have been on the market here during the last week. J. D. H.

Savannah, March 1.—In this vicinity our fishing season is commencing early this spring. One morning last week I took four bass and several perch and bream. We were very much annoyed by bell benders, called here water dogs. They were out in force, and we caught two that would weigh at least 4 pounds each. The mud turtles and moccasins were also swimming around, and the former took some stock in our minnows. It is very unusual to see snakes, turtles and water dogs at this season. Will.

Notes from Florida.—*Halifax Inlet, March* 15.—Jean Ribault, who visited the mouth of the St. John in 1562, says that the fish were there so plenty that "ye can take them without net or angle, as many as ye will." Two hundred years later Capt. Bernard Rowans, an English engineer who surveyed this coast, writes of the fishes of the Indian River, that "they so abound that a person may sit on the bank and kill them with a stick." A Mr. Vans, who lives on the Musquito lagoon, says that when he wants fish to feed his hogs he goes to a shallow part of the lagoon with a hoe, and brings out as many drums as he wants, just as a Northern farmer would resort to his potato field. I myself, lately saw a boy at this Inlet kill two large salt water trout with a stick, they were in a shallow slough where they had been left by the falling tide; they weighed five or six pounds each. Pacetti went there soon after with his cast net, and with three or four casts he got enough trout, bass and mullet, to nearly load our boat; he, however, is so skillful with that implement as to almost equal the Arab fisherman Nasrollak, of whom Southey writes, that if he threw his net upon the sand of the desert he was sure of catching fish. With all this abundance, the hook fishing in these rivers has been for the last four or five weeks very poor, No fish have been taken abundantly except sheepshead, and of that kind of sport one gets tired when fifty of them can be taken in one tide.

The people at the head of the Halifax River are attempting to open a new inlet to the ocean, near Bulow's Creek, the object being to let out the great volume of fresh water from the Tomoka, which has caused much sickness this year as well as killing the oysters and driving away the sea fish. This is a large enterprise for so poor and thinly settled a country. At the last accounts Jacksonville and St. Augustine were crowded with visitors, and all the Florida resorts were filling up after being empty since the beginning of the season. Loud's Ocean House at New Smyrna is full of hunters and anglers, the latter of whom have to subsist on faith and hope for the present; that is, the old hands, whose principal object of pursuit, the red bass, is very scarce—the new comers, who are satisfied with sheepshead fishing, can have sport enough. S. C. C.

Wisconsin—*Ashland, March* 16.—Fred Peterson and Peter Anderson caught one hundred and eighty pounds of herring Wednesday forenoon, book and line fishing.

California—*San Francisco, March* 17.—The Sacramento, Russian and American rivers are full of salmon, salmon trout, and trout, and will afford anglers and sportsmen plenty of sport this season. They are very large.

—"Come, come, my son, get up. The early bird catches the worm."

"All right, dad; you catch the worms and I'll go a-fishing."

Beautiful Fly Rods.—Years ago we used to delight in the privilege of entry to the little private workshop of the lamented Thad Norris, Esq. We should more properly speak of his quarters as an *atelier*, or studio, for he was not a mechanic by trade, and the word sounds more *distingue*, as the Frenchmen say. In his early efforts at rod-making, our friend Norris filled in his leisure moments by planing, sawing, serving and varnishing his not very excellent rods, pausing betimes for a pull at his cob pipe, or to chat with some chance visitor, until at last, after many months, his daily practice made him nearly perfect, and his rods came to be beautiful and much sought for by brother anglers, particularly by those who had the good fortune to be numbered among his friends. The demands grew so that he was unable to fill them, and a market having thus sprung up, the value of his rods was enhanced. He put a big price on them, and thenceforward, for several years, his business was sufficiently remunerative to keep him supplied with pocket change and tips to the contribution box on Sundays. But, finally, time grizzled his locks, and the good-natured dimples on his physiognomy deepened into furrows; his handiwork became less complete through that unsteadiness which the accumulation of years imposes upon the nerves, and then the few rods that he occasionally made were purchased more as *souvenirs*, so that he who is now so fortunate as to possess one of them, exhibits it with a fervor that does not attach to a contemplation of ordinary shop goods. William C. Prime, Harry Venning, of St. John, Walter Brackett, and other well-known gentlemen anglers, speak in the highest terms of the Norris rods which they own, and can hardly be induced to admit that there are any superior to them. No doubt veneration for the maker engrafts a quality upon them. Good old Norris! Many scores of friends lament his untimely taking off. Our retrospection has been naturally awakened by the visit of a resident of Utica, Mr. H. P. Buckingham, who has shown us a most exquisite eight-strip split bamboo rod of his own make. It is a beauty to the eye and confiding to the hand. Last year we saw three of his rods; but this one is so incomparably superior that it reflects much credit upon his study and perseverance during the intervening months. Mr. Buckingham is as strictly an amateur rod-maker, as Mr. Norris was. His success has induced him to manufacture for the market, and he places his price at $30 per rod. Of course he can make but a limited number, and he will not be strictly a competitor to the trade. Those who have any curiosity to inquire farther will be served with desired information by addressing him.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
March 28	7	55	4	23	3	42
March 29	8	51	5	15	4	34
March 30	9	38	6	65	5	19
March 31	10	19	6	46	5	59
April 1	10	56	7	23	6	33
April 2	11	31	7	52	7	08
April 3	M		8	24	7	44

Boston and Vicinity.—The South Boston Yacht Club holds its annual dinner April 10. The club has recently received several new members and several new yachts. The Boston *Herald*, which offers a cup for competition among six-oared amateur crews, speaking of yachting and boating, says: "The Addie Elmer, lately purchased by Mr. Robert Kidd, and now undergoing extensive alterations, will be added to the South Boston Club. Mr. Howard P. Elwell, of Gloucester, a new accession to the club, has nearly completed a very handsome 24-foot centre-board cat-rig yacht, which will make her appearance in the regattas the coming season. Captain Woodward is making numerous alterations in the Ivy, a much needed one being the setting of the mast some four feet aft. Mr. Seavy, who has lately joined the club, will swell the fleet by the addition of a 20-foot keel cat-rig. The annual Fast Day regatta of the mosquito fleet will be sailed April 11, and already the hammer, brush and putty knife are being applied to the tiny craft.

"Probably no city in the country can produce as many fine pair-oared crews as Boston, among whom are Faulkner-Reagen, Gookin Brothers, Connolly Brothers, and McGabey and Henry. Mahoney is as yet undecided whether he will row pair; but, with such a mate as Biglin or Plaisted, the two would make a strong team. In the four-oared working boat class, the Lakeman crew will, without doubt, maintain its position of last year, ranking first, though this is by no means certain, should the Shawmut crew secure a good man with Mahoney and Gookin Brothers. The Riverside and City Point crews have fallen off, especially the latter, which now ranks about medium. Both will be represented at Silver Lake. The Lynn, Casey, Atlantic, East Boston, Charlestown, and other minor crews, may also enter in the coming regattas. At present there is no professional four-oared crew in this vicinity, but there is excellent material for several such crews. In single-scull open boats a number of new comers are to enter the lists for prizes, and a fine contest may be looked for among this class of scullers."

—The officers of the Young Men's Christain Association Rowing Club are arranging for building a new boat-house. Four new hydraulic rowing machines have been added to the gymnasium.

—The Water Lily, a South Boston 19-foot open yacht, which left that city about Jan 1, on a cruise eastward, has just been heard from as having reached Mount Desert. Her crew consisted of two men, and the successful cruise of such a craft in such waters, and in such a season of the year, has created no little comment among yachtsmen.

The boat-builder, Mr. Geo. Roache, is building for his own use a catamaran, which is to be composed of two outrigger boats, each 30 feet in length, 2 feet 3 inches depth of hold and 2 feet 2 inches in beam. The platform is 8 feet wide and 14 feet in length, and is fixed midway between the two outrigged boats, which are fifteen feet apart. The catamaran will carry a jib and mainsail rig, and when loaded will only draw nine feet of water.

New Modeled Yacht.—Mr. John C. Foster, of East Gloucester is having a yacht built on a new model, which is expected to afford extra speed and good seaworthy qualities. She will be between 50 and 60 feet in length of deck, with keel about three-fourths as long, and a deck width of nine feet.

New York Yachting Notes.—The schooner-yacht Atalanta will be put in commission on the 15th prox....Mr. S. J. Colgate's yacht Idler will not be brought out this season. ....The Tidal Wave has been thoroughly overhauled.... Mr. A. Cary Smith has been making important altarations in the sloop Madcap, now owned in Boston. Her shoe has been dispensed with, and the balance of sail preserved.... The schooner-yacht Nettie is fitting out for Europe....Mr. W. H. Langley, the owner of the Comet, which will not race this season, has returned to the New York Yacht Club the Bennet Challenge Cup recently held by the Comet, and it will be one of the prizes competed for at the June regatta of the club....The measurements of the new schooner-yacht Intrepid, N. Y. Y. C., are: length over all, 116 feet 3 inches; at water-line, 100 feet 11 inches; beam, 24 feet 5 inches; depth of hold, 11 feet 6 inches; draught of water, 11 feet 6 inches; tonnage, 270.60 tons; cubical contents, 13,422.76. She is to be commanded by Captain Belmont, recently of the schooner-yacht Clytie, and before that of the schooner-yacht Ermengarde.

South Carolina.—Interest in aquatic matters is reviving. The Charleston Regatta Association will probably soon prepare a fine programme for their annual regatta. Several yachts are now being prepared for the fray. The Carolina Independent Boat Club, which has among its members some of our best oarsmen, will put some good crews on the river this year....The Palmetto Boat Club held their anniversary meeting on the 20th. Pres. E. A. Smyth having declined re-election, Wm. M. S. Lesesne was elected President; Robert M. Means, Vice-Pres.; Charles S. Chervey, Sec. and Treas.; H. Nabb Parker, boatmaster. The new President, Mr. Lesesne, is one of the oldest members of the club, and the enviable position now held by the Palmettos is in a great measure owing to his personal exertions. The club is in a very flourishing condition, both financially and as regards membership, and they expect to keep to the front this season, as they have done hitherto on almost every occasion. It is rumored that a splended first crew is made up, and among them some of the old first crew of the Palmettos, whose backs never have been seen in a race. Yenots.
Charleston, March 22.

—The Florida Yacht Club of Jacksonville, Fla., gave a reception last Monday evening to Capt. Jas. B. Eads.

—The Mystic Boat Club will hold its annual regatta June 8.

Rhode Island Championship.—The Narragansett Boat Club, of Providence, has challenged the Boat Club of Pawtucket to a three-mile race, with turn, in six-oared shells, for the championship of Rhode Island and a four-oared shell. The time and place has to be mutually agreed upon.

—Yale sends Kennedy, of Philadelphia, and the University crew of '66, to the Seneca Lake regatta.

The Watkins Regatta.—If we may judge from the great interest in the forthcoming regatta at Seneca Lake, that event will be one of the best attended events of recent years. About April 1 the Watkins Regatta Association will issue circulars containing full information respecting the boating reunion on Seneca Lake the latter part of May.

—Plaisted is practicing on the Harlem. He rows Hanlon on Toronto Bay May 15.

—The Carman Boating Association, of Carmansville, N. Y., will send representatives to Seneca Lake.

Osgood's Portable Boat.—Messrs. Osgood and Chapin, of Battle Creek, Mich., manufacture a new portable folding canvas boat, which unites in its construction the very desirable merits of simplicity, lightness and durability; and its price, $20 and $35, is, moreover, within the means of a a moderate purse. Fitted for trouting, duckling, etc.. The boat weighs 20 pounds; with bottom-boards, oars, etc., 40 pounds.

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On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

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Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

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This Institution was regularly incorporated by the Legislature of the State for Educational and Charitable purposes in 1868, with a capital of $1,000,000, to which it has since added a reserve fund of $350,000. ITS GRAND SINGLE NUMBER DISTRIBUTION will take place monthly on the second Tuesday. *It never scales or postpones.* Look at the following distribution:

CAPITAL PRIZE, $30,000.
100,000 TICKETS AT TWO DOLLARS EACH.
HALF-TICKETS, ONE DOLLAR.
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1 Capital Prize		$30,000
1 Capital Prize		10,000
1 Capital Prize		5,000
2 Prizes of $2,500		5,000
5 Prizes of 1,000		5,000
20 Prizes of 500		10,000
100 Prizes of 100		10,000
200 Prizes of 50		10,000
500 Prizes of 20		10,000
1000 Prizes of 10		10,000
APPROXIMATION PRIZES:		
9 Approximation Prizes of $300		2,700
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1857 Prizes amounting to		$110,400

Responsible corresponding agents wanted at all prominent points, to whom a liberal compensation will be paid.

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Write, clearly stating full address, for further information, or send orders to

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All our Grand Extraordinary Drawings are under the supervision and management of GENERALS G. T. BEAUREGARD and JUBAL A. EARLY.

The next drawing occurs Tuesday, May 14, 1878.

DISSOLUTION.

CHICAGO, March 13, 1878.

The co-partnership heretofore existing between Frederick J. Abbey, Christopher Olsen and William W. Foss, under the firm name and style of F. J. Abbey & Co., is this day dissolved by mutual consent. Said William W. Foss and Christopher Olsen are authorized to settle the affairs of the firm.

COPARTNERSHIP.

The undersigned have this day formed a copartnership, for the purpose of carrying on the business of manufacturing and selling guns and sporting goods, at the old stand, No. 43 South Clark street, Chicago, Ill., under the name and style of Foss Bros. & Co.

WILLIAM W. FOSS,
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mar28 1t CHRISTOPHER OLSEN.

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Fishing Pants, Coats, Leggins and Boots,

RUBBER CAMP BLANKETS,

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BECAUSE HE HAD NO

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Mar28 1t

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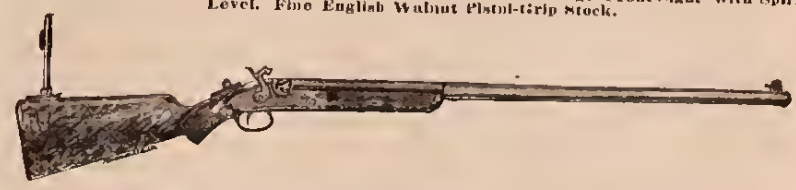

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In the spring traps now used to throw glass balls for practice shooting, sportsmen have a mechanical contrivance which should entirely do away with the "chances" which arise in trap-pigeon shooting, as the glass ball goes invariably in the direction desired by the trap pulles, or in which the trap is set. In bird shooting from a trap—which many dislike on account of the well-known objections to it—there is a large element of chance, as one man may have good, slow quartering birds, while his opponent may get strong "in-coming" or "tail-birds," making the match uneven, simply because the one has much easier shots than the other, and is not liable to miss or have his birds drop outside the boundaries. In order to derive the greatest possible benefit from trap shooting, and at the same time test the marksmanship of any number who may be engaged, it is necessary: **First**, that not only should the trap throw balls in different directions, but that each person shooting should have in every ten shots the same angles at which the others shoot, so that no one may be favored by chance or by the trapper; **Second**, that a record be kept of each person's hits and misses and the angles on which they occur, so that one may practise intelligently, knowing on what angles he needs more proficiency. It is believed that the plan adopted for scoring, (which has been copyrighted, together with all arrangements, whether of letters, or figures, characters or plats for recording shooting by angles) will be found all that is desired.

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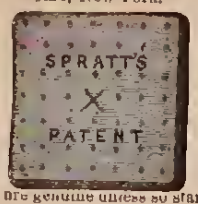

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FOR SALE—Imported French pointer dog. G. BAUER, 337 Fulton street, Brooklyn, N. Y. mar21 2t

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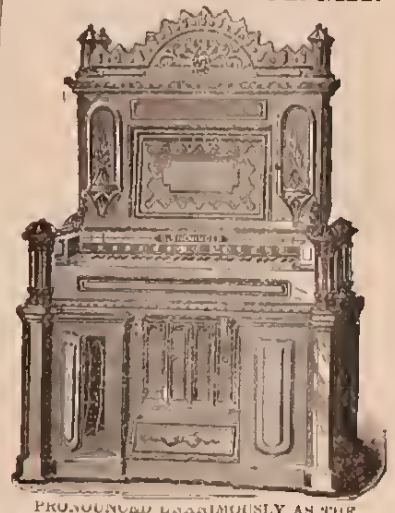

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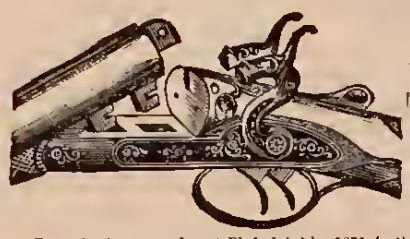

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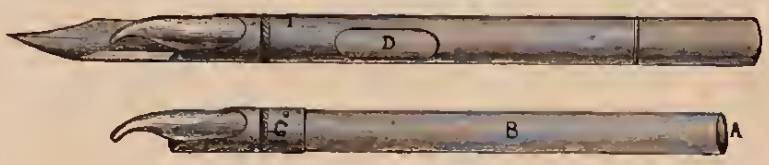

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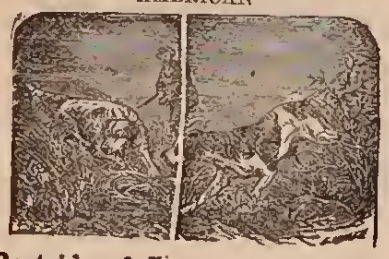

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IN PRESS, AND READY IN A FEW DAYS,

Containing Hints and Directions on Archery, Camping, Game and Glass Ball Shooting, Trout and Black Bass Fishing. Also Rules for Glass Ball Shooting.

SENT BY MAIL ON RECEIPT OF 15 CENTS.

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THAN THE SALE OF THIS BEAUTIFUL AND POPULAR BALL.

One Million and a Quarter

have been sold since August, and our moulds are now running night and day filling our constantly increasing orders.

Every Ball made to scale, and no imperfections. **$1,000** Reward to any one who can find a single ball in ten thousand beyond the maximum weight (two ounces). No thick sides or bottoms. Its uniformity of thickness won it favor from the first, and out of the immense number sold we have never had one complaint.

NO CLOSE DECISIONS.—A Feather-filled Ball once struck by shot, and the tale is told. *It satisfies every one on the instant, and saves all unpleasant work for Referees.*

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CARD.

During Mr. Paine's absence in England his Patents were grossly infringed upon. Glass Balls and Traps of the most worthless description were sold in large numbers. Balls that could not be broken with a cannon were thrust upon the market by thousands. On his arrival home, seeing this state of affairs, he immediately, with his fruitful brain, invented the Paine Feather-filled Glass Ball. American sportsmen are the best judges of its magnificent success.

No Sportsman's Warehouse is Complete without Paine's Feather-filled Class Balls. Men and Boys, from Maine to California, shoot at them! Old ladies darn socks on them! Children learn Geography on them! Babies cut their teeth on them! If you want a Ball for main strength and endurance try some other.

WARNING TO ALL.

The following will show how fully we are protected in the manufacture of the Paine Patent Feather-filled Glass Ball, and as the price is SO LOW there is little or no incentive beyond curiosity to infringe on the Patent:

UNITED STATES PATENT OFFICE.

IRA A. PAINE, OF NEW YORK, N. Y.

IMPROVEMENT IN GLASS-BALL TARGETS.

Specification forming part of Letters Patent No. **196,379,** dated October 23, 1877; application filed September 22, 1877.

To all whom it may concern:

Be it known that I, IRA A. PAINE, of New York City, in the County and State of New York, have invented a new and useful Improvement in Balls for Trap Shooting, of which the following is a specification:

The figure is a side view of one of my improved balls, part being broken away to show the construction.

The object of this invention is to furnish balls for trap-shooting which shall be so constructed as to "make the feathers fly" when broken by the shot, producing the same effect as when birds are struck by the shot.

The invention consists in a hollow glass ball for trap-shooting, filled with feathers or other light material, as will be hereinafter fully described.

A represents the ball, which is make of glass, is smooth upon the outer side, and has a neck upon one side for placing it upon the trap.

The ball A is filled with feathers B or other light material, as shown in the figure, which, when the ball A is broken by the shot, will be scattered through the air, showing that the ball was broken by the shot, and producing an effect similar to that produced when a bird is struck by shot, and enabling the marksman to see the effect of his shot, the smoke having time to disappear before the feathers can possibly reach the ground.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A hollow glass ball for trap-shooting, filled with feathers or other light material, substantially as herein shown and described.

Witnesses:
JAMES T. GRAHAM,
C. SEDGWICK.

IRA A. PAINE.

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Animal Portraiture.

Gentlemen desirous of having their Horses and Dogs painted will be guaranteed an authentic and perfect likeness. Reference to editor of this paper.

Sanguinetti

Oct18 tf

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SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

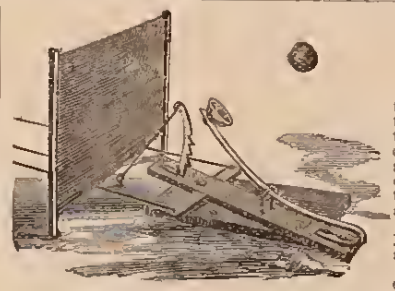
SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 10 A. M. Each team to consist of eight men. Entrance fee, $16 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

J. H. BEHRENS, Cor. Sec., 31 Bowery, New York



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These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

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Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. **Price $8. Old Style, $6.**

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

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Second and enlarged edition of "Field, Cover and Trap Shooting," by A. H. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, **Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill.** Dec6 tf

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, APRIL 4, 1878.

Volume 10.—No. 9. No. 111 Fulton St., N.

For Forest and Stream and Rod and Gun.

A SOLITAIRE.

A SOLITARY life the heron leads
In every land;
In thoughtful equipoise among the reeds
You see him stand,
As if great problems or heroic deeds
His thoughts command.

He comes from out the sky with slanting flight
Down through the air—
As if a fleck of cloud from realms of light
Were falling there—
And scans a murky beach with watchful sight
And timid care.

At rest he shuts his wings with quiet pride,
And seeks the dredge
Of weeds and mosses woven by the tide
Within the sedge—
Some lonely spot along the river side,
Or bayou's edge.

Think not he comes from labored flight to seek
For needed rest;
Or that his lonely life is but a freak;
The grim behest
Of hunger makes his whole demeanor meek,
And food his quest.

If fish or serpent, heeding not the form
That stands so still,
Comes lurking near, all reckless of the harm,
A flashing bill,
With never a premonition of alarm,
Will strike to kill!

The solitary life the heron leads
Is like some men's;
His thoughtful equipoise among the reeds
And silent fens,
Reminds of the stoic men of deeds
Who strike with pens!

J. C. BURNETT.

For Forest and Stream and Rod and Gun.

A Week on the Hushpucknia.

A PARTY of us, five in number, started down the Mississippi about the middle of November last, bent on slaughtering something in the way of game—that is, I speak for myself, for the main hold of the balance of the party was bear. Our generalissimo had collected together, by begging, borrowing, trading and, I guess, *purloining*, six as large and ferocious curs as one could imagine. Our pack consisted of seven in all, we taking one old hound that was used to the business as a leader, and the curs to do the fighting. The latter seemed to understand what was intended for them, and to keep in practice they fought among themselves whenever opportunity permitted. While waiting for the train or boat they would while away the tedious hours by a little wool picking. They fought in the baggage car, on the boat, in the woods and at camp, or any place, it made no difference to them whatever. When we were at a loss for other amusement we could, at least, have a first-class dog fight with all the latest improvements.

As I stated above, we had started down to the game country, but had not determined where we would hunt. We all agreed at last upon the Sunflower county of Mississippi. We got off the boat at Australia, 185 miles below Memphis. The weather was all that could be desired, except a little warm for us, as we were used to a colder climate. We laid in our supplies at Memphis, and all we had to do now was to find where to go and go there as soon as possible. We made inquiry among the natives and were told that game was everywhere about there, and back some distance people could scarcely live for the bears. They told such fabulous tales of what a hunting ground Hushpucknia was that we forthwith decided on that as our field of action. The distance varied as much as the men. They called it from seven to fifteen miles from the river. We found a man willing to haul us out there though for $5, and we struck out with the firm conviction of eating venison before sundown. We found the roads almost impassable from recent rains and hauling, as it was in the height of cotton and cotton seed delivering. We were informed that it had been raining more or less for three months; and it looked like it, for the low ground was full of water; an immense amount of cotton was still standing out, as the weather would not permit its being picked. We found we had blundered by coming this season, but were hopeful, as every one we met assured us we would have grand sport, there were "lots of bear," and gave us thrilling accounts of how they stole their pigs and destroyed their corn, etc. How we waded water and split mud! What cared we for that? all we wanted was to get a peep at a bear. We looked upon the simple-minded natives with contempt for not dropping everything else and going a-bear hunting.

We had to give up all notions of aiding ourselves and be content if we only got our luggage hauled. The mules composing our team were small, and, like all others, lazy, and the darkey driving had to lay the whip on vigorously, accompanied with choice expletives. I was raised in the Sunday-school and forbear quoting, as such language jars my nerves. We got within two miles of our destination when the team gave unmistakable signs of giving completely out. We concluded to strike camp and trust to luck to get the balance of the way, as it was then after sundown.

While the others were fixing around for the night, the General and I struck out through the cane to get some venison for supper. My gun was an old hammered barrel Kentucky rifle of about fifty to the pound. The barrel was 45 inches long and looked as if the maker had just that much iron in a piece and did not want to cut it. It was a trusty old piece, however, and just as good 200 yards as ten, if held straight. The others had shot-guns. The General and I stayed out until dark, but found no game. We saw some old deer sign and a bear track or two, which gave us hope.

The next morning was the holy Sabbath, and while some were hunting up a team, I shouldered "Long Tom" and struck out through the woods. The others at camp being of a religious turn of mind, declined following except far enough to "get some hickory nuts," and for fear of "meeting a bear" carried a large six shooter along. I went about two miles through wet slashes and low cane-ridges covered with switch cane. I saw some of the finest oak timber I ever saw, but very little sign of game.

We got a team without much trouble, and noon found us camped on a low ridge, with cane and water all round us. The cane was on three sides of us and varying from ten to twenty feet high, while the water was in front and was from two to six inches deep. Not a very cheering place for a camp, I admit, but when the old man that hauled us out got warmed up with a "jigger," as he called it, and his tongue loosened and began his marvelous tales of the amount of game about there, I reckon there never were five happier souls than we were at that time.

After getting things fixed up, I slipped out to leave the woods and look for signs. I found a few deer tracks and some of the heaviest cane brakes I ever heard of. Cane from twenty to thirty feet high, as thick almost as they could stand. One can draw some idea of their density by this. There were places where the cane had fallen down and bent over so that a man could walk over them. I walked on the top of cane four feet from the ground. It was like walking on rotten ice, through which one would break now and then, and it was fully as hard to scramble up on the cane as it is to get on the ice after breaking through. And the imagination of falling into a den of wild cats or a nest of bears fully equals the tickling sensation of freezing water slipping up one's leg.

Two of our best bear-hunters had also gone out with the dogs and were kicking up a fearful racket. I thought certain they had a bear up, but learned presently that it was only a dog fight. They reported lots of bear sign, and we went to bed early so as to get at them soon. The morning dawned bright and beautiful and we were almost tasting bear meat—in fact, we got up quite a discussion how we should cook it. Our dog commander summoned his forces, and three of us took stands where we thought the game would be most likely to run. The dogs would not hunt, none except the hound, and any one who has had anything to do with hounds knows that one by itself is not much. Our famous bear dogs would trot along behind and wait for us to break roads through the cane for them. I waded sloughs and canebrakes all day, and all I could get a shot at was a black squirrel. I skinned it and stretched its hide, as it was something of a curiosity, for I began to fear that our trophies of the chase would be small. I found considerable sign of game, but it was of old date, as if the game had made an exodus about the time we arrived.

I stayed out until near sundown. The other men came in at noon and went out again. They had not got in from their afternoon's hunt when I got in. I learned from the cook that their spirits had undergone a change since morning. Dogs would not hunt; water and cane so bad; where the cane was one could not get through scarcely at all, and the water was very disagreeable wading, as none of us had gum boots. After tramping all day I felt as if I had a great vacuum somewhere. After getting all right again, I started out to blaze some trees so we could find our way to camp more easily, for one might be within forty feet of it and not know it, unless some one there would make a noise, as the cane completely hid it from view. It is the most glorious place to get lost in I ever was.

I met the other fellows coming in, and they were in glorious spirits. They had struck a bonanza sure. They were terribly excited, such signs as they had seen surpassed anything we had imagined in our wildest dreams. Tracks as large as a man's hat; trees literally torn up by the roots; beds large enough to accommodate twenty; the largest bear we ever heard of, etc., etc. I flew back to camp and got the ax and cane knife, and we worked manfully, cutting roads, bridging sloughs and blazing paths, and fixing up for a general havoc the next day. We went back to camp tired, wet, and, that noon of a hunter's life, hungry, but perfectly happy. Just after dark it commenced raining and rained most gloriously until daylight. Our tent was ordinary duck, not waterproof, nor well stretched, and we got ourselves and everything else except our powder, wet. We managed to keep our guns and ammunition tolerably dry and let the rest go. The morning was the most gloomy and heaviest clouded I ever experienced. The clouds were scudding across the sky from a southwesterly direction and looked as if at any moment they would burst open and give us a second flood. We ventured out, however, and did our best to raise a bear, but after wandering around for a couple of hours without success, gave it up as a bad job and returned to camp a sadder if not a wiser lot of men. It was impossible to go anywhere. We would start off, getting the course from the compass, and after wandering around awhile would find ourselves everywhere but where we wanted to be. We would get lost in five minutes, and if we had not stationed a man with a horn to give us the course we might have been there until now.

I could not stay in camp, and, after resting a little, I struck out on my own hook. The sloughs had risen four inches from the rain, and the cane was so wet I got soaked through in going a short distance. It commenced raining about two hours before night, and found me two miles from camp without my coat, and sloughs, canebrakes, etc., without number. I got my course and lit out, and got in about as wet as is possible for a man to be. The sum of the third day's hunt was a large hawk that I knocked over and four as wet men as ever come along. The bear hunters were exceedingly low, and I began to fear that even burnt brandy would not save them, although frequent visitations to the jug containing the raw article seemed to help them a little.

The rain continued all through the night, and it was none of your gentle, refreshing Southern showers which one reads of; it was a regular pour down, and it was only by the hardest exertion we kept our fire alive. The fourth morning dawned almost as gloomy as third. Water everywhere, in camp and out. A few of us ventured out, but found our roads impassable from water. When we got back to camp we found our old friend the teamster had come to get us out of the water. There was nothing remarkable about him, and he was far from handsome; but we were about as glad to see him as most any one we could name. Dom Pedro was nowhere. We brought the jug and drained it for one more "jigger," which he turned off with a vim. As I was one of the young men of the party, I was detailed to go for his wagon. I had a nice, pleasant walk of two miles through the cool, refreshing water, which varied from four to twelve inches deep. All things must have an end, however, and the middle of the afternoon found us camped on the high banks of Hushpucknia, and happy once more.

The stream we were camped on is a tributary of the Sunflower River, and heads somewhere in the northern part of Bolivar County. It seems to be a considerable stream, large enough to float a small steamer. I did not see much of it, though, and no one around there seems to know anything about it; and as it is not laid down on any maps that I have seen, it is altogether guess-work with me.

The morning of the fifth day was gloomy as ever. We killed a few squirrels and made a deer drive, without getting a run. About noon an old bear hunter came to our camp, wanting to take a hunt with us. He brought about a dozen half-starved, nondescript dogs, all shapes, all sizes and colors. He vowed, though, that they would not "cross a trail," and if our dogs would only help his to do the fighting, we were as good for bear as a bit is for a barlow. We told him that was just to our hand; we held the bowers, and all we wanted was some small trumps to lead them out. His dogs came near making a bare trail of our camp by eating everything they could find. It was only by the cook's judicious use of a two handed club, intermixed with some very formidable oaths, that we saved anything. After dinner we got a couple of mules and our best bear hunter and the stranger mounted them. I now thought bear certain, for it was a strong force mustered out that gloomy November evening. Our old friend of the team summoned his forces—of himself and three boys and a half dozen dogs. Our general started off blowing to the dogs, and all began to look lovely, and the goose hung away out of reach. That was the first act of the drama; the second was more exciting, and came near being more tragical. The mule that our general was on suddenly became displeased with the dogs, crowd, or something else, and all at once there was a grand panorama of a buck-jumping mule, flying gun, and a bear hunter going through the air, making several revolutions to the minute, as if he had suddenly conceived the idea of making a windmill out of himself.

After enjoying a good laugh—the first for several days—the general picked himself up and continued the hunt on foot. They seemed to have enough in the bear drag without me, and I struck out on my own hook. I had seen some fresh deer tracks that morning, and I wanted to go back to the same place. I saw two fine deer—the first sighted by any of the party. I followed them some time, but could not see them any more. I returned to camp in good spirits, for I believed I or some one else of the party would get one the next day. I found the bear hunters had returned without getting a run, and the sum total of the hunt was a coon and a possum; the latter they managed to lose coming in. Our party now began to get the "blues" to an alarming extent. The bitters had given out, and we had no way of replenishing them. I suggested a dog fight, thinking to arouse them a little from the "slough of despond;" but they sadly shook

their heads. Even dog fighting had lost its charms. The night was enlivened by a herd of cattle that smelt the one hundred and fifty pounds of salt that we brought along to salt our bear meat. They would tramp all around the camp, walk over the dogs, poke their heads into the tent, and scatter our traps promiscuously. At the first peep of day three of us went for deer. After waiting some time one of our party obtained a running shot, but effected nothing. We returned to camp and put in the day by chasing the cattle away from camp. The seventh morning was cool and frosty. Four of us went for deer, but with the same success as heretofore—got nothing.

We now came to the following conclusions:

Firstly. That there was plenty of game there.

Secondly. That it would stay there for all we could do to keep it from it.

Thirdly. That bear was dry meat anyhow.

Fourthly. That home was the best place after all.

The above resolutions being unanimously carried, we set about preparing to leave. The next day being Sunday, and teams idle, it was decided to leave then. A drizzling rain fell all day, and we failed to get out to the river on Sunday; but Monday found us on our way. I took one more little round for deer and joined the party about two miles from camp. I laid old "Long Tom" sadly in the wagon, and I will not say what I thought about bear hunting then. The roads were better, as the rains had thinned the mud, and if one did go a little deeper, it was not so hard to get out. We got to the river in time to board a boat before night, and were happy again. Some of your readers may wonder what I wrote this for, as there is nothing remarkable chronicled in it—no hair-breadth escapes from panthers or wolves, or suffocating hugs from bears or anything else, like most of the letters to your paper contain. That is just it. I wish to state to some of the uninitiated that a hunter's life has its ups and downs as well as any other; that it does not always run smooth and flow with milk and honey.

Although we made a miserable failure, we are far from being disheartened, and if everything works right, next November will find some of us back there. We have learned the way and got acquainted a little, and with the right kind of season, a party could have glorious sport, as there is any amount of game there. PADDY O'LEARY.

Ashbysburg, Hopkins County, Kentucky.

SHOOTING ON GREAT BAY.

As viewed at high tide, a more beautiful sheet of water it has rarely been my good fortune to see in a somewhat extensive traveling experience, than Great Bay in Rockingham county, N. H., some four miles from Portsmouth. Surrounded as it is with charmingly diversified scenery, with well cultivated farms stretching down to its shores, beautiful with wooded capes jutting out into its waters, paradises for picnic parties and deliciously shaded little nooks into which one may sail to escape the heat of the summer sun, it has many a time been a source of never ending delight to me, as I have skimmed over its placid surface and realized that keen sense of enjoyment that makes one glad to be alive to feast his eyes on the rich beauties of nature.

But not the least among its many charms are the facilities and felicities which Great Bay furnishes to the sportsman, to tell of which this article was more especially written than for the purpose of describing this great reservoir into whose basin the Piscataqua River pours its rushing tide. To those sportsmen, whose numerous inquiries I see in your valuable paper as to where good shooting can be found, I would say, here is an opportunity for you to try your skill on the water-fowl that make these waters their resting place and feeding ground during their spring and autumn flights. From the great wild goose down to the little "dipper" duck through all the grades of water-fowl that wing their way along our coast, some are almost always to be found, in their season, upon the bosom of this beautiful bay; but let no sportsman, who may condescend to read this communication, come here with the expectation of making the enormous bags such as are shot on the Chesapeake and at Currituck or the prairie sloughs of the West; indeed, for myself—than whom no one can be more fond of the gun—there is but little sport where such a surfeit of game can be found; for, in my opinion, sport degenerates into slaughter, and there is more satisfaction for me to stop the lightning flight of the ruffed grouse in full October plumage, than to bag a dozen brace of teal or mallard where they exist in such profusion as I have seen them in the prairie waterholes of Western Kansas. I read—more with sorrow than with envy—of men, calling themselves sportsmen, shooting down hundreds of water fowl in the course of a day, many of which must necessarily spoil unless shot for the market, and many of which they allow to escape, wounded—especially if bagging them is attended with any exertion; and then they call this indiscriminate destruction *sport*. I have no patience with such libels on the name of sportsmen.

The water fowl which, during their flight, make this their rendezvous, are, generally speaking, and more especially in the spring, the wariest of their kind. Shot at, as they are, from every available point in their long autumnal journey to their southern resorts, and running the gauntlet of a like fusilade during their return flight to their far-away breeding haunts in the north, all the skill of the hunter is required to get them within reach of his gun. In the fall larger bags can be made; probably because the young broods, from lack of intimacy with the hunter, are more unsophisticated and not posted in the many wiles originated for their destruction. But the spring bird is an entirely different customer, and the hunter who can show four or five brace for his day's work goes home with a good appetite for his dinner and the feeling that it has not been wanton destruction on his part, but simply a match of human cunning against the wary shyness of his game.

All shooting is done here from a "float"—a very light boat some twelve or fifteen feet in length, with a square stern perforated a little to the left of the centre, with a "scull-hole," the edges of which are lined with leather; that part of the paddle which in sculling is in contact, is also lined with leather in order that in working the boat the noise shall be reduced to a minimum. This description may not be considered superfluous by some of your Western readers, who are, perhaps, unaware of the difficulties Eastern sportsmen have to contend with in approaching this species of game. With one of these "floats" so-called, its "gunnel" entirely concealed by a covering of eel-grass or rock-weed, the gunner takes his place in the bows on a bed of straw, reclining in such a position as to be hidden from sight of everything on the surface of the water; his companion, who sculls, assumes a like attitude in the stern, with his head just sufficiently raised to see over the bows of the boat. In this position, the birds having first been sighted with a good spy-glass, the boat is noiselessly sculled to within shot, if possible, or until the movements of the birds give evidence to the silent worker of the "float" that their suspicions are aroused, and they are about to take flight. It is no easy matter even for the most skillful boatman to approach these shy water-fowl, ever on the alert for danger, and well knowing, by hard experience, to shun every object that looks even most remotely like a device of their greatest enemy—man. Here is the place where the shooting power of a gun can be well tested. Many birds are brought to bag from sixty up to seventy-five yards, and old gunners speak of having knocked over geese at one hundred yards or more with their old-fashioned, bell muzzled ducking guns, with barrels six feet in length. "FLOAT."

Portsmouth, N. H., March, 21, 1878.

DUCK SHOOTING IN SOUTHERN ILLINOIS.—Since last December some of us sportsmen have been looking forward with no small amount of interest to a grand duck and camping-out expedition, to take place about the first of March (or whenever the ducks begin to come in) at the great duck grounds, the lakes south of Jonesboro, Ill. Our friends at Jonesboro were to keep us posted as to the best time for the three of us to start from the vicinity of St. Louis. Last Tuesday a dispatch came, worded thus: "Come by first train; the lake is filled with ducks. There's millions in it, and more coming." That was sufficient, but right here a disappointment stepped in—two of our party found that it would be impossible for them to go, and so your humble servant was forced to go unaccompanied. After a ride of 140 miles, at 3:42, Wednesday afternoon, I arrived at Jonesboro and found Mr. D., Mr. C. and Jim at the depot, and the greeting I received was both appreciated and reciprocated. And right here, I remark that there is something about the greeting extended by one sportsman to another that is different from most any other greeting in vogue. There is a whole-souled heartiness about it that is both contagious and refreshing; it is so entirely void of any selfishness that it is received and returned with the same gusto. I think that my fellow sportsmen will bear me out in this assertion.

Daybreak coming, morning found us busily packing our wagon with camping utensils, etc., and soon we were on our way to the lakes, where we arrived about noon. After having selected our camping ground close by the lakes, we speedily pitched our two large tents, and, in a short time, seemingly an incredibly short time, we had fire made, coffee boiling, table spread, and were partaking of the abundance of good things before us, only interrupted by watching the flight of ducks which constantly passed over us. The meal over, pipes were brought into service, and about five P. M. the rubber boots were put on, shells inserted into belts and pockets, and, walking fifty yards, each selected a boat and slowly pushed (we used push-poles only) away to the different points and passes for our evening shooting. We returned at dusk highly delighted with our sport, and counting heads (duck heads) we found sixty-eight on hand. After a good supper (and the way we made the food vanish would be a mystery to any one but a hungry hunter) jokes and reminiscences of former hunts held the boards; and, Oh! how we did make those old woods ring with the laughter that could not be contained. Before long, however, drowsiness ruled the hour, and in a short time nothing was heard but the dismal croak of the frogs, and the occasional "honk, honk," of the wild geese in their flight; and last, but by no means least, the sundry frightful communications and exclamations made by Jim in his sleep. At four o'clock, while yet everything was dark, we were all up, fire re-kindled, a hasty breakfast eaten, belts recharged with shells, a hurried consultation, and then to the boats; the water baled out, another word, and each slowly and silently glided into the gloom. D. and C. went to points nearly opposite to each other down the lake; W. and Jim opposite each other in the middle of the lake, and I up to the head of the lake. After having pushed my monitor into a good point and getting in readiness, I sat down to await the approach of dawn and ducks. I shall never forget that morning's shooting. I had not remained in my cover long before the coming of the morning became apparent; the darkness began to change to a grayer tint, and as the faint streaks of light flashed up from the eastern horizon, heralding the nearer approach of the great luminary, I fancied I could see to the further end of the lake. Ah, what's that? Clear down the lake there shoots up a thread of fire, and boom, boom comes floating up to me. Now for business; those were C. and D.'s guns I thought. Boom; there goes Jim; and boom, boom; now W. has "turned loose on them," and before I'm fully prepared here they are right on to me. I discharge the first barrel; missed, by all that's pleasant! Not so with the left, however, for down he comes right by me, quite dead. Quickly extracting the shell and as quickly replacing it by a loaded one; again I am ready for them, but none too soon, for the continued firing of my companions below me kept the ducks sweeping over me in a continued whirl; and how we did give it to them! I would fire at a fine flock; back they would go only to receive two barrels from W., and then over to Jim to receive a similar compliment, and then right down to D. and C., who were most certain to get two or three of them. So the sport went on; bang, bang, on every side. By nine o'clock we are pushing back for camp, perfectly satisfied with our morning's work. Again we count heads, and this time we find, for us all, 210. This was not so bad considering the fact that some of us were not the best shots in the world. The rest of our shooting was only a repetition of this just described, and we returned home Sunday fully satisfied with the amount of sport afforded, all declaring that a more delightful time could not well have been had; and we promised each other that the fall shooting should find us all grasping hands again, and ready for the ducks at the old camping grounds. WILL.

Lebanon, Ill., March 10.

THE LAST TREE IN THE BOWERY.—The button-ball in front of 164 Bowery, this city, is the last of the many trees which once shaded that famous thoroughfare. It has braved the storms of seventy years to fall at last before the ax of the Elevated Railroad. It is the custom of some savage tribes, when a tree is felled in the forest, to offer sacrifices to the deity of the wood. Some such ceremony would be eminently fitting now if, indeed, the sylvan deities have not long departed from these haunts. The gamin would make an edifying priest, and that elixir peculiar to the Bowery a fitting libation.

Fish Culture.

SALMON IN THE HUDSON.—Professor Spencer F. Baird, of the Smithsonian Institution, writes us in regard to the salmon found at Peekskill, in the North River:

"I have little doubt that the salmon found in the North River was a spawning fish that had entered the river last summer or autumn, and remained there throughout the winter. This a very common thing in the Penobscot and the streams of Nova Scotia and New Brunswick, the fish returning to the ocean the following spring. I shall be delighted to have the first procurable specimen of a Hudson River salmon, as I have from the Delaware."

—The Greenwood Lake Association placed fifty thousand salmon trout in Greenwood Lake on the 22d March.

—On the 19th inst. 10,000 young salmon were put into Lake Waramaug, Conn. Five thousand were put in four years ago. The Litchfield *Enquirer* hears they have been seen to weigh two and one-half pounds.

GOLD FISH IN THE POTOMAC.—*Washington, D. C., March* 29.—My attention has several times been called, during the past three or four years, to the catch of gold fish (*Cyprinus auratus*) in the seines hauled in the Potomac and eastern branch, in the immediate vicinity of Washington. These attractive little fellows, which are so often found in glass globes and other vessels ornamenting parlors, and in aquariums attached to greenhouses, originally came from Chinese waters; but I do not mean to say that they have encircled the globe and altered the Potomac from the Pei Ho or some other Chinese stream. For years they have been in the fountain bowls and baisins in our public parks, and especially in the large pool on the west front of the Capitol, in which the Decatur monument formerly stood. After the removal of that monument to Annapolis, stones were loosly placed in the pool, which afforded suitable shelter and crevices for the fish to spawn, and they multiplied rapidly. The outlet from this pool connects with a sewer which empties into the Potomac, and through the wire covering which guards the outlet the spawn has escaped from time to time and been conveyed to the river, where the young fish soon developed and thrived, and are now becoming quite plentiful. R. F. B.

THE CARP HATCHING PONDS.—The work of converting the lakes south of the Executive mansion into a national carp hatching establishment, is progressing rapidly under direction of Prof. Baird, U. S. Fish Commissioner, and Prof. Rudolph Hessel. In a recent letter I described at length these ponds, and proposed changes to adapt them to the propagation of carp for distribution in southern waters, Congress having appropriated $5,000 for that purpose. They will soon be ready for the fish now in the ponds of the Maryland Fish Commission in Druid Hill Park. The establishment promises to be a place of much interest, and will surpass some of the renowned hatching ponds of Germany and other European countries.

—Recently Mr. Reilly introduced in the House of Representatives a bill for the preservation of game and protection of birds in the District of Columbia, the provisions of which are the same as of that introduced in the Senate by William Edmunds, of Vermont, a year or more ago, and which was noticed at length in this correspondence. A strong effort will be made to have the bill passed at the present session, as we are badly in need of a game law in this district.

PRIVATE FISH PONDS IN VIRGINIA.—In reply to a question from Mr. Charles T. Palmer, Attorney-General James G. Field construes the words "waters of this Commonwealth," as used in the first section of an act entitled an act for the protection of fish in the waters of this Commonwealth, above tide-water, approved April 4, 1877, to comprehend and mean lakes, ponds, dams, rivers, creeks, runs and branches in their natural courses within the limits of the State, and in which fish are found in their natural condition. The language does not embrace nor apply to what are known as private ponds, constructed for raising fish, and into which the owners have placed fish, taken from their native streams, and thereby made private property.—*Richmond Whig.*

MORE MISSISSIPPI SALMON.—Mr. Jesse Turner, of Van Buren, Arkansas, in a letter dated March 17, 1878, states that he has just heard of the recent capture of a salmon in the Mississippi river, at Helena, Arkansas, just below Memphis. A similar occurrence has taken place recently, which we noticed in our last and previous issues of our journal.

WHITEFISH IN MICHIGAN.—*Detroit, March* 23.—During the past week the State fish commission, through their agent, C. H. Brownell, of the State Fish Hatchery at Pokagon, planted whitefish fry from Detroit Hatchery, viz.: Adrian, Wamplais Lake, 50,000; Hudson, Mallory Lake, 20,000; Hillsdale, Bau Beese Lake, 50,000; Long Lake, 40,000; Quincy, Marble Lake, 40,000; Douglas, Klinger Lake, 50,000; White Pigeon, Pickerel Lake, 40,000; Bristol, Long Lake, 40,000; Baldwin Lake, 40,000, and Indiana Lake, 40,000. All of the above are near the line of the Lake Shore and Michigan Southern Railroad. The following were distributed along the line of the Grand Rapids and Indiana Railroad: Ross, Hilton Lake, 40,000; Crystal Lake, 20,000; Cedar Springs, Oleans Lake, 40,000; Wood Lake Station, Whitefish Lake, 80,000; Wood Lake, 60,000; Clam Lake Station, Muskrat Lake, 60,000, and Traverse City, Ann Lake, 100,000. Over 2,000,000 fish hatched at the Detroit Hatchery this spring have been hatched in Lake St. Clair and the Detroit River. DRUID.

—The Sandwich, Mich., Hatchery closes this season with a very good record; 50,000 salmon have been distributed in the lower lakes and rivers, and 22,000,000 whitefish have been placed in the Detroit River alone.

—Forty thousand whitefish have been put in Turtle Lake, Union City. Thirty thousand eels will be put in the same lake next June.

—A young salmon, thirteen and one-half inches in length, has been caught in the Kalamazoo River below the dam at Plainwell.

SPAWNING OF CALIFORNIA SALMON.

San Francisco, California, March 13, 1878.

Prof. Spencer F. Baird, Washington, D. C.:

Dear Sir—In reading that portion of the Massachusetts report for 1878 which relates to California salmon, some questions are asked and doubts expressed on subjects which are to me quite clear. I thought it advisable to answer some of these questions to you, if you are not already informed in relation to them.

First—The impassable barrier of which the report speaks across the McCloud River, is only a temporary affair, and is only placed across the river after the great body of spawning salmon have gone to the head waters, and is only used during the necessary time of taking fish in the pool below for spawning purposes.

Secondly—In relation to Mr. Stone's theory that all the McCloud River salmon die after having spawned. Both the Senate and Assembly committees of the Legislature have been taking testimony of all the leading fishermen on the Sacramento River. Probably more than fifty fishermen have given testimony, especially on two points: First, "Where does the spring run spawn?" and, secondly, "Do you catch any fish on their return from the spawning grounds, and what proportions?" On the first question they expressed entire ignorance, except that in the San Joaquin River in the spring large numbers of salmon are ripe or nearly ripe; they are also ripe at this season in the short coast rivers. The concurrent testimony of the fishermen was, that in October and November in the Sacramento river they caught from five to fifteen per cent. of fish that had spawned. Many of these were taken on the "back of nets," drifting toward the ocean with their heads up the stream. This testimony was given by fishermen who had fished at Vallejo in salt water, at Rio Vista and Collinsville in brackish water, and so on up to Sacramento in entire fresh water. They all concurred that about ten per cent. of the catch in October and November was of fish on the return from their spawning grounds; they do not draw their seines for these fish as they will not sell and are considered of no value. They say that these fish are black, hooked-mouthed and have dog's teeth. Some are caught on the right side of the net, but a majority drift into the net on the upper side. They said that they saw them in large numbers at this season of the year, and they were usually with head up stream with only sufficient motion to their fins to keep them balanced, and floating to the sea with the current. I know of my own knowledge that some of the McCloud River salmon remain in the river until the next year. On the 5th of July last I was fishing on the headwarters of the McCloud River about fifty miles above the U. S. Fishery, catching salmon and trout. The salmon that season had just arrived and would take the hook, but in the pools there were also numerous salmon of the previous year—hook-mouth and dog-teeth—which could not be tempted to take anything. Sir John Reed, who was fishing in the same pool with me, improvised a long gaff with which he caught one of these fish of the previous year. Although thin, it weighed twenty-two pounds. We saw several others but did not attempt to take them. These fish certainly must have remained in the water six or eight months without food, and for some unaccountable reason failed to return to the Ocean. It is certainly true that large numbers do die and get injured, but from the testimony of the fishermen I am satisfied that large numbers return to the ocean each year. The opinion of the fishermen is that they return to the ocean after spawning, with the first rains on the head waters. The coast rivers salmon spawn in January and February in the short streams that empty into the ocean, and immediately return after spawning. Most of our coast rivers have bars at their mouths thrown up by the waves, and when these rivers and streams are low fresh water passes through these sand bars to the ocean. When the floods come in the winter they tear open a passage through these bars. The salmon immediately enter and work up into all the small branches in the hills where it is possible for them to reach, spawn in a few days and immediately return down stream into the ocean. It was but last Saturday I took seven of these salmon in pools in a small stream which ran through a pasture within twenty miles of San Francisco. This stream empties into the Bay. Our winter rains have been more heavy than usual, and all these short coast and bay streams are full of salmon spawning.

Now, as regards young fish, I have repeatedly taken young salmon, one year old, with a fly, at the N. S. fishery in July and August. These young fish were always in the centre of the river, while trout would be taken in shoaler water near the shore. I am, therefore, certain that some of them remain in the river for one year after they are hatched. Many grilse are taken in the bay here from the wharfs, weighing from three-quarters of a pound to five or six pounds. I have never seen any taken in salt water which I thought was younger than two or three years. I am certain that Mr. Stone is in error in reporting that California salmon die after having spawned.

The Joint Committee of the Senate and Assembly have agreed to report a bill for the close season, from August 1 to September 15, and also from Saturday noon until Sunday noon of every week throughout the year. We have urged that in addition to every Sunday, the close season should be from August 1 to October 1. This concession has been made to the fishermen, who ask that in consideration of giving them the additional two weeks, that the penalties might be increased to $25 for each salmon found in possession during the close season, and $250 penalty and confiscation of any net found in the water during the close season. They also promise that they themselves, in their own neighborhoods, will see that this law is faithfully observed. In their testimony they admit the benefits derived from the artificial hatching of salmon, and urge upon the Legislature to increase the appropriation for this purpose, but did not seem willing that the close season should be longer than one month and every Sunday. So this bill, as reported, is a compromise as between what we ask and what the fishermen want.

Shad are becoming quite numerous, and there are one or two every day in the market, which sell for from five to eight dollars a piece. They are generally caught in the bay by fishermen fishing for herrings. B. B. Redding.

White Trout.—*Editor Forest and Stream*—I have hatched trout for six years, and during that time have hatched out several "white trout." Have never had one live to be six months old. They always prove weak and in time are found against the outlet screen dead. I find none this year among my 80,000 fry. Yours, Levi Hodges.

London Trout Ponds, March 30, Farrington, Ct.

$5 Breech-Loading Rifles, brand new. The greatest bargains ever offered. Elegant finish. Best steel rifled barrels. Cannot be bought of any other house for less than $20. They cost to manufacture over $15. See advertisement, G. W. Turner & Ross, 26 and 28 Central street, Boston, Mass.—[Adv.

Natural History.

THE EUROPEAN STARLING.

Editor Forest and Stream:

Your Texan correspondent, N. A. T., asks you many questions about our startling. Will you allow me to give him some information on the subject?

He first asks, "Is the starling a pugnacious bird to such a degree that he will drive other birds from his bailiwick?" Certainly he is not a quarrelsome bird. His habits are most decidedly social and friendly, and he lives on terms of perfect harmony with almost every other non-rapacious bird. On the broad pasture-lands he feeds with the rooks all the day, and at night he roosts in the same firs, laurels or ivy with the redwing, the thrush and the blackbird. If he ever finds his way to Texas, unless the climate sadly changes his temper, he will never drive the mocking-bird or any other songster from "his bailiwick." And here let me say that your correspondent does no small wrong to our British sparrow when he writes about his "furious pugnacity." Though a bold and brave little bird, our domestic sparrow is not a quarrelsome bird. The fights witnessed by your correspondent in the New York parks, when he saw numbers of sparrows "gathered together in knots and balls, falling to the ground, and fighting one another like forty wild cats," were only "the endless contentions of rivals" about that which has been the cause of war since time was young, "*Nam fuit ante Helenan teteri ima belli causa.*" At all other seasons but that in which the great natural instinct siezes him, the sparrow is a jolly, good natured bird, but

"When a fuller crimson comes upon the robin's breast
When the wanton lapwing gets himself another crest
When a livelier lirts changes on the burnished dove
Then the "sparrow's" fancy lightly turns to thoughts of love."

And his passionate little heart, full of the presence of a tidy, plump little hen, sideling and bridling and flirting her wings and tail before him with all the arts of an accomplished coquette, sometimes causes him to forget himself so far as to approach her with a certain amount of violence, and, this being resented, leads to a scolding match which soon collects the lady's other admirers from the neighboring hedge, and then ensues the row as described by your correspondent, in which the combatants, gathering into a ball, roll over and over, apparently fighting "like forty wild cats," while in reality not one of them is a feather the worse when the battle is over.

To N. A. T's second question, "Is the starling a first-class bug and worm eater?" there is only one answer. The starling is one of our most useful birds. He feeds almost exclusively on the grubs and worms destructive to the grass family. The staple products of Ireland—beef and mutton—owe no small share of their repute to the humble efforts of the rook and the starling. The rich, heavy grass lands of Meath are the starling's favorite feeding grounds, and when his swift squadrons in dense masses roll along the pastures, clearing out before them every root eating grub and worm, it would be impossible to calculate the good that is done, not to speak of the evil that is resisted by the graziers best and most economical servant. For, as the starling destroys nothing that is useful to man, he receives nothing in return for his invaluable services to the farmer. Wherever a pale and sickly blade or stem points the starling's quick eye to where the root eater is at work below, down goes the avenging beak of the agile bird, and grubby troubles the grass no more. No county in Ireland has finer grass lands than Meath, and no county more abounds with starlings. One winter's evening, coming home from shooting, near Kells in that county, a keeper called the writer's attention to a heavy black cloud just above some timbers about three miles off. "Thim's birds, sir," said he, and where he pointed the starling cloud lifted and rolled away like a vast column of smoke, and then returning condensed again into a huge black mass as its hundreds of thousands hovered over their roosting place before pitching down into the woods for the night. About six miles from these woods, at another Meath country seat, the starlings made their home by night, and as the sun went down came by myriads to roost in the laurels along the shore of a sheet of water close under the drawing-room windows. The owner of the place, an ardent preserver of everything carrying fur or feather, gave the starlings a hearty welcome; but so numerous were the guests who accepted his hospitality, that their droppings produced an intolerable stench, not to be permitted so close to the house. It was determined, if possible, to banish the starlings to a distant part of the coverts; but they would not go. In vain the evening flight, night after night, was received with a blank fusilade. In vain a skilled pyrotechnist from the metropolis, opened fire with rocket batteries upon their devoted squadrons. Dead and dying, battered and scorched, though their comrades might lie thick beneath them, tenaciously as the heroic Osman clung to his fireswept earthworks of Plevna, the starling clung to their beloved laurels, until as a last resource the laurels themselves were cut close to the ground, and the starlings had to seek a home elsewhere.

Now, taking this evidence of their numbers in the centre of the finest fattening land in Ireland, it is safe to conclude that our starlings would do no injury to the graziers on the Texas preserves.

Your correspondent next asks, "Is the starling urban or suburban in his habits?" He is both. In this country he builds his nest indifferently in town and country, wherever a hollow tree, public buildings or private chimneys afford him the accommodation he requires. When the young leave the nest they remain under the guidance of the old couple, and do not travel far, but generally seek the nearest pasture where the little family soon finds another like itself, till from fifty to a hundred birds pack together, and so they remain till the approach of winter compels them to seek a sheltered roosting-place for the long cold nights. They generally select some secluded spot deep in the pine woods, in dense laurel or holly shrubberies, or along the sedgy shores of rivers, lakes or fens. And then the smaller flocks unite at their chosen trysting-place, and form those vast clouds already described.

Your correspondent next inquires, "Does the starling sing well?" The starling is not a songster; at least he has very little pretension to the title. The male bird has a low, sweet whistle, a solitary note, clear and musical, which he repeats at short intervals, perched, it may be, on the topmost spray of an old ash tree, happy in the first warm glow of the early spring sunshine, pluming his glossy coat and whispering in flute-like accents to his listening mate that the season for grubs is close at hand.

In reply to your correspondent's last question it may be said that the starling is decidedly a shapely, pretty bird, and need take no mean place, even among the beautiful birds of your own continent.

And now, sir, as one of your most distant subscribers, allow me to thank you for the pleasure and instruction which your admirable paper has afforded for the last two years to myself and to some other lovers of the Rod and Gun in this island.

Believe me to be your faithful servant, R. O'C.

Dublin, Feb. 8, 1878.

[We take great pleasure in laying before our readers the above highly valuable letter, feeling sure that it will prove of the greatest interest to all those who are considering the feasibility of acclimatizing foreign birds in this country, as well as to many others.—Ed.]

EXTRACTS FROM A NATURALIST'S NOTE-BOOK.

BY TRAIL.

Nov. 30, 1869.—I took to-day, on Salem Neck, a specimen of the Hutchins gull (*Larus hutchinsii*), young. This specimen I mounted and gave to the Peabody Academy of Science. I inquired about it a while ago, but failed to get track of it.

Feb. 1, 1870.—To-day I shot two snow buntings (*Plectrophanes nivalis*), and four shore larks (*Eremophila cornuta*). These specimens I took on Salem Neck near the "Willows." These birds are bright, cheery little fellows, found commonly along the fields and meadows bordering on the sea shore. The buntings are often incorrectly called snow-birds, many persons thinking them forerunners of snow storms. Of course, this is a misapplied name, as the true snow-bird (*J. hyemalis*), is quite different in size, plumage and habits. Both the larks and buntings are gregarious, and, though very often found together, I think the larks rather dislike the buntings, as I have seen them attack and drive out from among them scattering buntings which would alight among them to feed. The buntings are also about here called "winter geese," though I fail to see the resemblance. The name fits full as well as many nick-names to natural objects. Judging from my own experience, I am convinced that many good birds are lost through the mixed up knowledge of local gunners, their lack of interest and the great difference between them. I often get laughed at for trying to set them on the right track. They say, "Humph! Reckon they know something; guess they knowed birds afore I was born, when there was some." Still, I often convince these people and make a point.

Feb. 17.—A specimen of the wild cat (*Lynx rufus*), female, was shot at Essex, Mass., by Mr. Luther Clapp. This is unusual to find here, though they have been taken before.

March 8.—During a stroll to-day I took a robin (*T. migratorius*), and a chickadee (*P. atricapillus*). These last often make us visits in the city during winter—oftenest on mild days—and do much by their presence and cheerful notes to make us happy. Salem, Mass.

March 12.—A specimen of the dusky duck (*Anas obscura*), female. I notice this bird is universally called black duck. Salem, Mass.

March 31.—Three shore larks (*E. cornuta*) and one song sparrow (*Melospiza melodia*). Mr. Ober, whom your readers know as Fred Beverly, was with me. He also shot some larks. Salem, Mass.

April 2.—A specimen of the cedar bird (*Ampelis cedrorum*), taken. This bird is also known as cherry bird and wax-wing. I have seen them stuff themselves with wild cherries, and sit on a tree perfectly regardless of danger while persons threw a number of stones at them. Unless hit, or the limb whereon they sat was struck hard, they would not think of moving. They are most common in spring and fall, though many breed. Domesticated they make interesting pets, and will eat cake and ginger bread, as much as they can hold, about every half hour. Salem, Mass.

April 11.—Two purple grakles (*Quiscalus versicolor*) taken. I have seen row after row of garden peas, the pods hanging to the vines, open, and every pea taken out by these birds as clean as the best servant could shell them. This I have seen on Mr. Gregory's seed farm, in Marblehead. These birds are very common with us, mostly in fall, when they, with some other blackbirds, congregate in large flocks before going South. It also breeds. Salem, Mass.

April 14.—Bluebird (*Sialia sialis*), male, one of our earliest and most welcome visitors from the south, breeding and staying until November. Contests for bird houses between this bird and the swallows (*T. bicolor*) are very amusing. Salem, Mass.

April 23.—Red-winged blackbird (*Agelæus phœniceus*), male, taken at Marblehead, Mass. This bird is very common about here, though, excepting when near its nest, it is quite shy. At North Beverly, near Miles River, they are numerous and not near as shy as at Salem. Why, I cannot say, but this is my experience.

(*To be continued.*)

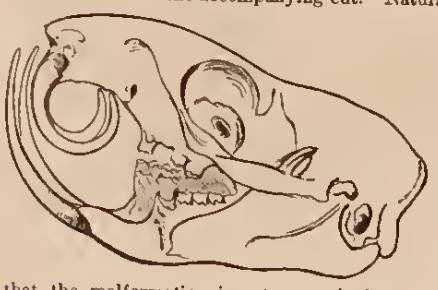
Mr. Ridgeway's Ornithology.—By some strange inadvertence, Mr. Ridgeway's Ornithological Report, referred to last week, was spoken of as one of the publications of Dr. Hayden's Survey. The error we hasten to correct. Mr. Ridgeway's work was done in connection with the Survey of the Fortieth Parallel (Clarence King, U. S. Geologist, in charge), and his report forms part of Volume IV. of the publications of that Survey. We have already referred to the importance and value of the work performed by Mr. King and his staff, and the present work is in no way behind previous publications in excellence. It deals chiefly with the bird fauna of California and the Great Interior Basin, and contains many new and interesting observations. Mr. Ridgeway will accept our best thanks for the volume sent us.

Judge Caton's Park.—Our readers will recall some interesting notes sent to us by Judge J. D. Caton, of Ottawa, Ill., concerning his domesticated wild turkeys. That gentleman, who is now abroad, has added to the extensive natural history collection in his private park by sending home a pair of black swans from Australia and two pairs of Hawaiian geese. That this is a highly satisfactory method of studying natural history Judge Caton's work on the "Antelope and Deer of America" abundantly proves.

A CURIOSITY.—We have received from Mr. W. Kellerman, of Aberdeen, Miss., an account of a curiosity in the shape of a deer's foot encircled by a ring of wood. A slip, cut from the Aberdeen *Examiner*, inclosed by our correspondent, will give our readers an idea of this odd combinations:

"We were shown on Friday by Mr. Kellerman, the noted gunsmith of our city, a curiosity in the shape of a deer's hoof encircled by a pine knot, which, fitting around it like a ring, appears to have been worn for many years. The deer was killed by Mr. James Gillispie, formerly of this county in the piney woods near Winchester Station, on the M. & O. R. R. last fall, and the general impression is that the animal must have thrust his foot through the knot when quite a small fawn, and worn the strange appendage through all the succeeding years, rubbing it down to the ring that now encircles the bone.

CURIOUS MALFORMATION.—Mr. Eugene Thorne, of Thornedale, Dutchess County, N. Y., has shown us the skull of a common woodchuck, whose incisors have been bent and lengthened as shown in the accompanying cut. Naturalists



tell us that the malformation is not unusual; but it seems strange that the animal could forage sufficiently to keep himself fat and in as good condition as he was found to be when it was headed off from his burrow and pounced upon by Mr. Thorne's foxhounds.

BIRDS TOWERING.—*Vail, Iowa, Feb.* 23, 1878.—My experience regarding the towering of birds after being shot is similar to that of "T. S. S.," in FOREST AND STREAM of Feb. 14. I have occasionally shot prairie chickens, but more frequently pigeons, that would tower to a height of nearly 100 feet, each circle growing smaller as they ascended until they would suddenly drop dead. Also on several occasions I have shot prairie chickens that, instead of flying in a circle, would fly nearly straight up to a considerable height and then drop dead. Upon examining these birds I found they were usually shot in the eye or across the top of the head. E. B. B.

CORMORANTS IN CENTRAL NEW YORK.—Some time since we called attention to the fact that a cormorant (*Graculus dilophus*) had been captured by Mr. J. B. Gilbert, of Penn Yan, New York, and we have recently learned of the taking of another bird of this genus near Rochester, N. Y., the specimen being now in the possession of Mr. E. H. C. Griffin of that city.

A CARDINAL GROSBEAK IN CENTRAL PARK.—A city correspondent, "E. C. M.," writes that while walking in the Park on Sunday, March 17, he observed a number of early spring arrivals, among them the purple and rusty grakles, robins, bluebirds, warblers and song-sparrows; and a friend of unquestionable veracity saw a Baltimore oriole and catbirds in the Park last week. The most noteworthy observation of our correspondent was what his naturalist's eyes assured him was a cardinal grosbeak. He adds: "Now, is not this a very unusual occurrence? If the cardinal bird ever migrates as far north as this, was it ever known to be here in March?"

[Very unusual, no doubt, but not unparalleled, for Mr. E. P. Bicknell has, if we are not mistaken, captured this species in November and December at Riverdale-on-the-Hudson, and the writer once killed one in February on Manhattan Island, about two miles above the Central Park. The occurrence of *Icterus baltimore* so early is quite as surprising.—ED.]

SPRING NOTES.—At Portland, Conn., woodcock, February 25; crow black birds, March 2; red-winged do., March 3; *Melospiza melodia* and *Passerella ilica*, March 5; *Sayornias fuscus*, March 7. The above are reported by Mr. J. H. Sage. At New Haven, Conn., *Gallinago wilsonii*, March 16; *Harporhynchus rufus*, March 20; this last about six weeks in advance of its usual time. At Hornellsville, N. Y., blue birds, February 28; red-winged blackbirds, March 2; *Spizella socialis* and *Ceryle alcyon*, March 3; these reported by "John." March 20, blue birds, downy woodpeckers and *Sayornis fuscus* beginning to build; March 15, eggs of *Bubo virginianus* taken at East Hampton, Conn., by Mr. W. W. Coe.

—A friend sends us from St. John, N. B., under date of Feb. 25, 1878, the following note, which says: "Our winter has been unprecedentedly mild; continual soft weather and much rain. As an evidence of the mildness of the winter, a Mr. Kimball, of Grand Bay, near the city, while chopping in the woods last week, found a nest in the stump of an old tree with two young cross-bills in it, nearly fledged, alive and active.

HABITS OF RUFFED GROUSE.—In Connecticut my experience has been that, where ruffed grouse were hunted excessively and very often missed, they are much more inclined to tree; also, where foxes are plenty and disturb the birds very much, in all cases they will tree in pines or hemlocks, if there are any about; very seldom in any other, except when young—September and August birds—which we do not hunt in this State. W. H. W.

Lakeville, Conn., March 15.

ANOTHER OWL ON THE RAMPAGE.—A Menomonie, Wis., correspondent writes:

"M—— was walking through the woods, his black pup accompanying, when a large owl swooped at the dog three times. When M—— turned to defend the dog, the owl made for him; but by a well directed blow from the right shoulder his owlship was knocked into a cocked hat."

RED TROUT OR REDFISH OF OREGON AND IDAHO.—A fish under this name, found in various localities in Oregon and Idaho, appears likely to prove, from what we can learn, an undescribed species of the *Salmonidæ*, as the characteristics of habit, color and other conditions are such as to exclude it from any reference to a known species; indeed, it is not impossible that it may constitute a special section of the family. Captain Charles Bendire, U. S. A., writes, under date of March 7, as follows:

"I heard about the red trout first in 1869, when stationed at Fort Lapwai, and saw specimens there salted down with heads and tails cut off. They form now an article of commerce in the mining camps of Florence and Warrens of Idaho, and parties visit the lake (Fayette) every summer and put up large quantities. The small streams running into the lake are said to be literally filled with them during the month of August and part of September. They are also found in Wallowa Lake, and I believe the fishing in that locality was the first cause of trouble between the Nez Perces and the whites.

"There would be no difficulty in getting specimens if I could only get away about that time. Perhaps you have correspondents in Grand Ronde Valley, Oregon; this is in the vicinity of Wallowa Lake, and they might be procured through some one there."

[We would call the attention of our correspondents in the West to this matter, with the suggestion that if specimens be secured they be sent to the Smithsonian for identification and for introduction into the monograph of the American *Salmonidæ*, which Prof. Gill and Prof. Jordan have now in preparation. They can be best preserved in alcohol, but the larger ones might be skinned and the skins properly dressed with arsenic or other preservative.

SPANISH MACKEREL.—With regard to the strange fish caught at Bayport, Florida, by a correspondent, to which reference was made in our issue of the 14th, we are informed by a note from Professor Gill that it was undoubtedly a *Cybium maculatum*, or Spanish mackerel.

—Prof. Marsh, of Yale College, last week purchased from the Messrs. Lamson Brothers, of Maiden Lane, this city, a large and valuable collection of relics of an extinct race—pottery, stoneware, etc.—from graves in Chiriqui, Isthmus of Panama, received by a recent steamer. Prof. Baird, of the Smithsonian Institution, Prof. Tarry, of the Assay Office; W. C. Prime, Esq., R. L. Stuart, and others well known, had previously examined them with interest.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN, FAIRMOUNT PARK, MARCH 26, 1878.—One common seal, *Phoca vitulina*, purchased; one pig-tailed macaque, *M. nemistrinus*, born in the garden; one alligator, *A. mississippiensis*, presented; one herring gull, *Larus argentatus*; four sirens, *S. lacertina*, presented.

ARTHUR E. BROWN, Gen'l Supt.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

PEARS.

THE season for transplanting fruit trees is now with us, and indeed this operation, from the extreme mildness of the winter, could have been performed at any time during the last two months. The Pear is, without doubt, the favorite fruit of modern cultivators, and is a very different morsel for the palate than that which obtained two or three hundred years ago. It likes a good, deep, strong loam of a somewhat cool character and dry subsoil; and it must always be borne in mind that, in planting fruit trees (or, indeed, anything else for permanency) you are not planting a stake or fence-post, but should take out holes at least three feet in diameter, to enable you to spread the roots carefully, thus permitting the tree to develop itself to the best advantage. Give it a good chance for the first few years; if it grows too luxuriantly it is easy to curb its growth and throw it into fruit-bearing by judicious root-pruning. A mulching of salt hay or manure will be found of great service, especially during the first season, preventing evaporation, and keeping the ground moist and cool. Within the last thirty years the variety of pears has become almost endless, and a selection from the following may be of use to those who intend planting or adding to their collection of varieties:

Varieties Ripening in August and September.—Brandywine—A delicious variety of good size, vinous and full of sugary juice, grows well and fruits freely. Boston—This variety comes nearer the old White Doyenne than any we know of; an enormous bearer every other year. Bloodgood—A pear of decided character and of fine flavor. The tree is a slow grower, but of fine habits and a heavy bearer. Clapp's Favorite—A variety combining the qualities of the Bartlett and Flemish Beauty; tree very vigorous and a good bearer. Andrews—An old but thoroughly good pear, with oily skin, rich juice and delicate aroma. It is sometimes called the "Water Lily Pear," the skin having the delicious fragrance of our Nymphæa. Adams—A fit companion to the well-known Bartlett, but of regular and handsome form, and a fine rosy cheek. It has a rich, vinous flavor, very melting, and keeps a long time. These may be considered the choicest of our summer pears, but the following are also good: Dearborn's Seedling, Tyson Hanners, Moore's, Cushing, Cabot, Collins, Buffum, Bartlett, Ontario, etc., etc.

October is our month, rich in fruits, and the grower must be very careful in his selection, unless he has plenty of space. In fact, it is hard to reject any, so fine are the sorts: Sheldon—This pear has a rich Bergamot flavor, rich juice, and is one of the pears with which you never get satiated. It is of large size, a good keeper; and the tree is productive and beautiful, probably our best October pear. Pratt—This ranks nearly as high, but is of altogether different form from the preceding. But its excellence consists in its melting, sugary quality and juiciness rather than in its flavor. It is a very free grower and an abundant fruiter. Hull—Another enormously productive variety and very fine fruit, melting, sugary and rich, like the Doyenne. The tree is spreading, slightly pendulous, and of vigorous growth. Seckel—This variety, like the Bartlett, is too well known to need any description. Meriam—One of the most popular, though not one of the finest pears. If gathered in time it comes very near a first-class pear for excellence as well as every other quality. The tree is very vigorous and spreading. Other October sorts of good quality and general excellence are: Washington, Swan's Orange, Mount Vernon, Kirtland, Admirable, Oswego Beurre, Huntington, etc. For November, December and later, Kingsessing takes the lead in earliness. It is a large, handsome pear, something like a medium Duchesse, with a yellow skin and red cheek, keeping a long time, and is of excellent quality. Abbott is a good pear, with a strongly pronounced almond flavor. It is a very beautiful sort, with waxy yellow skin and red cheek, of medium size and of a peculiarly upright growth. Howell—This is a fine pear, full of brisk sub-acid juice, refreshing, rich, and a really pretty fruit. The tree assumes a somewhat open irregular shape, and the branches, when loaded with fruit, nearly touch the ground. Fulton—This is one of our oldest American pears, but not yet extensively cultivated. The fruit is roundish, flattened, has a deep russet skin, like Beurre Bosc, and is nearly or quite equal to that variety in quality. Lawrence—A most melting, rich, sugary pear, of good size and clear lemon color at maturity, too sweet, indeed, for some pear lovers. The tree grows freely, and when well established produces heavy crops. Columbia—This is a strong grower, of spreading habit, and a good bearer. The fruit is large, in shape and appearance like a lemon, with a long stem, and is very juicy and refreshing, keeping well till February and March. Dana's Hovey—What the green gage is among plums, and the muscat among grapes, the Hovey is among other pears. It is not much larger than the seckel, and when gathered in October has a dull, greenish, quite uninviting look, but as it matures it changes to russet, and then to a rich golden hue, really charming to look at. They are more like huge drops of confectionary than pears, the mere cutting of one setting free the delicious aroma and perfuming the air. The tree is strong and stocky, a free fruiter, and the fruit ripening in December, continuing well into January. Other varities of excellence will be familiar to our readers, as Duchesse, Beurre Bosc, Easter Beurre, Winter Nelis, Beurre Langelier, Glou Morceau, etc., which in succession run into the spring months with us, if properly kept. It is a curious fact, however, that with one or two exceptions, scarcely any of the pears mentioned will grow on the Quince stock. Some will grow for a few years and then stop, others will not budge a foot, therefore they must all be grown on the pear stock.

CALIFORNIA RAISINS.

RIVERSIDE, S. B. Co., Cal., March 14, 1878.

EDITOR FOREST AND STREAM:

I send you by to-day's mail samples of raisins—white muscat of Alexandria—taken from a twenty-pound box, one of seventy-five produced last fall from not quite three-quarters of an acre. They readily brought $2 per box, taken at the vineyard. The vines planted in Riverside are five years old, and have been in bearing three years. The amount of raisins produced hereafter will increase rapidly from year to year. Through ignorance as to the method of curing, last year was the first in which the above satisfactory results were obtained. The samples I send you, like many others sent East, and which have excited considerable wonder, are a fair representation in size and quality of the crop in question. The method of curing adopted last year was as follows: Trays or platforms, three feet square (easily and cheaply made), are laid on the ground between the rows, and covered to the depth of a single cluster. The proper time for picking is ascertained when the grape has taken on a pale amber hue. After lying exposed to the sun on the trays for nearly two weeks, in the meantime changing to a beautiful purple, the bloom showing like the dust on a moth's wing, a spare tray is placed over the first in the row, and, pressing them firmly together, the whole is reversed, leaving the raisins—after the top tray is taken off—with the uncured sides exposed to view. The tray just spoken of is used to turn the next one in the row laden with fruit, and thus the whole production of the vineyard is turned in a very short time by two men, at a great saving of time, expense and preservation of bloom on the fruit over the old way of turning by hand.

The characteristics of this section of Southern California, which produce such favorable results in raisin production, are an extremely dry electric atmosphere, rich soil, and almost constant sunshine. But many sections in the lower counties rich in the above, are rendered almost worthless by lacking that fourth and most important element, viz., water. This, however, the "Riverside Land and Irrigating Co.," have secured by an elaborate system of irrigation, costing at present over $250,000, but making available 20,000 acres of land which, formerly worthless, now readily sells for from $40 to $50 per acre. Although the orange is supposed to be the golden egg for Riverside, in the future the raisin bids fair to be a formidable rival. J. D. H.

[The samples of raisins sent and received are marvelously fine; the bunches remarkably large, the fruit large and uniform in size, the flavor equal to any imported grapes we have ever eaten, though a trifle less sweet. Upon the whole we prefer the California grape, and, so long as the product is up to the sample, shall encourage home industry all that we can. —ED.]

NEW YORK HORTICULTURAL SOCIETY.—At the regular monthly meeting of this society last Tuesday, Mr. Peter Henderson, of New Jersey, delivered an entertaining and instructive address on "City and Suburban Gardens."

POULTRY BREEDERS' ASSOCIATION OF TENNESSEE.—Encouraged by the liberal patronage of their first show, held here in February, the Association have determined to hold another one some time in December, and as an inducement to breeders at a distance they intend giving larger prizes than at the first one.

THE FOUR-LEAFED SHAMROCK.

NEAR TWYMAN'S STORE, Spottsylvania Co., Va., March 20, 1878.

EDITOR FOREST AND STREAM:

In the issue of FOREST AND STREAM, of March 14, you tell us just enough of the shamrock to cause us, like Oliver Twist, to "ask for more." Is there not an old Irish superstition that whosoever finds a four-leafed shamrock has power to use it after the order of an enchanter's wand? 'Tis said also, I believe, they are only to be found growing where a mare has cast her foal. I am sure, Mr. Editor, that it is not without the province of one who delights us weekly upon such topics as fruits, flowers and plants, to give us, in connection with the real, some of the poetic conceits, which must ever be associated with things so beautiful. Who does not remember the old song—

"I'll seek the four-leaf shamrock
In all the fairy dells,
And if I find that charmed leaf,
Ah! how I'll weave my spells.
I'd fill the world with riches
And scatter bliss around,
And not a tear or aching heart
Should in the world be found."

I do not know if I quote correctly, for I write from memory, and after a lapse of 150 years; at any rate, it seems so long to me. I have found clover with four leaves. Is *oxalis acetosella* ever thus found. And now, Mr. Editor, if I have allowed my fancy and pen to get the better of my discretion, my only excuse is that, like an old dog, I only wished to open on a trail, which, however cold, might eventually lead to a find.

R. M. C.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 16, 17, 18 and 19. Dr. W. Seward Webb Secretary.

MASSACHUSETTS KENNEL CLUB—THE BOSTON BENCH SHOW.

IN a first article, written in Boston, we designated some of the prize winners, and added some brief description of the appearance of the leading dogs, giving some idea of the general disposition of the show. Where many really good animals are shown, and there can be but few prize winners, the owners of those dogs who have not secured distinction are always more or less dissatisfied. A bench show is, above all, a place of heart burnings and of bitter disappointments. It must be stated that unless directly owning dogs, representatives of the press, visiting bench shows, get in time more or less tired with the champion imported classes. Such dogs, though admirable of their kind, revolving as they do from show to show, cannot have any claim to novelty. We must confess that it is in the get of such leading dogs that we see objects of greater interest. The champion dog A, for instance, when pitted with the champion B, having been collar to collar with one another in Memphis, St. Louis and Boston, during the last month or so, may be likely within a few weeks to enter the lists afresh in Baltimore and New York. Until newer importations are made of fresher or more original stock, or unless we put in the contest our own native dogs and challenge all foreign dogs, these competitions of imported champions must be more or less trite and passably monotonous. It is not expected that a judge can stultify himself. A judge having for very good reasons (conscientious ones, no doubt,) given a dog a first prize in the West, there is every reason to suppose, unless there be some marked change in the condition of the dog, that the same judge will give the same dog a prize in the East; just as he would be likely to place the blue ribbon on the identica animal if within a month or so the dog was shown in San Francisco. Of course there is a way out of all this. The position of judge is no sinecure. If it brings its honors it also carries along with it duties which are onerous to a degree. "Oh! that mine enemy were judge at a bench show!" might be used instead of a much hackneyed phrase. It may be very trying both to an impatient public anxious to know who wins, as to the owners of dogs, but it seems to us that for all future bench shows we will want for sporting dogs at least three judges for all the leading classes, who must compare notes and make their decisions from the individual points all have taken; otherwise we shall always have objections. For the non-sporting animals, unless the classes of dogs were too large, one judge might suffice. A divided responsibility in such a case would undoubtedly be better for all concerned. We particularly disclaim any intention to find the least fault with Mr. Davidson. This gentlemen showed the utmost attention to all details, was most careful and painstaking in all his examinations, and, as far as our opinion goes, ninety times in a hundred was perfectly correct in his awards, and we shall abide by his decisions in the Baltimore show with the utmost respect.

In the special classes for the best kennel of English setters, Mr. L. H. Smith's Leicester, Paris, Pearl, Clip, Temple Bar and Lass o' Gowrie were awarded the prize. These are all very fine dogs. Opposed to them was Messrs. Nesbitt's kennel, of which Rock was the chief. Rock has a superb head, but perhaps not as good in his hindquarters. Dora is a superb bitch, and so is Zilpha, a lemon and white, out of Rock and Belle. Of Messrs. Beebe Brother's kennel, two of these, Don and Hasseyn, by Mr. Morris' Lark, showed all the finest traits of their very good sire. In Class B, the best kennel of Irish setters, the cracks of the St. Louis kennel stood well to the front. Berkley is undoubtedly Elcho's best progeny. Biddy was in fine form. In fact, all of them, from having come so far and looking so fresh, reflect great credit on Mr. Whitford, the manager of the St. Louis Kennel Club. It was, we are inclined to think, an easy victory over Scout, Rattler and the rest. In Class C, best kennel of Gordon setters, Mr. Farrar's Rupert and Rapp were winners. Mr. James R. Tilley's kennel, of Locust Valley, L. I., deserves more than a passing mention. Whip and Ring are very choice animals. There was one bitch, Dream, of the same stock, the property of the Baltimore Kennel Club, No. 282, a V. H. C., which, when worked on Boston Common in such good company as even Leicester, showed the most sprightly form, with superb action and speed. Only a month in the hands of her trainer, Mr. Kelly, Dream has shown not only her superb natural instincts, but her docility; a more promising Gordon bitch we never saw. For the best kennel of pointers, Mr. Edmund Orgill's Flake, Rush, Rose, Ruby and Belle were good winners. Of the beauty and game points of Rose we have already made particular mention. Mr. G. A. Strong showed his fine lot, of which that good old dog Pete was a fine representative. In the Neversink Lodge kennels, Mr. A. E. Goddefroy had quite a string of remarkably good liver-and-white dogs, some of which, we are pretty sure, will go to the Pacific Coast on orders. It is to be regretted that in this class, D, the pointers belonging to the Westminster kennel did not show. It was in Class F, best English stud dogs, that a great deal of interest was taken, for many of Mr. Morris' Lark's progeny had been found in Boston. Paris, the great crack, the superlative, was shown. Paris won, and Strathroy was victorious, with Boston and New York much discomfited. In Class G, Mr. Jarvis was alone with Elcho, and in Class I, Mr. Orgill won with Flake. Mr. Smith, over-burdened now with prizes, scores one more with Pearl as a setter brood bitch, as does Mr. Develin with Moya as an Irish setter bitch. Mr. Tileston won with Lou, and the Baltimore kennel with Lady for a first-class pointer bitch.

Casting now a retrospective view on the champion pointer dogs, we notice how really good all the animals were, when, with the exception of one, all received either a V. H. C. or an H. C., and only one had a C. awarded to him. We have been asked about Snapshot. Quite a number of letters have already reached us with these questions: "Where was Snapshot?" "Did Snapshot really have the mange?" "How do you know that Snapshot had the mange?" We must state that, fully prepared for these queries, we went with a leading member of the Massachusetts Kennel Club to Watts, the dog infirmary man of Boston, and there we saw poor Snapshot quite a mangy dog, and under treatment for it. In our former brief summary we had no opportunity of speaking of Mr. Forsyth's Di, a handsome orange and white, the winner of the native English setter bitches. In the English setters, class 5, Lelaps, black, white and tan, of Purcell Llewellen Kennel, was as handsome a dog as could be found in the show. The peculiar marking of his head, white with blue ticks, and the tan over his eyes, proclaims him as one of the true Belton's. His sister, Diana, in the English setter class, took with Lelap first prizes. Mr. Mercilliott's Pet and the Baltimore Czarina were all very close. In the pointer puppies, we have before referred to the fine lot shown by the Neversink Lodge kennels, more promising puppies we never saw. The time for a *furore* in setters is fast approaching.

In the classes judged by Dr. Twaddell the Chesapeake Bay dogs were quite distinguishable for their excellence, the Baltimore Kennel Club winning with Rob, and in bitches Mr. Hammond taking the prize with Rose. Of clumbers, as fine a specimen as we ever saw was Mr. Poole's Romey. In cocker spaniels, Fanchon II. was a thorough beauty. Mr. Pownall, of Christiana, showed his beagle, Bess, a black and tan, which was by long odds the best dog in the lot. In dachshunde, Mr. Leisler's Puck and Nellie won, and admirable dogs they are. Gisela, of the greyhounds, taking the first prize, and Charlie, the winner of the second prize, were first class dogs. Of Scotch deer hounds, though there were few, two won, and one more was commended. Lupus is as fine a specimen of this fine breed as we ever saw. Of mastiffs, the show was a superlatively good one. Mr. Austin's Jack would have done credit to an English bench show, as would have done Ross. These were noble dogs, and for tramps better than any legislative enactments. Of St. Bernards, neither Rodney nor Lion would have been our choice. St. Bernard judging is a very much mixed thing in the U. S. We are going away from the true Barry form, and the monks of St. Gothard would grow wild did they see some of the decisions. Of Newfoundlands, the whole line was good. Of collies, Mr. Harlow's Dan and Mr. Hammond's Capt. Jack, of the dogs, and Jessie, among the bitches, also belonging to Mr. Hammond, and another Jessie, belonging to Mrs. E. Ward, were of fine type, and worthy of the prizes. (Why can't we have a collies' field trial some day?) In the classes judged by Mr. Scott, this gentleman seemed to have a very thorough knowledge of his duties. If the animals in many cases were not up to his high English standard, still he acknowledged that there were many fine specimens in the toy classes. In Scotch terriers and Dandie Dinmonts, as no pure dogs were in the show, no prizes were given. This judgment gave rise to some little discussion, but Mr. Scott was perfectly right. We may call a dog by any name we please, but that does not give him the peculiar points of a breed. In toy terriers, Mr. Kistermann, of N. Y., and Mr. Cross, of Boston, divided the prizes. The money for these prizes, if paid in silver, would far outweigh their dogs. Miss Chickering's Punch, a nice dog with a comic mask, took the blue, and the lamed Sambo had a V. H. C.

We have again to offer to the gentlemen of the Massachusetts Kennel Club our congratulations on the most successful character of their bench show, and to thank them for numerous courtesies shown us.

LIST OF AWARDS.

DIVISION FIRST—SPORTING DOGS.

Class 1—Champion English Setter Dogs—First prize, 5, P. H. Bryson, Memphis, Tenn., Gladstone. V H C, 3, F. H. Morris, N. Y., Lark. H C, same owner, Czar, 1. C. M. Carleton, Norwich, Conn., Dash.

Bitches—1st prize, 7, D. T. Charles, Albany, N. Y., Rose. V H C, 6, same owner, Nina 10, L H Smith, Strathroy, Clip. H C, Grace. 8, E F Mercilliott, N Y.

Class 2—Champion Irish Setter Dogs—1st prize, 12, St. Louis, Kennel Club, Loo II. V H C, 13, D Wm Jarvis, Claremont, N. H., Elcho.

Bitches—1st prize, 15, St. Louis Kennel Club, Biddy. H. C., 16, E D Brainard, Albany, N. Y., Fanny; 17, J E Develin, N. Y., Moya.

Class 3—Champion Gordon Setter Dogs—1st prize, 22, W J Farrar, Goldsmith Kennels, Toledo, O., Rupert. V H, 18, S C Du Bois Wagstaff, Babylon, L I, Kent; 19, Sam Bradstreet, Jr, Dorchester, Mass. Dinks, 20; J Marble, Worcester, Mass.

Bitches—1st prize, 26, W J Farrar, Toledo, O., Fan. V h c, 24, W. M. Tileston, New York, Lou. H. c., 25, Dr. J. H Wright, Boston, Gipsy.

Class 4—Champion Pointer Dogs—H c, 27, W G B Shelton, Auburndale, Mass., Fosco. C, 28, J Walter Houstis, Boston, Don. H c, 29, V Ward, Woodville, Mass., Scout. V h c, 30, G A Strong, West Meriden, Conn. V h c, 31, Edmund Orgill, Memphis, Tenn., Flake. V h c, 32, Edmund Orgill, Rush. V h c, 31, E C Sterling, St. Louis, Mo., Sleaford. 1st prize, 35, Westminster Kennel Club, N. Y., Sensation.

Bitches—H c, 37, Henry S. Hall, Worcester, Mass., Kit. V h c, 38, Joseph S Fay, Jr, Boston, Gipsy. V h c, 39, John Hadley, Worcester, Mass., Buff. 1st prize, 40, Edmund Orgill, Memphis, Tenn., Rose.

Class 5—Imported English Setter Dogs—V h c, Isaac Fiske, Worcester, Mass., Wagner. 1st prize, 43, Franklin Sumner, Blue Hill, Milton, Mass., Lelaps. H c, 44, T Austin, Stratford, Conn., Bronte. H c, 50, Justus Von Lengerke, New York, Jersey Duke. V h c, 51, Lincoln & Hillyar, Frank II. H c, 52, J W F Wilson, South Boston, Scott. 2d prize, 54, T H Scott, Kitwington, Thirsk, Yorkshire, England, Pound. H c, 55, T H Scott, Paul. V h c, 4, P H Morris, Czar.

Bitches—1st prize, 61, Franklin Sumner, Diana. 2d prize, 7, D T Charles, Rose.

Dog Puppies, Under 12 mos.—H c, 65, James C Melvin, Boston, Zilph. 1st, 67, L H Smith, Strathroy, Ont., Temple Bar.

Bitch Puppies, Under twelve months.—H c, 70, Nelson D Hathaway, M D, Fall River, Mass., Opal. V h c, J & R B Nesbitt, Cambridge, Mass., Dora II. 1st prize, 72, L H Smith, Lass O'Gowrie.

Class 6—Native English Setter Dogs—H c, 73, C Du Bois Wagstaff, Babylon, L I, Joseph. V h c, 74, Avery W Gore, Boston, Fred. H c, 75, Hiram Norcross, Boston, Rab. C, 76, C Portlock, Boston, Spot. H c, 78, W B Cross, Brockton, Mass., Shot. V h c, 79, James H Cleaves, Boston, Tramp. 1st prize, 80, George A Thayer, Boston, Daniel Webster. H c, 81, Wm B Durfee, Jr, Fall River, Mass., Dot. C, 82, Reuben Whalon, Fall River, Mass., John. H C, 83, Edward King, Taunton, Mass., Jocko. H c, 84, William Tallman, Barrington, Mass, Rufe. 2d prize, 85, David P. Waters, Salem, Mass, Grouse. H c, 86, G F Woodman, Jr, Jamaica Plains, Ned. V h c, 87, C W Copeland, Boston, Rex; 88, E N Haines, Lynn, Mass, Duke; 89, Leo J Calley, Boston, Kit; 90, E P Adams, Boston, Guy. H c, 91, W B Cross, Brockton, Mass, Sam. V h c, 93, E L Wales, Franklin, Mass, Sancho Panza. H C, 94, Gilbert M Randall, Olneyville, R I, Ben. H c, 95, J S Duncklee, Brighton, Mass, Joe. C, 96, Dr Wm Jarvis, Claremont, N H, Joe II. H c, 97, Wm P Parker, Salem, Mass, Schneider. C, 99, Alvin C Seymour, Fall River, Mass, Ross. C, 101, F H Raymond, Boston, Monte. V h c, 102, T R Cook, Somerville, Mass, Jack. V h c, 105, C M Barrett, West Medford, Mass, Sam. H c, Beebe Bros, Boston, Tom. H c, 109, Everett M Erskine, Boston Highlands, Dash. C, 110, J Wilson, Boston Highlands, Sam. C, 111, A W Whitney, M D, West Newton, Mass, Duke. H c, 114, S T Hammond, Springfield, Mass, Pat. V h c, 115, I M Thrasher, Fall River, Mass, Dash; 117, I Ferguson, Westfield, Mass, William, formerly Bill. C, 119, J C Bates Smith, Boston, Guy; 120, J A Lakin, Westfield, Mass. Ned; 121, Beebe Brothers, Boston, Chevy. H c, 122, Beebe Brothers, Boston, Hasseyn. H c, 124, T Dean, Providence, R I, Dash. V h c, 125, C K Barrett, David. H c, 126, M M French, West Medford, Mass, Rash. V h c, 1, C M Carleton's Dash; 50, Justus Von Lengerke, Jersey Duke.

Bitches—V h c, 128, Avery W Gore, Boston, Mollie II; 129, James H Pulhn, St John, N B, Bessie; 132, Edwin Roswell, Lynn, Mass, Jennie. H c, 133, J J Farwell, Fall River, Mass, Trusty. C, 134, Reuben Whalon, Fall River, Mass, Liz. 2d prize, 135, William Tallman, Jenny. C, 140, A P Joll, Boston, Nix. H c, 141, John Taylor, Portland, Me, May. C, 142, W H Wates, Providence, R I, Georgie. V h c, 143, E F Mercilliott, N Y, Pet. H C, 144, Walter Clark, West Medford, Mass, Rose. V h c, 145, Baltimore Kennel Club, Czarina. H c, 147, J & R B Nesbitt, Cambridge, Mass, Zilpha. 1st prize, 149, Fred A Forsaith, Kittery, Me, Di. H c, 150, Frank Haskell, Sacarappa, Me, Lu; 151, T M Aldrich, Providence, R I, Smut.

Dog Puppies, Under 12 months—H c, 157, A S Hardy, Hanover, N H, Jerry. 1st prize, 158, Allie Hardy, Brookline, Mass, Dandy. V h c, 161, F O Daniels, South Boston, Stub; 167, E H Newhall, East Saugus, Mass, Don.

Bitch Puppies, Under 12 months—H c, 169, Harris M. Brigham, Natick, Mass, Jet. 1st, 170, Charles H Stowe, Chelsea, Mass., Norah. H c, 171, W B Cross, Brockton, Mass, Rose. V h c, 172, M M Tierney, Fall River, Mass, Moll.

Class 7—Imported Irish Setter Dogs—Open Class—1st prize, 178, St Louis Kennel Club, Sling II. V h c, 179, St Louis Kennel Club, Elcho II; 180, H Le Grand Canon, New York, Guy; 182, John E Develin, New York, Scout; 184, Wm M Tileston, Limerick. H c, 185, Max Wenzel, Hoboken, N J, Jack. 2d prize, 187, Lincoln & Hillyar, Dash. H c, 189, John H See, Providence, R I, Plunkett Jr.

Bitches—Open Class—1st prize, 192, St Louis Kennel Club, Duck. H c, 194, John E Develin, New York, Lucy. V h c, 196, W M Tileston, Flora. 2d prize, 197, Baltimore Kennel Club, Flounce. V h c, 198, Max Wenzel, Doe. H c, 17, J E Develin, Moya.

Dog Puppies, Under 12 months—C, 199, J A Rockwood, Boston, Mass, Dash. 1st, 202, James Hanley, Providence, R I, Larry.

Bitch Puppies, Under 12 months—H c, 206, N L Lafrenure

Boston, Hazel. 1st, 207, Thomas Adcock, Providence, R I, Rhne. H c, 208, Mohawk Kennel Club, Hussac, N Y, Claret.

Class 8—Native Irish Setter Dogs, Open Class—C, 209, C Du Bois Wagstaff, Babylon, L I, Dick. C, 211, C T Pierce, Brooklyn, Bess. 1st, 212, Wm H Emerson, Boston, Bob. V h c, 214, A A Whittimore, West Medford, Mass, Shot. H c, 217, Thomas A Addison, Chelsea, Dash. 2d, 227, S D Salmon, Jr, Boston, Duke.

Setter Bitches—C, 229, George E Metcalf, Norwood, Mass, Flora. 2d, 531, H B Plumer, Boston, Kate. C, 233, N S Chamberlain, Marlborough, Mass, Fly. V h c, 234, Charles F Goff, New Bedford, Mass, Fancy. 1st, No 16, E D Brainard's Fanny.

Dog Puppies, Under 12 months—1st, 239, Wm Borrowscale, Boston, Smoke. C, 241, H F Stranger, Brockton, Mass, Le Grand. V h c, 244, J B Millitt, Boston, Check.

Bitch Puppies, Under 12 months—1st, 245, A E Godeffroy, Minx.

Class 9—Gordon Setter Dogs, Open Class—H c, 251, Fred A Taft, Dedham, Mass, Dorr. H c, 257, Louis B Wright, Prince. V h c, 260, Edward H Pierce, Boston, Shot. V h c, 264, Harry Dutton, Boston, Snipe. C, 265, Baltimore Kennel Club, Grand Duke. V h c, 267, Edmund Orgill, Rep. 1st, 268, Geo B Inches, Boston, Dick. H c, 270, James R Tilley, Conut.

Setter Bitches—V h c, 272, Alex Pope, Jr, Boston, Jule. C, 273, Frank L Gay, Providence, R I, Pansy. 2d, 275, Lawrence Curtis, Boston, Bess. C, 279, William Clegg, Pearley; 280, H R Richardson, Boston, Maud. V h c, 281, David G Hartt, Northport, N Y, Beauty; 282, Baltimore Kennel Club, Dream. C, 288, George S Thompson, Foxborough, Mass, Bessie. V h c, 290, James F Walton, Boston, Flora. H c, 292, W J Farrar, Nell.

Dog Puppies, Under 12 months—C, 294, Edward O Blanchard, Boston, Hector. V h c, 296, Julian P Wood, Marlborough, Mass, Rob Roy.

Bitch Puppies, Under 12 months—C, 302, Arthur C Mudge, Boston, Dinah. 1st, 304, Henry L Kinsley, Stoughton, Mass, Bessie B.

Class 10—Pointer Dogs, Over 50 lbs. weight, Open Class—1st, 311, J Nelson Borland, Jr, Boston, Bob. H c, 313, Jos C Davis, Boston, Sam, late Sale; 314, Z S Barnes, Boston, Dash; 316, George G Barker, Boston, Mass, Phil, Jr. V h c, 320, Martin L Keith, Boston, Brownie. H c, 328, E A Strong, Jack; 331, F O Downing, West Meriden, Conn, Start. V h c, 332, J W Coffin, Providence, R I, Rake II. H c 334, Lincoln & Hillyar, Spotswood, C, 338, R G Hall, Portland, Me, Dash.

Bitches, Over 50 lbs weight—2d, 342, E C Alden, Dedham, Mass, Peg. C, 344, W E Davis, Boston, Fan. V h c, 346, Wm H Slocum, Boston, Kate. 1st, 347, G A Strong, West Meriden, Conn, Fan. C, Luke Corcoran, M D, Springfield, Mass, Bess; No 39, John Hadley's Buff.

Class 11—Pointer Dogs, Under 50 lbs weight—C, 351, Z S Barnes, Jupiter. H c, 352, F Rose, Roxbury, Boston Highlands, Nat. 1st, 353, Charles A Thomas, Peabody, Mass, Dash. 2d, 354, G A Strong, West Merider, Conn, Ben. C, 357, B W Morgan, Franklin, N H, Jim; 358, M Williams, Boston, Sam; 359, Charles Burleigh, Fitchburg, Mass, Ponte. V h c, 360, Westminster Kennel Club, Flake II.

Bitches, Under 50 lbs weight—V h c, 365, Geo G Barker, Boston, Princess. C, 366, F E Simpson, Cambridge, Fancy; 367, Dr P E Day, Bristol, R I, Nellie. V h c, 368, G A Strong, Mab; 369, Baltimore Kennel Club, Lilly. 2d, 370, Edmund Orgill, Ruby. C, 371, A E Godeffroy, Guymard, N Y, Queen. 1st, No 40, Edmund Orgill's Rose.

Class 12—Pointer Dog Puppies, Under 12 months—H c, 378, Austin White, Braintree, Mass, Rover. 1st, 380, same owner, Snipe. V h c, 381, same owner, Ring.

Bitch Puppies, Under 15 months—V h c, Richard Eaves, Providence, R I, Queen; 396, same owner, Belle. H c, 398, A E Godeffroy. V h c, 399, same owner; 400, same owner. 1st, 401, same owner. V h c, 403, same owner.

Class 19—Beagles, Dogs or Bitches—1st, 462, George Pownall, Christiana, Pa, Bess. 2d 465, Al Watts, Boston, Sancho.

Class 20—Dachshunds, Dogs or Bitches—1st, 467, Francis Leisler, New York, Punk. 2d, 468, same owner, Nellie.

Class 21—Fox Terriers, Dogs or Bitches—1st, 469, Al Watts, Boston, Turk. H c, 461, Geo Walton, Boston, Guy; 475, Chas H Milliken, Portland, Me, Fox. 2d, 477, J A Doyle, Plas Dulas, Abergle, England, Lottery, late Tricard.

Class 22—Greyhounds, Dogs or Bitches—1st, Ernest W Cushing, Boston, Gisela. 2d, Henry W Livingston, New York, Charlie.

Class 23—Scotch Deerhounds, Dogs or Bitches—V h c, 483, J R Webster, East Milton, Mass, Mona. 1st, 484, same owner, Lupus.

DIVISION TWO—NON-SPORTING DOGS.

Class 24—Mastiffs, Dogs or Bitches—1st, 494, A W Austin, Boston, Jack. V h c, 504, Francis B Appleton, Ipswich, Mass, Juno.

Class 25—St Bernards, Dogs or Bitches—V h c, 509, Le Roy Z Collins, Lancaster, Mass, Alp. 1st, 514, John R Alley, Jamaica Plain, Mass, Rodney. H c, 516, Arthur H Nichols, Boston Highlands, Mass, Jack. 2d, 519, Charles Armstrong, Allston, Mass, Lion.

Class 26—Newfoundlands, Dogs or Bitches—V h c, 522, Simon T Sweet, Beverly, Mass, Rose. H c, 524, Horace L Nilee, Springfield, Mass, Boston. 1st, 615, Henry W Livingston, New York, Hayes. H c, 526, Wm S Blodgett, Cambridge, Mass, Fritz. 2d, 527, Augustus Thorndike, Longwood, Mass, Cæsar.

Class 27—Siberian, or Utm Dogs, Dogs or Bitches—V h c, 529, Christian Muller, North Cambridge, Flora. 1st, 530, Al Watts, Boston, Nero. 2d, 531, J H Healey, Boston, Linn.

Class 28—Dalmatian or Coach Dogs, Dogs or Bitches—2d, 532, Oscar Foote, Reading, Mass, Sport. 1st, 533, James A Bowtelle, Providence, Spot.

Class 29—Shepherd Dogs or Collies, Dogs—2d, 535, Fred A Taft, Dedham, Mass, Bruce. H c, 536, Gard G Hammond, New London, Conn, Capt Jack. V h c, 539, H M Lathrop, Boston, Nick. 1st, 540, J E Harlow, Jr, Hingham, Mass, Dan.

Bitches—1st, 542, Gard G Hammond, New London, Conn, Jessie. 2d, 543, Mrs E Ward, Cambridgeport, Mass, Jessie. H c, 544, Edward Ward, Cambridgeport, Mass, Flora. V h c, 545, same owner, Jessie.

Class 32—Pugs, Dogs or Bitches—V h c, 576, Miss Mary D Wagstaff, Babylon, L I, Sambo. H c, 578, A H Stebbins, Boston, Donna. 2d, 580, H L Daggett, Boston, Dandy. 1st, 582, Miss Chickering, Boston, Punch.

Class 34—Black and Tan Terriers, Dogs or Bitches, not exceeding 11 pounds weight.—2d, 591, William Vaneon, Boston, Pinkey. 1st, 595, N Gunning, Boston, Ida. V h c, 598, James A Bowtelle, Providence, R I, Pinkum.

Class 35—Skye Terriers, Dogs or Bitches—1st, 607, George M Gale, Boston, Flossie. 2d, 608, Mrs A Levins, Boston, Dick.

Class 38—Yorkshire Terriers, Dogs or Bitches—2d, 631, Henry Kistermann, Bright. V h c, 632, same owner, Charley. H c, 633, same owner, Dandy. 1st, 634, same owner, Beauty.

Class 41—Italian Greyhounds, Dogs or Bitches—2d, 646, Geo A Converse, Salem, Mass, Mollie. 1st, 649, George W Poore, Boston, Dandy.

Class 42—Poodles, Dogs or Bitches—1st, 650, William Hodnett, East Boston, Carlo. H c, 651, W T Hord, Charlestown, Mass, Dot. 1st, 655, James Carroll, East Cambridge, Mass, Pompey.

DIVISION THREE—SPECIAL CLASSES.

Class A—Best Kennel English Setters—1st, 676, L H Smith, Leicester, Paris, Pearl, Clip, Temple Bar and Lass o' Gowrie.

Class B—Best Kennel Irish Setters—1st, 678, St Louis Kennel Club, Loo II, Berkley, Sting II, Elcho II and Biddy.

Class C—Best Kennel Gordon Setters—1st, 682, W J Farrar, Rupert, Rapp and others.

Class D—Best Kennel Pointers—1st, 686, Edmund Orgill, Memphis, Tenn, Flake, Rush, Rose, Luby, Belle.

Class F—Best English Setter Stud Dogs—1st, 692, L H Smith, Paris.

Class G—Best Irish Setter Stud Dogs—1st, 694, Dr Wm Jarvis, Elcho.

Class H—Best Gordon Setter Stud Dogs—1st, 696, Jerome Marble, Grouse.

Class I—Best Pointer Stud Dogs—1st, 697, Edmund Orgill, Flake, with Rush and Rose.

Class J—Best English Setter Brood Bitches—1st, L H Smith, Pearl.

Class K—Best Irish Setter Brood Bitch—1st, John E Develin, Moya.

Class L—Best Gordon Setter Brood Bitches—1st, 709, W M Tileston, Lou.

Class M—Pointer Brood Bitches—1st, 714, Baltimore Kennel Club, Lilly.

Class N—Foxhounds, Not less than two couples—1st, L P Bartlett, Arlington, Mass, Lion, Jack, Hunter, Fannie.

Class O—Mastiffs, Dog or Bitch—1st, A W Austin, Boston, Jack.

Class P—St Bernards, Dogs or Bitches—1st, 734, Arthur H Nichole, Boston Highlands, Mass, Jack.

Class Q—Pugs, Dogs or Bitches—1st, 740, Miss Chickering, Boston, Punch.

Class R—Best Pair Irish Setters, Dog or Bitch—1st, 741, St Louis Kennel Club, Loo II and Berkley.

Class S—English Setter, Dog or Bitch, Native or Imported, having the handsomest head—1st, 762, J & R B Nesbitt, Cambridge, Mass, Rock.

Class T—Best Setter of any Breed, Dog or Bitch, Imported or Native—1st, 775, P H Bryson, Memphis, Tenn, Gladstone.

Class U—Best Field Spaniel, Dog or Bitch, either Clumber or Cocker—1st, 779, E W Davis, Providence, R I, Fanchon II.

Class V—Best Brace Beagles—1st, 781, Arthur Talbot, Lead—Race.

Class W—Best Pointer of any Weight, Dog or Bitch—1st, 699, Westminster Kennel Club, New York, Sensation.

Class X—Best Native Setter Puppy of any Strain, Dog or Bitch—1st, 803, Henry L Kingsley, Stoughton, Mass, Bessie B.

Class Y—Best Skye Terrier, Dog or Bitch—1st, 806, Geo M Gale, Boston, Flossie.

Class Z—Best Blenheim or King Charles Spaniel—1st, 809, S K Hindley, Worcester, Mass, Lady, with three pups.

BALTIMORE BENCH SHOW.—This show, which takes place April 23, 24, 25 and 26, promises to be the finest display of the kind ever seen here. The building selected for this exhibition—Masonic Temple—could not have been better, as the hall is well lighted, and easy of access from any part of the city, and splendidly adapted to the purpose. The number of entries promises to be very large, and from appearances the Maryland Kennel Club will have no cause to regret their enterprize. TRAYMORE.

DOGS FOR THE BALTIMORE BENCH SHOW.—The Adams Express Company will carry dogs from New York to Baltimore, for the bench show, at three dollars per 100 pounds or less and return them free. *Dogs must be boxed and prepared in all cases.* If enough dogs are sent at the same time, a special car will be provided for their transportation. The first eight cubic feet are considered as taking the bulk of a hundred pounds and will be charged as such. Every additional four cubic feet count as 100 pounds more.

WESTMINSTER KENNEL CLUB.—Mr. Charles Lincoln informs us of the assured success of the coming bench show in New York. The managers have determined to limit the number of entries to 940 dogs. We beg to acknowledge catalogue of prizes, etc., which the crowded condition of our columns prevents our publishing in this issue.

NATIONAL AMERICAN KENNEL CLUB.—By virtue of authority conferred by Article 5 of the constitution and by-laws, I hereby call a regular meeting of said club at New York, May 16 next, at 12 M. The secretary will give the members the requisite notice of objects of meeting. Notice of the place of meeting will be given hereafter and be posted in the Hippodrome during bench show of Westminster Kennel Club. E. H. LATHROP, Pres't. N. A. K. C.

Springfield, Mass., March 20, 1878.

A VISIT TO THE EDINA KENNEL.

CYNTHIANA, Ky., March 18th, 1878.

EDITOR FOREST AND STREAM:

The recent bench show at St. Louis recalls to my mind a visit I made to the kennel of Jessie Sherwood, at Edina, Mo., last fall, while shooting in that vicinity. I consider the kennel a model establishment, and for cleanliness, neatness and general convenience it surpasses any I have seen. The grounds are quite spacious for the purpose, comprising an enclosure of about two acres of dry and rolling ground, part of which is covered by a grove of natural shade trees. The whole is enclosed by a high, tight board fence. Along one entire side are arranged the kennels, a continuous building, divided by close partitions into roomy and airy apartments—those intended for a pair of dogs being about 10x12 feet, with eight-feet ceilings—others are more roomy still. The sleeping bunks are placed about two feet above the floor, and are supported from the wall, so that underneath they are entirely clear of props or supports, or anything that can interfere with a free use of the broom in sweeping out. Adjoining the kennels on a side running at right angles with them are the sleeping apartments of the attendants and the kitchen; the latter is furnished with a large stove and boilers for the preparation of the food for the dogs. The fence and entire range of buildings, inside and out, except the floors, are neatly whitewashed, and every thing is kept scrupulously and rigorously clean—the effect of which was apparent in the healthfulness and good appearance of the dogs, young and old.

Mr. S. took much pride and delight in showing me his stock, which consisted of more than fifty sporting dogs of all kinds and ages—setters, pointers, spaniels, retrievers, foxhounds, beagles, fox-terriers, etc. First and prominent among the setters was the imported champion Rupert—black and tan Gordon—a noble and handsome animal who fully deserves his title of "Champion." Another beauty was Pride of the West, a scion of Pride of the Border, a remarkably fine dog, liver and white, who was first at St. Louis in 1876 and 1877. Among the bitches were the red Irish Fanchon and Carrie II., the latter was third at the Field Trial at Hampton, Iowa, last fall. Blue Dash, a roan dog, who is pronounced as "good as they make 'em" in the field. Among the pointers I noticed Sancho, imported, winner of ten prizes in England and America; he is a finely proportioned liver and white dog, of the lesser breed of pointers. Cæsar, a small liver-colored pointer, I know from experience to be as good a dog as ever was shot over; he was a winner at Chicago when a year old. Among the bitches were Dream and Jule with their litters of promising looking pups. The imported clumber spaniels Flax and Florence, I admired very much; I percieve they were both winners at St. Louis, this month. Also among the fortunate ones at St. Louis this time were the beagles Lee and Lillie, which I also saw during my visit, and thought them little beauties—but enough, suffice it to say that I was highly pleased and well-entertained by that prince of good fellows, Jesse Sherwood. J. A. HENSHALL, M. D.

COL. JOHNSON'S FOX-HOUNDS.

NASHVILLE, Tenn., March 26.

EDITOR FOREST AND STREAM:

As the weather yesterday was so very fine, the sun so bright and the air so balmy, I was thinking how very agreeable a drive in the country would be, when, to my delight, my friend Marsh Pinchard, Esq., drove up behind his favorite horse, Mike, and proposed a visit to Col. W. H. Johnson, at his farm, about seven miles north of this place. I accepted the proposition and away we went. We crossed the Cumberland River over the Suspension Bridge, and took the Gallatin Turnpike, which passes by the Colonel's farm. The road is an excellent one, and the country on both sides of it is as fine for farming purposes as any there is in Middle Tennessee, and as highly cultivated. The farms along this road are not very large, but highly improved, many of them having magnificent residences upon them. About three miles out we passed upon our right the Davidson County Asylum for indigent men and women. The site is a handsome one, and the grounds about it beautifully laid out. A mile or so further on, upon the left, is the national cemetery, where some 12,000 Union soldiers are buried. At last, after a delightful drive of an hour, we reached Col. Johnson's farm, one of the finest improved places in the country. We were fortunate in finding the Colonel at home. He received us in the most kind and hospitable manner.

The name of Col. W. H. Johnson is well known from Maine to Florida as an authority on all matters pertaining to thoroughbred stock, particularly horses and hounds. He has no thoroughbred horses on his place at present, but he has the finest pack of fox-hounds in this part of the State. The dogs have been bred with great care, their pedigrees being traceable back for thirty or forty years. Some of them are one-half and some seven-eighths, English bred. He has seven couples, which are as handsome specimens as can be seen. The Colonel shows even in the names of some of his dogs his great weakness for the blood horse, his favorites being called Harry Bassett and Tom Bowling; the others are named, respectively, Bramble, Jack, Peter Cooper, Phil, Pointer, Sandy, Doria, Minnie, Dolly, Kitty Lou and Zoo Zoo, puppies, and Lily; the last is of the Gold-Dust strain. They are of different colors: Bassett and Bowling are white with very dark tan spots; Phil, Sandy and Doria are red; the others are white, with yellow and white and black spots; they are not quite so heavy as the pure English hound, but Col. J. thinks they are faster. Their voices are very fine, as I had an opportunity of judging while they were chasing some rabbits about the fields in the afternoon.

The Colonel is an indefatigable huntsman, as the evidences in the shape of scalps and brushes of this year's take, which he has hung up on his piazza, will prove. This winter past his pack caught thirty-one foxes—twenty-six gray and five red ones. He greatly prefers chasing the gray fox, because there is more sport in it. The red fox, as soon as frightened by the sound of the huntsman's horn or by the dogs, before they get his scent, starts right away in a straight line, and will often run eight or ten miles without stopping; and as the country is too rough, the fences too high and the farmers objecting to riding across their fields, if the dogs should get upon such a trail they run clear away, and the huntsmen lose all the sport. Whereas the gray fox, when unearthed or started, tries to evade the dogs by doubling and turning, and running from one cover to another, thus allowing the huntsmen an opportunity of witnessing the chase from some elevated place, or for those who are well acquainted with the country to dodge about from point to point, and thus keep the hounds in sight the greater portion of the time. Next to following the hounds, nothing pleases Col. J. more than to relate anecdotes of scenes connected with hunting. Of these he gave us quite a number. He also stated one or two peculiarities of the hound; one was that a pack of hounds would never fight or interfere with a strange hound that might be added to the pack, but that with any other breed of dogs they would not only fight when first brought into contact with them, but would never become reconciled to him. Another was that a thoroughbred fox-hound would not kill sheep. After a first-rate dinner and a most enjoyable day, we bid good-by to Col. Johnson and returned to town. J. D. H.

THE ROSE TREE FOX HUNT.—Our thanks are due to this fine club for a copy of their constitution and by-laws. We would call particular attention to an admirable description of the Hunt and its members, kindly furnished us by a leading fox hunter, which we shall print in our next issue.

KENNEL REGISTER.—Mr. Arnold Burges announces that the "Kennel Register" will be placed in the printers' hands about the close of May. We sincerely trust, now that Mr. Burges' editorial labors have drawn to a close, that this long-expected book will not be delayed in the mechanical part. To those numerous inquirers of the FOREST AND STREAM AND ROD AND GUN, as to pedigrees, we pray them to have a little more patience.

CURSORY JOTTINGS BY A STRAY DOG.—A dog in Cambridge, Mass., leads policemen to the spot where drunken men are lying, and in that way saves many lives which would otherwise go to the dogs, and stay.....They have been attempting at Bergen-Point, N. J., recently to test the superior brutality of dog and man. A brute of a dog made an unprovoked attack upon a little girl, seriously injuring her. Thereupon a masked mob of human brutes, headed by a man who dispenses religion on the Sabbath, paraded the streets at night, demanded all dogs of their owners, and killed them on the spot. Some very valuable animals fell a prey to the fury of the rioters. Legal proceeding are to be instituted for the recovery of damages.....The failure of another New York bank reminds me that a bank in Massachusetts was protected from burglary the other night by a faithful watch-dog.....What is the relation of a catastrophe and a dogmatism? Ans. A catastrophe is serious—Sirius is the dog star—the dog's tar, if his bark be on the seas, may be a mate—which the same is a dogmatism—*Q. E. D.*.....A Stamford, Conn., puppy has been adopted by a hen; follows his feathered fostermother about,

responds to her cluck! cluck! and nestles under her wing at night.....I heard not long since of a dog in Wisconsin whose exploit, narrated in the *Wisconsin State Journal*, found a place in my note-book. An amendment was up in the Legislature of that State to prohibit all hunting with dogs:

"While the amendment was under discussion, a large dog, evidently smelling trouble in the breeze, determined to come to the rescue of his race, and made his appearance in the assembly chamber, and placed himself in the main isle in front of the speaker's desk, and near the introducer of the amendment so thoroughly calculated to interfere with the rights and pleasures of dogs. By a process of gracefully wagging his tail, and looking into the members' faces with a pleasant countenance, the desired effect was produced, and the aggressive amendment was killed."

DASH—*Jackson, Miss., March* 27.—Did you ever see a dog back out from his point on a covey of birds for fear of flushing when his master was some distance off? If so, did you ever know a dog to habitually back out from a covey of partridges (*Ortyx virg.*), when not in sight of his master, come to him and tell him—yes, tell him! as well as a pair of expressive hazel eyes and a crouching attitude can tell—and immediately go back and find the birds again? If you have known a dog to do that on partridges, have you ever known one to do so on snipe? What is more, back out from his point on one or more snipe, but never from a single partridge. There is no question about understanding Dash if you have ever seen him do it once. Dash will come back in the same manner when flushing a single bird, or a covey rises wild in the woods, not allowing the dog to come to a point. I can instantly tell that the birds are gone. Dash, instead of going back carefully, ranges rather wildly, glad, I suppose, to have gotten off without a scolding, which he thought to be in store for him.

Dash does not like water. Even in summer he never indulges in a voluntary swim. It would have done you good to see him retrieve a teal out of a pond, round the edges of which the water had congealed. Dash is a splendid retriever. He will bring a crippled bird without rumpling a feather. And with what delight he brings them in! I have never known him to deliver a bird to any one except myself. He will swim a creek with the bird in his mouth rather than fetch it to the friend on the same side with him. He is the dog who, when four and one-half months old, pointed as steady as he does now. Dash would not bring shucks at a bench show, nor is he anything extra in the field; simply a good average dog with a high order of intelligence.

Yours truly, GEO. C. EYRICH.

A VERY CONSCIENTIOUS DOG.—The following letter is from a Philadelphia correspondent. His dog is certainly a very intelligent animal. She wishes, as far as is possible, to accurately locate the game which she scents. We have known of similar cases:

Noticing several very interesting accounts of the peculiarities of dogs furnished at different times in the FOREST AND STREAM AND ROD AND GUN, and being much interested in the same, I am constrained to contribute the following on which I would very much like to have your opinion. In my kennel I have a pointer bitch which came into my possession after having been trained. She is thoroughly broken, has a perfect nose and is under control at all times, and I have never known her to pass a bird, although last season was my first experience with her. Her peculiarity is this: On a windy day, when she makes a point, she will wait until you get within ten feet of her, when off she starts, making a complete circle around the game, keeping her head turned toward the centre. On arriving at the place from which she started she makes another stand, when you can work her without any further difficulty. It never happens except when the wind is blowing, and never, to my knowledge, has she in this circus performance disturbed the game. Can you give any explanation? or have you ever heard of a similar case? G. K. M.

—Mr. William Vie, of St. Louis, requests us to state that at the St. Louis Bench Show his dog, Vance, was not entered for competition.

—George E. Poyneer, of Clinton, Iowa, claims the name of Boston, for his red Irish setter dog pup; color, deep red, white frill. Born December 15, 1877, out of St. Louis Kennel Club's Duck (formerly E. F. Stoddard's), by Stoddard's Bob. Bob and Duck are grand specimens of their class, as their many winnings indicate.

TENNESSEE—*Columbia, March* 25.—Fanny, an imported English setter bitch, the property of a negro man, was killed by a drunken countryman who had a dislike for the negro. He called the dog to him and cut her throat with his pocket-knife. Fanny's loss will be felt by sportsmen, as she gave them fine dogs. VAL.

Sea and River Fishing.

FISH IN SEASON IN APRIL.

Speckled Trout—*Salmo fontinalis.* Land-locked Salmon—*Salmo gloveri.* White Perch.—

THE OPENING OF THE TROUT SEASON.

MR. EUGENE G. BLACKFORD has worked miracles this year in his trout exposition. This idea, novel in its character, invented, if we may call it so, by Mr. Blackford, only dates from some years back. The Treasurer of the American Fishcultural Association conceived the idea that two ends might be accomplished by a trout show. Firstly, it would act as a stimulant to the breeders of fish, and secondly, it would educate the general public in regard to what is certainly the most beautiful of all the varieties of fish. Why should we not commend those who, dealing in articles of food, bring into the business proper taste as to the display of their business? Before Mr. Blackford's time food in Fulton Market was dumped on stall and counter; now, dealers in our great marts where food is sold are commencing to vie with one another in the neatness of their display. No end of good food is ruined in New York from the careless way in which it is handled. The lesson learned in Fulton Market in this famous trout display will have its good effects.

There never was such a superb show as this one. Exposed on marble stands, the proscenium, as it were, of a fish theatre; for a background was a huge tank swarming with trout. Of varieties of trout, these were endless. Mr. Blackford, for months beforehand, had been in communication with every trout raiser in the country, and on the stand were fish from all possible localities. England, Ireland and Scotland had furnished their quota. In examining the innumerable varieties of fish having wide divergencies of color, though the forms all more or less approach to the same type, a person with the least insight into the general effects of the domesticity of animals, is struck with this idea—to wit: that trout when cultivated, just like pigeons or dogs, though starting from one main type, through the agency of man, are prone to form certain new combinations first appreciable in color, and quite likely, in time, to be manifest in form. Let us, dropping the speculative, now get to the actual facts. The large tank was filled with live trout raised by Mr. H. D. McGovern. Mr. McGovern, a leading member of the Fishcultural Association, raises his trout almost in Brooklyn. Of dead trout, Messrs. E. H. Seaman, of Ridgewood, N. J.; Thomas Clapham, of Roslyn, L. I.; A. A. Anderson, of Bloomsburg, N. J.; H. T. Dousman, of North Prairie, Wis.; J. D. Brodhead, of the Delaware Water Gap: Ira Hoyt, of Halsey Valley; G. W. Thompson, of Sag Harbor, L. I., were among the many contributers. Such famous breeders as Livingston Stone, Seth Green and R. B. Roosevelt had also sent their cultivated fish. Of wild trout, few streams within five hundred miles of New York were there that had not sent their wild fish, trout from the Provinces being in abundance. Even anglers had commenced fishing a day or so before in other States where the close season is over sooner than in New York, in order to send in specimens to Mr. Blackford. For one single man to do all the talking and make the explanations was impossible, and accordingly, Mr. Fred Mather acted as *cicerone*, and, perhaps, there is not to be found in the United States a gentleman more familiar with wild and cultivated trout than is this leading fishculturist. As to the crowd, if it had been an exhibition of diamonds at Tiffany's it could not have been more largely attended. All day Monday, Tuesday and Wednesday the passage-way in Fulton Market was crowded, the ladies being present in large force. Mr. Blackford had numerous Ferguson jars on exhibition, where young trout and salmon, hatched out by him, could be seen. Such shows, quite unique of their kind, belong essentially to New York, and we doubt if such exhibitions could be made the same objects of interest anywhere out of the great Metropolis. We must highly applaud the good sense which dictates such a trout show, as it is one of the best methods of propagating fish culture and explaining its advantages to the masses. Certainly if trout, a most difficult fish to rear, can be raised in large quantity, why cannot the more ordinary fish in use be grown even on a more extensive scale? We have, then, in this hasty description, touched but little on the esthetic portion of such an exhibit, only endeavoring to show its usefulness.

To be very practical, then, we had the good fortune to be one of a tasting committee, of which Captain Mortimer and Mr. Fred Mather were among the judges. The flavor of the cultivated trout has been doubted as to its delicacy. There were passed in solemn review under the fork of the tasters, fish raised by Mr. Thomas Clapham, of Roslyn, L. I.; by Mr. Fenton, of Pequonnoc, Conn.; by Mr. H. D. McGovern, of Brooklyn; by A. Jackson, of Foster Meadows; by Ira Hoyt, of Halsey Falls; by G. W. Thompson, of Sag Harbor, and the real, true, original wild trout, caught by Mr. J. D. Brodhead, of the Kittatinney House, Delaware Water Gap. The cultivated trout of Mr. McGovern's breeding were found to be of two different colors—white and pink—and were wonderfully fine as to flavor. Mr. Thompson's Sag Harbor fish were equally good, as were Mr. Clapham's fish. The Clapham fish are not fed on liver, but on small fish and clams. In fact, all the fish were excellent, and no superiority could be claimed by the wild trout.

Whether in the season of 1879 Mr. Blackford will surpass this exhibition, remains to be seen. It is hard to imagine how he could make a more wonderful trout display.

As has been noticed before in the FOREST AND STREAM AND ROD AND GUN, the English fish had that purple gleam which Rolff, the English artist, invariably gives his fish. The English trout were in shape or appearance very similar to our own, save as to color. The Blackford trout show will continue, we suppose, throughout the week, and the leading icthyological event of April will be talked about and looked at for some time to come.

FISH IN MARKET—RETAIL PRICES.—Our quotations are as follows: Striped bass, 20 cents; large do., 15; smelts, 15; blue fish, 15; frozen salmon, 30; green do., $1; California, 50; mackerel, large, 20; mackerel, small, 12½; Southern shad, 30 to 50; native, 00 to 75; Connecticut River, $1.50; white perch, 15; Spanish mackerel, 35; green turtle, 15; frost fish, 6; halibut, 15; haddock, 6; codfish, heads off, 8; do., heads on, 6; black-fish, 15; Newfoundland herring, 6; flounders, 10; do., small, 6; eels, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 25; turbot, 25; scallops, $1.50 per gallon; soft clams, per 100, 30; do., large, 60; whitefish, 15; pickerel, 15; salmon trout, 15; Canada brook trout, 25; Long Island do., $1.

First Connecticut River shad received on Tuesday.

—In the market last week one of the most inspiring sights to an old salmon rod-fisherman, was five noble Scotch salmon, all the way from their native Tweed. They had crossed the Atlantic in prime condition, and now laid side by side on the marble slabs at the stand of Messrs. Middleton and Carman, nearly uniform in size and uniform in their hues of blue and silver, whose lustre the long voyage had scarcely dimmed. The quintette weighed together 125 pounds, the largest scaling full thirty pounds. An old Scotchman, whose birth-place was beneath the shadow of Kelso Abbey, was looking at them lovingly, as if they might be kindred. He recalled to mind the many struggles he had had in bygone days with fish as noble as they, whose capture required all the patience and artifices of the angler's craft, and no one but those who have tried can ever know what skill is required to kill so heavy and monstrous a fish with rod, reel and line. It is impossible to realize what 25 or 30 pounds of live, active salmon represents until one has seen the huge bulk stretched out before his eyes. The achievement of landing so great a fish is something to be justly proud of. These five fish, however, were not taken with the rod, but with gill nets. The discolored marks upon their broad shoulders showed where the fatal meshes had taken hold. From a measurement made, it was evident that the meshes were fully eight inches wide. The written testimony was a credit to the sagacity and providence of the Scottish fishermen and the wisdom of the Scottish laws, and a rebuke to the cupidity of greedy men who spread their toils for everything which swims, big or little, weaving their meshes so small that sprats can scarcely wriggle through.

Round black spots upon the gill covers are infallible identifications of the true salmon, and while these vary in number it is rare to find a fish without them. One of these Tweed salmon was peculiar in this respect, the spots being wholly absent. Of the other four, two had a spot each on one opercle, and two on the other; the third had nine spots on one cover and four on the other; the fourth, eight on one cover and three on the other. We had a present of a chunk of one of these Tweed salmon, and we assure our readers that it was a *bonne bouche* the flavor very little impaired by lapse of time since the fish was taken from its liquid element.

Years ago, and up to 1855, the importation of salmon from Great Britain was of frequent occurrence; and the market price was $2.25 per pound for a lot of fifty fish and upward. With the restoration of our own salmon fisheries, in both the Atlantic and Pacific waters, the price has dropped to 40 and 60 cents per pound, but the spring run of Eastern salmon readily bring $1.25 per pound.

MASSACHUSETTS—*Medford, March* 23.—Smelts have returned to their spawning beds at an earlier date and in larger numbers than heretofore. The law provides for their safety (or rather the watchman's pocket) from the 15th of March to the 1st of June, but during the unusually warm weather of the first of the month they made their appearance in large and goodly numbers, which necessitated the employment of a watchman to protect the hasty *eperlanus* from the frying pan of the immediate neighborhood. MEMOIR.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals reported at this port the past week has been 30, viz., 8 from the Banks with 300,000 lbs. halibut, and 22 from Georges with 650,000 lbs. round codfish. Fresh halibut were in liberal receipt the first of the week.—*Cape Ann Advertiser, March* 29.

RHODE ISLAND—*Newport, March* 4.—The first sea-bass of the season was taken last week by Mr. Crandal at Scituate Point. SEA DUCK.

NORTH CAROLINA.—The shad fishery in Albemarle Sound is reported to be a dead failure this season, and those who have large amounts of capital invested feel greatly depressed in consequence.

TENNESSEE—*Nashville, March* 28.—The weather the past week was most favorable to anglers, and they did not fail to take advantage of it. All those who went out met with good sport, and some of them took a great many fish. A party of gentlemen from Fayetteville caught in the Elk River, a tributary of the Tennessee (and one of the best stocked streams in the State) forty pounds of trout (bass) and black perch. Another party of three caught on the 21st inst., in Big Harpeth, thirty odd pounds of trout (bass) and black perch. To-day Messrs. Massey, Baker and Jackson, of this city, caught in Little Harpeth fifteen trout (bass) and one black perch, the former averaging 1½ pounds each. They caught them early in the morning, the fish ceasing to bite after eleven o'clock.

A few years ago a large number of shad eggs were put in the Cumberland, Tennessee and Ohio rivers, but the experiment has not proved successful; none of them have returned to the Cumberland, and but few have been seen in either of the other two rivers. At the time the deposit was made in the Cumberland there was a heavy freshet, and a great deal of drift-wood floating down, and this is no doubt the cause of the failure. The Meek reel is the favorite one among the more scientific anglers about here. They use the natural Japanese bamboo rod, from eight to ten feet long, and weighing from six to twelve ounces; to give them more stiffness they have them wrapped between the joints. The bait used is the minnow for trout (bass) and black perch; sometimes they will strike at a grasshopper. From what I have seen of the tackle used by several of our fishermen, I am satisfied that were they to use more delicate lines and colored to match the water, and some of the artificial flies in use elsewhere, they would be more than rewarded by the increase in their takes of fish. There are a number of artificial fish ponds about here, in which large numbers of bass, brim, and white perch are grown. When very small they are taken from the creeks with seines, and transferred to these ponds, where, with a little attention, they grow very rapidly. There is no establishment in the State for hatching, though there is no place in the country having more natural advantages for doing so than here. J. D. H.

Columbia, March 25.—Trout fishing here is now in full blast. Daylight finds parties on the road to the dam across Duck River, one mile north of the city, with their

tackle, all anxious to get there first. I counted no less than twelve there one morning, comprising sportsmen, profit fishers and ground-hog case anglers; men, boys, whites and blacks, all anxious "to get a bite." Although a great many trout were taken, I led the score with a creel of eight, weighing from one to two pounds each. There are fifty-four trout lines between the city and dam, and how fish manage to escape all the hooks on fifty-four trout lines is a mystery. The largest trout was caught by L. P. P., weighing two and one-half pounds. Catfish, suckers and red horse caught abundantly. VAL.

Will Val please step to the front and explain what a "grong-hog case angler" is?

SPECKLED TROUT IN TEXAS—*The Sportsman's Gazetteer Vindicated.*—Exception having been taken to a statement of Hallock's "Sportsman's Gazetteer" that there are speckled trout in Texas, we submit the following letter from the author of the "Coming Empire; Or, a Thousand Miles Through Texas on Horseback":

Mr. Hallock—Dear Sir: I have yours asking if we have the true speckled trout—*Salmo fontinalis*—in Texas. I have never seen it in Texas, but believe that it may exist in the streams of the elevated territory of the northwestern portion of the State. Judge J. F. Crosby, who lived several years at El Paso, tells me that he saw them very abundantly in a tributary of the Pecos, called Rio Bonito; but this is in New Mexico. As it is not far from the Texas line, I do not see why they may not be in the same sort of streams in Texas. The country is the same on both sides of the line, and the streams in all respects similar. Judge Crosby is sure that these were the true speckled trout, and there are few who are better skilled in fishology than he. I fully believe that you are right in your "Gazetteer," though most of Texans may not think so. The *Salmo fontinalis* certainly does not exist in the State outside of that wild, elevated territory. N. A. TAYLOR.

OHIO—*Painesville, March* 24.—C. A. Hardway caught four black bass in the river the other day. They averaged two pounds apiece. TARGET.

IOWA—*Pomeroy, March* 22.—Fishing is prime now. Pike are being caught by the load at Twin Lakes, near here. Farmers catch them and salt them down for summer use, and they are very nice. They are brought up sometimes as large as twenty-five pounds, and one was speared in Coon Creek, at Oxenford's Mills, that kicked the beam at thirty-three pounds. How is he for a minnow? Nothing is taken now but pike, the buffalo is not yet running. A large lot of California salmon were placed in the lakes about three years since, but nothing has been seen of them since, and it is thought they have all fallen a prey to the voracity of the pike.

—H. L. Leonard, of New York and Bangor, Me., has donated as a prize for fly casting one of his very beautiful six-strand split bamboo trout fly rods, 11½ feet long, with a reversible handle, so that the reel can be used above or below the hand; two long tips, one short tip for bait, in a black walnut grooved case, gotten up expressly for the occasion in extra style, to be competed for at the next annual meeeting of the New York Sportsmen's Association, to be held in May at Buffalo, under the auspices of the Forester Club. Mr Leonard's thirty years' experience in fly fishing for trout and salmon in the United States and Canada, have qualified him to know what the requisites of a good rod are. He is the first person, we believe, who ever made a six-splice bamboo trout rod. His six strand salmon and grilse fly rods have an equally enviable reputation. The winner of the prize at the Buffalo contest will consider himself a fortunate man.

EMULATION IN ANGLING—*Mr. Editor*: Trout fishing possesses peculiar fascination. Amateurs have been at a loss for adjectives with which to describe the emotions awakened by the first "strike," and the ecstacies experienced by their first capture. Though ordinarily it is all that may be claimed for it by even the enthusiast; yet it is possible to add greater zest to the pleasure by the introduction of a little wholesome competition. My simple object is to tell of one way in which this may be done. It is a plan that was adopted last season by several gentlemen residing in Chatham Village, Columbia County, New York, and which worked very successfully and happily.

In pursuance of a previous invitation, these gentlemen, eight in number, met together and resolved to form themselves into a club to be known as the "Field, Flood and Forest Fraternity." They called themselves, in brief, "The F's." They then proceeded to elect a President, Secretary and three of their number, whom they called "Masters of the Scales," to receive and weigh the products of the stream as they might be offered by the members, from time to time, and to report the result to the Secretary, whose duty it was to make and preserve a careful and accurate record of the same.

A first-class trout rod was procured, for which the members should compete, subject to the following conditions:

The trout must be caught with hook and line, during the season of 1877, between the 10th of April and the 9th of September, in any of the streams alike accessible to all the members, within a radius of 60 miles from Chatham Village. This excluded all lakes and private ponds. The member who first takes a trout weighing eight or more ounces to have charge of the rod. Any member taking a heavier trout than this shall receive the rod into his custody, and so on, the heaviest weight taking the rod. The member who thus holds the rod at the end of the season shall retain the rod as his own personal property.

The members were required to go a fishing on the last day of the season, and on the evening of that day or the day following they were to assemble at such time and place as should be determined upon, to partake of the trout on hand, the successful competitor for the rod furnishing the *et cetera* for the dinner, and the members of the fraternity, relying upon the inspiration of the occasion, to suggest suitable toasts. The members put themselves upon their honor in this declaration:

"We are a fraternity of gentlemen, and each is placed upon his honor in respect to his strict adherence to the foregoing rules and regulations, and any member who may, by falsification, prevarication or deception of any kind, compromise his honor and betray the confidence of his fellow-members, shall apologize for the same and purchase for the next season's competition the prize, to be worth not less than $10, nor more than $100."

The nearest approach to a violation of the compact happened in this way: A member of the club received one morning, from a friend, five or six niec trout from the New York market. That same day this gentleman and another member went together to whip "Indian Creek"—a stream about two miles distant. "Indian Creek" was once quite celebrated for its trout; but, like many other streams in neighborhoods which have become populous, it is now only occasionally that you have the good fortune to take a fish. In an incredibly short time they returned from their excursion with three fine specimens. The largest lacked only a fraction of an ounce of weighing enough to take the rod, and sufficient shot was introduced into its stomach to make it outweigh the champion trout. That afternoon the news reached the ears of the custodian that his fourteen-ounccr had been beaten by a fraction over. There were symptoms of great uneasiness in that man's bosom. His peace was gone. His rest was broken, until a day or two afterward, when he was officially informed that the whole affair was a hoax.

The trout which took the rod at the close of the season weighed 14¾ ounces. The whole number caught by the club was 1,028, weighing about 100 pounds. Ninety-one were taken the last day, affording a bountiful supply for the final dinner of the season, which formed a fitting conclusion to a season made ten-fold more interesting by a little competition. HIX.

[The suggestion of our friend is a happy one.—ED.]

INSTRUCTIONS IN BASS FISHING.
No. 1.

CHICAGO, March 12, 1878.

Dear Editor—This warm spring day the spirit of the fisherman is upon me, and, neglecting my labors and forgetful of the cares of life, I have sat by my table for an hour, dreaming over and over again my last season's sport. I want to talk to some one of the delights of bass fishing, and I propose to talk to you awhile about it, and to your readers, if it shall please you to introduce me to them.

Do you know how to take black bass *secundum artem?*

Now, Mr. Editor, this question is not addressed to you, because you are supposed to know everything, especially everything pertaining to the arts of fishing and hunting, and if one may judge from a perusal of your "Answers to Correspondents" upon all conceivable subjects, you either do know everything or you have a most wonderful encyclopædia. No, this question is addressed to an imaginary reader, who is not supposed to know anything, and of course he replies no. Now, I do not profess to know all about it, but something, and that something I propose to inflict upon said imaginary reader. And, first, I wish to define what is not bass fishing. It is not bass fishing to sit in the stern of a boat with a big line in your hand and a tablespoon at the end of it, trolling about at your ease to the great disgust of your boatman, and to pull in your fish hand over hand, by main strength, as you would a log of wood. I once saw a gentleman trolling for bass upon a lake in Wisconsin, with three lines astern with spoon-hooks, and a fourth line, attached to a rod, also trolling, while he sat in the stern of the boat with an umbrella attachment over his head to keep off the sun, while his boatman pulled him about the lake a whole blessed day. As I was fishing the same lake I watched him, as I would the actions of some monstrosity. Whenever a fish struck the hook connected with the rod he would give a yank, then throw the rod into the boat, grab the line and come the hand-over-hand operation. I wished then that some big fish would haul him overboard and drown him. Such ought to be the fate of all who try to murder bass in that way. There is another class of men who should never receive "benefit of clergy" from me—to wit, those who destroy bass with set lines. I find that I have not patience nor time to detail all the ways of killing fish without fishing, but every fisherman knows them. It is more pleasant to describe the genuine article.

FIRST—THE PREPARATION.

The rod should be light, about eight ounces; short, two joints, and about 15-inch butt, with a pretty stiff tip. I prefer the bamboo, the split of course is the best, but the other will do well enough. The reel should be placed at least ten inches from the end, in order that the butt may be held against the body when necessary, and at the same time the reel easily managed. I notice that Mr. Hallock places the reel at the extreme end of the rod. That is all right for light fish, but not for the strong black bass. [Remark—Except for a two-handed rod, weighing two pounds and upward, we advocate shipping the reel near the end of the but, and not above the grasp of the hand. It is absolutely necessary that the same hand which holds the rod shall be able to manipulate the line in casting.—ED.] I once bought a rod with the reel rings at the end because it looked so pretty, but at the close of my first day's bass fishing with it I applied my knife to it, and the next day the reel was where it ought to be. To control bass all day with ease, with the reel at the end of the rod, requires a stronger left arm than many fishermen are blessed with. Besides, it is difficult to cast with a rod rigged in that way. Join the rod so that the line guides will be on the lower side, as the line then runs more readily and is not liable to stick or be caught on the rod or rings; by the way, have large ring guides [we prefer standing guides.—ED.], and have the first ring at least eighteen inches from the reel. Have the line pass from the reel to the rings under the rod by the right-hand side.

THE REEL.

The best, by all odds, in my opinion, is the "Meek." I lately read in your paper the article by George A. Shufeldt in which he throws discredit upon the "Meek" and prefers the common double multiplier. I disagree with him in toto, however much respect I have for his abilities as a fisherman. In passing I would say that I have fished many a time and oft with Mr. Shufeldt, and can vouch for his skill, and I venture to believe that the Kentucky gentleman who seems to think that Shufeldt needs some lessons in the art of casting would find upon trial that he could teach him nothing. I admit that it requires more care to cast with the Meek reel than with the others; it pays out the line just twice as fast, and if the bait does not carry it off far enough the line is apt to overrun and foul badly on the reel, and unless checked promptly when the bait strikes the water, it will then overrun also, but by a little care and experience in the use of this reel you will readily overcome this disadvantage unless you are a very impatient man. On the other hand the powers of this reel are so vastly superior to all others after you have hooked your fish as to greatly counterbalance its disadvantages in making the cast. The great rapidity with which the line can be taken up or let out renders it the prince of reels. Another thing of not so much importance, it saves just half the labor required by other reels, as with one turn it does the work of two.

THE LINE.

This should be of the lightest description. Capt. Fitzgibbon, of Indianapolis (bless his old soul), than whom a more skillful fisherman does not exist in the Northwest, is reputed to have caught innumerable bass with a linen thread, but I never saw him do it. A twisted or cable-laid linen, or a sea grass line is the best—the lightest you can find. Avoid braided silk, as after a while it will flatten and pack on your reel. Don't look at oiled silk, even the best English make, as they will tell you at the shop. If you take sea grass, which I think is the best in the long run, get the kinks out of it by towing it loose for a while behind your boat. Have at least 125 to 150 feet of line.

THE HOOK.

The round "Carlisle" is the prince for bass, No. 4. The sprout-bend comes next. Avoid the Limerick and all crooked hooks—use hooks with gimp attachment. Don't lead your line, but attach the hook to it by a swivel. Have about 50 good-sized live minnows in your bucket. Shiners are the most attractive, but chubs will stand the racket better. Take a landing net, a basket of lunch, your pipe, a dry boat, a good boatman who knows the points of the lake, and upon the whole I think you are well fixed for the day. Now for the fishing. It is necessary that you start right. Don't put on any airs with your boatman. You can't keep them up; he will find you out at the first pop. Take him into your confidence at once. Tell him that you don't know anything about bass-fishing; have never tried it on, though, in order to preserve his respect, it is best to give him to understand that a good share of your life has been spent in salmon fishing in the wilds of Canada, diversified by an occasional run into the Adirondacks for trout. You may casually speak of the glorious sport experienced in landing a thirty-five pound salmon or four-pound trout, but you must be careful to tell him that in salmon and trout fishing you have always used a heavy rod with a slender tip (don't give yourself away by calling it a "pole"), and have always fished with a fly. Tell him that salmon and trout are very dainty and require different flies for different hours of the day, or different weathers, but that your experience has been that they will rise oftener to a brown hackle than any other. A little of this style of conversation will place you upon a seeming equality with him, which may last an hour or two. Be sure and tell him that you have never tried these light rods or cast from a reel, and you want him to teach you. This will flatter him and he will help you all he can. Pass your flask to him once in a while with the remark that it is pretty hot work for him, and he will think you a "good fellow" and take you to all the good places. If you do not have good success after awhile tell him that you are rather tired of standing and would enjoy the variety of rowing. Change places with him and let him have your rod, and if there are any fish around he will get you a bagful for a show at home.

Now, Mr. Editor, I find that it has taken me a long time to get my imaginary bass-fisher fairly started upon the lake, and if I undertake to tell him what to do, now he is there, my chapter will be so long that you will never publish it for his benefit. I hate to stop, now that I have got to where I intended to commence, and if you will give me another hearing, I will be glad to continue my lessons. Yours, G. C.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

FLY ROD, New York.—Letter for you at this office.

G. H. M., Troy.—Pedigree all right and reliable in every way.

G. E. S.—Is a —— —— $50 gun considered a good one? Ans. Yes—for the price.

C. P. S., Richmond.—Your method of testing the pull of your trigger is a good one.

F. N. B., Newton Centre, Mass.—You must apply to Col. Scheruerhorn for a copy of a report. It is just issued.

JACOBSTAFF.—See "Al. Fresco's" description of weatherly boat suitable for Florida waters in our issue of March 28.

C. H. W., Jr., St. Louis.—All the marks you give are Tower proof marks. Never heard of the maker you ask about.

J. B., Cheater.—Why don't you communicate with Baird & Huston, yacht builders, of Philadelphia. See their advertisement in our paper.

A. H. C., Canandaigua.—You can buy a copy of "Keige Anchor from J. L. Donner, Columbia, Tolland county, Connecticut. Address P. O. Box 40.

SUBSCRIBER, Hyannis, Mass.—My young setter kills hens. Would be quite valuable if cured of this bad habit. Ans. Thrash him severely when caught at it.

Dr. S., Sandy Falls, Mo.—Does Dr. Carver shooting glass balls with a rifle use a hair trigger, or a three pound pull? Ans. Not a hair trigger, but do not know the pull.

MISAL, New London, Conn.—Can you give address of parties who buy old and valuable works? Ans. Address Mr. Wright, care Leavett Bros., Clinton Place, New York city.

J. R. A., Petersburg, Ill.—Please give me, through Correspondents' column, the address of some dealer in aquarium goods at Chicago. Ans. Fred Kaempfer, 127 Clark street.

S. J. M., Baltimore.—Please give me prescription for a tonic pill for general use? Ans. Nothing better than a pill made of two grains of quinine taken three times a day, if a tonic is wanted.

SUB, Tenafly, N. J.—We have not on hand Moffat's "Secrets of Angling," but can import from England in six weeks' time. Price $3.75. Please advise us if you wish us to obtain it.

PLANKBRS, Hudson, N. Y.—The address you wish is W. H. Daly, M. D., Pittsburg, Pa.—Send your letter to this office at once, as the Doctor is bound for Europe and will call upon us on his way.

ICE KING, Catskill, N. Y.—1. How much capital is invested in the ice business? 2. Does this country ship ice abroad? Ans. 1. Between thirty and forty millions of dollars. 2. Yes, to South America.

H. J. H., Boston.—You can use with safety the load you mention—4 drs. powder and 1¼ oz. shot—in your Smith & Wesson 12 bore, 7¾ lbs., breech-loader, but it might be very uncomfortable as to recoil.

J. W. M., Winterset.—You ought to get Hazard, Dupont, Laflin & Rand, with you; cost should be, say, $1. If poor powder is found where you live get your storekeeper to send to Chicago for good powder.

R. T. VAN BUREN.—We trust soon to get up some wood-cuts which will fully illustrate what you wish to be acquainted with. Many of our readers have asked for it. Such cuts have been published in England.

CURTIS.—What wood is best for fly rod for trout, except bamboo, and price? Ans. Ash but, second joint and tip of lancewood; but and second joint greenheart, tip lancewood; entire greenheart. Price $10 manufactured.

C. W. M., Irving Place, City.—Gordons, black and tan, occasionally with white; Irish, red; Laveracks, white with blue ticks; for field trial colors they go through all shades. Could not send you the game laws you require under a volume.

H. M. S., Pittsburg.—A 14 gauge as far as killing upland game will answer your purpose. All things being equal, of course the pattern of a 14 is not equal to a 12, but penetration and range and everything else are quite as good in proportion.

F. S. S., Brooklyn.—My setter dog, three months old, is bow-legged, and his ankles are very large, as if double-jointed. I have had him three weeks, and don't allow him to run about. Can you inform me what to do? Ans. Let him run at large.

G. E. S., Bracketville, Texas.—Have got a pointer bitch six months old. She has white lumps similar to warts on and under the tongue and lips. What shall I do for it? Ans. Destroy the lumps if necessary by careful application of solid nitrate of silver.

W. C. P., City.—Vermont statute forbids fishing in tributaries of the Deerfield River. Has this expired, and can we fish those waters this spring? Ans. The law was passed in Nov., 1876, and there will, therefore, be no fishing until the spring of 1879.

B. P., Pittston, Pa.—Inclosed find patent fish book. What do you think of it? Ans. We have noticed this new style of hook editorially in a previous issue. We have no objection to the hook, if the fish like it; but we prefer the old fashioned varieties.

SETTER, Pavilion Centre, N. Y.—Have a setter dog that howls and barks if I take him away from home and chain him in a barn as soon as I am out of his sight. How shall I break him? Ans. Occasional punishment for the fault, and time will probably cure him.

DEDHAM, Mass.—I have a setter costing $100 having a disgusting habit. What shall I do to cure him? Ans. We know of no absolute cure. Give him plenty of exercise and chain him as little as possible Punish him when caught at it and let him line a few bitches.

PAT GALBRAITH, Erie.—Such a pistol as you ask for is no longer made. You might get a dueling pistol, and put a peep sight on it. We cannot agree with you in regard to the advantages of a muzzle-loader over a breech-loader, nor are cartridges filled with packed powder.

S. W. B., Vicksburg, Miss.—The "Marooners" are going to make an effort to have the Sunflower and Yazoo Rivers stocked with salmon or shad. Can you give us any information as to the proper way to begin operations? Ans. We have written to you by mail, giving directions.

J. R., Sharon, Pa.—A and B tie on a handle and trap pigeon match. B has birds to shoot off tie, A has none; B therefore claims that he has won. Ans. If no provision was made for a tie we should decide a draw. The tie should be shot off where the birds could be procured by both parties.

G. N. R., Georgetown, S. C.—Your targets 1 and 2 are fair, but 2 and 3 are quite excellent, and you deserve credit for your ingenuity in choking your barrels. We must say that if only other questioners would imitate your method of making drawings of targets our work would be much facilitated.

G. R., New Bedford, Mass.—I desire a light, cheap and serviceable canoe. I cannot afford much more than $10. Can I obtain a birch-bark canoe for this sum? Ans. Address David Dresser, Calais, Maine. He may be able to get you a good second-hand craft for $10. A new canoe costs from $15 to $20, usually.

C. R. H., Newcastle, N. Y.—1. What will it cost to send a dog from Newcastle, Westchester Co., to Baltimore? 2. Pray send me form of entry of the Baltimore Bench Show. Ans. 1. Express Co. $2.50, not boxed, from New York to Baltimore. Some slight addition from Newcastle. 2. Have forwarded you one.

C. E. C., Oil City, Pa.—What Government publications, or railroad reports should I procure fully describing the habits, etc., of the game birds, fishes and animals of Montana? Ans. Write to Prof. F. V. Hayden, U. S. Geographical Survey, Seventh street, Washington, D. C. See also "Hallock's Sportsman's Gazetteer."

C. E. M., South Boston.—My setter bitch is two years old. For the last eight months has been in good condition. Coat is now, however, rough, and eyes inflamed, with slight discharge; keeps thin; appetite not good. I feed on meat and scraps. What shall I do? Ans. Stop feeding meat, and give plenty of exercise.

E. C., S. 3d St., Philadelphia.—Have a Skye terrier; think he has distemper. Symptoms as follows. Cannot keep quiet; has had three fits; hides away; is very thin; does not eat; has a difficulty in swallowing. He is four or five months old. Ans. The dog has fits, and not distemper. Most probably will outgrow them. Feed on meat.

A. C. T., Ashtabula.—1. Would you advise me to buy a $45 —— gun for general shooting? 2. What is the difference between a $45 and a $100 laminated gun? 3. Would you think a —— gun preferable at the same price? Ans. 1. It is a gun we think very highly of. 2. The more expensive gun is the better. 3. Respectfully decline answering.

PARTRIDGE, Mass.—1. Have a double-barreled breech-loader, laminated steel, choke-bore No. 12, weight 7½ lbs., marked on lock ——; do you consider him a good maker? 2. How much Dupont powder shall I use? 3. Is the name on the lock of the gun a guarantee? Ans. 1. A good maker. 2. 3½ drs. powder, 1¼ oz. shot. 3. Not always.

SUBSCRIBER, Stamford.—1. What is the price of Spratt's dog biscuits? 2. Is Indian meal good food for dogs? 3. What is a good, cheap food for dogs? 4. When should English snipe be here? Have only seen one so far. Ans. 1. Ten cents per pound. 2. Excellent. 3. Indian meal and oatmeal. 4. About this time they should appear in good quantity.

E. F. B., Gouverneur, N. Y.—What is the best preparation to put on canvas boats for sizing or making a surface instead of (or before) painting, which will prevent the canvas from absorbing paint? Ans. Would advise a coat of boiled linseed oil, and then when you paint thin your paint. A thin preparation of a shellac varnish may be used, only it is an expensive compound.

D. O'C., Girardville, Pa.—Can one get the seeds of watercresses plant in a little spring, or shall they be transplanted? How should they be transplanted? Ans. Seeds of watercresses can be had in any of the New York, Philadelphia, Baltimore, etc., seed stores. Sow in shallow water or close by the edge of a pond; they will soon spread and take care of themselves.

L. B., Long Branch.—Questions of choking valuable guns such as a Dougat we always approach with a certain amount of hesitancy. Haydeo, in Fulton street, could possibly choke your barrels for you. Some instances where we have advised our friends to try choking have turned out well. Suppose you write to W. R. Shaefer, of Boston, or to Clark & Snyder, of Baltimore, about it.

J. W., Pittsburg.—Have a lemon and white setter pup, strong, limber, full breast, pretty well feathered, full forehead, but not a very square nose; tapers somewhat to the point, which is flesh color, and has black eyes. Are these good points going to prove him a full blooded English setter, which I bought him for? Ans. Should think from your description that you have a good dog.

W. J. R., Syracuse.—1. Where is the Evans repeating rifle manufactured and by who? Also the Express rifle. 2. Do Smith & Wesson make a 32 cal. revolver same style as their 38 with automatic ejector? 3. Can the same cartridge be used in their 44 cal. that is used in the Winchester rifle? Ans. 1. Evans repeating rifle at Mechanicsville, Maine. The Express in England. 2. Yes. 3. No.

SUBSCRIBER, Philadelphia.—I want a cure for my setter gyp. Six weeks ago she had pups, and by bad management she lost them. Since then a lump has come out on one of her dugs, about as large as a base ball. What ought to be done? Ans. She should have had the milk properly dried up in the glands—difficult to cure now. Give the gland support, if possible, and rub with camphor liniment.

R. L. G.—1. Where can I procure a county map of California? 2. Is Sharps' new model military a good rifle for large and dangerous game? 3. Is the climate at the foot of the Sierras in California good for consumptives? 4. Is $1,500 sufficient to start a farm with there? Ans. 1. Send to the Coltons, William St., N. Y. 2. Yes, excellent. 3. We have heard it highly spoken of. 4. You can start with that.

J. P. S., Philadelphia.—What is the average height, weight, and length of ear of a prize-winning beagle at bench shows? Ought stern to be flaggy? Ans. The smaller the beagle the higher the price. A prize winner ought to be from 9 to 11 inches high (smaller the better). Weight from 12 to 18 pounds; length of ear, from 5½ to 7 inches. The ears ought to meet under the chin easily. Slight brush at the tail.

SPORTSMAN, Ithaca, N. Y.—Have a setter pup six months old. Has dysentery. Got better of it in a measure, but is affected with a difficulty in breathing. Eats well, is lively, coat bright and glossy, eyes' discharge slightly violent. Exercise produces heavy, short breathing and cough. What is the matter and what must I do? Ans. Chronic bronchitis; result of distemper. Give him plenty of gentle exercise and keep warm and dry.

H. C. M., Worcester, Mass.—Would you be kind enough to give me a word of advice in regard to the lake region of Florida? Would it be a good place for a poor man to go that is willing to work some, hunt and fish a good deal, live in a log cabin and eat what he can get? Am a good shot. Ans. The region you speak of is one of the choicest in the southern part of the State. Have written you by mail, giving sundry suggestions.

J. M. D., Irwin Station, Pa.—Can a gyp fourteen months old be spayed successfully? Can a gyp be spayed after having had puppies? Are they as good for hunting after spaying as before? Ans. They may be spayed successfully, but danger is greatly increased after once being in heat. Mooted question as to excellence in the field. We think that though the sense of smell is not impaired they certainly have not the same courage as a perfect animal.

F. P. H., Syracuse.—1. Of the —— and —— breech-loading rifles, which, in your judgment, is better for common sporting purposes, such as shooting deer? 2. What can I purchase a breech-loading Ballard rifle for, one using .38, weight 8 lbs., and 28 ins. length of barrel? 3. What would a Remington cost, same description as the above? Ans. 1. Both rifles excellent. 2. Write to Schoverling & Daly, New York; price $35 and upward. 3. About the same price.

TOP SNAP, Cazenovia.—Please give address of Hegeman, maker of portable boats? Also, how large does the tree known as white holly grows, *i. e.*, diameter? Address of any man making portable boats. Ans. John Hegeman, Balston Spa, New York. Other portable boat builders are C. A. Fenner, Mystic, Ct.; R. C. Scott, Albany, maker of the Colvin boat; J. H. Bond, Cleveland, Ohio, and Osgood & Chapin, Battle Creek, Michigan. Holly grows ten inches in diameter.

W. P., New Britain Conn.—In last issue F. AND S., in programme for German Shooting Festival, regulation 3 is as follows: "Any fire-arm is allowed which carries not less than thirty round balls to the pound." Would this exclude the use of a Remington Creedmoor rifle with long-range bullet on any target mentioned in said programme? Ans. The Secretary of the German Shooting Festival writes us in reply to this: "Long-range rifle balls are not allowed in Schutzenfund rules."

A W. G., Boston.—Please tell me the very cheapest way of going to San Antonio, Texas, from Boston by cars? And is there any other mode of traveling by which I can get there cheaper, and if there is will you explain how? Ans. Via Missouri, Kansas and Texas railroad from Hannibal, Missouri, to Hempstead; thence to Austin and thence stage to San Antonio. A cheaper way would be to take steamer from New York to Galveston and cars to Hempstead and Austin as above.

R. T., Cincinnati.—1. What kinds of .22 cal. rifles are used at —— gallery? 2. Which is the longest range of a .22 cal. rifle in gallery practice? 3. Is the —— .22 cal. a good rifle? 4. How do you receive money from subscribers? Ans. 1. In the gallery you mention, Ballards, Wessons and Remingtons are used. 2. As to gallery practice, at 200 feet is about an extreme range for practice. In Boston, at the Lincoln Gallery, the distance is about 160 feet. 3. An excellent rifle. 4. By P. O. order.

A. O., Schanks, Ohio.—1. What brand, and what No. of powder would you use for all purposes in a 30-inch, 11 gauge, muzzle-loader? 2. In what localities in West Virginia are deer, bear and mountain trout abundant? 3. Is November a favorable time for hunting such game there, and are trout caught there in that month? 4. Is the ——, model of 1873, a reliable gun for such game? Ans. 1. Hazard's FG. 2. Michigan. 3. Deer, yes, but not trout. 4. Best rifle you could take with you.

G. D., New York.—The specimen of your work in fly tying is excellent, and your Blue Dunn particularly so. If we may be hypercritical, your bodies are a little too heavy. When your fly falls on the water it ought to make scarcely a ripple. Now, weight for a bass fly makes not much difference, but for a trout, a shy—wary fish, indifferent somewhat to color—he wants a more delicate lure. A trifle less material and tighter work would insure durability and especially lightness in casting.

F. E., New Orleans.—Have a pointer three to four years old. No worms, coat good, lips rather pale. Secretions from kidney dark, appetite variable. No fever, but with a bad cough apparently deep seated Ends her coughing with panting. Coughing comes on after drinking, or when suddenly exercised. Ans. The dog has bronchitis probably Keep him warm and dry, light food and occasionally give a dose of castor oil. Also, ten grains of muriate of ammonia in solution three times a day.

ROWE'S HOTEL, Burlington, Va.—Nine months ago my pointer dog had what I supposed was mange. I used, externally, tard and sulphur. Hair grew out, but disease went to head and ears. Two cracks appear on ears. Goes around the room with his head on one side and shakes his ears. Disagreeable smell from him. What shall I do? Ans. Your description very clear. Your dog has canker of the ear. Wash with warm water and then pour in a little dilute lead water (which you can get at any druggists) once a day.

J. G. A.—1. Please inform me how the cal. of a rifle is measured, from the lands, or grooves? 2. What is the peculiarity of the Express rifling? 3. Do the Creedmoor rifles have a "nip" at the muzzle? 4. Why don't they allow telescope sights in the N. R. A.? Ans. 1. From the lands. 2. Peculiarity not much, if any, on rifling, but the Express system depends on heavy charge and light projectile. 3. Yes, and so have all target rifles. 4. Because the end and aim of Creedmoor is to bring into perfect practice men with ordinary and not extraordinary weapons.

F. H., Chicago & N. W. R. R.—Have a Scott gun, breech-loader, 10 gauge, 10 pounds, cylinder bore, heavy at the breech, which I would like to have choked. Would it make it shoot closer and not stronger, and not weaken the gun? Can you mention some firm who could do it, and what would be the expense? Ans. The gun can be made to shoot closer. Could not tell you the expense. Write to Clark & Snyder, of Baltimore, or to Shaefer, of Boston. In all such alterations, however, care must be taken. It often happens that the improvement is not great enough to guarantee the cost.

HURLINGHAM.—In your opinion did Bogardus do his level best at those pigeons on March 23 at Deerfoot Park? Could Cale Loring, were he alive, accomplish the feat Bogardus undertook? Could Cale Loring take his double gun in his hand and lay his old single on the ground and kill two of those birds with the double and then take up the old single from the ground and kill the third bird in case there were three traps six feet apart, with a bird in each trap, he to stand 21 yards from the traps? Ans. We presume the Captain did the best he could on that particular occasion. 2d. *Non inventum est.*

ROYAL THE SECOND.—1. What are stubb and twist barrels made of? 2. Are there any made now? 3. What is the use of a rim on an army musket cap? 4. Which is the best size of shot for duck shooting? 5. I was born on the 19th of March, 1834, on what day of the week was that? Ans. 1. Old fashioned stubb was made of old horseshoe nails, and so was twist. To-day we have no necessity for such material. We can select our iron. 2. Old-fashioned stubb barrels, such as is meant by the above, are not made now—at least out of old iron. 3. In order to lift it off of the nipple. 4. No. 4. 5. Tuesday.

HUNTER, Virginia.—1. How do —— stand as gunmakers? What do you think of the $75 gun sold by them? 2. Will a 12 gauge shoot as far and strong as a 10 gauge? 3. How do you like the action of the —— gun, is it as strong as the top or side action? 4. In 103 pellets to 30 inch circle, 70 yards, No. 8 shot, 1¼ oz., good? 5. Can I get any back number of FOREST AND STREAM and what price each copy? Ans. 1. Excellent gunmakers and at the figure you mention turn out a very good gun. 2. With a heavier charge in a 10 gauge it will shoot further. 3. Very excellent action. 4 Quite a good target. 5. By stating the numbers and remitting to the office.

G. F. G., Amesbury.—1. Have you ever heard of ——, a gunsmith or rifle maker? 2. What grain powder—fine, quick powder, or coarse, slow-burning powder—will send the charge of shot in a target quickest at 30 or 40 yds., and which will give better penetration? 3. The pad I send, how is it as to pattern? Ans. 1. Never heard of him. 2. No. 6, Curtis & Harvey, will give greatest penetration, and is the quickest; but for general shooting, where the elements of quickness are not so necessary, our own powders are just as good. 3. The penetration in the book is excellent, and you must have an admirable gun, but it is always exceedingly difficult for us to judge of penetration when we have not a standard pad.

A. B., Hannibal.—1. Can you tell me about rubber inflated ducks? 2. Can a gun No. 12 breech-loader be rebored full choke without any permanent injury to the gun? 3. Will chilled shot lead a gun like other grades of softer shot? 4. Will they injure the barrels on account of it being harder than other shot? 5. Is not coal oil better to clean a gun than water? Ans. 1. Rubber decoys we have seen, but we do not like them. Are now rarely used. They lose shape and take water. Best, we think, are Simmons' decoys, made of struck copper; they all pack up in nests. 2. Must give us fuller details. If a heavy gun at breech, with good stout barrels, such alterations can be made. Read our reply to L. B. 3. Sometimes in chokes more, but in cylinders not any more. 4. Do no injury in any way. 5. Would rather use oil.

W. B. F., Rochester.—1. Will floor of emery injure the finish on the interior of the barrels of a fine breech-loader? 2. My gun, 12 bore, gives a pattern of 240 pellets in a 30-inch circle at 40 yards; charge, 3½ drs. powder and 1¼ oz. No. 7 chilled shot (284 to the oz.); is the above a good pattern? 3. With the same charge of No. 6 chilled shot (200 to the oz.) the pattern is 140. 4. Which is the best size for duck shooting at long range? 5. What is the relative penetration of Nos. 6 and 7 chilled shot? Ans. 1. Floor of emery should be used only by an expert; a person not understanding how to use it would ruin a gun. 2. An excellent target. 3. As is the one with No. 6. 4. Nos. 2 to 6 according to the ducks; 4 or 5 would suit your section of country. 5. Not yet determined. Write us again about this last question, say in two weeks.

G. H. E., New York.—1. Do you think Texas a suitable place for stock-raising? 2. What will land cost per acre for stock-raising? 3. Would 200 acres be enough land for a start in sheep raising? 4. What will sheep cost per head? 5. What will cattle cost per head? 6. What will horses, or the Mexican ponies that they use there, cost per head? And could you refer me to any parties that I could get information from in Texas? Ans. Texas is the finest stock-grazing country in the world. Land costs from 40 cents to $1.50 per acre. You could start with 200 acres and a small flock of Mexican sheep, crosses with pure merinos. Coat $4 per head, cattle, $17; horses, from $15 to $40. Refer to N. A. Taylor, author of "2,000 miles in Texas on Horseback," a book which will give you all needed information. Price $1.50; for sale at this office. See also files of FOREST AND STREAM for the past two months.

R. S. R., Phila.—In the receipt given in the last number for making a tent fireproof are "parts" by weight, or measure to be used in mixing the ingredients? Will this preparation render the tent more or less waterproof? Could it be used in connection with the sugar of lead waterproofing process? and in that case should all the ingredients be mixed together, or should the tent be treated by each process separately, and by which first? Can you give me a reliable receipt for making first-class flap-jacks in camp? Tell me if biscuits, etc., can be baked in camp by any such means as burying a covered pan in hot coals? Ans. By measure. We cannot answer these questions. We will state here that we have seen the following receipe in the *Scientific American* for making the lightest materials incombustible. Wash in a concentrated neutral solution of tungstate of soda diluted with about one-third of water, and then mixed with 3 per cent. of phosphate of soda. See innumerable cook books. They can; when the centre of your fire has become hot coals, rake out a sufficient space and place your sponge in it, then cover with ashes and hot coals, and leave twenty minutes. Your crust will be black, but the interior delicious.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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—AT—

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*** Any publisher inserting our prospectus as above one time, with brief editorial notice calling attention thereto, and sending marked copy to us, will receive the FOREST AND STREAM for one year.

NEW YORK, THURSDAY, APRIL 4, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

A WORD TO SOME OF OUR EXCHANGES.—The success of a journal may be partially inferred from the frequency with which its articles are copied into other papers. It affords us, therefore, much gratification to see ourselves so widely and so often quoted, and properly credited. But while the leading journals of the country are always particular to give us due acknowledgments, there are a number of papers which habitually draw upon us for good things, and never dream of making the slightest recognition of their indebtedness to these columns. We make no complaint, gentlemen, but even the Devil deserves his due.

KNIGHTS ERRANT.—The Charleston, S. C., Light Dragoons, celebrated their annual parade and tilt, at the race course, that city, last Monday. The tilts are deservedly popular among our Southern friends, and always attract a large number of interested fair ones, whose presence inspires in their champion knights doughty deeds worthy of the glorious days of the Round Table.

—The *Scientific American* of the 6th inst. contains the best view we have yet seen of the Brooklyn Bridge as it will appear when completed. Could some of those journalists whose names are revered in Printing House Square, return for a moment to the flesh, they would be amazed at the new aspect of their old haunts, with the rapid transit railroads and broad roadway leading directly to the heights of Brooklyn.

BLOOMING GROVE PARK ASSOCIATION.—At a recent meeting of the Blooming Grove Park Association in Pike county, Pa., the following were chosen directors for the ensuing year: Genio C. Scott, Sanders D. Bruce, George S. Greene, Jr., E. Bradley, George H. Glenney, Dudley Field, John Avery, F. S. Giles, A. H. Wellington, Charles Hallock, C. A. Read. The principal officers are: President, Dudley Field; Vice-President, John Avery; Treasurer, C. H. Read; Secretary, John Avery. Excursion tickets for Blooming Grove Park (price five dollars) will be sold this season by the Erie Railway to members of the association.

FOOD FISHES OF THE GREAT LAKES.

Quite a large number of petitions have been presented in Congress recently from citizens of Michigan in regard to the protection of food fishes of the great lakes and the rivers and straits connecting the same. The petitioners speak of the absence of suitable laws and regulations for the protection of the best varieties of food-fish, which are rapidly disappearing, and what should be productive of large benefit and consequent wealth to the country at large, will, in a very few years, if the present methods and system of conducting the fishing interests are continued, result in entirely depopulating the waters of the great lakes of their present store. It is generally conceded that, notwithstanding the efforts being made by the several States to increase the quantity of the better varieties of fish by artificial propagation, the quantity of this kind of fish is steadily decreasing, and while the several States are doing some good in the right direction, your petitioners are fully satisfied that the State governments cannot provide the necessary regulations for the protection of the fish in the methods employed to take them; and your petitioners believe that the power rests in the General Government to pass such laws and regulations that will be effectual in giving ample protection to the fishing interests of the great lakes, that their product will soon increase sufficiently to repay any outlay that may be made, and become a source of large revenue to the country.

In conclusion, they request Congress to pass a law for the preservation of the better varieties of the food-fishes native to Lakes Ontario, Erie, St. Clair, Huron, Michigan and Superior, and the Rivers St. Lawrence, Niagara, Detroit, St. Clair, Sault Ste. Marie and the Strait of Mackinac, and the appropriation of an amount of money sufficient to maintain Fish Commissioners, whose duty it shall be to enforce any law the Congress of the United States may enact. These petitions have all been referred to the Committee on Commerce, of which Senator Conkling is chairman, and he is thoroughly alive to the importance of this great question, not only as a matter of national advantage, but as a special advantage to the people of his own great State, living contiguous to some of the waters named above. Mr. Ferry, the oldest in service, but youngest in years of the Michigan Senators, is also deeply interested in this subject, and, as he is one of the most industrious members of the Senate, there is a good prospect that these two Senators will perfect a measure which will secure the end sought to be accomplished.

WHERE WE GO TO.—The pressure upon the advertising department of the *Herald* is an encouraging indication of increased activity in business circles. In this forecast of better times the FOREST AND STREAM AND ROD AND GUN has a showing, as will be seen by our multiplying advertisements. There is no journal in the country whose advertising pages afford just such a study as our own, and none whose pages are scanned with the same peculiar scrutiny and interest. Many of our readers tell us they look to these pages first, and to the reading matter afterward.

It may be taken as an aphorism that those things which are most directly under one's observation often escape notice. In like manner the circulation of FOREST AND STREAM has grown to an extent which surprised us when we recently examined our mailing books. Its widespread distribution throughout America, as well as in Europe, seemed to us so unusual for a weekly paper that we determined to prepare and print a complete list of the post offices to which our paper is sent by mail. This we have done in pamphlet form. The figures are attested and sworn to before a notary. We have not done this as a challenge to papers of our ilk or other, but because we feel confident of our position. We are willing to stand by our exhibit. We believe that no other paper in the country, of equal circulation, offers anything like the same advantages as an advertising medium:

California, 32; Oregon, 9; Dakota, 12; Colorado, 17; Montana, 8; Wyoming, 9; Idaho, 7; Utah, 2; Arizona, 7; Nevada, 9; New Mexico, 3; Indian Territory, 3; Washington Territory, 13; Nebraska, 12; Minnesota, 41; Iowa, 53; Wisconsin, 56; Michigan, 67; Illinois, 93; Indiana, 38; Ohio, 77; Missouri, 24; Kansas, 24; Arkansas, 12; Texas, 33; Pennsylvania, 61; Florida, 31; Louisiana, 11; Kentucky, 21; Tennessee, 20; Mississippi, 14; Georgia, 19; North Carolina, 21; South Carolina, 12; Virginia, 41; Alabama, 9; Maryland, 32; District of Columbia, 2; New Jersey, 69; West Virginia, 11; Massachusetts, 138; New York, 290; Maine, 55; Vermont, 33; New Hampshire, 41; Rhode Island, 11; Connecticut, 81; Canada, 85; England and Ireland, 26; Germany, 4; other foreign countries, 17.

It must be borne in mind that the foregoing list does not include those places to which bundles are sent by the American News Company upon the orders of newsdealers. So also, it should be understood that to some of these post offices we send hundreds of papers.

A REMARKABLE SURGICAL OPERATION.—The Cleveland, Ohio, *Plaindealer* furnishes the following account of a surgical operation recently performed by Dr. E. C. Sterling, of that city, which is sufficiently remarkable in itself, but will possess an additional interest to our readers, because they are so often entertained by the Doctor's contributions to FOREST AND STREAM:

Robert F. Hurlburt, private secretary of Gov. Bishop, recently underwent the amputation of his tongue near the root. The operation was necessitated by cancer. The surgeons of Columbus would not undertake the operation. Dr. E. Sterling, of Cleveland, successfully accomplished the wonderful task. No one was allowed in the room during the undertaking except the assisting surgeons from Columbus and Delaware. The chin was sawed in twain and the jaws spread apart in order to take out the diseased tongue. The work was performed in a comparatively short space of time, and the patient was comfortable and conscious in less than an hour. The physicians think he will be able to articulate audibly in the course of time. Thus far the difficulty has been to give nourishment, which has been done by injection. Glass tubes have been secured, and hereafter nourishment will be given by that means until the soreness in the mouth is somewhat subdued.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President.
Missouri State Sportsmen's Association.

GAME CONSTABLES AND THE GAME LAWS.—The office of game constable, under some circumstances, is not the most pleasant in the world. The same reverence attaching to other legislation is not always entertained by a large part of the community for the game enactments. When the laws conflict with personal aggrandizement, advantage is taken of any laxity of public sentiment, and the law is openly and defiantly violated. Without a powerful game club to support him on the right hand, and a healthy public feeling on the left hand, as Aaron and Hur upon the mountain top supported the hands of Moses, while Joshua smote Amalek on the plain below, the game constable is apt to be worsted in the unequal fight; or, indeed, will refuse to fight at all. This, so far as we are informed, is the situation at Niagara Falls, N. Y. The laws there prohibit the trapping or netting of fish in any manner, except angling with a hook and line, at any time. An extensive fishing business is carried on. The fish are caught by the ton, peddled through the streets, and sold to prominent members of the Niagara Falls Shooting Club. Meanwhile, the game constable, with a child-like and bland simplicity as refreshing as it is ingenuous, pleads total ignorance of any game laws; eats his fish and asks no questions for conscience sake. We confess that we can see no remedy for this unfortunate condition so long as the people of Erie and Niagara counties, or other counties, are content to eat the goose that lays the golden eggs. We presume they must be left in apathetic enjoyment of their inconsiderate repast.

NO MORE TROUT FISHING IN THE UPPER BEAVERKILL. *Dear Rod and Stream:* (That's the best part of your name at this season of the year). No more trout fishing in the upper Beaverkill. Please give notice through your columns. Last summer, while I was at Weaver's (formerly Munson's) there came down from "Quaker Clearing" three men on a buckboard, and they boasted "over four hundred trout;" I could not see nor imagine where they had so many stowed away, but after a while they opened a twelve-quart butter-firkin and showed me the poor little things. They claimed four hundred, *and I guess they told the truth.* I think that not one of the "fish" was six inches long. Now this sort of thing must be stopped, and I have made up my mind to stop it on that stream. How many of us have fished the Beaverkill! We used to put up at Murdock's, or Flint's, or Walmsleys, or Leal's, or camp out, and catch our creels full; but now-a-days the smallest creel half full of seven inch trout is good luck.

After the sight of those poor little innocents my plans were soon laid. I obtained the next day, from Joseph Banks, a long lease of the stream across his two lots; I have since made an arrangement with Mead Brothers, at the old Quaker Clearing. Messrs. Van Cleef and Van Brunt, the owners of Balsam Lake, have joined me, and so has Ransom Weaver. I have hired a patrol to guard that stream from Balsam Lake down to Weaver's west line, and have posted notices, and the fishing of the upper Beaverkill in Sullivan and Ulster counties, New York, is going to be preserved. All gentlemen sportsmen will keep away from there after this notice, unless they have my permission to fish, and all others will wish they had stayed away if they disregard it. It is unpleasant for me to write in this positive manner—it sounds boastful and ungenerous—but somebody had to take hold or the fishing would be gone from there in another two years; and, as I have fished there almost every season since 1856, it falls to my lot not unfairly. Since recording my lease, eight of my friends have agreed to share with me the expense of preserving and the pleasure of catching. We shall not increase our number above twelve or fifteen, and in two or three years we hope to have the lake and stream full of trout as they were less than twenty years ago. No tannery nor saw mill has ever polluted the waters of this part of the Beaverkill.

This notice will undoubtedly cause great disappointment to many, especially to sportsmen of Ulster, Delaware and Sullivan counties, N. Y., but I do hope that it will be regarded, because we have the legal right and title and the means to enforce it, and we shall certainly do so. It is but fair to add that any one stopping at Weaver's or at Mead's, will be allowed to fish over their respective pieces of stream, but not on Balsam Lake nor the "Banks" lots. The increasing fondness for real sports sends more hunters and fishermen afield every year, and forests and streams near the great cities are almost stripped of fin and feather. Those who cannot take time to go far have but one resource—to preserve the game by restricting the privilege.

Yours respectfully, GEO. W. VAN SICLEN.
No. 99 Nassau street, New York, March 23, 1878.

—Canastota, N. Y., rejoices in a game constable who does his duty in a creditable way, without regard to the color, race or previous condition of the law breaker.

—The Tully Lakes (N. Y.) poachers have been captured—four of them at least—and the thirty-two fish, at $10 each, should, according to our arithmetic, count up just $320.

A Disgusted Angler.—This plaint comes from New London, Conn. Whether "Misal" means this for a missile, or would intimate that conscientious anglers miss all the sport, we are at a loss to decide:

"We might as well not have any trout law. The brooks have been fished for nearly a month. No one takes notice of it, and we've no game club nor any one bold enough to start one, and if it were started the originators would be among the first to break it. Misal.

Texas Buffalo Extermination.—We are in receipt of frequent communications, calling attention to the destruction of buffalo, and we have often reverted to the subject in these columns. Mr. A. C. Goner, of the National Association of Wool Manufacturers, writes of a hunter in Texas, who has this season killed over 5,000 of these animals for their hides, and our correspondent asks if we cannot bring the matter to the notice of the Government. This has been done repeatedly. Individuals and associations, newspapers and books have ventilated the subject, and there has been abundant legislation in Congress. But all these measures appear ineffectual. It is impossible to enforce the laws when they are made, and the work of destruction goes on. Col. Dodge, in his book on the Great Plains, estimated that between four and five millions of buffalo had been killed within the last four or five years. The wonder, then, is not that the Texas hunter killed five thousand buffalo, but that there were five thousand left for him to kill. We opine that the greasers and their employers will respect the laws only when the laws themselves shall have become obsolete by the extermination of the last buffalo.

Ohio.—The new game bill introduced into the Ohio House prohibits the killing in any manner of swan, wild geese, wild ducks, wild turkeys, pigeons, woodcock or snipe, between the 15th of April and the first day of October, inclusive; makes the killing, or in any manner destoying any other birds in this State, unlawful for the next five years; and also makes it unlawful for any person to enter upon the inclosed premises of the owner of any land in this State for the purpose of fishing, hunting or killing any kind of game without first obtaining the consent of the owner of said premises. This was amended so as to allow the killing of hawks and owls.

The Rifle.

The Maine Rifle Club.—This new club was organized at Portland, Me., last Friday, with the following officers: President, E. C. Farrington; Vice-Presidents, F. G. Patterson and J. Manchester Haynes; Secretary, Frank R. Phenix; Treasurer, H. C. Hersey; Directors, E. C. Farrington, L. C. Daniels, George L. Beal and William A. Stillings. Among the incorporators were: General C. P. Mattocks, of Portland; General T. A. Hyde, General George L. Beal, George M. Patten, Esq.; General J. P. Cilley, Secretary of State Chadbourne, and Deputy Smith; E. C. Farrington, Esq., and A. P Gordon, Esq. The range will probably be located at Baldwin.

Massachusetts.—*Boston, March* 39.—The best scores for a Colt's revolver, at Rifle Gallery, 055 Washington; distance, 50 yards; eight shots per man.

F Hollis	4	5	5	5	5	5	5	5—39
H G Bixby	4	5	4	5	4	5	5	5—37
D F Small	4	4	4	4	5	5	5	5—36
T C Banks	4	4	4	4	5	4	5	5—35
H W Covell	4	4	4	5	5	4	4	5—35
E F Richardson	4	4	4	4	4	4	5	5—34
D F Wing	4	4	5	4	4	5	4	4—34
F Fitzpatrick	4	4	4	2	5	5	5	5—34

E. Bennett.

—The Massachusetts Rifle Association's spring meeting takes place in May.

The Rifle at Harvard.—The rifle club has elected the following officers: President and Captain, H. W. H. Powell, '79; Secretary and Treasurer, F. Simpson, '79; Marshals, T. Lee, '79, T. Russell, '79, C. Brigham, '80.

Medford Amateur Rifle Association.—Rifle matters in Medford Mass., are assuming a much livelier aspect. The Medford Amateur Rifle Association has accepted a friendly challenge from the Wakefield Rifle Club, to take place on Fast Day, at Bellevue Range. Each team to consist of seven men, distance 200 yards, off-hand, fifteen shots. M.

The Rifle in Connecticut.—With regard to the proposed contest for the possession of the prize won by the Connecticut team at Creedmoor in 1875, the match will take place at Quinnipiac range on Wednesday, May 8, shooting to commence at 10 A. M. In case the day is stormy, the match will take place on the following Friday. Each regiment will be represented by a team of twelve men, to appear in uniform. Epaulets may be removed when a member is shooting, but the coats must be fully buttoned. The Springfield rifle will be used, and ammunition furnished by the Quartermaster-General of the State. No two men allowed to use the same rifle. Conditions are, ten shots per man, at both 200 and 500 yards. Two sighting shots will be allowed, but there can be no practicing before the match. There must be no wiping of the rifles, excepting between the sighting and scoring shots, and Creedmoor rules will govern. Each team will select a judge, and the two judges thus chosen will decide upon a referee.

Challenge Accepted.—The general challenge offered by the Empire Rifle Club, issued in February last, has been accepted by the New York Rifle Club. Conditions, 200 and 300 yards; N. R. A. rules; two sighting shots and ten scoring shots; teams to be composed of from eight to ten men. The match is to take place on April 15. The New York Club have commenced well, having been second in the Forest and Stream and Rod and Gun Rifle Tournament.

A CHALLENGE—NEWARK AND ZETTLER CLUBS.

Newark, N. J., April 1, 1878.

To the Zettler Rifle Club:

Gentlemen—You are hereby challenged by the Newark Amateur Rifle Club to shoot a friendly match between the first and fifteenth (1st and 15 h) of May next, in the evening, at "Bayer's Gallery," this city, said match to be shot on the following conditions, viz.: Teams—Each team shall consist of ten men; each and every competitor must be a member of the club he represents. Rifles—22-100 cal., limited to ten pounds in weight. Minimum pull of trigger, three pounds. Number of shots, ten by each competitor. Sighting shots—Two sighting shots will be allowed to each competitor. Position, off-hand. Targets—200 yards targets, according to the regulations of the N. R. A., reduced in proportion to the range at the gallery. The match to be governed by the rules of the N. R. A. relating to team shooting.

Very respectfully yours, Newark Amateur Rifle Club.
J. T. Hill, Secretary. Wm. C. Gardner, President.

The Amateur Rifle Club.—The annual meeting of the Amateur Rifle Club was held on April 2. The President recommended the introduction of short-range matches for the benefit of those members who do not shoot at long range. A discussion took place in regard to leasing a piece of ground at the rear of the firing point at 1,000 yards at Creedmoor for the purpose of extending the range to 1,200 yards. Major Fulton, of the same committee, said that a range of 1,200 yards could be secured of the New Jersey Rifle Association free of charge. The two projects were referred to the Executive Committee, with power. Fifty dollars was appropriated for the purchase of a gold medal to form a prize in the "Leech Cup match at the autumn meeting at Creedmoor. An appropriation of $100 was made for the purchase of prizes to be given in a short-range and a mid-range match. The following officers were elected: President, Lieut-Col. E. H Sanford (re-elected;) Vice President, Major Henry Fulton; Secretary, Major Joseph Holland; Treasurer, A. Alford; Executive Committee, Col. H. A. Gildersleeve, John B. Holland, E. P. Waters, L. C. Bruce, and Major H. S. Jewell. A vote of thanks was passed to Lieut-Col. Scobel, of Toronto, for his courtesy to the club team during its visit to that city last year, and he was likewise elected an honorary member of the club. An adjournment was then taken.

Seppenfeldt Rifle Club.—104 Bowery, N. Y., April 2.—Scores from Friday, 28th. 175 feet off-hand target, 18-inch bull's-eye, 2½-inch Creedmoor; possible 50.

T Garrison	47	M Menmann	43
Wm Seppenfeldt	46	Ed Story, Jr	43
Ch Laing	46	G Strassner	43
Max Kern	45	C Rasch	43
Albt Keller	44	Th H Walker	41
E Holtzmann	44	H Rothenberg	40
Aug Greenenberg	44	W T Learzy	40
Wm Guttenberg	43	G Rasch	35
Fr Shakell	43		

Franois Strackell, Secy.

Report of the N. R. A. of America.—We beg to acknowledge from the Secretary a report for 1877, of the business, scores, etc., of the National Rifle Association of America.

—The National Rifle Association have resolved to hold an international match at Creedmoor in September next.

A Graceful Letter.—A. C. Hobbs, Esq., Superintendent of the Union Metallic Cartridge Company, of Bridgeport, has received the following letter of acknowledgment from the Secretary of the New York Rifle Club, on the occasion of their having won the handsome badge offered by the U. M. C. Co.:

Union Metallic Cartridge Company,
New York, March, 25, 1878.

Dear Sir—On the part of the New York Rifle Club, which had the pleasure of winning your extremely beautiful medal, I wish to express to you our appreciation of your generosity in sending such an elegant work of art to the tournament for competition, and beg you will accept our best thanks for your action in the matter. When your intention to send it became known to the riflemen it occasioned very general and very congratulatory remarks, and you may be certain that your remembrance of us was justly and properly appreciated by all.

This trophy is the first one which we have secured as a club, and the late contest, in which we were so fortunate as to win it, was our first also, and I beg to assure you that we are profoundly pleased and happy to have become the possessors of the medal so thoughtfully and kindly sent to the tournament by the Union Metallic Cartridge Company, of Bridgeport. Please receive, gentlemen, the assurance of our highest consideration, and permit us to remain your obedient servants.

The New York Rifle Club,
S. T. G. Dudley, Pres.

—The Maryland Rifle Club held its annual meeting on Wednesday evening, April 2, at the office of E. Remington & Sons, No. 47 German street.

How Dr. Carver Shoots.—*Editor Forest and Stream:* I saw Dr. Carver (about whose rifle shooting you Eastern people seem to have some doubts) shoot in Sacramento a few days ago. He shoots with a Winchester rifle, model 1873. Glass balls are thrown vertically to the height of thirty feet by an attendant, standing ten or fifteen paces distant. The doctor holds the rifle at the elbow until the ball is thrown, when it is raised to the shoulder, and the left hand slid out along the barrel until the arm is straight, following the barrel up until the motion ceases, when the rifle cracks, and the glass ball flies into a thousand pieces, the distorted goes humming through the air. The doctor is a young man, sandy hair and moustache, about six feet two inches, straight as arrow, well proportioned, and weighs 190 or 200 pounds, and sights his rifle with both his hazle eyes wide open. Cazador.

Shooting Extraordinary.—*Land and Water*, by no means very accurate as to its sporting matters in the United States, says that Dr. Carver "has broken 885 glass bottles out of a thousand, from a point twenty yards distant, with a rifle." Perhaps Dr. Carver shoots at five-gallon demijohns.

With a Ballard.—*San Francisco, March* 18.—The following remarkable scores were made on the 17th of March, at San Francisco, by Mr. W. Milton Farrow, with a Ballard Schutzen rifle, 200 yards, off-hand, on the German ring target, twenty shots without cleaning. The best shots here, with their finest muzzle loading rifles, have never equaled this score at this range:

First ten shots	20	21	25	24	25	21	21	25	24	25—231
Second ten shots	24	19	24	21	22	17	24	21	21	19—211
Total twenty shots										448

We fully expected that Mr. Farrow, well known here for skill, would distinguish himself with the Ballard on the Pacific side. Messrs. Ladd & Smith, of 821 Kearny street, San Francisco, are the agents for the Ballard rifle.

With the Compliments of the Duke of Cambridge.—*London, March* 28.—The Duke of Cambridge, speaking at a meeting of the National Rifle Association yesterday evening, declared that Sir Henry Halford and his team merited thanks for their gallant contest at Creedmoor, but, as they had been unsuccessful, the council had no intention of encouraging a repetition of such a contest. He spoke in high terms of the hospitality extended to the team in America. Lord Wharncliffe said the Creedmoor contest showed that the English required a better system of team shooting.

Notice of the Challenge of the N. R. A. A. in France.—*L'Armee Territoriale*, the organ of the army reserve in France, calls particular attention to the letter sent by Col. Schermerhorn, Secretary of the N. R. A. A., to Monsieur Duquesne, Director of the National Society of Riflemen in France. We may state that what is called *le tir des communes*, or rifle practice in the departments, has taken the widest development in France, and riflemen may be counted by the thousands.

Gallery Shooting in Dublin.—Somewhat impressed by the necessity of gallery practice, as carried on in the United States, Mr. J. K. Millner, the well-known Irish rifleman, has written the following to Mr. Conlin:

"A short range rifle club has just been formed in Dublin by a few friends of the rifle, and as we want information about rules, etc., for gallery shooting, I take the liberty of writing to you to ask you to send me the rules used at your gallery; also a list of club rules, etc. What price could we get a gallery rifle for (and a pistol)? Would you have any objections to test the shooting of a rifle before we buy it, as we want to get the best outfit for shooting? When you are shooting for measurement from the bull's-eye do you shoot all the shots at one target before you commence to measure? How do you manage when more than one shot strikes the same hole? We have called our club "The Miniature Rifle Club." Is there any chance of any American riflemen coming over here this year? Rifle shooting has not commenced here.

[We suppose if any one is thoroughly posted it is Mr. Conlin, and no doubt Mr. Millner will get the very best information.—Ed.]

Dennison's Rifle Targets.—As may be seen in our columns, the Messrs. Dennison have called upon the ingenuity of our readers for plans for a score card to be used in rifle practice. As manufacturers for the field and for gallery practice, the Messrs. Dennison are well known. Their pads also, for shot-guns, showing pattern and penetration, are the ones most in use. It became a matter of curiosity for us to call upon this house, and we were amazed at the scope and comprehensive character of their business. The parcels which move over the United States, mostly go to their proper address by means of the Dennison tag. The demand for such tags for an infinite variety of purposes is immense. At the manufactory we saw tags being made for far off Norway; and even France calls on the Messrs. Dennison for tags. To these large manufacturers, who certainly think that there is nothing like paper, their favorite material goes into all kinds of things. Here are counters made out of paper, as lasting as ivory or bone, which can be furnished at low cost. Those infinite variety of pretty boxes used by jewelers, which must be as strong as they are ornamental, are made by the millions by the Messrs. Dennison. Returning to their targets, they inform us that the demand is ever on the increase, and that they only await now the forthcoming score card in order to complete all that may be wanted by the riflemen in the field.

THE SPORTING RIFLE.—No. 2.

Chicago, March 1, 1878.

I have shown that in selecting a rifle for shooting game, the standards of accuracy and force should rest upon a different basis from that required for the long-range target rifle. Supposing two hundred yards to be the outside limit at which a shot should ever be taken at a deer—(and then only when there is no possibility of getting nearer)—we may say that a gun is sufficiently accurate, which is capable at that distance of placing every shot inside of a circle eight inches in diameter, because a circle of that size described on a deer's shoulder, would cover all the vital organs.

Such a degree of accuracy (provided it is accompanied with sufficient force) will, of course, be proportionately reliable for a much greater distance, and it may safely be assumed as the standard for the test of a sporting rifle.

But many rifles would pass this examination which are yet unfit for the sportsman's use, because they require so much elevation that the risk of missing by over or under-shooting is very great. In other words, the trajectory is not sufficiently flat; or, to put it in yet another form, the initial velocity is not enough to admit of aiming directly at the object, unless with a sight so much elevated as to allow for the dropping of the bullet in its passage. Often as the fact has been repeated, there are still multitudes of men who fail to realize the truth, that a rifle bullet falls just as far in every second of its flight, as it would do if dropped from the

hand, without any impulse in any other direction. All that can be done to overcome this effect of gravitation, is to impart such velocity to its forward motion as may carry it as far as possible during a given period, and thus increase the *proportionate* difference between the horizontal and the vertical movements. Now, we can give to a bullet an initial velocity of 1,700 feet in a second, and by so doing the fall during the fraction of a second occupied in passing over the first hundred yards (300 feet) will be so slight that for all practical purposes the trajectory may be treated as a straight line. There are various methods of ascertaining the trajectory, some of which are elaborate, and require more pains than most men can conveniently bestow. Others are more simple and sufficiently accurate for all practical purposes. Any man can test his own rifle without difficulty by providing himself with a number of paper targets made with a horizontal and a vertical line crossing each other in the centre, and shooting at them from different points on level ground, aiming always at the intersection of the lines, and using the same sights at all the different distances. The best way to do it is to learn first the exact distance for which the fixed sights on the barrel are set, that is to say—the distance at which the bullet will strike the horizontal line when aimed exactly at it through those sights. If the gun is provided with an elevating peep-sight on the stock, it will be well to set it in the first place, so that when sighting through it the bead of the muzzle sight can just be seen through the notch of the rear sight on the barrel. This will prevent the danger of variation in sighting which would result from using the barrel sights alone.

Having ascertained the point for which the gun is sighted, which we will suppose to be seventy-five yards, put up a fresh target, and begin at twenty-five yards, shooting from a fixed rest, the simplest arrangement for which is a table with a seat beside it, so that the right arm may be firmly supported with a contrivance for a muzzle rest in front. Fire as many shots as will suffice to give a satisfactory average of the distance above the line at which the bullets strike. Then label the target "twenty-five yards," and replace it with a fresh one, and retire to fifty yards and repeat the operation. Then go to one hundred (no need to try seventy-five, because that has previously been found to be the point where the bullets just strike the line), then 125, 150, and so on, as far as is thought desirable, aiming always exactly at the intersection of the lines, and carefully labeling each target before laying it aside. Then measure and calculate the average distances above the line at twenty-five and fifty yards, and below the line at 100 and beyond, and it is obvious that this will show all that is needed for practical application in sporting service. And those who are not familiar with such tests will be surprised to find in many instances that rifles which they had thought very accurate, because they could make bull's-eyes with them at every shot, *when the distance was measured and the sight set at the proper elevation*, will shoot three or four inches above the line at twenty-five and fifty yards, and as much below at one hundred. A moment's reflection will show the hopelessness of trying to do nice shooting, when such an allowance as this must be made, and when, as in game shooting, the distance must be estimated on the instant for each shot. A really good sporting gun ought not to show a greater difference than three inches between twenty-five and one hundred yards. This would allow the aim to be taken exactly at the object for that distance, and a full bead would suffice for 150 yards.

If manufacturers would have a careful test made of the trajectories of their sporting rifles, and furnish statements setting forth the length, weight and calibre of the gun, the weight of the bullet and the weight and quality of powder, and then the distance for which the gun was sighted, and the variation of the trajectory above the line at shorter distances and below it for greater ones, it would furnish exactly the information wanted. Any gunmaker who would furnish a certificate, with every sporting rifle he offered for sale, stating the proper charge of powder and lead, and the distance for which its fixed sights were set, and *containing a guarantee* that the curve of its trajectory was not more than three inches in 100 yards, so that within that distance the aim might be taken exactly at the object without risk of a greater variation than one and a half inches above or below, would supply a want of sportsmen which would secure him a large custom, and drive a multitude of poor guns out of the market.

There is yet another method by which the initial velocity may be approximately determined, which is by the penetration of the bullet. It would be an exceedingly interesting and valuable contribution to the data already collected, if a properly certified statement could be furnished of the ratio, which must, of course, exist between the trajectory or the initial velocity and the power of penetration, so that one might be estimated from the other. We could then determine the trajectory simply by learning the calibre and weight of bullet, and its power of penetration. I have proved this only in a single instance, a statement of which will explain my meaning. With a rifle of 4-10th calibre, and a bullet weighing 312 grains, I get a penetration at thirty yards of eight pine boards, each one inch thick, and placed an inch apart. The same charge and bullet gives a trajectory for the first 100 yards so flat as practically to require no other change of elevation than a little fuller bead for one hundred than for fifty yards. I assume, therefore, that if a bullet of that size and weight gives such a degree of penetration, its initial velocity must be sufficient to give it a corresponding trajectory, and I deduce from this statement that a rifle of 4-10ths calibre, with a bullet of the above weight, which will give eight inches of penetration at thirty yards, and can be relied on to place every shot in an eight-inch ring at 200 yards, has sufficient force and accuracy for any possible demand of sporting service for a gun of that calibre.

It is easy to see that a similar standard might be furnished for guns of any size, weight or calibre, which would enable any one to test his weapon without difficulty, but it is obvious that the ratio of penetration must change with every change of calibre and weight of gun and ammunition.

H. W. S. C.

RIFLEMEN'S RIGHTS.

HUDSON, March 29, 1878.

EDITOR FOREST AND STREAM:

It was with great pleasure I read two articles in your recent issues, where merit, demerit, fairness and unfairness, were ably discussed. In looking over these articles, I think it proper to say a word concerning many as well as myself. The articles I have reference to are the one of Mr. Jackson, of Boston, late of the American Rifle Team, and the other, "Who Shall Select the Next Team?" Being an ardent lover of rifle shooting, and having visited Creedmoor since 1874, and being interested more or less in long-range matches, private, national and international, and having the misfortune of being an adopted citizen, I would respectfully ask the following questions through your valuable columns, trusting that some of your readers will give some explanation on this subject. Why is it that an adopted citizen is excluded from participating in matches for the Centennial Trophy? Why cannot he compete for a place on the trophy team? Why cannot he enter in an international match with a team? I am well aware that the Irish team of 1874 required in their specifications that none but an American-born should shoot in that match, but since that time I have failed to see any such specifications or agreements from foreign teams. In international matches there may possibly be a slight excuse for the N. R. A. in excluding the complainants; but how about the "Palma." Was it not given by "Uncle Sam" to the riflemen of the world? All nations have a right to compete for it, except the adopted citizen of America (of this free and democratic country). He alone is told by the N. R. A. that he is unfit to enjoy the pleasure and bear the honor of competing for that national gift. The adopted citizen is excluded everywhere—cannot even enter a foreign team—because foreigners regard us as Americans, and no longer of their nationality, and if, perchance, he could enter a team from abroad, I fancy there would be criticisms on the part of some of the American riflemen, especially if he was a superior marksman. This, in my judgment, should be different. I think we should have a right to enjoy this, as other privileges; as, for instance, when a great rifle match is to be gotten up, attended with expenditures, the American-born is willing to accept the aid of the adopted shooter. When the tax collector comes none will say, "We cannot take your money: you are a stranger;" or, in time of war, will the American-born say, "Stop back, we alone will stop the enemies' bullets." When we look at the Sharpshooters' Union (Schutzenbund) we find a different state of things. Although it originated among Swiss and Germans, they welcome every one, without regard to nationality. The requirements of that institution are to pay dues and maintain manly conduct. Much more could be said on this subject, but I will content myself with the above for the present, trusting that I have offended no one, and that justice may be done.

Very respectfully yours, L. G.

Game Bag and Gun.

GAME IN SEASON IN APRIL.

Wild ducks, geese, brant, etc.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Partridges, ruffed grouse, per pair, $1.50; canvas back duck, $1.25; red head ducks, $1.50; Brant geese, 75 cents; mallard ducks, 75; black ducks, 50; widgeon ducks, 50; broad bill ducks, 50; teal ducks, 50; Wilson snipe, per doz., $1.25, $1.50; plover, $2; bay birds, large and small, 75 cents; wild pigeons, flights, $1.25; stall fed, $2; Philadelphia squabs, $3.50.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25 cents; do., fowls, 20; do., turkeys, 20; do., ducks, 20; do., geese, 15; State and Western chickens, 15; do., turkeys, 16; do., fowls, 15; do., ducks, 18; do., geese, 12; capons, 35; slips, 30; spring chickens, per pair, $1.50; Vermont frozen turkeys, 25, 28 cents per pound.

MASSACHUSETTS—*New Bedford, March* 29.—Snipe shooting has commenced in good earnest hereabouts, and some fine strings have been taken. There ought to be good fall shooting in these regions, for I do not remember of seeing so many quail and partridges for some years, the mild winter having been favorable to them. Woodcock quite plenty, but now nearly all nesting. CONCHA.

CONNECTICUT—*Stamford, March* 30.—English snipe have come. One was killed by Théo R. Hoyt. H.

RHODE ISLAND—*Newport, March* 4.—Our local shooters for the last six weeks have had sport in shooting muskrats. No sea fowl shooting of any consequence. SEA DUCK.

NEW YORK.—Wild geese on Lake Champlain.

New Dorp, March 30.—Wilson snipe up. Seven killed yesterday. Birds will be plenty for the next three or four weeks. Any one wishing the services of a good dog and experienced shot will find one in the person of John Wood at this station. W. A. G.

A FORMIDABLE EXPEDITION.—"Jacobstaff" and a goodly proportion of the Jersey City Heights Gun Club, with several tons (more or less) of guns and ammunition, started on Tuesday for Bill Lane's, Shinnecock Bay, after geese and ducks. We prophecy a good time and good bags.

Buffalo, March 27.—Eight snipe were shot near the city last week. Preparations for the State shoot are being made. J. E. P.

PENNSYLVANIA—*Titusville, April* 1.—Our woods are full of pigeons. Hundreds are killed every day. Some English snipe along the creek. G. H. W.

MARYLAND—*Baltimore, April* 1.—The snipe shooters have turned out in full force along the swamps bordering the Patapsco, but the game is not very abundant. In the piscatorial sports things are slow, also, and our lovers of the rod have to content themselves with gudgeons, which are being caught in enormous quantities. A friend and myself hooked ten dozen of them in a few hours at the Relay, B. & O. R. R., with hook and line. TRAYMORE.

DELAWARE—*Lewis, March* 29.—Wilson snipe are reported plenty on the marshes.

KENTUCKY—*Ashbysburg, March* 24.—Every prospect for plenty of game the next season is seen. Squirrels are very plenty. Quail were not much hunted this season, and consequently there is lots for seed. Turkeys are tolerable plenty, and have been gobbling for a week or two. PADDY O'LEARY.

—The great bald eagle of Balson Creek Range, Georgia, which has been a pest to stock raisers thereabouts for the last four years, was killed a week or two ago. The measurements were: 7 ft. 10 in. from tip to tip of wings; foot, 8 in.; claw, 3¼ in.

SOUTH CAROLINA—*Port Royal, March* 23.—I notice you have an early spring at New York. It is not very early here. There are no flight birds (waders) yet, although they usually put in their appearance by the 20th of March. We have steady cool nights. R.

TENNESSEE—*Columbia, March* 25.—Squirrels are so plentiful that farmers are anxious to have sportsmen spend a week or two with them, offering to take them from and bring them back to town, and board them while hunting. I was told the other day by an old sportsman that the squirrels are more plentiful than any time since the year '59, when they were very numerous. VAL.

Nashville, March 28.—Some few bags of jacksnipe have been made about here lately, but they are reported to be much less numerous than usual at this season. Messrs. Nicholson, Pettigrew and France, of Memphis, went over into Arkansas some time ago for a few days' shooting. Besides killing several deer, one hundred partridges (quail) and some other game birds, Mr. Nicholson, by a chance shot, succeeded in killing an enormous wolf, which had been the terror of the farmers in that neighborhood for a year or two, they having lost a number of sheep and hogs, killed, no doubt, by him.

OHIO—*Painesville, March* 29.—We have had snipe shooting for ten days past. TARGET.

MINNESOTA—*Eyota, March* 27.—Chickens plenty this spring, and weather beautiful. Snipe have not put in an appearance yet, although the season is so forward. VERD MONT.

St. Paul, March 30.—Shooting parties after ducks and geese is the order of the day. The birds are here by the millions. J. S.

IOWA—*Pomeroy, March* 22.—Brant, pelican, geese, etc., going north in large numbers. We expect snipe soon. ABE DACOTAH.

Clinton, April 1.—Very few snipe coming in. G. E. P.

THE SEASON.—Our Exchange Editor reports as much sportsman as game shot, up to date. When will people learn that a loaded gun is not a walking stick, nor a hair brush, nor a tooth pick, nor a thing to poke another man's ribs with?

WILD RICE.—Attention is called to the information in another column of the wild rice at English Lake, Indiana, and the possibility of securing the seed there.

WHAT THE DISTRACTED DOE SAID.—How happy could I be with either were 'tother *deer* charmer away.

DITTMAR'S POWDER.—Our California correspondent writes as follows: "I have been using Dittmar powder all winter. I mix half and half with common 'Oriental Powder,' which is the cheapest we can buy here for use in the shot-gun. It has given me the greatest satisfaction, as I can shoot all day and my gun will be as clean at night as after firing the first shot. I shoot 3½ drachms of the mixture and one ounce No. 8 shot in No. 12 gun for quail. I shall use the C. Dittmar alone next season, on account of the absence of smoke, as our quail shooting is mostly in thick brush, where the smoke hangs so heavy as to obscure the sight. Some of your correspondents speak of obtaining our valley quail for breeding purposes. They can be obtained here frequently alive, in cages, for $1.50 per dozen. CAZADOR.

"HONOR TO WHOM HONOR IS DUE."—*Mr. Editor:* In your issue of March 21, under head of Answers to Correspondents, in reply to queries made by "Long Island," you say it is a difficult feat to kill 85 pigeons out of 50 double rises, and that it never has been done. I most heartily agree with you in your conclusions that it is a difficult feat. But when you say it has never been done, I most respectfully beg to differ. I find by referring to the official scores made by John Taylor, which I have before me, that in his match with Mr. King, shot at Chicago, Ill., Taylor killed 91. In his (Taylor's) match with Robert Newell, shot at Syracuse, N. Y., Taylor killed 98. Nowell killed 94. Captain Bogardus, is, without doubt, the best shot living, but in all his shooting I have yet to see where he has equaled the scores made by John Taylor. In his (Taylor's) four matches with King and Newell, he averaged 94, and, if my memory serves me right, John Taylor was the first to use glass balls in practice. Will not some of his Jersey friends enlighten us? Respectfully yours, ELOHO.

Clinton, Ia., March 29, 1878.

A "LAND-LOOKER'S" FIND.—Here is a subject for our sensational story writers. Let it be called "The Tory Trapper of Wolf Creek." For this suggestion we only ask the privilege of a bid for the manuscript:

"W. B. Leonard, a 'land-looker,' while tramping through Alpena County, found, near Wolf Creek, sixty steel traps, a double-barreled rifle, a sheath knife and the bones of the man who once owned them."

THAT DEAF HORSE.—"Aqua" writes from Danville, P. Q., of another instance where a horse was deafened by the discharge of a gun from the wagon. We should be pleased to hear further from our Cedar Rapids correspondent:

"Last fall an acquaintance had occasion to fire a few times from his wagon. After the last shot 'old Gray' stopped short and paid no attention to the command of his master; did not start till struck with the reins, nor stop until pulled up—in fact, was 'deaf as a post.' He remained so some two or three weeks, then, all at once, he took a notion to hear again, and now his auriculars appear to be in as good working order as those of any other quadru or biped."

—Capt. Bogardus evidently means that the Britishers shall have ample time to prepare for him this summer. He has, through the *Herald*, challenged all Europe to meet him in the field upon the occasion of his visit to the Paris Exposition, and the Britishers are up and doing, too. The captain has already received cabled acceptance of his challenge.

PIGEON MATCHES.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

GLASS BALL MATCH AT DEXTER PARK.—On Saturday last, March 30, a number of gentlemen from the Long Branch Club, the West Side Club, and the Long Island Club met at Dexter Park. The conditions were: 100 balls per man, 12-bores to to shoot at eighteen yards; 10-bores at twenty-one yards. Bogardus traps were used, with Ira Paine's feather-filled ball. The prize was a handsome silver cup, worth $100. As may be seen by the subjoined score, the match was narrowed down to a contest between Mr. Edgar G. Murphy, son of ex-Collector Murphy, and Mr. Butler. Mr. Murphy's score is a most remarkable one, and for number of balls broken is quite as good as that of any of the professionals. By an analysis of the score, it will be seen that Mr. Murphy, who is a young gentleman of 19 years of age, and a member of the Long Branch Club, scored 94 out of 100, making in one case 54 balls, with but one miss, and after his fifteenth ball, which was not a break, scoring forty straight balls. Mr. Butler broke twenty-eight straight balls, making two successive scores of twenty-eight and twenty-seven. Mr. Butler, well known for his skill with the rifle, is a quick and accurate shot with a gun, and though on this occasion parting with his laurels, he gracefully acknowledged the skill and nerve of his younger adversary. After luncheon, the day's amusement concluded with various sweepstakes. The Long Branch Club necessarily felt quite elated over the success of Mr. Murphy, who, if he continues with the same skill as shown in this match, will undoubtedly become the champion amateur shot.

Edgar G Murphy, 18 yards rise, 12-bore, Westley-Richards gun .....
1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 : 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0
1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—94

Mr Zeltner 18 yards, 12-bore, Daly Gun.....1 1 0 1 1 1 1 1 1 1 1 1
1 0 1 1 1 1 1 1 1 1 1 0 1 0 1 0 1 1 1 1 1 1 1 0 1 1 0 0 1 1 0 1 0 1 1 0
1 1 1 1 1 1 1 1 1 0 1 w—5t.

Mr. Salmon, 18 yards, 19-bore, Grant Gun.....0 1 1 1 1 1 0 1 0 1 1
0 0 1 1 0 1 1 1 1 1 1 1 1 0 0 0 1 1 0 1 1 1 1 0 0 1 1 1 1 1 w—30.

Mr. Rattles, 18 yards, 12-bore, Daly Gun.....1 0 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 0 1 : 1 0 1 0 1 1 1 1 1 1 1 0 1 1 1 1 0 0 0 1 1 0 1 1
1 0 1 1 1 1 1 1 1 1 w-49

Mr. Butler, 18 yards, 12-bore, Scott "Premiere" gun.....1 1 1 1 1 1
1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1
1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1
1 0 1 1 1 1 0 0 0 1 1 1 1 0 1 1 1 1 1—91.

Mr. Shepard, 21 yards, 10-bore, Scott Gun.....1 1 1 0 1 1 0 1 0 1 1 1
0 1 1 1 1 0 1 0 0 0 1 0 1 0 0 1 1 0 1 1 1 0 1 0 1 0 1 1 1 1 1 1 1 1 0 w
—82.

Cohoes, March 30.—Two matches were shot here at glass balls to-day. First match, ten glass balls.

A Grant.....1 1 1 1 1 1 1 1 1 0—9
L Leackman.....0 1 1 1 1 1 1 0 1 1—8
W Westover.....0 1 0 1 1 1 0 1 1 1—7

Second match, five glass balls.

A Paul.....1 1 1 1 1—5 A Laing.....0 1 0 0 1—2
D Newby.....1 1 1 1 1—5

Ties on five were not shot off.

W. J. WESTOVER.

—A glass ball match was shot in Bay Ridge, L. I., last Saturday, March 30, between Peter S. Bogart and George H. Hope, at twenty-five double balls, Bogardus traps and rules, which proved to be a very close and interesting contest. Following is the full score:

George H Hope.....11 10 11 10 01 10 11 10 10 10 11 11 11 10 01 11 01
11 11 11 01 10 11 11 10—Total, 38 out of 50 balls shot at.
Peter S Bogart.....11 10 11 11 10 11 00 11 11 10 10 11 11 10 10 00 01
10 11 11 11 00 11 11 11—Total, 36 out of 50 balls shot at.

—The Newark, N. J., Amateur Gun Club shoot every Tuesday for a prize cup.

PENNSYLVANIA—*Mechanicsburg, March* 28.—Pigeon match, 21 yards rise, 80 yards boundary; birds strong flyers.

First Match.

W Humer.....1 1 1 1 1 1 1 1—8
J C Rupp.....1 1 1 0 1 1 1 0—6
J J Ringwalt.....0 1 1 0 1 1 0 1—5
A D Boas.....0 1 1 0 1 0 1 1—6
Dr J C Slyder.....1 1 1 0 0 1 0 1—5
"Bogardus" Overdeer.....1 0 1 0 1 0 1 1—5
J D Rea.....1 0 1 0 0 1 0 1—4
M Pierrepont.....0 1 0 1 0 0 1 1—4
D Brandt.....0 1 1 0 0 1 1 0—4
D A Urich.....0 1 0 1 1 0 0 0—3
S F Hanck.....1 0 1 0 0 0 0 1—3

Tie for third purse.

Dr Slyder.....0 0 0 0 0—0 Boas.....1 1 0 0 0—2
Ringwalt.....1 1 0 1 1—4 Overdeer.....1 1 0 1 1—4

Second tie for third purse—miss and out.

Ringwalt.....0 Overdeer.....1

W. Humer, first; J. C. Rupp, second; Overdeer, third.

Second Match—Balls.

Rupp.....1 1 1 0 0 0 0 0 0 0—3
Ringwalt.....0 1 0 1 0 0 1 0 1 0—4
Woll.....0 0 0 1 1 1 0 0 1 1—5
Overdeer.....1 1 0 1 1 1 1 0 1 0—7
Nobis.....0 1 1 1 1 1 1 1 0 1—8

Third Match.

Rupp.....1 1 1 0 1—4 Boas.....0 1 1 0 0—2
Stine.....0 1 1 1 1—4 Hanck.....1 0 1 0 0—2
Overdeer.....1 1 1 1 1—5 Grissinger.....1 1 0 0 0—2
Brandt.....1 1 0 0 1—3 Uhrich.....0 0 0 0 0—0
Milleisen.....0 1 0 1 0—2 Ringwalt.....0 0 0 0 1—1
Rhea.....0 1 0 0 1—2

Ties for second—miss and out.

Rupp.....1 1 1 1 1 1 0 1 1 1—9
Stine.....1 1 1 1 1 1 0 1 1 0—8

SOHELL.

LOUISVILLE GUN CLUB—*Wednesday, March* 27.—First match, twenty single birds, 21 yards rise.

J E Green.....1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—19
J M Barbour.....1 1 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 0—16

Second Match—Single birds; miss and out.

J E Green.....21 yds.....1 1 1 1 1—5
H S Gilmore.....21 " .....1 1 1 0 —4
Joseph Griffith.....21 " .....1 1 1 1 1—5
Dr J H Bedford.....23 " .....1 1 0 —3
J V Cowling, Jr.....23 " .....1 0 —1
T W Thomson.....23 " .....1 1 1 0 —3

J. E. Green and Jos. Griffith divided sweepstakes.

Third Match—Sides, five single birds.

J E Green.....21 yds.....1 1 1 1 0—4
J V Cowling, Jr.....23 " .....1 1 1 1 1—5
Dr J H Bedford.....23 " .....1 0 0 0 0—1
T W Thompson.....23 " .....1 1 1 1 1—5
C W Moore.....21 " .....1 0 1 0 0—2—17
Jos Griffith.....21 yds.....1 1 0 0 1—3
H S Gilmore.....21 " .....0 1 1 1 1—4
J M Barbour.....21 " .....0 1 1 1 1—4
O Barbour.....21 " .....1 1 0 1 0—3
M Stewart.....21 " .....0 0 0 1 0—1—15

Fourth Match—Sides, four double rises, 20 yards.

J V Cowling, Jr.....11 11 11 11—8
Dr J H Bedford.....11 10 10 11—6—14
Jos Griffith.....11 11 10 11—7
S Hutchings.....10 10 11 11—6—13

TENNESSEE—*Murfreesborough, Feb.* 27.—Amateur match at glass balls, 21 yards.

J H Nelson.....1 1 1 1 1 1 0 1 1 1—9
B B Kerr.....1 0 0 1 0 1 0 1 1 0—5
E R Jones.....1 0 1 1 1 0 0 1 1 0—6
C A Cheal.....1 0 0 1 1 0 0 0 0 0—3
J E Arnold.....0 1 0 0 0 0 0 0 1 1—3
J B Kimbro.....0 0 1 0 0 1 1 1 1 1—6
A B Peyton.....1 0 1 1 0 0 1 0 1 1—6
H O Smith.....0 1 0 0 0 0 0 0 1 0—2
J D Miller.....1 0 1 0 1 1 1 0 0 1—5
G A Nelson.....1 0 1 0 0 1 0 0 0 0—3
M Nelson.....1 1 1 0 0 0 1 1 1 0—6
O W Sotora.....0 0 0 0 0 0 0 0 0 1—1

Second Match—Birds; 18 yards.

J H Nelson.....0 0 1—1 A B Peyton.....0 0 1—1
E R Jones.....1 1 1—3 M Nelson.....1 0 0—1
J D Miller.....0 0 1—1 J E Arnold.....0 1 1—2

The above-named gentlemen are organized in a regular club, and propose having shooting matches once a month.

Respectfully, J. D. H.

OHIO—*Cleveland*—Pigeon shoot; chosen sides.

Cham....0 1 0 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 t 1 1 1 1 1 t 1 1 1—26
Ross.....1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 t—28
Away....1 1 1 0 1 0 1 1 1 1 1 1 0 1 1 0 0 0 1 1 1 0 0 1 1 0 0 1 0 0 1 0—21
Kburt....1 1 1 0 1 0 0 1 0 0 1 1 1 0 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1—21
Bertson..1 1 0 1 0 1 0 1 1 0 1 0 0 1 1 1 t 1 0 1 1 0 1 1 1 1 0 1 1 0—21

Total.....117

Linn.... 0 0 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1—24
Omper...1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1 1—25
Mack.....1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 0—25
Asper....1 0 0 0 1 0 1 1 1 0 0 0 1 0 0 1 6 1 1 0 1 1 1 1 1 0 0 0 1 0—15
Smeddy...1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 0 1 1 1 1 0 1 1—24

Total.....113

C.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
April 5	0	54	9	42	8	57
April 6	1	29	10	22	9	37
April 7	2	05	11	05	10	25
April 8	2	47	11	53	11	16
April 9	3	35	0	21	M	
April 10	4	30	1	14	0	45
April 11	5	35	2	12	1	53

NOTES FROM BOSTON AND VICINITY.—The yachting interest has fairly opened in this section of the country. The past week has been one of unusual pleasantness, and some lovers of salt water have taken advantage of the season. The honor of the first launching belongs to Capt. Macomber, he having launched the Florella and Ripple. Capt. Macomber has also placed his float stages in position. Vice-Com. Natt Wales has his schooner Wivern placed at her mooring, where she gracefully rises and falls in the gentle so'-west chop, caused by the fresh breeze, at the time of writing. Many yachts and boats are being got in readiness, and next week will find many in their natural element. At the time I last wrote there were quite a number of yachts in process of completion. New ideas have been advanced which are watched with anxious eyes by the curious, while the more brave critics come forth with their praise or dislike of the various models that form the topic of conversation. If an architect could go to work and produce a model of different likes and dislikes of the wise men of the "Hub," what a study the future generation of yachtsmen would have to pore over. You meet your friend and neighbor at some boat shop where idle curiosity has tempted you to criticise his idea of a yacht, and with a knowing shake of the head, mildly asserts that boat building has not been improved for forty years. They built then as fine models and craft as they do now. Another asserts that he has discovered the great secret of speed. He points with confidant finger to the point of balance, and also mildly asserts that you must throw lines and model to the dogs and figure for the centre or balance of model, sails and power. Still another comes forward for displacement; figures that you ought to carry part of weight (say one-third) on the keel, and do away with so much weight inside; states he can produce a boat by figures so fine that after he has struck her water-line he will place her proper amount of ballast in, spar and rig her, and she will sit in the water to that line and no more. One party says it's not models, but sails; another, it is not sails but men! By some it is claimed "that a flat boat for speed;" another man wants depth, another wants width or beam, another wants hollow lines, cites his authority and defies you to beat it; along comes a man with an old hull (round bottom) and dashes the hollow theory to atoms. Another cites his idea of a lean, sharp bow, and builds his accordingly; the first time he is thoroughly underweigh, an antediluvian clipper (on the sculpin model) cleans him out so bad that he is more mystified than ever. We have fishing boats here that are narrow and deep, they carry large square headed sails, and do away with bowsprits, using in light weather a jib-boom that is hauled to place by the use of tackle. They carry a fore-sail on head stay and are considered very fast in light or heavy weather, "which is certainly proof against flat bottoms or beam." I suppose I could fill your paper with the many criticisms I have heard, but will close with these. If we had a model with each individual idea expressed it would be a curiosity shop indeed. W. S. N.

South Boston, March 24.

NAHASSET YACHT CLUB.—The following are the officers for the ensuing year: Com., Patrick Grant, Jr.; Vice-Com., J. Bryant; Sec. and Treas., J. P. Hawes, Jr.; Measurer, Henry G. Hall; Regatta Committee, J. P. Hawes, Jr., T. Daland, C. G. Weld, P. Grant, Jr., and W. C. Haskell. The club will have two regattas on the North Shore and the same number on the South Shore during this season, and liberal prizes will be awarded the winning boats at each of these races. The report of the secretary shows the number of members of the club to be 43; number of boats, 36.

LYNN YACHT CLUB.—Active preparations are being made for the coming season. The officers and yachts are as follows: Com., E. C. Neal; Vice-Com., William Estes; Captain of fleet, Charles Clifford; Sec., Charles Marston; Treas., Henry A. Marks; Measurer, Joseph Taylor; Trustees, D. H. Sweester, Q. A. Towns, G. H. Cushman; Regatta Committee, Frank Earle, Q. A. Towns, Simon T. Downs.

BOATS.

Name and Owner.	Residence.	Length on W'ter L'e.	Rig.	C. B. or Keel.
Lillie, Purinton	Lynn	26.04	Sl.	C. B.
Magic, Neal	Lynn	29.04	Sl.	C. B.
Gemsbrook, Atwood	Lynn	26.04	Sl.	Keel
Witch of the Wave, Sanborn	Gloucester	....	Sch.	....
Louie, Neal	Lynn	23.04	Sl.	C. B
Expert, Davidson	Lynn	23.02	Sl.	C. B
Fleetwing, Lord	Lynn	22.08	Sl.	C. B.
Mary Ann, Conway	Lynn	22.06	Sl.	C. B.
Nellie J., Clifford	Lynn	20.10	Cat	C. B.
Alpha, Runey	Lynn	18.05	Cat	C. B.
Comfort, Downs	Lynn	22.00	Sl.	C. B.
Truant, Poland	Lynn	15.04	Cat	Keel.
Lucy, Purinton	Lynn	15.02	Cat	C. B.
———, Brown	Nantucket	28.06	Sl.	Keel.
Ruth, Bassett	Lynn	22.06	Sl.	C. B.
Susie, Luscomb	Nahant	21.06	Sl.	C. B.
Ethel, Coase	Lynn	20.06	Sl.	C. B.
No Name, Lee	Lynn	20.04	Cat	C. B.
Carrie, Bond	Lynn	30.00	Sch.	C. B
Coast Guard, Alley	Lynn	31.06	Sch.	Keel.
Avis, Haskell	Swampscott	17.06	Cat	C. B.
Curlew, Tappen	Swampscott	18.06	Cat	C. B

LONG ISLAND YACHT CLUB.—The following gentlemen have been elected to fill the various offices of the Long Island Yacht Club, of Brooklyn: Com., John P. Tribken, of the yacht Minne T.; Vice-Com., Franklin Beamer, of the yacht Maria; Pres., James F. Finley; Sec., A. F. Miller; Treas., Frank Bates; Measurer, George Crolins; Regatta Committee, George Farley, Jas. Lenox, Jas. Sweeney, Jas. McMahon; Committee on Membership, Ellsworth Bend, John M. Sawyer, Edward Bushnell; Trustees, David Snediker, Wm. Oldham, Walter Dixon, Henry Smedley, Roswell W. Holmes.

THE INTREPID.—Mr. Lloyd Phœnix's new schooner yacht was launched last week from the yard of Messrs. C. & R. Poillon, Brooklyn. She registers 270.60 tons, is 116 ft. 3 in. long over all, 100 ft. 11 in. at the water-line, 24 ft. 5 in. beam, 11 ft. 6 in. depth of hold. She will be all complete by the 1st of May, when the yachting season begins. She will be commanded by Captain Belmont, late of the schooner yacht Clytie; and Mr. J. K. Campbell, recently mate of the schooner-yacht Wanderer, will be her chief officer.

—The Brooklyn Yacht Club will probably sell their club house at Gantherville, and put up a new structure adjoining the Manhattan Beach Railroad station at Bay Ridge. The club will retain the old house at the foot of Court street.

NEW ENGLAND COLLEGE ROWING ASSOCIATION.—The recent effort to establish a New England College Rowing Association seems to have failed, there being delegates from only one college (Williams) to the convention which was called to be held at Springfield on the 27th March, ult. We can see advantages to accrue from a division of the present College Association, which is unwieldy, and from our present point of view are inclined to favor two associations, especially on account of the difficulty of securing unity of action in all things from the council to the regatta, and even harmony itself where the colleges are so widely scattered, and so much time and expense are necessary for attendance upon meetings and regattas. Possibly the interest is increased by the greater number of competitors, but where opinions, local interests and conditions are various, as they are likely to be between colleges situated at antipodal extremes of the country they are likely to be at variance.

LYNN ROWING ASSOCIATION.—This club of Lynn, Mass., has a good membership and owns seven boats—three four-oared boats, three single and one double-scull. Its officers are: Pres., Michael B. Donovan; Vice-Pres., John McHugh; Sec., Thomas Eugan; Treas., John Driscoll; Fin. Sec., James Corcoran; Directors, T. Carrol, J. Tully, W. Buckley, J. Lucy, J. Berry.

—The Old Colony Railroad Company is building a fine boat house at Silver Lake, Mass.

THAMES ROWING ASSOCIATION.—This association, of New London, Conn., held a meeting April 2d, to take action upon the proposed purchase of the Columbia Boat Club (Brooklyn) boat house. The necessary funds have already been subscribed. The association is now three years old, has a goodly number of boats and enough members to insure it success in the future. With the fine course on the Thames there is no reason why we should not receive very creditable reports from the New London oarsmen.

PALISADE BOAT CLUB.—At the last meeting of the Palisade Boat Club, of Yonkers, N. Y., the annual reports showed that the summary of work for the season of 1877 was as follows: Number of miles rowed, 5,511⅛; number of miles gone over by boats, 3,282⅞; average number of miles rowed per day, 24½; average number of miles gone over by day by boats, 14¼; number of working days, 225; longest trip (S. H. Thayer, Jr.) number of miles, 70; number of guests in barge parties, 389. The boats belonging to the club are: Two eight-oared barges, one six-oared shell, two four-oared shells, two paired-oared gigs, one double scull working boat, two single shells. Private boats: Three double scull working boats, one single scull working boat, one pair-oared shell and six single shells. The officers are: Pres., Wm. H. King; Vice-Pres., H. H. Thayer; Rec. Sec., Jesse Hoyt; Cor. Sec., W. E. Drummon; Treas., E. M. Jackson; Capt., R. G. Jackson; Lieut., Andrew Moffat; Trustees, E. M. Jackson, H. T. Keyser, A. O. Lawrence, E. A. Nichols and J. Lawson, Jr.; Standing Committees—Repairs and Supplies, R. G. Jackson, A. Moffat, Wm. Affleck, Jr.; Inquiry, S. H. Thayer, Jr., H. T. Keyser, E. Logan, Jr.; Auditing, H. B. Starr, J. D. Thomson, T. H. Silkman; Delegates to Empire Navy, R. G. Jackson, H. H. Thayer, H. T. Keyser.

—The Farragut Boat Club, of Chicago, is having a brick boat house built at a cost of $4,000.

A BOAT FOR SPORTSMEN.—ASHBURY PARK, March 17—*Mr. Editor:* I am quite interested in one of your correspondents, signed H. M. B. D., Corning, N. Y. I will give him a few hints on building a boat to suit his purpose, as I built one for myself. Use white cedar, 5-16 in. thick on outside,

and white oak ribs ¾ in. square; cover the deck with heavy duck, 18 oz. I find mine very handy; it will carry six very nicely, and is light also, weighing only 92 pounds when finished, cushions, seats and all. The size of mine is as follows: Length, 12 ft.; beam, 3x4 in., depth of pit, 10 in. Set the mast about three feet from the bow. I find my sail very useful when any distance from camp.

GEORGE R. SQUIRE.

DAUNTLESS BOAT CLUB ENTERTAINMENT.—Those who enjoyed the amateur minstrel entertainment of the Dauntless Boat Club last year will be pleased to learn that a similar treat is to be given at the Lexington Avenue Opera House tomorrow evening. The talent is composed of members of the Argonauta, N. Y. Athletic, Pioneer and Our Own Clubs. The tickets admitting lady and gentleman are $1.

—The Neptune Boat Club, of the same city, has the following officers: Pres., Michael N. Lane, Vice-Pres., Edward L. Fanning; Sec., James Doherty; Treas., Stephen Moran; Capt., John Moran; Directors, John Murray, Geo. Brown, William White, John Moran, 2d.

COURTNEY AND TRICKETT.—Courtney has accepted the challenge of Trickett, the Australian oarsman, for a race, £1,000 a side, and allowing Trickett £300 for expenses. Courtney is to name the water.

BOATING AT NEW ORLEANS.—It is rumored that the St. John Boat Club will hold a grand Southern regatta sometime in June or July. Participating crews are expected from Charleston, Savannah, and other cities. The affair certainly might be made an important event in aquatic circles.

THE WA-WA-YANDA CLUB.—A new club has been formed in this city, of which Shepard F. Knapp has been chosen President; Charles E. Loew, Treasurer, and Daniel Jackson, Secretary. The club has rented at Greenwood Lake the Jeness Cottage, on Willow Point, which will be entirely renovated and furnished as soon as the improvements are completed. The club will put on the lake a number of pleasure boats for use during their stay at the club house. The *cuisine* will be in charge of an experienced caterer.

NEW CANOE SEAT.—Com. R. L. Ogden, of the San Francisco Yacht Club, has invented a new seat for canoe paddles. The improvement on sitting on the bottom of the boat is simply a child's rocking chair with a low back. The rockers are prevented from any lateral motion or working by being confined in two parallel grooves of the width of the rocker, the bottom being flat rubber, to prevent wear and creaking. Over the forward end of the rocker, and screwed to the bottom, are two loops of rubber, which, as the motion of the body inclines the chair backwards with the stroke of the oar, the rubber loop resists sufficiently to bring the chair back with the forward motion, and the back of the chair is consequently flat to the back of the rower all the time, thus overcoming the greatest point of fatigue, that of the back, consequent upon the shallowness of the boat obliging the thwart to be low, and doubling the rower up, which promotes back-ache. This chair seat is of course not intended so much for short work as long pulls. It supplies the universal want felt by long-distance rowers, a support for the back. With this rocking seat, rowing is thus made easy. It is not adapted to shell boats, as there is scarcely space for placing it.

THE KING OF SIAM'S YACHT.—This is the kind of a yacht the King of Siam is to sail in. We take the description from *Land and Water*:

This yacht, just built by Messrs. Day, Summers & Co., of Southampton, has made a very successful trial trip, although under unfavorable circumstances of weather. She is named Vesatri, which, being interpreted, means "most excellent," an aspiring, but in her case perfectly true, title. Her dimensions are as follows: Length over all, 144 ft.; ditto between perpendiculars, 120 ft.; breadth (extreme) 22 ft. 1½ in.; depth from top of keel amidships, 13 ft. 2 in.; ditto from top of floors, 11 ft. 2 in.; tonnage (builder's measurement), 275 tons; draught of water forward, 8 ft.; do. aft, 11 ft. Her hull is of best Staffordshire iron, and all wood used is of teak, with the exception of the maple and mahogany in the main saloons, and she has been built under survey of Lloyd's. Her engines are of 40-horse-power nominal, on the compound principle, with all the latest improvements. At the preliminary trial, on the 30th of January, the engines developed a horse power of 264. Steam is only intended as an auxiliary, as the Vesatri has a hoisting propeller of 7 ft. 6 in. in diameter, with a pitch of 10 ft. She is fore and aft schooner rigged, and provided with full sail power, and should be fast under canvas. Her accommodation is very good, and she is elegantly fitted up throughout.

National Pastimes.

HARVARD ATHLETICS.—The following were the winners in the second athletic meeting: Horizontal bar, F. B. Keene, '79; light-weight sparring, first bout, F. W. Sharon, '80; second bout, L. A. Plummer, Jr., L. S. S., '79; third bout, N. E. Teschemacher, '78; Indian clubs, J. T. Howe, '80; vaulting with two hands, J. H. Tyng, L. S., 6 ft. 9 in.; tug of war, '79 vs. '80, won by '79, first heat in 10 sec., second heat in 7 sec.; '78 vs. '81, first heat won by '78 in 17 sec., second heat, '81 in 1 min. 41 sec., third heat, '81, in 1 min. 44 sec. The third meeting resulted as follows: Standing high jump, H. L. Morse, of the Scientific School; light-weight wrestling, W. A. Gaston, '80; light-weight sparring, V. W. Sharon, '80; middle-weight sparring, W. Churchill, '78. The tug of war between the Juniors and Freshmen was won by the former.

ST. GEORGE'S CRICKET CLUB.—The club grounds at Hoboken have been put in a complete order by Mr. S. Giles, the professional cricketer. The annual dinner of the club is held at Delmonico's next Monday evening. The sport will begin somewhat earlier than usual this season owing to the mild weather.

AMATEUR ASSOCIATION OF AMERICAN ATHLETES.—Delegates from the Amateur, Adelphi, American, Fanwood, Greenpoint, Harlem, Knickerbocker, Plainfield, Scottish-American and Yonkers Athletic clubs met at the Sturtevant House Monday evening and perfected the organization of the Amateur Association of American Athletes with the following officers: Pres., H. M. Gilligan, Plainfield Club; Vice-Pres., John Gath, American Club; Sec., William McEwen, Scottish-American Club; Treas., K. W. I. Kendrick, Harlem Club.

COLLEGE ATHLETICS.—The third annual convention of the Athletic Association of American Colleges will be held at the Fifth Avenue Hotel on Saturday, April 20.

—The Prospect Park ball fields are now open to all amateur clubs securing a permit from the Park office, at the Coney Island Railroad depot entrance. No field on the Parade Ground can be used without a permit.

HARVARD UNIVERSITY FOOT-BALL CLUB.—The officers newly elected are: Pres., Mr. W. S. Otis; Vice-Pres., Mr. G. R. Sheldon; Sec. and Treas., Mr. P. T. Barlow. A new practice field has been engaged, and some good play from the Harvard boys may be looked for this season.

New Publications.

—The articles on the "Evolution of Ceremonial Government," by Herbert Spencer, which are now appearing in the *Popular Science Monthly*, are of absorbing interest to the thinking reader. The facts which the writer brings forward, will prove new to most people, and the reasoning employed is so clear and simple that it can be followed without too much effort. The present paper, which is the third of the series, treats of Mutilations, and is extremely thoughtful and instructive.

Another pleasant article, and one which is to be particularly recommended to readers in California and the Southern States, is on "The Eucalyptus of the Future," by Rev. Samuel Lockwood. The cultivation of this tree is now being carried on to a very large extent on the Pacific Coast; and, indeed, it is thought by many that this wood is, in the future, to supply fuel for the whole Southern portion of California. On the other hand, we are told by others equally enthusiastic on the subject of Eucalyptus culture, that timber furnished by this tree is substantially incombustible, and that houses built of it will be virtually fire-proof: who shall decide which of these views is the correct one? Other interesting articles are Prof. Marsh's "Address on Vertebrate Life in America," "On Weasels," "Edison's Talking Machine (the Phonograph)," "Living Corals," etc.

The Editor's Table is lively and attractive, and the Literary Notices and Popular Miscellany full of interesting matter.

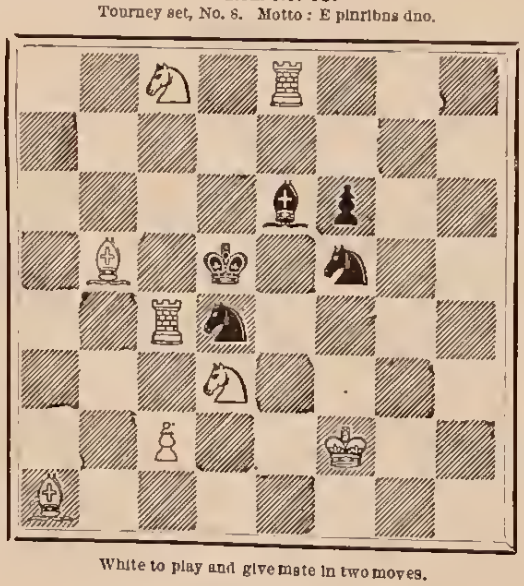
—DE WITT'S BASE BALL GUIDE. This handbook claims to be a complete manual of the national game and certainly contains enough matter to entitle it to that claim. There are full instructions, records and rules; we commend the book as all that is necessary. Published by Clinton T. Dewitt, 33 Rose St., N. Y. Price 10 cents.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 12.

Tourney set, No. 8. Motto: E pluribus duo.



White to play and give mate in two moves.

SOLUTIONS TO PROBLEMS—NO. 10.

1—Q-Q5 ch	1—Any
2—Mates accordingly.	

Game No. 38.—VIENNA OPENING.

This and the following games are variations translated from the *Handbuch*:

White.	Black.	White.	Black.
1—P-K4	1—P-K4	10—P-K Kt3	10—Q-K B3 (c)
2—Kt-Q B3	2—Kt-K B3 (a)	11—B tks K P	11—Kt-B6 ch
3—P-K B4	3—P-Q4	12—Kt tks Kt	12—Q tks Kt
4—P-Q3	4—P tks K P	13—K-Q2	13—Q tks Kt ch
5—P tks K P	5—Kt-K Kt5	14—Q tks Q	14—B tks Q
6—P-Q4 (b)	6—P-K6	15—K tks B	15—B K2
7—B-Q B4 (c)	7—Kt tks K P	16—K R-K B	16—P-K B3
8—B-Q Kt3	8—B-K Kt5	Even game.	
9—Kt-K2	9—Q-R5 ch (d)		

NOTES.

(a) If Black play 2—P-K B4?, then 3—P tks P follows, and the game is similar to a Bishop's or King's Gambit, without, however, having the advantage of Kt-Q B3. Dr. M. Lange recommends B-Q Kt4 as the best continuation for Black on his third move.

(b) Steinitz and Neumann continued (*Neue Berliner Schach Zeitung*, 1870, p. 248) Kt tks P, 6—Kt tks P; 7—P-Q4, 7—Kt-K Kt3; 8—Kt-K B3, etc.

(c) This variation is taken from a game between Gunetzky and Paulsen, (*Schach Zeitung*, 1860, p. 183). If Black move 7—Kt-Q B3, then 8—B Q Kt5, 8—Q-R5 ch; 9—K-B, 9—B-Q2, etc., as in the *Quarterly Chronicle*, 1870, p. 165; also in "Lowenthal," 1861, p. 7.

(d) If 9—Kt-K Kt3 the game is about equalized.

(e) The following gives White the superiority, viz.: 10—B tks Kt; 11—Q tks B, Q tks Q P, or Q-K5; 12—B tks K P.

Game No. 39.—VIENNA OPENING.

The first seven moves are the same as in the preceding game:

White.	Black.	White.	Black.
8—B Q Kt3	8—Kt-K Kt5	13—Kt tks Q	13—B Q B4
9—Q K B3	9—Q tks Q P	14—P-K R3	14—Kt-K B7
10—Q tks B P ch	10—K-Q	15—K R-K B	15—K R-K
11—K-K2	11—Q-K1	16—B tks K P	16—B tks B
12—Q-Q5 ch	12—Q tks Q	White has the best game.	

Game No. 40.—VIENNA OPENING.

The first moves are the same as in Game No. 38:

White.	Black.	White.	Black.
2—Kt-Q B3	2—Kt-Q B3	16—P-Q4	10—Q Kt-K2 (c)
3—P-K B4 (a)	3—P tks B P	11—Kt-Q4	11—P-K B6
4—Kt-K B3	4—P-K Kt4	12—B-Kt5 ch	12—K-B
5—B-Q B1	5—B-K Kt2 (b)	13—Kt-K2	13—Kt-K Kt3
6—Castles	6—P-Q3 (c)	14—Kt-K B1	14—Kt tks Kt
7—P-Q4	7—P-K R3	15—B tks Kt	15—B-K4
8—P-K Kt3	8—B-K Kt6 (d)	Black has the best game.	
9—R-K B2	9—P-K Kt5		

NOTES.

(a) The *Quarterly Chronicle*, 1871, p. 326, gives the following continuation: 3—Kt-K B3, 3—B-Q B4; 4—Kt tks K P, 4—B tks B P ch; 5—K tks B, 5—Kt tks K; 6—P-Q1, 6—Q-B3 ch; 7—K-Kt?, 7—Kt-K Kt5.

(b) In a game between Earl Czernin and Friederich, Black attains a position similar to the Muzio Gambit, in which he has the advantage by 5—P-K Kt4; 6—Castles.

(c) If 6—P-K Kt4; 7—Kt-K, and the K B P cannot be maintained. Lowenthal, 1864, p. 8, moved 7—P-Q6?, and P-Q5?

(d) 8—P-K Kt4 gives no advantage here. This variation, which is taken from a game in the *Schach Zeitung*, 1861, p. 385, is identical with the King's Gambit.

(e) Suhle and Neumann, 1865, p. 193, consider 10—Kt-Q R4 better.

Game No. 41.—VIENNA OPENING.

The first three moves are the same as in Game No. 40:

White.	Black.	White.	Black.
4—P-Q4 (a)	4—Q-R5 ch	12—P tks Kt	12—B Q B1
5—K-K2	5—P-Q4 (b)	13—Q-K	13—Kt-K B5 ch
6—Kt tks Q P? (c)	6—B-K Kt5 ch	14—K-Q	14—K R-Q ch
7—Kt-K B3	7—Castles Q R	15—B-Q3	15—Kt tks Kt P
8—B tks K B P (d)	8—Kt-K B3	16—Q tks Q	16—Kt tks Q
9—B tks Q B P	9—R tks Kt	17—K R-K B	17—Kt tks Kt
10—P tks R	10—Kt tks P	Black has a winning game.	
11—B-K5	11—Kt tks B		

NOTES.

(a) This quaint and, in appearance, highly dangerous move, Steinitz first introduced at Dundee, Scotland, in 1867, and afterwards at Baden-Baden in 1870. It is similar to an antiquated gambit in the days of Lopez and Salerno, viz.: 1—P-K4, 1—P-K4; 2—P-K B4, 2—P tks P; 3—P-Q4.

(b) Zukertort continues the game (*Neue Berliner Schach Zeitung*, 1871), giving Black the advantage, which, however, is not the case.

(c) The following continuation is of no benefit: 6—P-K5, 6—B-K Kt5 ch; 7—Kt-K B3, 7—Castles Q R; 8—B tks K B P, 8—P-K B3; 9—B-K Kt3, 9—Q-R4; 10—P tks P, 10—Kt tks P, with a good game. Or, 6—P-K R3, 6—P tks P (6—B-K Kt5 ch; 7—P tks B, 7—Q tks R; 8—Kt-K R3, 8—P tks P; 9—Kt tks P, 9—Castles Q R; 10—P-Q B3, and the Q cannot be retreated without making a sacrifice), whereby Zukertort gives Black a good game by the following continuation: 7—Kt tks P, 7—Q-K2; 8—K-B3, 8—B-K B4; 9—Kt-K B2, 9—Castles Q R; 10—P-Q B3, 10—P-K Kt4.

(d) The following yields White no advantage: 8—P-Q B3, 8—P-K B4; 9—Q-Q3, 9—P tks P; 10—Q tks P, 10—P-K Kt4; 11—B-Q2, 11—B-K Kt2.

In next week's issue we shall conclude the variations on this Vienna Opening, and commence the publication of the *Handbuch* variations on the Ruy Lopez Opening.

Game No. 42.—PETROFF DEFENCE.

White.	Black.	White.	Black.
1—P-K4	1—P-K4	5—Q-K2	5—Q-K2
2—Kt-K B3	2—Kt-K B3	6—P-Q3	6—Kt-K B3
3—Kt tks P	3—P-Q3? (a)	7—Q tks Q ch	7—B tks Q
4—Kt-K B3	4—Kt tks P	Even game.	

NOTES.

(a) This move was first published by Cozio, 1766, vol. 1., p. 214; and in 1842, after Petroff had played it often, closely analyzed by Jaenisch.

Game No. 43.—PETROFF DEFENCE.

The first four moves are the same as in the preceding game:

White.	Black.	White.	Black.
5—P-Q3	5—Kt-K B3	8—Castles	8—Castles
6—P-Q4	6—P-Q4	9—P-Q B4	9—P-Q B4
7—B-Q3 (a)	7—B-Q3	Even game.	

NOTES.

(a) The position is obtained in the Queen's Gambit by the following moves: 1—P-K4, 1—P-K4; 2—P-Q4, 2—P-Q4; 3—P tks P, 3—P tks P; 4—Kt-K B3, 4—Kt-K B3, etc.

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The following is the locale of the several chess clubs and chess rooms of New York and Brooklyn:

New York Chess Rooms.—101 East 11th st., corner of Union Square; Captain McKenzie, Manager.

Turner Hall Chess Club.—Nos. 66 and 68 East 4th st.

New York Chess Club.—Cafe Cosmopolitan, No. 1½ Second ave.

Manhattan Chess Club.—Cafe Logeling, No. 49 Bowery.

The Brooklyn Chess Club meets Wednesdays and Saturdays at 7 P. M; in the Mercantile Library Building, Montague st.

Williamsburgh Philidor Chess Club.—No. 212 Graham ave.

CURSORY JOTTINGS.

—The chess players of Great Britain engaged in the International Match are "dealing out destruction" to the American team, having already scored 3 games to 2. This great contest appears thus far to have been negligently and carelessly conducted on the part of the American team. Bro. Belden should "coach" them up a bit, and be right smart about it, too.

—The New York Chess Club handicap tourney is now in full operation. One game only is played. There are thirty contestants, and the following players take the lead:

	Won.	Lost.	Dr'wn.		Won.	Lost.	Dr'wn.
Mr. Burke.....	7	1	2	Mr. Limbec.....	6	0	2
Mr. Ettlinger...	6	3	3	Mr. Ryan.....	6	3	2
Mr. Henshel....	11	2	4				

Three money prizes are offered, $50, $30, $20, and a fourth consisting of an inlaid chess board, has been promised; the first prize of $50 and the chess board being presented by Mr. H. Hoenack, the liberal proprietor of the Cafe Cosmopolitan, where the New York Chess Club has its rooms.

—The Brooklyn Club tourney is proceeding slowly. It would not be consistent for it to go fast. A consultation match is on the tapis for next Saturday night.

—Mr. W. A. Shinkman carries off the prize for the best two moves, and Mr. F. W. Martindale ties with an unknown for the best four moves, entered in the *Huddersfield College Magazine* Problem Tourney, just ended. The enterprising editor of this popular and attractive publication announces another tourney, wherein several prizes are offered for a set and single problems, not to exceed three in number, forwarded him within the time limited.

THE FIGHTING DOG.

A man, he owned a Terrier dog—
A bob-tailed, onery cuss,
And that there purp got that there man
In many an ugly muss;
For the man he was on his muscle,
And the dog he was on his bite;
So to kick the dorg-goned animile
Was sure to raise a fight.

A woman owned a Thomae cat,
That fit at fifteen pound;
And other cats got up and slid
When that there cat was round.
The man and his dorg came along one day,
Where the women she did dwell,
And the purp he growled ferociously
Then went for that cat pell-mell.

He tried to chaw the neck of the cat,
But the cat he wouldn't be chawed,
So he lit on the back of that there dorg,
And bit! and clawed! and chawed!
Oh! the hair it flew! and the purp he yonled!
As the claws went into his hide,
And chunks of flesh were peeled from his side;
Then he flummuxed, and kicked, and died!

The man he ripped, and cursed, and swore,
As he gathered a big brick-bat,
That he would be durned essentially
If he didn't kill that cat!
But the old woman allowed she'd be blessed if he did!
And snatched up an old shot-gun,
Which she fired and peppered his diaphragm
With bird-shot number one.

They toted him home on a window blind,
And the doctor cured him up;
But he was never known to fight again,
Or own another purp.
Folks may turn up their snoots at this here rhyme,
I don't care a cuse for that!
All I want to show is, that fighting dogs
May tackle the wrong Tom cat.—Ex.

THE "SETTER" HORSE.—We have heard this story before, but never heard Mr. Lincoln's name in connection with it. In the April *Scribner's* Mr. Noah Brooks gives it as told by that President:

"A young gentleman in Tennessee was once traveling a country road, mounted on a fine black racing horse of great value. His casual companion was a shrewd old fellow, who was known in those parts as a Yankee, and rode a rack-o'-bones of a horse, apparently hardly able to stand on his feet. The Yankee bantered the Southerner for a horse trade, which, of course, the Southerner indignantly declined. The Yankee, however, insisted that his was a very remarkable horse, of what was known as the setter breed, which sets for big game as a dog sets for small game, and that as animals of this breed were very scarce, his horse was accordingly valuable. The Yankee soon had an opportunity to demonstrate the truth of his statement, as his had the peculiarity of dropping on all fours when touched in a certain spot by the spur or the heel of the rider. The Yankee seeing a deer on a knoll not far away, touched his raw-bones in the tender spot, and, sure enough, down he went on all-fours, assuring the Southerner there was game ahead. The would be-horse-trader told the Southerner that there must be game near by, for his horse never 'set' in that way except when on the scent for game. Immediately after, the deer made its appearance to the Southerner, who succeeded in bringing him down, and so much pleased was he with the wonderful instinct of the horse that he immediately swapped off with the Yankee, on even terms. Soon after they came to a stream which the Yankee, mounted on the Southerner's horse, crossed in good style; then standing on the opposite bank, he looked back after his companion. 'The 'setter horse' had sunk, his head being hardly above water; his rider was dismounted and nearly drowned. Reaching the bank and blowing the water from his mouth, he exclaimed: 'Here, you infernal Yankee! what kind of a horse is this to drop on his knees in the middle of a stream?' 'Hush! hush!' replied the Yankee, 'keep perfectly quiet. Thats a setter horse; he sets for fish as well as for deer, and I tell you there's game there!'"

STRAW FUEL.—The Russians in the Mennonite settlement of Nebraska have introduced simple furnaces for burning straw. One of these furnaces only costs $5 for the iron work, the rest being made of brick or clay. By proper use a ton of straw will go more than half as far as a ton of coal for fuel. The Mennonites twist the straw into hard rolls, or press it into hard cakes, so that it burns as well as wood, and gives off as much heat. One of these furnaces, supplied with fuel only three times a day, will keep a house warm the whole twenty-four hours, besides doing the cooking. As coal is costly, and wood still more so, and as most Western farmers have heretofore wasted their straw, the Mennonite plan of preparing and using it for fuel is an economy which will prove of great value to the prairie States, and it is rapidly extending among the Americans. Of course American invention will speedily supply handy machines for pressing the straw into cakes, and improved stoves for burning it.—*Detroit Telegraph.*

HIGH ART IN NAPKINS.—A Washington waiter has issued a challenge to the whole world to produce his equal in the art of folding napkins, the match to come off at Saratoga in June or July next. The winner has to look to the admiration and applause of those colored gentlemen whose summering at Saratoga adds an otherwise unattainable *ton* to the place as his reward.

A CURIOUS HOUSE PLANT.—The spray of the carrot is of a handsome green and quite ornamental. In 1629 carrot leaves were worn by ladies in England in place of feathers, and Loudon says that an elegant ornament for a sitting room is formed by cutting off a section of the head or thick end of a carrot, containing the buds, and placing it in a shallow vessel of water. Young and delicate leaves unfold themselves, forming a radiated tuft of a very handsome appearance.

—If six cats can kill six rats in six minutes, how many cats will you require to kill one hundred rats in fifty minutes.

—A young man who went to Texas last spring has telegraphed home to his father: "Fatted calf for one."

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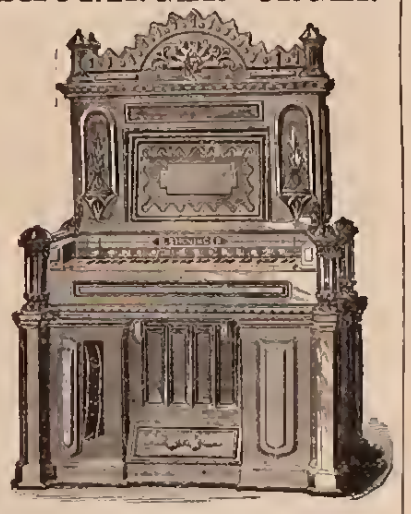

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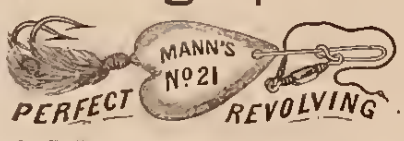

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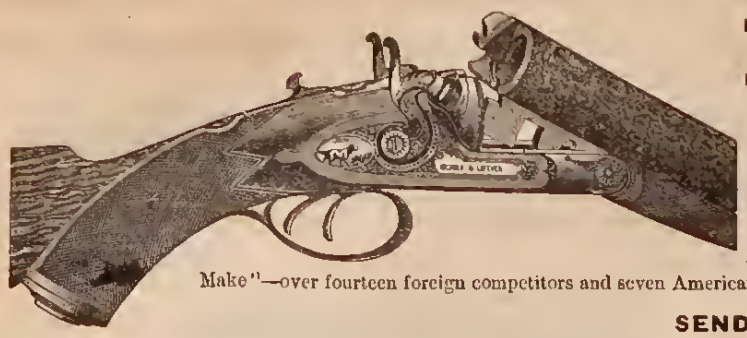

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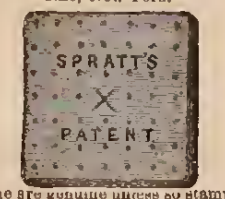

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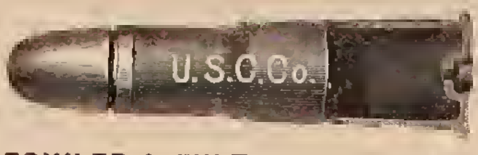

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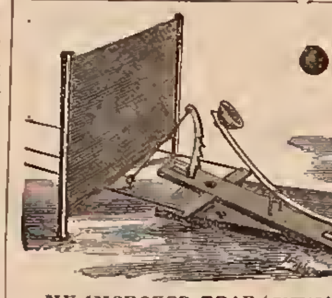

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The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caotion the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

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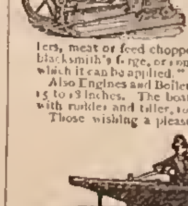
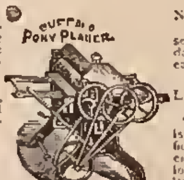


With Copper Boiler, to drive light Lathes, Scroll Saws, etc. Are all sizes from 1-8 up to 2 horse power; either plain castings, partly finished, or complete, ready for use.

The "Scientific American" of June 19, 1875, says of the above, in an extended Editorial, introducing our manufactures to the public: "It can turn wringers, churns, washing machines, or Ice cream freezers, run coffee mills, pump water through a house, actuate foot lathes, scroll saws or light boxing machinery, run knitting or sewing machines, turn a grindstone or emery wheel, work ventilating or hand thrashing machine cutters, meat or feed choppers, or sausage machines, drive small blowers for pneumatic dispatch tubes in a building, or for a blacksmith's forge, or compress air or work an air pump on a small scale in a laboratory. These are a few only of the purposes to which it can be applied."



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The great success of these machines is unprecedented, and it may be confidently affirmed that no article has ever more clearly proved its superiority for the quantity and quality of its work than this. It is made in several sizes, and can be fitted up suitable for bullock, mule, steam or wind power, in addition to those above mentioned.

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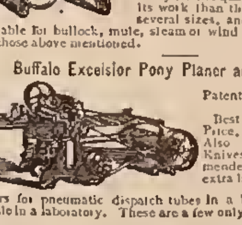

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Implements, Cartridges, Cases, Shooting Suits, Camping Outfits, etc., etc., etc. Glass Balls aod Traps, II aod T Pigeon Traps, $7 50 per pair. The New Recoil Pads, $2 each; (prooounced by the FOREST AND STREAM, February 21st, 1878, the best contrivance made for the purpose). Every sportsman should have one. Look at this! A Central Fire English Double Gun, Side Snap, Twist Barrels, Warranted, $28. Same with Pistol Grip aod Large Head Strikers, $35. Shells Loaded to Order with the greatest care, and Repairing Done in the most artistic manner. Guns taken lo Exchange, and Second-Hand Guns a Specialty.

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Split Bamboo Rods, $18 aod upwards. Reels in German silver, rubber and brass, of the best makers, aod with all the latest improvements. Artificial Minnows, Spoons and Insects. Large variety of Fine Tront, Bass and Salmon Flies. LINES—Tapered, Water-Proof, Oiled, Braided Silk, Braided Linen, Grass, etc, etc., and everything required by Fisherman aod Anglers. CUTLERY—Fine Sportsmen's Bowie and Hunting Knives; also, Large Assortment of Finest Pocket Cutlery and Razors. OPTICAL GOODS—Compasses, Field and Marine Glasses, Microscopes, etc., etc.; also, Rifles, Revolvers, Foils, Rapiers, Boxing Gloves, etc., etc., etc.

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March 21

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RUBBER CAMP BLANKETS,

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SPORTING AND CAMPING OUTFITS,

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For Guns, Cutlery and Surgical Instruments. Safe to handle, WILL NOT GUM, and will keep in any climate. Sportsmen everywhere in the United States pronounce it the best gun oil in the market. Judge Holmes, of Bay City, Mich., writes: "It is the best preparation I have found in thirty-five years of active and freqoent use of guns."

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Oct18 tf

FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, APRIL 11, 1878.

Volume 10.—No. 10. No. 111 Fulton St., N. Y.

Selected.

PIGEONS.

PINK-FOOTED, steekly white, or delicate fawn,
Or darkiler plumed, with glossy throat where clings
One soft perpetual ripple of rainbow rings,
How often to your beauty our sight is drawn
When back from roamings wide you suddenly dawn,
A love'y turbulence of quick-fluttered wings,
Alighting on some brown slanted roof like spring's
Pale showers of blossoms on an orchard lawn!

Our common barn-yard life, plain, stolid, rude,
You haunt with tenier purity sweet to note;
And gladden its dullness with your buoyant throng,
In many a smooth and mellow interlude
Through homiler sound serenely letting float
Your strange luxurious monotones of song!

—*Edgar Fawcett in Atlantic Monthly.*

For Forest and Stream and Rod and Gun.

On Bay Chaleur.

THE NOUVELLE AND ESCUMINAC.

ANGLING is my profession. In its pursuit I have spent the happiest hours of my life, and though I have seen more than fifty summers, yet when the leaves begin to come forth, and the warm spring rains are falling, that same old fever throbs in my veins, and I experience an irresistible longing to hear once more the music of running water, to inhale the aroma of the forest, and to feel the thrill which none but a born angler can experience. And so I found myself last summer impatiently waiting for the halcyon season to arrive. Determined to find some locality, no matter how far away, that was not yet fished out, I concluded to visit streams in the Province of New Brunswick, and one morning in July I found myself with a companion in the pleasant village of Dalhousie, on the south shore of the Bay of Chaleur. Opposite to this village, in the Province of Quebec, are two small rivers called the Nouvelle and Escuminac, which empty into the bay at points about six miles apart. By the kindness of two gentlemen, residents of Dalhousie, we procured the necessary outfit, including letters to the wardens of the streams, and one pleasant afternoon, after having received the kindest attentions from Messrs. Montgomery and Phillips, we set sail in a birch bark canoe for our objective point—the mouth of the "Skiminac." Tom, our guide, rigged an old blanket in his light craft, which supplemented his efforts with the paddle, and, under certain conditions, "worked splendidly." We found that the Escuminac was leased to the proprietor of the hotel at Matapedia, but that by paying a small fee we could obtain privilege to fish. Dan Brown, the warden, at whose house we stayed, was one of the best hearted, most accommodating men I ever met. Indeed I may here add that we received courteous treatment from every person with whom we came in contact while in this portion of Canada. We spent the remainder of the week skirmishing around, hunting with but indifferent success. We made a trip to the Nouvelle. This is a beautiful river, well stocked with fine trout. I can imagine no trout stream more attractive. Fishing is free to all. To fish it to the best advantage requires a birch bark canoe and two men. These, and ordinary supplies, can be procured at Dalhousie. A tent and camp utensils are also needed, for though the valley is in some parts quite thickly settled, yet I heard of no one prepared to accommodate sportsmen.

The trout begin to ascend the stream about the first of July. The fishing is best from about the middle of July until the latter part of August. The flies most successfully used are nearly, if not quite, as large as salmon flies. There never have been any salmon caught in either the Nouvelle or Escuminac.

On the following Monday we packed our baggage into a one horse wagon, drove to the end of the road, and in the afternoon pitched our tent on the banks of the Escuminac, four miles beyond the last clearing. Tom, our half-breed guide, is strong, patient and willing. He has hunted and trapped all through these forests, and knows every foot of the territory. Dan Brown accompanied us, determined, as he said, to show us that there are trout, and big ones too, in the "Skiminac."

Toward evening I proposed to my companion that we try to catch some trout for supper. He declined to fish, but took his landing-net and accompanied me. A few rods above our tent we came to a long, deep pool. At the second or third cast I hooked a fish, and after a short and not very exciting struggle the meshes of the net inclosed a beauty. Again I dropped my fly over a ripple on the further side of the pool. It was instantly taken, and the sport began. My game had made a dash for a bit of fly for his supper. I was now intent upon securing him for our supper. 'Twas a long; clear pool, and I gave him a fair chance. And right gallantly did he struggle. But each desperate rush was less vigorous than the preceding, and at last he too lay quivering in the net. The midgets were biting fiercely, and we returned to camp with two trout weighing 2½ and 3½ pounds. Enough surely for our supper, and a rather encouraging commencement. The next day Dan and I started to explore the North Branch. A few hundred feet from its mouth we discovered several large trout. But though we ascended it about three miles we found no others. I was never so much nonplussed and disappointed. It seemed to be the most natural trout stream I ever saw. But they were not there. Late in the afternoon we again reached the main stream. Here we found a beautiful pool. Within half an hour, by the aid of Dan and his landing-net, I captured three trout weighing together 6½ pounds. Myriads of midgets were attacking Dan's unprotected face, neck and arms, and so, feeling that the day's fishing had not been an entire failure, we returned to camp. My companion and Tom were absent, but within an hour returned. Tom carried a string of nine trout weighing 25¼ pounds. My string of three, of which I had previously felt a little proud, was nowhere, and I couldn't help wishing that I had staid upon the main stream. The next morning early we three started on our tramp up the river. We waded nearly all the way. The forest was almost impassable, and the underbrush grew close to the water's edge. The water in many places was knee deep, and every foot of the river bed was thickly strewn with large stones or the sharp edges of a kind of slate rock which seemed to dip at right angles with the surface. The current was swift, and our progress slow. It was one long, and I began to think, endless rapid. The water was so perfectly clear that every part of the bottom could plainly be seen, and no fish could have escaped the keen eyes of Dan, but not a trout was discovered. It was a wearisome tramp.

At last we reached a pool. Dan, who was several hundred feet in advance, stood gazing into the water, and signaling us to approach cautiously. We did so, and looking where he directed us, saw plainly a portion of the bottom literally covered with large trout. It was a long, deep pool and about fifty feet wide. The opposite bank was high and thickly covered with underbrush to the water's edge. On the side where we stood there was a stony beach about eight feet in width, back of which was a dense growth of cedar and spruce. A current of swift running water extended to the middle of the pool, and seemed to shield us partially from the sight of the trout. Mr. B. advanced to the head of the pool and cast directly over the "school." There was a sudden swirl in the water; the next instant the click of his reel and the bend of his beautiful grilse rod indicated that he had exciting and very agreeable business on hand. I took position about thirty feet below him. At the third cast my fly dropped at the right spot, and I too hooked one, which I led toward the lower part of the pool, where I had plenty of room to play my fish without disturbing the others.

"Gentlemen," said Dan, "there is a barrelful of big trout in that pool. It's plain now that they'll rise to a fly. Just play your fish until I go below there and pile up a wall of stones across the mouth of that little bay, and then you will have a crib where you can keep your trout alive until you get done fishing. To my certain knowledge there has never been a fly cast in that pool; and if you don't do some tall fishin' it will be your own fault."

I am unable to fully describe my feelings while standing on the shore of that beautiful pool, carefully handling a 3½ pound fish, while Dan was building his crib. For more than thirty years I had dreamed, by day and by night, of some such spot. Before me, in plain sight, lay the beautiful fish, whose retreat, far away in the forest, no angler had hitherto invaded. They were evidently hungry, and sprang fiercely at the tempting fly. And noble game they were, averaging more than three pounds in weight. They could only be landed by the aid of the net, which, in the skilful hands of Dan, seldom missed. Being in search of *sport* and not specially desirous to *count*, I gave every one of the beauties that I hooked a fair chance. My light but tough rod was a delight to the eye, as it gracefully bent and sprang back again, ever keeping a taut, but not too stiff, hold upon the fish. Talk of 'Thomas' orchestra, or the most gifted singer's voice! I'll leave it to any real lover of angling whether the hum of the reel as some noble fish runs out 75, 100—more—feet of line isn't the most exhilarating music he ever heard!

At last the sport began to wane and we surveyed our catch. In that crib lay forty as gracefully formed and as beautifully marked trout as I ever saw. They were all alive and apparently uninjured. We had left our scales at the tent, and were unable to tell the exact weight, but they undoubtedly averaged more than three pounds. To determine as near as possible, and to settle a difference of opinion, we took out and killed the two smallest and eleven of the largest. We then turned the others back into the stream. It was a rare excitement and pleasure to me to catch my share of these beautiful fish. It was an almost equal satisfaction to be able to return to their native waters, absolutely uninjured, such as we were unable to rise, and thus waste no game.

Upon returning to our tent we found that our two smallest fish weighed 2½ pounds each and the others from 3½ to 4½. That evening Dan, having, as he said, fulfilled his promise to show us all the trout we wanted, returned home, taking to our kind friends in Dalhousie a present of trout, which were pronounced as large and as fine as either had ever seen.

The next evening, at about 6 o'clock, my friend not caring to fish, I took Tom with me, and after a tramp of thirty-five minutes, reached the pool from which Mr. B. had caught his string of nine. On the side opposite to me lay a submerged cedar log, and close to it a "school" of trout. The water ran swiftly past this log and settled in a deep pool below. The instant my fly dropped near the log it was gamely taken and carried with a rush away down into the pool, until about 100 feet of line had run out. After an exhibition of more vigor than had been displayed by any I had yet handled, a three-pounder lay gasping at our feet. Another, still more lively, weighing 3½, afforded lively sport, and was subdued only after a long struggle.

The evening was cloudy, and as it was becoming dark under the shadow of a hill to the west of us, I added a nearly white fly. Casting within a foot of the old cedar, I was astonished at the commotion in the water and the unusual strain upon the rod that instantly followed. "You've got two!" cried Tom, now almost as much excited as myself; "you'll lose 'em, sure." But I didn't. Fortunately they ran into the deep water and engaged in an unceasing series of ground and lofty tumbling very exhaustive even to a trout; and, sooner than I had expected, they were lying upon their sides in the water at our feet, and were secured. They weighed 5¾ pounds. Not wishing to engage in a struggle with two, at the great risk of losing both, I took off the flies I had used and put on one of a dozen tied for us by a gentleman, a most skillful angler, named Beard, residing at Campbelltown on the Restigouche. At the second cast I hooked a trout, the capture of which rewarded me for all the time, money and fatigue expended on the trip. I shall ever feel under certain personal obligations to that trout. I have always been interested in "fish stories." Every detailed account of exciting struggles with game fish, whether printed or oral, has absorbed my attention. I had up to this time, under the most favorable circumstances for real sport, caught some large trout, yet their "play" had not quite equaled the glowing stories I had read and heard; and the unwelcome suspicion had obtruded itself, that the narrators had drawn largely upon their imaginations, but that trout redeemed the reputation of its species and restored my confidence in the veracity of anglers.

A full description of all his performances during that fifteen minutes' unceasing struggle, would be a *resume* of all I had previously read or heard told. He was 23 inches long and weighed 4½ pounds. From the same "school," and as rapidly as I could handle them, I caught four more nearly as large; but, as we could not use them, and I never willingly wasted game, I turned them back. The shades of night were closing round us. I put up my tackle and bade a regretful adieu to a spot where, for about two hours, I had realized the aspirations of almost a lifetime. A few days more of this glorious sport was vouchsafed to us, and then we bade good-bye to Dan and his estimable wife, who had striven in every possible way to make our stay comfortable and pleasant, and then returned to Dalhousie.

The Bay of Chaleur is here about six miles wide. The land on the north shore rises into irregular steep hills and mountains. There is a line of farms close to the shore, but the interior is a wilderness. On the south shore the land is less broken, and is occupied by apparently thrifty farmers, who make the most they can of the short summer. As we sailed into the middle of the bay and looked back upon the hills and mountains, rising one above another far toward the north and northwest, and then upon the quiet beauty of the south shore, no sound disturbing the Sabbath-like stillness but the cry of the loon, the clear bracing air of this far northern latitude sensibly reinvigorating us as well as speeding us on our way, I thought that though I had often sailed upon a pleasant lake, yet nothing in my previous experience had been quite so enjoyable as that evening's trip across the Bay of Chaleur. S.

THE LAKE REGION OF FLORIDA.

MELROSE, Fla., March 25, 1878.

EDITOR FOREST AND STREAM:

We left here Tuesday evening for Wall's place on Lake Pleasant for a two-days' deer hunt. As it is getting near the time when the law is on, we thought we would try our hand at this noble game. We arrived at Wall's—about six miles from here—in good condition, after having a rather noisy, but not unmusical, reception by his pack of hounds. After a good night's sleep and a solid breakfast we started for the pine woods, a party of four, Wall, Paggett, an old deer hunter on his horse, Steve and myself, with a pack of hounds, one of them—Paggett's—being a perfect beauty. Such a fine head and nose! such intelligent eyes! And to hear her when at work in the distance, what finer music could one wish for, especially the deer hunter? After a pleasant walk of about four miles through the woods, the country being gently rolling, with no swamps or underbrush, we arrive at our stands (Wall, Steve and I), while Paggett circles out on the drive. We place ourselves about 200 yards apart, sit down and wait. At first I keep a sharp look out in the direction in which the dogs have gone, and from which direction I expect to see the game appear, only occasionally turning my head to take a backward glance. Thus I sit for what seems a long

time, thinking only of deer; but, as nothing is heard from the dogs, and nothing seen but the squirrels, my mind gradually wanders off, and I am thinking of home and of the friends I have left there.

How still it is! Nothing is heard but the soughing of the wind through the pine tops—a lonesome sound. I also try to imagine how it will look here—the circle I can sweep with my eyes—in the future. How it will be improved, and what now is only a forest, will be homes, cultivated fields, orange groves, and yonder beautiful lake will be dotted with sails. And what a place for a scull race on this same lake! Plenty of water, no obstructions, no need for fouls; and with the telegraph we can tell you which of the famous crews have won; or, which would be better, you could get on a palace car and come and see it yourself. This beautiful and healthful climate, the adaptability of the soil for fruits and vegetables, with its splendid lakes (all filled with fish), will make this region the Italy of America. It is only a question of time, and I am thinking that time will come sooner than most people are aware of now. Already civilization is rapidly approaching, and the deer and other game will have to keep on their ever onward march before its approach. It seems a pity almost that they cannot have this portion of their native land left to them.

But, while my sympathies are being aroused for the persecuted, I hear a gentle pat pat, and quickly turn my head, when behold! two fine does have stolen softly up behind me and are quartering off on a slow lope. I have heard no dogs, so the sight is quite unexpected. My reveries are dispelled like a flash; my sympathies are forgotten, and I rise up, take careful aim, as I suppose, fire, and—I have missed my first deer! But I knew it not then, for when I fired she fell upon her knees. I let drive at the other as she wheeled. As I fired my second shot the first deer had regained her feet, and both rushed off like bullets in the direction of Wall's stand. In a moment I heard him fire, then all was still again. He soon came in and reported. He had had a long shot, and thought both went off unhurt, but said he would follow them up and look for blood signs. As he and Steve left I sat down to ruminate over that shot of mine. Why had I not killed my deer? I took careful aim; it was within close shooting distance; I was not excited; did not have the buck ague, for they came upon me too suddenly for that. It was one of those "unaccountables." Perhaps my sympathies had something to do about it—who knows? The others soon came in and reported no signs of the game being hurt. Probably the deer partly falling was caused by its wheeling so suddenly.

By this time, hearing Paggett's horn, we start for the lake, where we are to meet him and take our lunch. On seeing him I tell him about my shots. He answers by saying when he heard the guns he "allowed we had shot a deer," although his dogs had failed to jump any. He saw plenty of signs, but said the cow hunters were out looking for their stock and had driven the deer off into the swamps, but "allowed" he would jump some after dinner. In the afternoon he started a drove of five, but they went off in an opposite direction, and I did not get another shot during the day.

We camped by the lake during the night, Paggett going home, intending to make an early drive in the morning. The day being rainy, he fails to make his appearance, and we, after getting a string of squirrels, start for Wall's, where we arrive toward sundown, tired, but I, for one, well pleased with my trip, notwithstanding the poor shot. Next fall I hope to try it again, also the turkeys, there being plenty of both deer and turkey a few miles farther on from where we camped. We intend to take our "fixings" along and camp out a week or more. There are also bear and panther in the swamps, which we shall have a chance to see, and at which I hope to take a better aim than I did at my first deer.

I noticed two very large flocks of brant flying over the lake (Santa Fe) this morning, on their way North. We are having warm weather, everything growing finely. Orange and peach have been in full bloom for some time. They both give promise of a large yield. Yours, C. O. GLADWIN.

DUCKING AT ENGLISH LAKE.

LANCASTER, O., March 25, 1878.

I have been on a most enjoyable as well as successful duck hunt at English Lake, Northern Indiana, one of the finest feeding grounds for water-fowl to be found within the borders of the United States. There are vast fields of wild rice in and about this lake, and I was assured by my "pusher"—boatman—that it could be gathered in large quantities in the proper season. If George Green, proprietor of the Sportsmen's Hotel at English Lake Station, was applied to, I have no doubt that he would attend to the harvesting of a crop. Wild celery, too, abounds here in sparse patches along some of the sluices and bayous, but not in sufficient quantities to attract the canvas-back very numerously.

English Lake at this time of the year is an almost interminable stretch of watery wilderness, the whole country being so swallowed up by the extending swamps and marshes as to be utterly indistinguishable from the lake proper. The Kankakee River, dim artery to the core of that whole wild region's heart, cannot be told, even, by one familiar with the general configuration of the landscape, from the hundreds of sluices, divides, channels, bayous, and cut-offs, which bewilder one on all sides. These waters cover, in a great measure, a heavily wooded country with an exuberant growth of pucker-bush and swamp-willow to fill up the interstices, while extensive fields of wild rice and cane are to be met with at very frequent intervals; and these towering fastnesses, with the interspersing woods and lonely shades of morass and lagoon, afford an almost undisturbed home for the wild goose and duck, the brant, sand-hill and fish-hawk. That it is a fine point for duck shooting, I will observe, parenthetically, that Dr. G. W. Boerstler and myself bagged ninety-three in two days' shooting, and that, too, during the extreme summerish weather of a week ago, which was diametrically opposed to success. Our bag was composed principally of blue-bills, with a fair showing of mallards and whistle-wings, and a single canvas-back, downed by the Doctor from a flock of six, all we saw that came near settling among our decoys. By the way, a blue-bill is no slouch of a duck, but a splendid, plump little fellow, somewhat larger than a blue-wing teal, and every whit as much of a *moreau*, and far the mallard's superior.

Our sportsmen here are all much puzzled at the non-appearance of snipe, as the weather, with the exception of yesterday's sudden change, for the past fortnight, has been highly snipe-like. On Saturday I took a prospecting tramp through the low, marshy prairie land west of the city, but failed to "jump" a single bird. I did "put up," however, a veritable flock of owls, who had been basking in the sun among the "nigger heads" in the open prairie, and without a moment's thought, and spurred on, I suppose, by the aggravating absence of the snipe, I tumbled two into the dead grass, as they fanned heavily away. Upon examination I discovered that they belonged to species of the *genus* owl, with which I am unacquainted, being neither screech, barn or horned owls, but about half the size of the latter, with an enormous stretch of wing, and a smaller head, devoid of the horn-like tufts of our big hooter. What were they?

About all of our summer birds, with the exception of the martin and swallow, the oriole and catbird, are here. The robin, sparrow, woodpecker, yellow-hammer, blackbird, in all colors, yellow and bluebird, the dove, night-hawk, meadow-lark and peewee, are all back; in fact, have been here for weeks, many of them all winter. The martin and swallow invariably come within a day or two either way of the 1st of April.

Yesterday we had a break in our "bland and childlike weather" of the rigid description, accompanied with a fine flurry of snow; but it is hoped that our glorious fruit and wheat prospects will come out safe. The cold has brought the ducks about as if by magic, and a party left this morning for the Big Reservoir crazy for a little shooting. Our rifle and sporting club has not as yet been put upon a permanent foundation, but a lively interest has been aroused, and if you will only be so kind as to send us the form for such an organization we'll all be happy. S. G. V. G.

Fish Culture.

FISH BREEDING IN CANADA.—The importance of this subject has attracted no little attention during late years, and great efforts have been made to increase the stock in Canadian waters. The present headquarters at Newcastle, Ont., are under the special charge and superintendence of Mr. Wilmot, whose knowledge of such matters is well known. Besides the above, there are at present in the Dominion six fish-breeding establishments, located as follows: Bedford, N. S.; Restigouche River, N. B.; Miramichi River, N. B.; Gaspe, Que.; Tadousac, Que., and the Whitefish breeding establishment of Sandwich, on the Detroit River. We learn that it is the intention this spring to stock the rivers back of Ottawa with 3,000 whitefish and 1,500 speckled trout. The fry are in Col. Denis' aquarium pending favorable weather. To give some idea of the extent to which fish culture is carried in Canada we might state that no less than 150,000,000 of these fish have been turned into the open waters of this county, a great proportion of which are to be found in Lake Erie. Last fall 30,000,000 eggs were successfully laid down, and with the improved facilities, it is anticipated that from six to one hundred millions of eggs will be laid down next autumn. It is found that 60,000,000 can be produced at the same cost as 7,000,000.

Considerable headway is being made in salmon culture. There are 7,000,000 ova now in process of hatching which will be distributed at various points in due time. Also 1,000,000 salmon trout, the ova of which has been obtained from Lake Huron. There are now being hatched 10,000 *Salmo fontinalis*, or speckled trout, and what is only found in the lakes of Cumberland and Westmoreland (England), the *Salmo simbla* or Char, one of the most delicious eating fish that swims. ROYAL H.

Montreal, April 2, 1878.

MR. WHITCHER TO MR. BLACKFORD.—The Fish Commissioner of Canada writes thus pleasantly to Mr. E. G. Blackford:

MY DEAR MR. BLACKFORD: OTTAWA, April 1, 1878.

I am much obliged to you for interesting printed circulars respecting exhibitions of choice varieties of fishes. These displays would be profitable as well as entertaining to me, if for another reason than that I know you to be so practical and skilful a man of fishes, that none but the best of each class would be represented in your collection. It was my intention, and I looked forward to it with great pleasure, to attend meetings of the Fish Cultural Association at New York last winter. Unfortunately, however, pressing public business rendered it impossible for me to realize such pleasurable expectation, and the same pressure still prevents my visiting your establishment this spring. Probably our friend Hallock will notice it, and as I take FOREST AND STREAM, will look out for it. That paper I consider the best authority on fishing and fish culture published in the United States.

Yours truly, W. F. WHITCHER.

—The California brook trout at Caledonia began to spawn, and a large number of eggs are expected March 14. Seth Green has crossed them with the native brook trout, expecting an improvement on both parents.

—Seth Green has done a good work by planting 100 black bass in Wappingles Creek last week. They were fine breeders, averaging a pound and a quarter apiece.

—Six cans of black bass, one hundred in number, each weighing from one to two pounds, were taken to Middletown on March 2 and placed in Monhagen Lake. Seth Green's agent accompanied them from the State fishery at Rochester. A number of brook trout will be brought soon and placed in the different streams in Second Assembly District.

MICHIGAN.—Loon Lake, Assyria, has been stocked with 3,000 lake trout. Aldrich Lake, White Pigeon, has been stocked with 5,000,000 whitefish, and Klinger Lake with 50,000 of the same.

WISCONSIN—*Tomah, April* 8.—Hon. William Y. Baker, member of assembly, in connection with the Buckhorn Sporting Club, have just planted 15,000 small fry of speckled trout in the head waters of Bear Creek. The little fellows were received from the State commission in good condition, and successfully placed in the stream on Monday night, April 1. SOUD.

CARP AT SAN FRANCISCO.—It is probable that in a few years the small streams around the Bay will be well stocked with carp. Those which escaped from Poppe's ponds, in Sonoma Valley, a couple of years ago, have increased considerably, and it is now no uncommon occurrence for the boys to catch them along Petaluma Creek with a hook. Several were taken in out of the wet last week, and parties who know the fish say they are genuine carp. One of them weighed between one and two pounds.—*Pacific Life.*

Natural History.

BIRD NOTES FROM LONG ISLAND.

BY FRANKLIN BENNER.

THE following remarks are founded on notes and observations made during the early part of the past year and give some idea of the birds that are nesting as near the city of New York as Astoria, L. I. A few days only could be obtained for extended investigation, and these amply repaid for the time expended. The birds noted were nearly all found within a mile of the ferry that crosses from 92d street.

This proximity to the city is having a most destructive effect on the fauna, and the woods in the fall are overrun with pseudo-sportsmen, followed by worthless curs, who shoot anything and everything that has the least apology for feathers or the remotest appearance to game. Robins, sparrows, warblers, all fall under this category and are ruthlessly destroyed. There are still a few rabbits, gray squirrels, and occasionally a woodcock to be found there, but the day of their complete extermination is near at hand. The local destruction of all the small birds and songsters is getting to be intolerable, not only in Astoria, but in all the suburbs of the city, especially on Staten Island, and it does seem as if there should be some action taken by the local authorities to prevent it.

The observations recorded commenced on the 8th of May when a song sparrow (*Melospiza melodia*) was found snugly ensconced in an ivy growing along the inner wall of a greenhouse. The birds had evidently watched their opportunity when the door was open or the glass raised during the warm days, and constructed their nest and deposited three eggs before they were discovered. In 1875 they built a nest in the same place, and the year before on the ground against the wall just outside. A pair has been around there for a great while; a nest being found within a hundred feet of the spot for some six or seven years. Whether they are the same pair of birds I am unable to state, but it is to be presumed so. The next day another egg was laid and incubation commenced. On the 22d four hungry mouths greeted me when I looked into the nest, but alas for the future happiness of the parents, a cat, during her investigations two days after, found them, and a deserted home was the result.

May 15—Noticed the appearance of the chestnut-sided warbler (*Dendroeca pennsylvanica*), yellow warbler (*Dendroeca æstiva*) and Baltimore oriole (*Icterus baltimore*). The catbird (*Mimus carolinensis*) put in its appearance the next day. On the 20th, while sitting on the front piazza of the house, I noticed two wood thrushes (*Turdus mustelinus*) under a copper leaved beech not twenty feet off, tugging at an old piece of newspaper The paper was too large for them, and they were not inclined to use anything else just then for the nest, which they had decided to construct, and whose location had been already fixed upon as will be seen. In a few moments they were off, and hastily running down, I tore the paper into strips and went back to watch results. In a short time they returned and eagerly seized the strips, which had by some force unknown to them become suitable to their wants, and flying up in the tree they placed them in a fork about ten feet from the ground. I then furnished them with pieces of cedar bark, soft hay and some pieces of cotton, scattering it under the tree, and from that moment the building went on at a lively rate all day long without intermission. The cotton they declined to use, as unsuitable for their purpose, but it was appropriated by a pair of Orioles that were building in a neighboring willow tree and had already a nest half finished. Two pairs of chipping sparrows (*Spizella socialis*) were also noticed in the garden as having their nests under way.

The thrushes' nest progressed favorably, and in due time the eggs were laid and hatched, and the young left it on the 20th of June, just one month from its commencement. The parents on June 30th started another in a maple tree near by and brought it to a like successful issue. These thrushes are abundant, both around houses and in the deep recesses of the woods, where they usually keep themselves in other localities, some four nests being found in such places. Near houses they are very sociable, a pair building one year in a tree so near the house that I could touch it with a cane from the piazza before mentioned. There is a limb of a flowering crab apple on which they seem to delight to perch, and all through the spring and early summer at evening there is one of these birds upon it, pouring out its rich notes to the world at large. They have used this perch for years, and they all seem to know it. Perhaps there is an inspiration in the view from it which brings pleasant thoughts to them of incidents in their bird life that make them happy. On several occasions I have heard a note or two from them as late in the evening as ten o'clock, but this is only on rare occasions.

The 30th of May was a bright, warm, sunny day, just such an one to be enjoyed by a tramp through the country, and I took advantage of it and started out at nine o'clock for the woods a short distance from the house and extended my tour for two miles beyond during the day. In going along a small stream I soon noticed the yellow warblers, and Maryland yellow-throat (*Geothlypis trichas*) dodging in and out among the alder bushes and blackberry briars that covered both sides. Soon I found a nest of the former in an alder bush, containing four fresh eggs; a little farther on, another, containing four fresh eggs and one of the cow bunting. There were probably many more in the neighborhood if the trouble had been taken to find them. A song sparrow's nest was discovered on the ground quite near these, with four fresh eggs. After searching for some time for the yellow throats I was at last rewarded. As I was passing through some black alders one started out almost under my feet, and, on looking down, I saw the nest placed in some weeds and raised some six inches from the ground. The cow buntings had been on a visit here also, but had not let it off so easily as the warblers; three of their eggs were in the nest, and only one of its rightful owner. Thinking the bird might still lay its full complement, I left it, but on my return, a few days after, I found incubation had commenced without further addition to the number of eggs. Could this bird count and thus know that she would have all the mouths she could possibly fill, and that four was her just number? If her reason had extended a little further, she might have deserted this set entirely, for the fate of her own was sealed when the strangers were placed under her unwilling care. A few days after I found another nest of the same species, and this, in addition to the full set of the bird's own eggs, contained likewise one of the hunting. I judge that birds, where the bunting eggs have been placed in their nests, before they have commenced laying, will never lay full sets, and where full sets are found with the addition of the bunting, the latter has been placed there after

he laying was completed. This fact, I think, will be borne out by observation. In the woods the golden crowned thrushes (*Siurus auricapilus*) were abundant, and their clear ringing notes were heard all around, but their nests could not be found.

In a small thicket, not more than fifty feet in diameter, I watched a least fly-catcher (*Empidonax minimus*) building, and within twenty feet of it found two nests of the cat bird and one of the song thrush. There were also a pair of those independent little birds, the white-eyed vireos (*Vireo noveboracensis*) perching about and searching for their food, and every once in a while stopping to give forth their emphatic notes and continuing their investigations as before. I am positively sure they were building, if they had not already finished a nest, but was unable to discover it. These birds are common here, and nearly every thicket contains a pair, in order, perhaps, to enliven the otherwise silent habits of its denizens. Three days after this a nest was found suspended from a limb about three feet from the ground. The female was occupying it, and watched me very sharply with her sparkling white eyes as I approached, and did not leave it until I nearly covered it with my hand, when she started up, and calling to her mate, they both exhibited the utmost concern for their treasures, which consisted of four newly laid eggs, together with one of the ever-present bunting. The nest was a beauty—one of the most perfect of its kind I ever saw. It was composed of moss and bark, and decorated outside with pieces of decayed wood and spiders' webs. I had one in my collection, which was entirely covered with bits of white decayed wood and green moss. It was an exquisite structure. The use of the wood I have never noticed except in these two nests. A red start (*Setophaga ruticilla*) was also noticed before leaving the clump of bushes above mentioned.

Passing through an orchard, I heard the voluble chatter of a wren, and on investigation found the nest in a deserted hole of some woodpecker. It contained six eggs. These birds are common, both around the houses and in the orchards; but they will have to look well to their homes in the latter place, for the sparrow (*Passer domesticus*) is rapidly taking up his residence there also. Within two hundred feet I found one of their nests, with five eggs, in a hole in an apple tree, and during the season two others in like situations, one with eggs and one with only one young bird. The sparrows are abundant and make themselves at home around the houses and barns, associating familiarly with the chickens when feeding time comes round, to pick up the wheat which is thrown to them. In regard to their contests with the other birds, I have had several incidents come under my notice during the last two years. Just in front of my window is the stem of a dead spruce tree, with the limbs trimmed up, and on the top is placed a house with two compartments, and a shelf running around each side, the possession of which is welcome to any tenants who are able to hold their own. Year before last a pair of sparrows took up one side of it, and a few days later I heard a pair of wrens around, who seemed inclined to occupy the other half. They soon commenced to build, and now the fun began. The sparrows took it very quietly at first, only looking on while the wrens scolded and chaffed at them, sometimes even coming around to their side to pick a quarrel. One morning I heard a tremendous fuss, and, on looking out, found that the sparrows were going to resent insults, and that in a very curious way. They watched when one of the wrens came up with a few sticks, and when it had gone inside one of the sparrows followed, and turning around, quietly sat down in the doorway. Such a noise as that imprisoned wren made, and its mate outside also objected; but there was no way out of the difficulty. The sparrows would stay in this position a few minutes, and then fly off, only to repeat the performance when the wrens became too aggressive. After a while there was a mutual truce and matters went on more quietly. Last spring the same thing was re-enacted, and with the same results. How it will be next year, and which one will be inclined to yield, I cannot tell; but it is probable that two pairs of sparrows may occupy the house, and then friends wren will find it hard work to dislodge them. It has been recently stated that the sparrows are very prolific, and an instance was given of thirty-five eggs having been taken successively from one nest. This might be very true; but it is no good reason for their rapid increase. Various other birds are known to do the same thing, notably our golden-winged woodpecker, (*Colaptes auratus*), and very many of our common birds will rebuild if the first nest is destroyed. As stated before, in regard to the imposition of the hunting eggs, birds seem to have the faculty of counting, and if the experiment of withdrawing the eggs from the nests of some of our other birds, unseen by them, could be tried, they could undoubtedly be induced to continue laying for some time. The sparrows and the golden-winged woodpeckers are both, in a measure, careless about the location and construction of their nests, and any intrusion is not so palpable to them as to many birds which display so much more taste and skill upon their summer homes.

NOTE.—Since writing the above I have been informed that fish hawks will continue laying in the same manner as the eggs are gradually taken from the nest. B.

(*To be continued*).

LIVING BIRDS WITH TEETH.

EDITOR FOREST AND STREAM: CHICAGO, 1878.

In your issue of Feb. 21 there appears an interesting and well-written article, entitled, "Birds With Teeth." The description of the fossil birds of the Cretaceous period is accurate and instructive; but I cannot believe it certain that *Hesperornis* was a water bird exclusively, nor that it was a pure carnivorous creature. But whether it was one, or both of these, the doctrine of the Evolutionists, that these birds represented the transition forms between the great reptiles of the Oolitic and the subsequent higher developments, is neither a necessary nor, in my opinion, logical deduction from the great facts of creation.

The birds spoken of had teeth—*bona fide* teeth, without doubt; some of them set in sockets, with a fang at one extremity, and enamel at the other. But, in order to fully understand the import of so remarkable a circumstance, we must take into full view all of the surrounding facts.

A great change had come upon the world during the ages under consideration. Geology tells us that there are indefinite markings of plant life so low down as the Silurian and Cambrian beds, but these represent mere sea weeds, which preceded the rich development of vegetable life during the Devonian—that age rendered famous by Hugh Miller in his studies of the "Old Red Sandstone."

But up to the beginning of the Cretaceous period, the only known flora consisted of cycads, pines, and various forms of cryptogamic vegetation. At this time, however, a remarkable development takes place. Flowering plants—the dicotyledonous—the higher forms of vegetable and plant life, have made their appearance. Along with this great change, marking another click in Nature's time-piece, comes, hand in hand, an almost incredible fact, viz.: Many forms of tropical vegetation, as the myrtle, fig-tree, oleander, etc., flourished luxuriantly in that region now known as Greenland, where, at present, natural vegetation, with the exception of the small forms of snow-lichens, etc., is impossible.

What do these accompanying facts show? Why, simply, that the fauna of the age was in harmony with the surroundings. In other words, that these birds with teeth lived largely, if not exclusively, upon the luxuriant vegetation. In this they but represented a fact which constantly shows itself throughout animate nature, viz.: Special forms of life exist by reason of special physical conditions, and local variations in species are possible within certain limits, though these limits are sufficiently well-defined, always, to preserve the characteristics of the species. The bird with teeth, then, came into existence as a demand of the period, and gradually vanished, as the demand passed away. It seems impossible to the writer to connect these birds with the reptiles as transition forms. The conclusion seems lame and impotent, and though the sound sense of the Evolution philosophers cannot be impeached, yet the *reductio ad absurdum* may be illustrated by imagining a chipmunk constructed from a sea-serpent, and a tom-tit built into a mastodon.

The point raised is susceptible of extended argument and analogy, but we have no need to ransack the records of vanished ages to tell the story of these birds. *We have living birds with teeth in our own era!* Those referred to inhabit Chili, in South America, and there is at least one specimen in our country. It is on exhibition at the rooms of the Cuvier Club of Cincinnati, and belongs to the private collection of the Hon. Thomas A. Logan, of that city. This bird, the *Phytoma rara*, is about the size of an English sparrow. The teeth are not set in sockets, but consist of serrations in the mandibles. It is in no sense carnivorous, but lives entirely upon vegetation, and is very destructive to the young fruit buds and tender plants in the spring, as the writer has frequently witnessed. The bird is perfectly authenticated, and has been described by Gillies in his "Report of the Expedition to the Southern Hemisphere." There is probably a specimen of this transmogrified little Saurian in the Government Collection at Washington.

C. A. L.

[We regret that lack of space forbids us to go into this question with our correspondent, for we should enjoy breaking a lance or two for the Evolutionists. However, those gentlemen are well able to take care of themselves, and so we will merely notice one or two points in "C. A. L's." communication. He says that no traces of plant life, except indefinite markings of sea weeds, have been found during the Silurian. We think that if he will look the matter up more carefully, he will find that lycopodiums and ferns have been discovered in rocks of that age.

The question as to whether the toothed birds are transitional forms between the reptiles and the birds of the present era, is only to be decided by evidence. Anatomists, without exception, believe that they are; and in support of this belief, adduce facts, which, in our judgment, amount to incontrovertible arguments.

The strangest part of "C. A. L's." communication is, that after having shown that he knows perfectly well what teeth are, by speaking of them as "set in sockets, with a fang at one end and enamel at the other," he proceeds to speak of a living species which has the horny covering of the bill serrated, as toothed. If this be a toothed bird, our common ducks, geese and swans are toothed, and it is scarcely necessary to go so far as South America for a Living Bird With Teeth.—ED.]

PRAIRIE CHICKENS IN NEVADA.

UNDER head of "Notes from California" in your issue of March 2d I notice that your correspondent "Amigo" has something to say upon the prairie chicken. Speaking of its extension westward, he tells us, but not without some evident misgivings, that there may have been a mistake somewhere of the supposed arrival of the chicken at Battle Mountain, Nevada, and the belief of his informant, Hon. B. B. Redding, of its eventual occurrence in California. I should be very sorry to destroy any well-founded hopes in a result so ardently to be hoped for by California sportsmen, but that there is an error I am quite sure, and believe further that it may be readily pointed out.

Coues, writing as late as 1874, says: "I have found no record of the prairie chicken (*Cupidonia cupido*) reaching, as yet, either Colorado or Wyoming." Without doubt he was correct in thus limiting the westward range of the bird, and a similar statement of its non-occurrence so far west as Colorado will, I think, hold good to-day. As a well-known matter of fact the prairie chicken is traveling westward, but very slowly, and certainly not in jumps of some thousand miles or more. That it will ever reach so far as the west coast is to the highest degree improbable; for, if deserts do not, mountains will surely prove an insurmountable barrier, just as they have to the bird we are now about to speak of.

What species, then, is it involved in the above statement of "Amigo's?" Why surely none other than the *Pedioecetes phasianellus columbianus*—a rather hard name, we must confess, but still one that will enable us to pin our bird down fast, and escape all danger of misleading—in other words, the southern sharp- or spike-tailed, grouse. The name of "prairie chicken" is just as applicable to this bird as to the Cupidonia, and whether it be or not, so is the sharp-tail called in Northeastern California, Oregon, Idaho, and throughout that whole region.

I cannot make a positive statement of ever having, myself, known of this bird so far east in Nevada as Battle Mountain, having only passed through there on the cars, but I doubt not that it is actually found thereabouts, as this is by no means out of its range. Furthermore, I have an indistinct recollection of having noticed some of these grouse at one of the stations on the U. P. R. R. in Nevada, which were said to have been shot near by. Of the Oregon and Eastern California bird, I can speak with all positiveness, having seen it in more than one locality, and having last fall, in company with my friend Maj. Norvall, had many a crack at the sharp-tails about Camp Bidwelt, Colorado, where they are numerous. In no part of this region, however, is its presence at all new, for this has been known as a part of its true home ever since we knew anything of the far Western avifauna.

In addition, let me say that sportsmen have no need to repine at the absence of the better known plumated grouse wherever the sharp-tail is found; for in all essential particulars of habits, it is the counterpart of that bird, and lies as well to the dog, flies as strongly and swiftly, eats as well, and is every whit as much of a game bird.

In return for his hint as to the introduction of the mountain quail into the East, let me suggest an attempt on the part of the California sportsmen to carry the sharp-tailed grouse beyond the western slope of the Sierras and into the fields of the rich river valleys, especially toward Northern California. Doubtless it is the presence of a high mountain chain which alone has prevented this bird from occupying the Pacific slope, and once there, it must thrive and multiply, and afford no end of fine sport to those eager for it. It is already at their doors, and very little effort is needed to secure all the advantages which its presence affords both to sportsmen and epicures within reasonable distance of San Francisco.

Echo "Amigo's" query, "Why does not some one interested in the game of that region introduce the mountain quail of California (*Oreortyx picta*) into the Middle States?" It is a splendid bird, and judging from its habits and the localities it frequents—high and rugged mountains—such an effort has all the likelihood of success that should commend it to the lover of fine game. Apropos of this I understand that such an attempt as this has been inaugurated by certain of the gun-loving men of Vermont, as Dr. Goldsmith, Mr. Meyers and others. To increase their chances of success their birds were procured from Oregon, as being hardier and and more likely to become accustomed to the deep snows which they must contend against in the Granite State. A trial of the same bird in Virginia has been talked of in Washington, though here the less robust valley quail would probably answer.

Washington, March 26, 1878. H. W. HENSHAW.

BREEDING OF THE OPOSSUM.

BERLIN HEIGHTS, O., Feb. 25, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I would request that sportsmen who have had opportunity to become familiar with the embryonic development of the opossum, would give their ideas of the same through your paper. I had the pleasure, about eight months since, of examining one, with twelve little ones in the marsupium or pouch, which was to me, indeed, a great curiosity. The little ones were no larger than half-grown mice, hairless, and grown fast to the teat of the mother. Now comes the query—how did they get there at that tender age? Did they originate there, or were they transplanted from the uterus of the mother to the quarters they then occupied? I have heard several theories advanced regarding this point, none of which are quite satisfactory to my mind. TONIC.

[This is a matter which, in the past, caused a world of discussion among naturalists. We have not space this week to discuss it, but shall do so later. In the meantime, we shall be very glad to have the views of any of our correspondents on the point raised by "Tonic."—ED.]

THE WORMY TROUT OF THE YELLOWSTONE.—A correspondent writing from Portland, Oregon, inquires why the trout of the Yellowstone River are wormy. He says:

"While on a recent trip with Governor Howard's command, after the Nez Perce Indians, we struck the Yellowstone River, about the first of September, some six miles below the famous Yellowstone Lake, and found the river to be swarming with trout from fifteen to eighteen inches in length, but literally full of worms, not in the insides, but in the flesh. Cut them lengthwise along the sides, and there would be a mass of yellowish-looking matter ooze out at intervals along the cut, or as a half-breed Indian called it, worms. Otherwise the fish seemed to be all right, lively, and would fight to the end. Now, as this place is near the also famous Geyser Basin, in the National Park, and hot sulphur springs are everywhere all along the banks of the river—in fact the air in that section is full of the smell,—I thought, perhaps, that may have been the cause. The river was very swift, and perfectly clear, except a kind of sediment, coming as I thought from the springs. In taking up a cupful of water, it would seem to be full of small pulp-like balls, the size of a No. 8 shot and smaller. This same half-breed of whom I speak, told me that it was only the fish above the falls that were in this condition, which was found to be true. Reaching a place about twenty miles below the lower falls, and not getting time to experiment myself, I had a companion do so for me, and he reported 'no worms.' OCCIDENTAL."

[Mr. Omohundro ("Texas Jack") was calling our attention to the same fact only a few days ago. The parasite with which these fish are afflicted was first described by Professor Leidy in 1872, under the name of *Dibothrium cordiceps*. Although the trout of the lake, and of the river above the falls, are especially subject to the attacks of this creature, we have taken many below the falls that had the worms in their flesh. The "sediment" of which our correspondent speaks is thought to be the fruit of some aquatic plant, but its nature is not well understood. It is said to be present in the water only during the late summer and autumn. We do not imagine that the presence of sulphur springs in the region has anything to do with the worms in the trout.—ED.]

BIGHORN ON THE BIRDWOOD.—Our friend, "L. H. N.," writes us from Nebraska that a bighorn (*Ovis montana*) was seen last autumn on the head of the Birdwood in that State. We have never before known of a sheep being found so far to the eastward along the Platt River. The individual probably came from somewhere in the neighborhood of Scotts Bluffs, but what induced it to wander so far from its usual feeding-grounds?

DEER SHEDDING THEIR HORNS.—*Bromfield House, Boston, March* 18.—The big buck in the park on our common has not yet shed his horns, although they look bleached and dead as sticks. One might conjecture that he is aware of the controversy in the FOREST AND STREAM and is waiting to have the question decided, that he may drop them at the proper time; but, in my note book of last year, I find: March 15—"The big buck has shed one horn and carries the other." I then thought it strange, having shot two in Jan. that had evidently dropped them some weeks before. I am too green in the business to take sides on the question of burying, but it looks quite reasonable that the time of shedding should vary according to locality, the age and condition of the animal. M.

[We quite agree with our correspondent that it is impossible to decide difficult points like those to which reference is made above, by what takes place in captive animals.—ED.]

MILLIONS IN IT.—*Wareham, March* 1st, 1878.—In the FOREST AND STREAM AND ROD AND GUN of Feb. 7th, Dom Pedro, of Pottsville, Pa., reports a rare quadruped in the form of a white weasel with a black tipped tail, for which its captor received twenty-five dollars ($25). Well, that was a good price for a weasel, and perhaps it was cheap for that market, but while they are rare there they are not particularly so in

this locality, there being no less than three captured ones in my neighborhood. Notwithstanding the high rates in Pa. I should quote the genuine white weasel with black tipped tails in our market at one dollar each. Thus it can readily be seen that at a reasonable rate for freight between the two points there can be a handsome living margin in the white weasel enterprise. C. L.

THE LINNEAN SOCIETY OF NEW YORK.—A meeting of the society was held on the evening of Saturday, March 30, at the residence of Mr. N. T. Lawrence. In the absence of Mr. C. H. Merriam, the President's chair was occupied by Mr. Herrick, and the Secretary failing to appear, Mr. Benner was appointed Secy. *pro tem.* Papers were presented by Mr. Herrick on "Falcons and Falconry," and by Mr. Benner "On the Breeding of Certain Birds about Astoria, L. I.," while Mr. H. B. Bailey read copious extracts from Robert Collett's "Catalogue of the Birds of Norway," commenting thereon. The literary exercises were of much interest, and were followed by the usual verbal communications and miscellaneous business, after which the meeting adjourned, several papers being left over for next week.

ENGLISH PHEASANTS IN CALIFORNIA.—J. P. Whitney, of Placer County, Cal., recently imported 400 eggs of the English pheasant, from which he has succeeded in hatching out some 60 birds. They are now some four weeks old. He keeps them in an enclosure 40x60 feet in area, with a shed at one end to which they can retire for seclusion.

DEFORMED TEETH.—R. L. N., of Salem, Mass., says: "Noticing cut as to woodchucks' teeth, I would remark that in the county collection of the Peabody Academy of Science in our city, is a woodchuck with upper teeth grown through the lip close to its nose. I think the specimen is also albino.

CAMELS IN THE SOUTHWEST.—The *Arizona Miner* says: "For nearly a year past four camels have been running at large in the vicinity of Mineral Park—three old ones and a young one. One of the old ones looks to be quite ancient, and it may be that it is one of the original stock imported from Asia many years ago. These animals are very gentle. A few days ago Mr. Knobman was out hunting stock and he came across these camels, but his mule objected to an intimate acquaintance, and commenced bucking. Horses and mules are frightened at the sight of them. In Nevada and Idaho, and I think Montana, there is a law against using these animals in towns or traveling on the roads, as they frighten stock. There seem to be no owners for these camels, and in time they may increase and become numerous."

Apropos of this item is one that recently appeared in the Louisville *Courier-Journal* to the effect that camels are very easily raised, and require but very little care. The females are said to produce one young one each year, the colt at first being somewhat delicate, but after a day or two it is well able to look out for itself. Their food consists almost entirely of sage brush and cactus, and they are said to thrive where a government mule would starve.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN, FAIRMOUNT PARK, APRIL 3, 1878.—Two spotted salamanders, *S. maculosa*, presented; one Bactrachan camel, *C. bactrianus*, born in garden; two alligators, *A. mississippiensis*, presented; one ruffed grouse, *Bonasa umbellus*.
ARTHUR E. BROWN, Gen'l Supt.

ARRIVALS AT THE ZOOLOGICAL GARDEN CINCINNATI, TO APRIL 1.—One prairie dog, *Cynomys ludovicianus*, born in garden; one tiger, *Felis tigris*, deposited by Dells Bros.; one aoudad, *Ammotragus tragelaphus*, born in garden; forty Virginian quail, *Ortyx virginianus*, purchased; one ruffed grouse, *Tetrao umbellus*, deposited; three flying squirrels, *Sciuropterus volucella*, presented by J. & J. M. Pfau; one red-tailed hawk, *Buteo borealis*, presented by C. A. Gillette; one bald eagle, *Haliaetus leucocephalus*, presented by P. O. Sharpless; one pony, *Equus caballus*, purchased; eight pea-fowl, *Pavo cristatus*, presented by Miss Stettinius; one Cashmere goat, *Capra hircus*, born in garden; one alligator, *A. mississippiensis*, presented by steamer "Golden Crown;" sixteen undulated grass parrakeets, *Melopsittacus undulatus*, hatched in garden; three spitz pups, *Canis domesticus*, born in garden.
H. P. INGALLS, Superintendent.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE NEW YORK HORTICULTURAL SOCIETY.

IT gives us much pleasure to state that the monthly meetings of this growing society show that the love for the beautiful in nature in the people of New York has only been lying dormant, for at the last meeting not only was the attendance large, and the interest exhibited in all the beautiful plants and flowers unflagging, but the display brought forward by our principal nurserymen and florists was really surprising, more especially as it is gratuitous and the meetings or exhibitions entirely free to the public. Mr. William Bennett, Flatbush, L. I., filled a large table with a most gorgeous display of orchids and other flowering plants, the most notable of which were a finely grown plant of *Dendrobium nobile* with magnificent spikes of bloom *Cypripedium harrisianum*, *C. Lowii*, *C. barbatum majus*, *C. villosum*, *Cattleya Skinnerii*, *Anthuranum Schertzerianum*, a magnificent variety with very large spathes; some well grown *Azaleas*, the most beautiful of which were *Madame Van der Cruysen*, *Marquis of Lorne*, *A. Borsig*, *Souvenir de Prince Albert*, *Flag of Truce* and *Neptune*. Mr. Isaac Buchanan, Astoria, L. I., had a beautiful lot of seedling *Azaleas*, and R. B. Parsons & Co. had also a nice group of the newer sorts of *Azaleas*, well grown and bloomed. Mr. F. Roenbeck, Bayonne, N. J., exhibited a collection of 28 of his new seedling *Begonias* of the *B. rex* section and six *Ferns*, which received a special commendation and were much admired. Mr. Mayne, gardener to Mrs. Morgan, Twenty-sixth street, brought two fine plants of the rare and beautiful yellow orchid *Cattleya citrina*. Mr. Thos. Ascott, Flatbush, *Pelargoniums* and large *Azaleas*; Mr. J. Roehrs, Jersey City, a collection of *Tulips*; Mr. John Henderson, Flushing, *Lady Blanche Pinks* and *Roses*, and Mr. Jas. Riddle Inwood a well grown plant of the beautiful blue *Browallia elata*. In cut flowers Mr. George Such, South Amboy, N. J., as usual took the lead with a rich collection including fine sprays of *Dendrobium nobile*, *D. thyrsiflorum*, *D. macrophyllum giganteum*, *Anthurium schertzerianum*, *Angræcum sesquipedale*, some splendid sprays of the newer sorts of *Azaleas*, and *Rhododendrons formosum*, *limbatum*, *Princess Helene* and *Veitchianum*. He was closely followed by Mr. S. Henshaw, Staten Island, who, in addition to a splendid display of cut flowers, including the exceedingly curious *Bryophyllum calycinum* or life-plant, exhibited cucumbers 26 inches in length and mushrooms large as saucers. Mr. John Jones, Madison, N. J., who is well and favorably known as a rose grower, showed a specimen of his skill in a group of over twenty sorts that would be hard to match by the most extensive growers of this most lovely flower, his *Cornelia Cooks*, *La Sylphides*, *Sprunts* and *Bon Silenes* being particularly admired. Many other florists brought their quota of what they had rare or desirable and made the meeting a most enjoyable one. At the close of the business part of it Mr. Peter Henderson read an essay which was listened to with marked interest and attention on

CITY AND SUBURBAN GARDENS.

If a horticultural society conduces to the improvement of our city and suburban gardens, there is probably nowhere in the civilized world where the necessity for one exists more than for the city of New York. Take the European cities, London, Paris, Berlin, Edinburgh or Dublin, or our own cities of Philadelphia, Boston, Baltimore or Cincinnati, and the gardens of their suburb show that we are yet far behind them in the taste in which our suburban gardens are laid out and planted. It is a most common thing to see with us a building erected at a cost of $20,000, furnished, perhaps, at a cost of $10,000 more, while the grounds surrounding the house are left to be "laid out" and planted by some ignorant pretender, who manages to make the owner believe, by a few high sounding phrases that he has got by rote, that he is a veritable landscape gardener. We have, necessarily, all phases of intelligence among gardeners in the various grades of the business, but it is quite as unreasonable to expect good taste in a landscape gardener destitute of intelligence, as it would be to expect good taste or good judgment in an ignorant architect. We know that no house architect can prosecute his business without being educated to it, while it is a deplorable fact that the "architects of the garden" (if we may so term them) often undertake the business while utterly ignorant of the first principles of the art.

One of the most ridiculous cases of this kind came to my notice a few years ago. A gentleman owned a plot in the suburbs about the size of an ordinary city block in extent. After building a most expensive house in the rear of the plot, he engaged a gentleman who dubbed himself a "landscaper" to lay out the grounds. The plot was some 200 feet wide by 400 deep. Teddy's first operation was to start a walk from the street to the house, which, had it been a straight line, would have been about 300 feet, but Teddy, the "landscaper," had a true artist's horror of straight lines, and had the walk curved like a corkscrew, so that to reach the house from the street nearly 600 feet had to be traveled instead of 300. This walk was laid through the centre of an unplanted lawn, and was allowed to remain some years before the shoddy owner realized its absurdity. There is not the time here, nor have I the ability if there was, to say much about the proper manner of laying out the suburban garden, but there is one common-sense rule in laying out walks or roads that should never be lost sight of. This rule, first laid down by Loudon, I believe, is that there never should be any deviation from a straight line, unless there was some real or apparent cause. This is common sense. Presuming this room was entirely empty, and I wanted to get to that window, I would undoubtedly use the shortest distance between the two points—a straight line; but if it was, as it is now, filled with seats in the centre, I would naturally go around without hardly thinking of the obstacles in the way. It is just so in the walks in the garden or grounds. Unless there is some reason for deviating from a straight line—rocks, trees, flower beds, or some such obstacle—we must make one, that is, when curved lines are wanted, if there are not shrubs or flower-beds to get around, we must plant them in the angles of the curve, else the uselessness of going a roundabout way, without a cause for so doing, will be apparent, and grate on the senses.

What to plant in the suburban garden is an all-important consideration. If there is extent enough, say an acre in area, it should, to be complete, have its due complement of space allotted for fruits, flowers and vegetables. What the varieties of these should be is so much a matter of detail that no allusion can properly be made to them here.

I will simply say that good taste requires that the fruits and vegetables be planted in the rear of the plot, and the flowering or ornamental part in the front. In any case, at least, there should be no mixing up when there is room to separate them, for it is just in as bad taste to plant vegetables and flowers on the lawn in front of your dwelling, as it would be to have the cooking and washing done in the parlor when there are separate rooms for such work. Some may think that such absurdities are never practiced, but they certainly are. I passed every day last summer in front of a $15,000 dwelling, where the coarse-grained owner had mixed up the useful with the ornamental in such a way that it would have been hard to determine whether it was a flower-plot or a cabbage garden. This heterogenious planting may be perfectly proper in the owner of a shanty who may indulge his esthetic taste by planting a few flowers where it is necessary for him to grow his corn or potatoes; but in my opinion it is utterly inexcusable where there is any pretension to well kept suburban grounds.

While the ownership of the suburban garden has its pleasures it has also its troubles; not only has the occupant to submit to the onslaught of the usual crop of book peddlers, sewing machine agents and the thousand and one venders of patent wonders that his city friend has to submit to, but he is the special victim of the irresponsible tree and bulb peddler, who generally manages to sell him a mass of rubbish, and often supplements the injury by telling him how to plant it; for be it known that not one in a hundred of these tree agents are practical gardeners, and hence are utterly unfit to instruct. One stereotyped piece of knowledge that many of them seem to possess, is to advise the placing of a quantity of stones in the hole where a tree or shrub is to be planted, and which advice the owner often religiously follows at great expense. I need not say that this practice is consummate nonsense, and if it has any effect at all it would be injurious, as, of course, the stones displace just so much good soil. These remarks do not apply to accredited agents from responsible firms, but there are hundreds plying their vocation who are not such, and it is against such we would warn you.

There is yet another class in whose attractive nets the amateur horticulturist gets often entangled. These gentlemen are now distinguished by the name of the "Blue Rose men." For the past ten years they have never failed to plant themselves in some prominent location in this city—usually in Broadway; they are in all probability there now, for this is their season of harvest, and their victims are the owners of our suburban villas and city gardens. The blue rose men have usually just arrived from Paris, at least they say they have, such wonders could come from nowhere else. Unfortunately, their goods being all imported, they cannot well show them in flower or in fruit, so they have to resort to pictures; by these you can have ocular evidence that they have to sell cherry trees bearing fruit as large as apples, strawberries growing on trees as large as cocoa-nuts, gigantic asparagus, of which they will sell you the seeds that in ninety days from time of sowing will produce a full crop!

But fruits and vegetables are thrown entirely in the shade by their flowers. Here you can have blue moss roses, blue tea roses, blue dahlias, blue and coal black gladiolus, and a wonderfully rainbow-spangled, nondescript flower that the blasphemous wretches call the "Hand of God." This last is very expensive, and ranges according to variety from $3 to $10 each. To my untutored mind this "Hand of God" flower looked suspiciously like the common columbine or Aguelegia. The wonderful strawberry tree was the calycanthus, while the blue moss roses were very good specimens of the red Prairie rose, which no doubt had been imported from some Long Island or Jersey nurseryman at $12 per 100, which by the time they had got to New York became, in the hands of the gentlemen from Paris, blue moss roses, ready to be sold at $5 apiece!

I will not insult the intelligence of the members of the New York Horticultural Society by supposing that any of them were ever at any time the victims of these vandals. But if others become victims by failing to become members of our society, and thereby losing the knowledge that such membership gives, I feel like saying that if any such should pay $5 for a blue rose or a strawberry tree—rather than to give the same amount yearly to the society—served him right! But little can be said about "city gardens" proper. The area is so limited that there is less scope for display either of good taste or bad taste, and to even suggest what would be most satisfactory to plant would be nearly useless.

The most available space is usually the fences. An excellent effect may be had by training against these roses, honeysuckles, or other climbing plants, intermingling the colors. These trained close to the fences will interfere but little with the borders, which can be planted with whatever flowers the inclination may suggest, only they should be such as are close growing. In fruits, about the only satisfactory things are grape vines. These, also, may be trained on trellis work against the fence or on a separate trellis. In half a dozen of varieties of grape vines for the city garden, I would suggest Concord, Iowa and Roger's Nos. 4, 15, 22 and 44. These would embrace about all the varieties of color, and succeed each other in ripening during the season. If the owner of a city garden has any proclivity for vegetables, he should try and confine it to half a dozen tomato plants, which should be trained against the fences. But it must be borne in mind that whether fruits, flowers or vegetables are planted, to do well they must have at least three or four hours' sunshine. If the garden is entirely shaded, it is useless to expect much satisfaction from anything that can be planted. We are asked hundreds of times every season the question of "What plants will grow in the shade?" and the answer is ever meagre and unsatisfactory. It is true that such plants as pansies, forget-me-nots, lobelias, lily of the valley, and such herbaceous plants as are natives of shady woods, will do with partial sunlight, but their flowers are never so bright or so well developed as in the open sunshine. Therefore, for shady city gardens, flowering plants should not be attempted, as a far more satisfactory result can be produced by the use of what, for want of a better term, we call "foliage plants," such as the variegated leaved geraniums, coleuses, fancy caladiums, cannas, etc., and marked colored foliage may be used for ribbon lines or for massing in distinct colors, such as achyranthus, centaureas, alternantheras, golden tetterfew, etc., but in any case do not get your small city garden overcrowded. Plants should not be planted so close as to run into each other and form a tangled mass. This is one of the commonest errors, and one, too, that the unsophisticated owner is often apt to fall into, from his his desire to have an immediate effect produced. Sometimes, however, he overcrowds from accident that no previous knowledge could guard against.

I recollect some years ago among other European novelties that we imported, was a plant called *salvia gigantea*, which came to us with the usual array of magnificent adjectives. We modestly followed suit in describing it, and our description happened to arrest the attention of the owner of a 7x9 city plot. I sold him a plant, and remember he complained bitterly of the small quantity he got for his money. He planted it, however, and he soon got more than he bargained for. He wanted to see the magnificent flower, and dared not cut a branch of it. So it kept on increasing in breadth and stature, until it not only took possession of his whole plot, but bid fair to take possesion of his house also. But, luckily, Jack Frost came to the rescue, and one October night stopped its progress. That man never forgave me for what he considered a mean practical joke; but it was not, for I did not know when I sold him the plant whether he was going to plant it in a city garden or a ten-acre lot. Had he planted it in a ten-acre lot, and had Jack Frost not interfered, I have no doubt that *Salvia gigantea* would have done all that we claimed for it.

ICE TO THE NORTHWARD.—The northeast is still ice-bound, and the Strait of Northumberland, separating Prince Edward's Island from Nova Scotia, is full of ice as far as the eye can reach. Last Saturday the mails and passengers from the Gulf of St. Lawrence steamer were landed at Cariboo and brought to Pictou, N. S., by teams, having crossed over the ice to the land, the steamer lying three miles off shore.

—Track laying on the Canadian Pacific Railway is progressing three-quarters of a mile daily.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the forelegs. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 14, 15, 16 and 17. Dr. W. Seward Webb, Secretary.

For Forest and Stream and Rod and Gun.

THE ROSE TREE FOX-HUNTING CLUB.

THE Rose Tree Fox Hunting Club, as a definite and regular club, was organized September, 1873; but for a number of years previously the gentlemen who founded it had hunted together, and many of them are descendants of families who have hunted in the county as long as Delaware County has been one. Formerly the packs were all trencher ones, each man keeping from one to a half dozen couples of hounds. About 1853, J. Howard Lewis, Esq., and Geo. E. Darlington, Esq., began to keep their hounds at the Rose Tree Tavern, on the Providence road, about one and a half miles above the Court House, which had just been located in the present town of Media. The Rose Tree was then kept by Morg. Baker, and the hounds remained there for several years. These gentlemen, gradually joined by others, some years later moved to the Lamb Tavern, kept by Woodword, but owing to the landlord's intentionally crippling a fox, the kennel was moved to Tom McClure's farm. McClure always kept a few good hounds of his own until the winter of 1875-76, when he met with an accident hunting, and was killed. About 1869 the locality of the hunt was changed to the Black Horse in Middletown township. The leaders now were Messrs. J. Howard Lewis, Samuel Lewis, Prof. Fairman Rogers, who had his country place near Concord, and Mr. E. Farnum. While here they were joined by Mr. Geo. Hill, the present Mr. F. H., who was living on Chester Creek, and hunting with John Mahoney, Mr. Henry Saulnier and Mr. Mark Pennell. The former is now at three score years and ten, as true a fox hunter as ever followed hounds, and keeps the same blood in his kennel for which he has always been famous. Without children he and his wife live on a small farm, where, as he says, he "always has mate for the hounds and milk for the puppies," and at any time you can find a lot of puppies occupying the warmest corner of the fire; and Mrs. Mahony will say, pointing to one or the other, "Now, isn't he pretty." About the same time, Henry E. Saulnier, Esq. (who lived formerly in New York, but was attracted to a country place near Ivy Mills on account of the beauty of the scenery and the hunting), joined. The hounds were moved back to the "Lamb," then kept by Benjamin Rodgers, and the next year, 1872, the Rose Tree was bought by Messrs. J. Howard Lewis, Samuel Lewis, Prof. Fairman Rogers and Mr. E. Farnum, the hounds sent there, and "Benny" came as landlord. The club was then regularly organized with six to seven couple of members, with Mr. Geo. Hill, M. F. H. and, President; Mr. J. Howard Lewis, Vice-President; Mr. Geo. Lewis, Treasurer, and Mr. Samuel Miller, Secretary. It has gradually increased in size until there are now about two score and six.

On the Saturday night on or before each full moon, the members meet at the Rose Tree, where Benny has a turkey or a six weeks' pig roasted, as only a fox hunting Quaker can roast. After supper the club attends to what business there is, and the "celera" intendent upon men meeting for sport and as fellow fox hunters, the reputed most brotherly race of men existing. During the season, *i. e.*, from November to the middle of March, the hounds hunt on Mondays, Thursdays and Saturdays, and usually a fourth day is added. The present officers are: Mr. George Hill, President and M. F. H.; Mr. Henry Saulnier, Vice-President, and Mr. Corlies the efficient Treasurer and Secretary, who is much better at doing two men's work than our two officers were formerly at doing none at all. Among our best riders I may mention Mr. Henry Saulnier and Mr. J. Howard Lewis, both over three score years of age, who sit on a horse as gracefully and lightly as any younger man; and, although they do not show the ardor to speed a horse when Reynard first breaks cover, you may be sure to see them well on to the hounds when more than half the field are scattered over the country, stopping every one they meet with, "Say, Mister, have you seen anything of the hounds?" Mr. Hill is one of the sure riders who, however badly out he may be, knows by instinct where he can best bring in the tail hounds and puppies. Mr. Fairman Rogers is sure to be gracefully riding to the front, without any apparent exertion, on Josephine or his sorrel mare, and in close company you see Mr. Sam Miller, riding, with his saddle, a full fourteen stone and a half. Very possibly his shoulders are muddy, but he is a poor rider who don't muddy himself occasionally. For a hard rider we are best represented by Mr. Sam Lewis, who, after hunting for over forty years, cannot see why some men complain of a "horse being hard to hold;" he never saw such a one, but only wants a good "Ash plant." Mr. ——— Lewis (but it is unnecessary to mention first name, for all Lewises are either good or hard riders). Dr. Bray and Mr. Robinson are also men who have no idea of the comparative height of fences or the value of necks. The farmers through the county, with but a few exceptions, are generous and hospitable to fox hunters, and many of them hunting themselves, they will protect the foxes. At present I know of several bitch foxes with pups, who are fed from the farmers' kitchens. Mr. Jessie Hickman, M. F. H., Thornbury; Mr. Jeff Shaner, M. F. H., Westchester, and Mr. Pratt Bishop, M. F. H., Edgemont, are honorary members, of the Rose Tree, and an honor they are. Two of them have kept and hunted hounds for half a century. The hounds have just been heavily drafted, leaving none but those with whose noses, tongues and running no one but a professional grumbler could find fault. The hounds we keep are as follows:

Hunter, from Centreville stock; Blue Beard, from Welsh Mountain stock; Chil, Mingo—Fanny; Mose, Hess' Piper—Flora; Leader, Drummer, Chaser, Moore's Drum—Rodger's Lucy; Spot, Pearce's—Vanity; Whitie, Joe, Rattler—Vanity; Dexter, Drummer—Fanny; Dan, from Reiper's kennel; Trailer, Sounder—Flora; Tuck, Mercury, Mingo—Juno; Fashion, Sounder—Flora; Lady, Slasher—Flora; Juno, Mahony's—Vanity; Doxy S., Wallace—Vanity; Hornet S., from Yerkes kennel; Nora S., Mingo—Fanny; Gipsy, Dea; S., Rattler—Vanity; Minerva, Nip, Fanny, Mingo—Juno Dido, from Maryland.

BALTIMORE BENCH SHOW OF DOGS.

LIST OF SPECIAL PRIZES.

Class 42—Best Native Setter Dog or Bitch, any strain—A fine double-barreled breech-loading shot-gun in case, complete, manufactured and presented by Alexander McComas, dealer in sportsman's goods, Baltimore. Value, $200.

Class 43—Best Imported Setter Dog, any strain—$25. Bitch, any strain—$25.

Class 44—Best Pointer Dog, imported or native, any weight—$25. Bitch—$25.

Class 45—Best Brace English Setters, imported or native—A fine shooting suit, presented by Henry Depkin, Tailor, Baltimore. Value, $50.

Class 46—Best Brace Irish Setters, imported or native—A fine moleskin shooting suit, presented by Rosenfield Bros. & Co., Clothiers. Value, $35.

Class 47—Best Brace Gordon Setters, imported or native—A corduroy shooting suit, presented by F. L. Sheld on, Newark, N. J. Value, $28.

Class 48—Best Brace Pointers, imported or native, any weight—A magnificent cartridge belt, with solid silver buckle, handsomely engraved with the heads of two noted dogs and strings of game, also bearing monogram of B. K. C. Value, $60.

Class 49—Best Brace Native Setters—A Colt's new model revolver, gold mounted, ivory handle, in case, presented by Edward Melchoir, Baltimore. Value, $35.

Class 50—Best Imported English Setter Stud Dog, to be shown with two of his get—A handsome oil painting—game piece—presented by Don Forster, artist. Value, $50.

Class 51—Best Native English Setter Stud Dog, to be shown with two of his get—A handsome oil painting—game piece—presented by Reuben Johnston, artist. Value, $50. Also frame for same, presented by Myers & Hedian, Baltimore. Value, $18

Class 52—Best Irish Setter Stud Dog, imported or native, to be shown with two of his get—Two beautiful landscapes, by Way, presented by a member of the club. Value, $60.

Class 53—Best Gordon Setter Stud Dog, imported or native, to be shown with two of his get—A silver water pitcher and waiter, presented by Canfield Bro. & Co., Baltimore. Value, $25.

Class 54—Best Pointer Stud Dog, any weight—A silver cup, presented by Trimble & Kleibacker, gun dealers, Baltimore. Value $75.

Class 55—Best Native English Setter Brood Bitch, to be shown, with two of her progeny—A silver wine cooler, presented by Geo. W. Webb Jeweler, Baltimore. Value, $25.

Class 56—Best Imported English Setter Brood Bitch, to be shown with two of her progeny—A subscription to "Upland Game Birds." Value, $25.

Class 57—Best Irish Setter Brood Bitch, imported or native, to be shown with two of her progeny—A shooting suit, presented by N. Walker & Co., clothiers, Baltimore. Value, $10.

Class 58—Best Gordon Setter Brood Bitch, imported or native, to be shown with two of her progeny—A splendid hunting coat, presented by H. H. Lucke & Sons, tailors, Baltimore. Value, $40.

Class 59—Best Pointer Brood Bitch, any weight, to be shown with two of her progeny—A magazine revolver, gold mounted, handsomely engraved, with pearl handle, with one hundred cartridges, presented by E. Remington & Sons. Value, $25.

Class 60—Best Native English Setter Puppy, dog or bitch, under 12 months of age—A pair of gunning boots, presented by Geo. S. Clogg, boot and shoe maker, Baltimore. Value, $18.

Class 61—Best Imported English Setter Puppy, dog or bitch, under 12 months of age—A fine field glass, presented by G. T. Sadtler & Sons, opticians, Baltimore. Value, $20.

Class 62—Best Gordon Setter Puppy, dog or bitch, under 12 months of age—Half dozen fine shirts, presented by Wm. P. Towles & Bro., gents' furnishing goods, Baltimore. Value, $18.

Class 63—Best Irish Setter Puppy, dog or bitch, under 12 months of age—Half dozen fine shirts, presented by R. Adams, manufacturer of shirts, Baltimore. Value, $18.

Class 64—Best Pointer Puppy, dog or bitch, under 12 months of age—A glass-ball trap and one barrel of glass balls, presented by A. H. Bogardus. Value, $15.

Class 65—Best Collection of Foxhounds, not less than two couple—A saddle, presented by J. D. Hammond, saddler, Baltimore. Value, $20. Also, one riding bridle, presented by H. H. McNally & Co., Baltimore. Value, $10.

Class 66—Best Couple of Foxhounds—A saddle, presented by J. H. Boyd, saddler, Baltimore. Value, $35. Also, a riding bridle, presented by H. W. Herman, Baltimore. Value, $15. For the second best couple, a pair of riding boots, presented by Buck, Heflebower & Near, Baltimore. Value, $18. For the third best couple, a pair of riding pants, presented by Roberts & Co., tailors, Baltimore. Value, $15.

Class 67—Best Couple Beagles—A nickel-plated revolver, in case, presented by Phillips & Davis, Baltimore. Value, $20.

Class 68—Best Chesapeake Bay Dog—A complete rubber suit, presented by Towner, Landstreet & Co., dealers in rubber goods, Baltimore. Value, $25.

Class 69—Best Chesapeake Bay Bitch—A complete rubber suit, presented by the Goodyear Rubber Co., Baltimore. Value, $25.

Class 70—Best Chesapeake Bay Dog or Bitch Puppy, under 12 months of age—Two pairs fleece-lined ducking stockings, presented by J. P. Hartman & Son, Baltimore. Value, $10. Also, a silver cup, presented by Chas. W. Hamill & Co. Value, $10.

Class 71—Best Dachshunde, dog or bitch—A case of Hock wine, presented by Thos. A. Agnew & Co., Baltimore. Value, $10.

Class 72—Best Fox Terrier, dog or bitch—A parlor rifle, presented by C. H. Schumacher, Baltimore. Value, $10.

Class 73—Best Scotch Terrier, dog or bitch—A case of wine, presented by May & Fairall, grocers, Baltimore. Value, $18.

Class 74—Best Skye Terrier, dog or bitch—An album, presented by R. Walzl, Baltimore. Value, $5. Also one satchel, presented by R. Lawson & Co., Baltimore. Value, $10.

Class 75—Best Black and Tan Terrier, dog or bitch, any weight—Cash, $10.

Class 76—Best Pug, dog or bitch—Twenty-four bottles "Grand Duchess Cologne," presented by W. H. Read, Baltimore. Value $6. Also a silver cake basket, presented by Shirley & Son, Baltimore. Value, $10.

Class 77—Best Shepherd or Collie Dog or Bitch, rough or smooth—One pair silver cake baskets, presented by S. Child & Son, Baltimore. Value, $20. Also one album, presented by R. Walzl, Baltimore. Value, $5.

Class 78—Best Rough Shepherd or Collie Dog or Bitch—A cup, presented by Dr. J. W. Dorney, East New Market, Md. Value, $10.

Class 79—Best Chesapeake Bay Dog or Bitch—Hazard's Powder presented by D. J. Foley, Bro. & Co. Value, $20.

Class 80—Best Chesapeake Bay Dog or Bitch—8 bags shot, 25 pounds each, presented by Merchants' Shot Tower, Baltimore; 8 bags chilled shot, 5 pounds each, presented by Tatham Bros., N.Y. Value, $25.

Class 81—Best English Setter, imported or native, dog or bitch—8 bags shot, 25 pounds each, presented by Merchants' Shot Tower, Baltimore; 8 bags chilled shot, 5 pounds each, presented by Tatham Bros., N. Y. Value, $25.

Class 82—Best Irish Setter, imported or native, dog or bitch—8 bags shot, 25 pounds each, presented by Merchants' Shot Tower, Baltimore; 8 bags chilled shot, 5 pounds each, presented by Tatham Bros., N. Y. Value, $25.

Class 83—Best Gordon Setter, imported or native, dog or bitch—8 bags shot, 25 pounds each, presented by Merchants' Shot Tower, Baltimore; 8 bags chilled shot, 5 pounds each, presented by Tatham Bros., N. Y. Value, $25.

Class 84—Best Pointer, imported or native, dog or bitch—8 bags shot, 25 pounds each, presented by Merchants' Shot Tower, Baltimore; 8 bags chilled shot, 5 pounds each, presented by Tatham Bros., N. Y. Value, $25.

Class 85—Best Native English Setter Dog or Bitch—Cash, presented by Col. Chas. P. Montague, President of the Society for the Prevention of Cruelty to Animals, $25.

Class 86—Best Pointer or Setter Dog or Bitch, imported or native—A long-range rifle, presented by Clark & Snyder, Baltimore. Value, $75.

Class 87—Best Chesapeake Bay Dog or Bitch, short-haired—A cup, presented by Clarke & Snyder, Baltimore. Value, $15.

Any additional special prizes will be published in the sporting papers. The entrance fee for special prizes will be $3, except in cases where the special is under $20, when the entrance fee will be $1. In judging stud dogs and brood bitches, their progeny will alone be considered. CHAS. LINCOLN, Sup't, P. O. Box 767.

Show takes place April 22d, 24th, 25th and 26th.

BALTIMORE BENCH SHOW.—*Baltimore, April 7.*—Since my last letter the following entries of first-class stock have been made: S. R. Dillie, Lake City, Mich., whole kennel, including the celebrated dog, Ranger; L. H. Smith, Canada, will bring his entire kennel, including Paris and Lester (Mr. Smith is the breeder of Gladstone, the winner of the Nashville field prize last year, and also winner of the four first prizes at the St. Louis Exhibition); Arnold Burges, of Hillsdale, Michigan, will enter Rufus, Rob Roy, and Queen Mab; the St. Louis Club have entered their entire kennel, including the celebrated Irish setters, Elcho II., Berkeley, Duck, Erin and Sting II.; R. C. Sterling will enter his famous pointer Sleaford, winner of the first prize at Birmingham, England; also, Bow, the winner of the first prize at many of the principal English bench shows. THAYMOON.

ADDITIONAL PRIZES.—Mr. L. R. Cassard, the Secy. of the Baltimore Kennel Club, informs us that the Messrs. Tiffany & Co., New York, donate a cup, the class to which it is assigned will be announced next week. Messrs. Parker Bros. give a fine breech-loading gun, value $125, for the best kennel of Gordon setters. The entries for the above special will not close until the 20th.

NEW YORK BENCH SHOW.

PREMIUM LIST OF THE SECOND ANNUAL BENCH SHOW OF DOGS, UNDER THE AUSPICES OF THE WESTMINSTER KENNEL CLUB, GILMORE'S GARDEN, MAY 14, 15, 16, 17.

Class 1—Mastiffs—Dogs—Best, $25; second, $15; third, silver medal.

Class 2—Mastiffs—Bitches—Best, $25; second, $15; third, silver medal.

Class 3—Rough-coated St. Bernard Dogs—Best, $25; second, $15; third, silver medal.

Class 4—Rough-coated St. Bernard Bitches—Best, $25; second, $15; third, silver medal.

Class 5—Smooth-coated St. Bernard Dogs—Best, $25; second, $15; third, silver medal.

Class 6—Smooth-coated St. Bernard Bitches—Best, $25; second, $15; third, silver medal.

Class 7—Newfoundland Dogs and Bitches—Best, $20; second, $10; third, silver medal.

Class 8—Siberian or Ulm Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 9—Bloodhounds, Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 10—Greyhounds, Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 11—Deerhounds, Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 12—Champion Pointers, over 50 lbs—Dogs—See Regulation No. IX—Best, $60.

Class 13—Champion Pointers, over 50 lbs—Dogs—See Regulation No. IX—Best, $60.

Class 14—Pointers, over 50 lbs—Dogs—Best, $50; second, $25; third, $15.

Class 15—Pointers, over 50 lbs—Bitches—Best, $50; second, $25; third, $15.

Class 16—Champion Pointers, under 50 lbs—Dogs—See Regulation No. IX—Best, $60.

Class 17—Champion Pointers, under 50 lbs—Bitches—See Regulation No. IX—Best, $60.

Class 18—Pointers, under 50 lbs—Dogs—Best, $50; second, $25; third, $15.

Class 19—Pointers, under 50 lbs—Bitches—Best, $50; second, $25; third, $15.

Class 20—Pointer Puppies, over 6 and under 12 months old—Dogs—Best, $15; second, silver medal.

Class 21—Pointer Puppies, over 6 and under 12 months old—Bitches—Best, $15; second, silver medal.

Class 22—Pointer Puppies, under 6 months—Dogs—Best, $10; second, silver medal.

Class 23—Pointer Puppies, under 6 months—Bitches—Best, $10; second, silver medal.

Class 24—Champion English Setters—Dogs—See Regulation No. IX—Best, $60.

Class 25—Champion English Setters—Bitches—See Regulation No. IX—Best, $60.

Class 26—English Setters—Dogs—Best, $50, second, $25; third, $15.

Class 27—English Setters—Bitches—Best, $50; second, $25; third, $15.

Class 28—English Setter Puppies, over 6 months—Dogs—Best, $15; second, silver medal.

Class 29—English Setter Puppies, over 6 months—Bitches—Best, $15; second, silver medal.

Class 30—English Setter Puppies, under 6 months—Dogs—Best, $10; second, silver medal.

Class 31—English Setter Puppies, under 6 months—Bitches—Best, $10; second, silver medal.

Class 32—White markings will not debar dogs from being entered in Classes 32 to 39—Champion Black and Tan Setters—Dogs—See Regulation No. IX—Best, $60.

Class 33—Champion Black and Tan Setters—Bitches—See Regulation No. IX—Best, $60.

Class 34—Black and Tan Setters—Dogs—Best, $50; second, $25; third, $15.

Class 35—Black and Tan Setters—Bitches—Best, $50; second, $25; third, $15.

Class 36—Black and Tan Setter Puppies, over 6 months—Dogs—Best, $15; second, silver medal.

Class 37—Black and Tan Setter Puppies, over 6 months—Bitches—Best, $15; second, silver medal.

Class 38—Black and Tan Setter Puppies, under 6 months—Dogs—Best, $10; second, silver medal.

Class 39—Black and Tan or Setter Puppies, under 6 months—Bitches—Best, $10; second, silver medal.

Class 40—Champion Red or Red and White Setters—Dogs—See Regulation No. IX—Best, $60.

Class 41—Champion Red or Red and White Setters—Bitches—See Regulation No. IX—Best, $60.

Class 42—Red or Red and White Setters—Dogs—Best, $50; second, $25; third, $15.

Class 43—Red or Red and White Setters—Bitches—Best, $50; second, $25; third, $15.

Class 44—Red or Red and White Setter Puppies, over 6 months—Dogs—Best, $15; second, silver medal.

Class 45—Red or Red and White Setter Puppies, over 6 months—Bitches—Best, $15; second, silver medal.

Class 46—Red or Red and White Setter Puppies, under 6 months—Dogs—Best, $10; second, silver medal.

Class 47—Red or Red and White Setter Puppies, under 6 months—Bitches—Best, $10; second, silver medal.

Class 48—Chesapeake Bay Dogs—Best, $20; second, $10.

Class 49—Chesapeake Bay Bitches—Best, $20; second, $10.

Class 50—Irish Water Spaniels—Dogs—Best, $20; second, $10; third, silver medal.

Class 51—Irish Water Spaniels—Bitches—Best, $20; second, $10; third, silver medal.

Class 52—Retrieving Spaniels, other than pure Irish—Dogs—Best, $20; second, silver medal.

Class 53—Retrieving Spaniels, other than pure Irish—Bitches—Best, $20; second, silver medal.

Class 54—Clumber Spaniels—Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 55—Cocker Spaniels—Dogs—Best, $20; second, $10; third, silver medal.

Class 56—Cocker Spaniels—Bitches—Best, $20; second, $10; third, silver medal.

Class 57—Cocker Spaniels, Puppies, Dogs or Bitches—Best, $10; second, silver medal.

Class 58—Field Spaniels, not otherwise mentioned—Dogs—Best, $20; second, silver medal.

Class 59—Field Spaniels, not otherwise mentioned—Bitches—Best, $20; second, silver medal.

Class 60—Foxhounds, Dogs or Bitches—Best couple, $25; second, $10; third, silver medal.

Class 61—Harriers, Dogs or Bitches—Best couple, $20; second, $10.

Class 62—Beaglee, Dogs or Bitches—Best, $20; second, $15; third, silver medal.

Class 63—Dachshunds—Dogs—Best, $20; second, $10; third, silver medal.

Class 64—Dachshunds—Bitches—Best, $20; second, $10; third, silver medal.

Class 65—Fox Terriers—Dogs—Best, $20; second, $10; third, silver medal.

Class 66—Fox Terriers—Bitches—Best, $20; second, $10; third, silver medal.

Class 67—Fox Terrier Puppies—Dogs—Best, $10; second, silver medal.

Class 68—Fox Terrier Puppies—Bitches—Best, $10; second, silver medal.

Class 69—Collies—Dogs—Best, $15; second, $10; third, silver medal;

Class 70—Collies—Bitches—Best, $15; second, $10; third, silver medal.

Class 71—Collie Puppies—Dog or Bitch—Best, $10; second, silver medal.

Class 72—Dalmatian or Coach Dogs or Bitches—Best, $15; second, silver medal.

Class 73—Bull Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 74—Bull Terriers, Dogs or Bitches—Best, $20; second, $10; third, silver medal.

Class 75—Bull Terrier Puppies, Dogs or Bitches—Best, $10; second, silver medal.

Class 76—Skye Terriers—Dogs—Best, $20; second, silver medal.

Class 77—Skye Terriers—Bitches—Best, $20; second silver medal.

Class 78—Pugs—Dogs—Best, $20; second, $10; third, silver medal.

Class 79—Pugs—Bitches—Best, $20; second, $10; third, silver medal.

Class 80—Pug Puppies, Dogs or Bitches—Best, $10; second, silver medal.

Class 81—Scotch Terriers, Dogs or Bitches—Best, $15; second, silver medal.

Class 82—Black and Tan Terriers, Dogs or Bitches—Best, $15; second, silver medal.

Class 83—Dandy Dinmont Terriers, Dogs or Bitches—Best, $15; second, silver medal.

Class 84—Yorkshire Terriers, blue and tan, over 5 lbs, Dog or Bitch—Best, $20; second, $10; third, silver medal.

Class 85—Yorkshire Terriers, blue and tan, not exceeding 5 lbs, Dog or Bitch—Best, $20; second, $10; third, silver medal.

Class 86—Toy Terriers, other than Yorkshire, blue and tan terriers, Dogs or Bitches—Best, $15; second, silver medal.

Class 87—Blenheim Spaniels, Dogs or Bitches—Best, $15; second, silver medal.

Class 88—King Charles Spaniels, Dogs or Bitches—Best, $15; second, silver medal.

Class 89—Japanese Spaniels, Dogs and Bitches—Best, $10; second, silver medal.

Class 90—Italian Greyhounds, Dogs or Bitches—Best, $15; second, silver medal.

Owing to a want of space, the managers can only receive 940 dogs, and the entries will close as soon as the above number is completed. As this rule will positively be enforced, exhibitors are requested to send in their entries at the earliest possible moment.

—Mr. Chas. Lincoln, Supt. of the coming New York Dog Show at Gilmore's Garden, in May, informs us that his headquarters during the exhibition will be at the Ashland House, on Fourth Avenue, which is within three blocks of the Garden. The Ashland is one of those good houses that are deserving, and the rates are very reasonable, either on the European plan or *table de hote*, and the proprietor is a genial sportsman.

In Regard to Bench Shows.—*Editor Forest and Stream:* The Boston Bench Show of Dogs suggests several matters that are of considerable importance to all breeders of thoroughbred dogs. First comes this question, "How shall the classes be divided in future bench shows?" Have we any right to claim a separate class for native setters or pointers? If we have separate classes for native dogs, is it not a tacit acknowledgement that our pointers and setters are inferior to English pointers or setters? If this is the case, which I for one do not believe, it is high time that we should know just where we stand, and the only way to improve our dogs is to put them in direct competition with other and better dogs of the same breed. If our dogs are equal, or even better, than imported dogs, then there is no reason for any native class, and the sooner it is abolished in all American Bench Shows the better. Let us at once throw down the gauntlet to all the world, and enter our best dogs against the best any other country can produce. By careful breeding of short-horns in this State, it is well-known that English buyers have given enormous prices for stock to go back to the country from which they were originally brought, and this is what will happen before many years are over in regard to sporting dogs. There are many breeders like Mr. Smith, of Strathroy; Mr. Godeffroy, of Guymard, and Mr. Tilly, of Long Island, to say nothing of the various kennel clubs who are making a specialty of setters and pointers, taking every care in selecting the best bitches to breed from, and buying the best native or imported stud dogs. This can have but one result, and that is to produce a class of dogs that are fit to compete for any prize either here or in Europe. Under such circumstances, where is the use then of a native class? There is another matter of minor importance suggested by the Boston show, which would tend very much to increase the interest not only of exhibitors but the outside public, and that is, that during judging, the number of the class being judged should be displayed in a conspicuous manner, and the winners announced in the same way; similar, indeed, to the number of the winning horses at a race-course. This would not only give exhibitors a chance to have their dogs ready for the next class to be judged, but would tend to concentrate the interest of all the visitors on the winning dogs. I would conclude by saying that from experience at the New York and Boston Bench Shows, I would suggest that some other food be supplied for the dogs, as dog biscuits, for those dogs that are not accustomed to them, have the effect of scouring altogether too much. Yours respectfully, John E. J. Grainger.

New York, March 29, 1878.

Art at the Boston Bench Show.—We gave in our last issue but a few words in regard to the really fine collection of pictures which graced the walls of the building in which the Massachusetts Kennel Club held their exhibition. Mr. Walter M. Brackett, who as an artist in fish, has really no equal either at home or abroad, exhibited there his wonderful series of pictures, "The Rise," "The Leap," "The Last Struggle," and "Landed." These four companion pictures are as a poem, the epic, in fact, of the most beautiful of all fish. There is the dash, the boldness of the gamest of fish, as he takes the lure, the swift plunge, the lightning dash of the salmon as he is struck, and, lastly, the quiet repose of the king of fish, as, lustrous like frosted silver with the gleams of the opal, he lies passive on the shore. There are many things to be considered in pictures of this character. Your artist may, if he pleases, portray his subject, as a dead salmon lying recumbent in the fish-dealers' stand, and it may be a good work of still art, but to Mr. Brackett the credit belongs of having caught with his pencil those various phases of life and action in fish with which the angler is so cognizant. Of course, Mr. Brackett is well known for his prowess as a salmon fisherman, or how otherwise could he have drawn and colored these fish? How often must the artist have had printed in his brain the exact similitude of how a salmon leaped for the fly, or how, when he had the hook, with a whirl and plunge, as fast as a rifle shot, as swift as an eagle, he flew with whirring line and rattling reel from the deep pool away down the stream below. We often have endeavored to explain what difference there must necessarily exist in the appreciation of such works of art. Your ichthyologist wants exactly so many spines in dorsal, and if he cannot count them he is not satisfied. But it is the better cognizance of what is natural, idealized by art, which gives the only perfect illusion. Just such capital traits does Mr. Brackett possess. A visit to this artist's *atelier* was a source of great pleasure to us. Here were studies of salmon and trout from far distant streams in Maine or the provinces, which were perfect in drawing and color. The impressions made on visitors when they see such pictures vary so much. Your Philistine *connoisseur*, when he looks at a fine salmon has his digestive organs mostly called into play. "How a slice of such a fellow would taste—say, cooked with green peas." To another of a less physical temperament, it brings the thought of rushing waters, of dripping rocks, of shady forests, fragrant with resinous odors, and the excitement of the long cast, and then the silver ingot, which, like a bolt, springs upward from the dark, silent pool. In the collection were also exhibited two pictures of Mr. A. L. Brackett, a woodcock and partridge, which, for color of plumage and that peculiarly fluffiness of feather, were very excellent. There are numerous painters of dogs in Boston, whose works should be better appreciated in New York. Mr. T. Hinckley, Mr. W. J. Hays and Mr. F. W. Rogers had umerous pictures of dogs of great merit. A study of two setters by Mr. Rogers is a vigorous bit of work, and was especially admired by many exhibitors. Mr. Gaston Fay's "Bull-Dozer" was a clever production of this well-known illustrator.

Discrimination in Scent.—There seems to be little doubt that by the sense of smell alone the dog exercises the faculty of discrimination for which in man that of sight is needed. Who that has hunted much over pointer or setter broken to retrieve has not frequently enjoyed the pleasure of seeing the live bird pointed by a dog, who, while on the point, still held the dead one in his mouth. With the effluvium of the latter streaming up his nostrils he yet detects the propinquity of the former by the scent alone, and yet how similar must be the smell! Some may say the dog has pointed the living bird by sight, but I think not, for most retrievers will seize, or attempt to seize, a bird the moment it is visible. I have seen a dog draw on and point a bevy of quail near the carcass of a dead horse when the stench for rods around was disgustingly offensive, and yet his nose enabled him to distinguish the presence of game. I was hunting once with two well-known physicians of this city, when one of them shot at and wounded a snipe. The dog went to retrieve it; it fluttered on a yard or two beyond him, and he was eagerly bent upon recovering it, when suddenly he turned and pointed a bevy of quail thirty feet distant, leaving the wounded snipe till we had flushed and fired into the former, when, of his own accord, he returned and retrieved it. Most sportsmen who have hunted several kinds of game over one dog and have become familiar with his style, can tell by his action and attitude what game is before him. I would like to hear, through the columns of your valuable paper, if you have not numerous correspondents who agree with me upon this subject.

Charleston, S. C., April, 1878. J. H. H.

Bear Dogs.—Our cognizance of what a bear dog is is that he is a mixed animal, with a good dash of hound and a predominance of bull dog. On the frontier where the offscourings of whites and Indians are found, such a breed of dog exists, made up possibly of a dozen different kinds of animal. They are fairly fast and have no end of courage, and some three to six dogs are used in hunting bruin. Such dogs will go for a bear and fight him regardless of wounds. Now a correspondent of this paper wants some information about dogs proper for tracking bear. Will some of our friends in Maine or in the Provinces give us briefly what they know about bear dogs, and where one or two good ones may be had?

Mississippi Dog Law.—A bill was passed in the Mississippi Legislature, at its last session, making it a felony to steal a dog. This may put a stop to the wholesale dog stealing formerly practiced. Guyon.

For Distemper.—We are always glad to publish the experience of others in their treatment of sick dogs. The fumigation of tar and burnt feathers, mentioned by our correspondent, Mr. G. Lyman Appleton, Bryan Grove, Ga., we can ourselves indorse:

"My dogs—eight hounds, one pointer and a Gordon setter—have had distemper, and I not only have not lost a dog, but only one was seriously sick. I tried this receipt with the above result: When dog is first taken, give one pod of red pepper; this is all. Six of the dogs were young, and I am satisfied from past experience that had it not been for the pepper I should have lost some of them. In two of the worst cases I smoked the dogs with tar and feathers to stimulate discharge from the nose; the others did not require it. Every dog was well in two weeks from attack, coat bright and discharge gone, also cough. I gave the pepper as I would a pill; common red pepper, pod dried. I hope some one will try this and see how it works. I have lost several dogs by distemper, and had one lose all use of one hind-leg, and used many remedies, but was sure of none until now."

The Muirkirk Kennel.—The following-named dogs belong to the Muirkirk (Maryland) Kennel.—[*See advertisement.*

"Ponto, four years, liver, got by Milo, dam Juno; Bragg, lemon and white, own brother to Tell, winner of first premium for native pointers, at New York, May, 1877; Dash, liver and white, whelped Aug., 1877, got by Ponto, out of Ginger; Bob, four years, liver, got by Don, out of Meg. Bitches—Ginger, four years, liver, got by Don, out of Meg; Kate, lemon ticked, one year old, got by Sensation, out of A. Dodge's liver bitch, Dolly; Meg, black, six months old, got by Captain Nicholson's Meg, out of Allen Dodge's Dolly. Ginger whelped, April 1, 1878, nine pups, four liver dogs, one liver and white dog, and four liver bitches.

Fox Hunting.—*Columbia, Tenn., March* 30.—S. M. Matthews and several other gentlemen started a large red fox at dark last night with ten hounds. They kept up the chase all night. Reynard finally gave them the slip by swimming the river; two dogs followed but soon returned. Val.

Maryland Fox Chasing.—The members of the Elkridge Fox Hunting Club and their invited guests, a party of thirty, had a most exciting run in Anne Arundel County, last Saturday. Traymoor.

—Edward Lohman, of New York, claims the names of Erwin and Quail III. for dog and bitch puppies out of his imported Irish setter bitch, Quail II., by Redgauntlet.

Very Good Dogs For Sale.—We call particular attention to an advertisement of the Westminster Kennel Club. This leading kennel, being desirous of making a draft, will sell some of the choicest of their pointer stock. The progeny of so well known a dog as Sensation with Whiskey for dam, ought to be in demand. Any one wishing a dog for the field or to breed ought not to overlook this chance.

A Very Good Pointer.—Mr. E. S. Wanmaker, of Pascack, N. J., the well known breaker, has a remarkably fine pointer puppy, which he offers for sale. As the pedigree of the dog is well known, we should suppose it would find a ready purchaser.

CARD.

The letters received at this office addressed to "T. W. S.," in reply to advertisement offering Stafford for sale, have been lost. If the writers will duplicate their letters they will be promptly attended to. Address "T. W. S., this office.

Game Bag and Gun.

GAME IN SEASON IN APRIL.

Wild ducks, geese, brant, etc.

Game in Market—Retail Prices, Poultry and Game—Game—Canvas back duck, per pair, $1.25; red head ducks, $1.00; brant geese, $1.25; mallard ducks, 75 cents; black ducks, 75; widgeon ducks, 40; broad bill ducks, 50; teal ducks, 40; Wilson snipe, per doz., $1.50; plover, $1.50; bay birds, large and small, 75 cents; wild pigeons, flights, $1.50; stall fed, $2; Philadelphia squabs, $3.00.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25 cents; do., fowls, 18; do., turkeys, 18; do., ducks, 20; do., geese, 15; State and Western chickens, 15; do., turkeys, 15; do., fowls, 12; do., ducks, 16; capons, 40; slips, 30; spring chickens, per pair, $1.50 to $2.00.

New Hampshire—*Warner, April* 8.—For four days it has been cloudy and cool continually. March 14th—Saw purple finch; from 20th to April 1st, ducks, woodcock, peewee, fox sparrow and probably hermit thrushes in the woods, as they usually arive early. April 1st—Cow birds; 5th, heard first frogs. A young collector brought in a very fine specimen of *Bonassa milberti*, and 18 do. *Brephos infans*. We accept these at least as harbingers of warmer days. *P. minor* is reported more than usually abundant, and is cutting antics on earth and in air. 7th—Grass finch. M. C. H.

Wild Pigeons.—Great numbers of wild pigeons are being slaughtered in the vicinity of Petoskey, Mich.

MASSACHUSETTS—*Salem, April* 2.—Among the birds seen the past week have been woodcock; plenty snipe, partridge, robins, bluebirds, song and fox sparrows, eagles, crows. Numerous red-shouldered marsh and fish hawks, black ducks, geese, sheldrake, golden-winged woodpeckers, bluejays, etc. Also have heard of several quail. Shot first snipe last Monday. Some brant were shot last week by the "Monomoy Club" and friends at the Cape. Snipe grounds in fine order. One man has shot some sixty musk rats in Miles River this season. Mr. Eben Gould, of Wenham, one day last week, caught a very fine otter in a trap set in Pleasant Pond Brook. These animals are very rare in our county. Newburyport Grounds in fine order for snipe. Charles River grounds are favorably spoken of. R. L. N.

NEW YORK—*Buffalo, April* 8.—The first snipe killed near the city was shot on the last day of March. The birds have been in the market for several weeks. They are now coming in in ones and twos. Mr. Knapp, of Palmyra, the well-known "pigeon man," is here superintending the building of coops to contain the birds for the coming convention. The "Foresters" are negotiating for the pigeons. Ducks are in the river in some force, with an occasional goose. UNOAS.

LONG ISLAND, *April* 9.—The gunners report few snipe and plenty of wild fowl. They expect good shooting with the first easterly storm. W. H.

NEW JERSEY.—Snipe shooting at Pine Brook is reported fair. Hanover Neck birds very wild, and offer only long shots.

BIG PIECE, ON THE PASSAIC RIVER, N. J.—Considerable duck and geese, and a fair quantity of snipe, but very wild. Messrs. Huber and Elvin made a bag of some thirteen on Friday last. Birds in good condition. Big Piece is quite wet and hard to work over.

PENNSYLVANIA—*Sharon.*—The mild winter here makes prospect for quail and grouse unusually good this season. ELMER.

MARYLAND—*Baltimore, April* 8.—I have just got back from a snipe and duck shooting trip to Spesutie Narrows. Black-head ducks abundant, but snipe very scarce. B. VON KAPF.

TENNESSEE—*Nashville, April* 4.—Jacksnipe plenty. I have heard of several large bags being made. Woodcock unusually scarce this season. J. D. H.

Columbia, March 30.—Few snipe are shot at present in the bottoms around the city; occasionally a duck and woodcock are bagged by some more lucky than the rest. VAL.

FLORIDA—*St. Augustine, April* 4.—Visitors are returning North. Weather quite warm—82 deg. in the shade. Game has been quite plenty. Mr. Clark has been successful in bass fishing, having made many fine takes of 20 pounds. We regret to state that shooting deer continues in the neighborhood of St. Augustine up to April 1. There should be a close season, commencing certainly at the 1st of March, as many does killed here in their flanks their progeny.

MISSISSIPPI—*Corinth, April* 2.—A few squirrels killed within the past week. No turkeys killed yet by any of our crack hunters. Close season commences April 15. ONYON.

GULF CITY GUN CLUB.—The club was organized here (Mobile, Ala.) in the latter part of March with a membership of over thirty, and the following officers: Pres., Capt. Wm. Cottrill; Vice-Pres., Frank Davis; Sec., Dr. T. S. Scales; Treas., Dr. C. C. Sherard; Attorney, Braxton Bragg, Esq.; Executive Committee, Messrs. M. Primo, G. W. Tunstall, O. Farley, E. Carre, C. Burke, L. H. Kennerly, and Dr. Rhett Goode. We look forward to a large increase of game from the protective influence of this club, and consequently much sport next season. Traps and balls have been ordered, and we expect to commence shooting soon. BLACK GEORGE.

ILLINOIS—*Warsaw, April* 5.—Jack snipe are coming, and are found in the upland marshes back from the river bottom. General Oliver Edwards, an ardent sportsman, got forty jack snipe last Friday week ago. Duck are not very plenty. A few flocks of spoon-bills and black jacks are seen on the river daily, and a flock of from a dozen to two of geese or brant are seen passing over going up or down the Mississippi. A. A.

MICHIGAN—*Detroit, April* 7.—J. H. Canniff returned from St. Clair Flats from a three day's shoot with 130 fine ducks. Your correspondent can attest to their fineness, for he had the pleasure of planting his teeth in a couple of them. Alex Witherspoon was down the river on the 4th inst. ducking, and bagged 32. DRUID.

OHIO—*Lancaster, April* 1.—Snipe rode in on the warm gale of Tuesday night, and on Wednesday the shooting in the marshes west of the city was moderately good. Wednesday I "took in" nineteen, Thursday twenty-six and Friday afternoon fourteen and two plover. There has been another change of hyperborean description, however, in the weather, and it will require several days of warm sunshine and wind to make shooting good again. S. G. V. G.

Ashtabula, April 4.—Snipe are plenty, and a few woodcock. There is a shooting club under way here. J. G.

Detroit, April 3.—At the last annual meeting of the North Channel Shooting and Fishing Club the following officers were elected: Pres., W. B. Robinson; Vice-Pres., L. P. Knight; Sec., J. Lathrop; Treas., Wm. A. Butler, Jr.; Directors—J. P. Donaldson, H. C. Penny, Julius Hess, F. A. Baker, Capt. Wm. Kelly.

HONES' POINT CLUB.—The officers of the Hones' Point Hunting and Fishing Club, of Cleveland, O., for the ensuing year are: Pres., L. Smithnight; Vice-Pres., Geo. W. Baker; Sec. and Treas., F. L. Chamberlain; Ex. Com., L. Smithnight, E. J. Cutler, S. M. Eddy, P. W. Rice, Isaac Newton.

MINNESOTA—*Nobles Co.*—Mr. Fulweiler, who lives near Worthington, Minn., has caught since the fur season began 250 "rats," 7 minks, 12 skunks, 8 weasels, 2 badgers and 5 wolves. In 46 shots he killed 42 "rats," 3 ducks and 1 goose. All these were secured within a radius of one and a half miles of his home. The region, by reason of the nature of the subsoil, abounds in lakes, game and fish. R. E. DUCAIGNE.

INDIANA—*Brazil, April* 6.—Snipe-shooting good here. One party of four killed thirty-four, March 6. Another party of two killed twenty, March 10. Another party killed thirty-one, March 27, and two sportsmen killed seventy-six, April 4. Duck-shooting an entire failure. DICK.

Knox, March 30.—Shooting here has been the poorest of any season for years. Ducks and geese scarce. Hunters on the Kankakee report poor sport. Snipe have not made their appearance. Woodcock quite plenty, and can be heard whistling near by every evening. Ruffed grouse plenty, and the prospect of a good crop next year. Pigeons none. Squirrels, with the exception of reds, scarce. KILYI.

NEVADA—*Virginia City, April* 31.—Our country is rather dry, and we have to go a distance for our fishing and shooting; but we do occasionally get in a shot on the side at a deer or bear, and fill our basket to overflowing with trout. CRUCIBLE.

ON THE ST. CLAIR FLATS—*Tronto, March* 30.—Several of the members of the St. Clair Flats Shooting Club are on their preserves making good bags of geese, red head, blue bill, etc. R. M.

RUFFED GROUSE SHOOTING.—*Editor Forest and Stream:* There has been a great ado made about the ruffed grouse being so hard to kill, especially on the wing. Says one writer: "Whiz! bang! Gone out of sight like an arrow!" Another: "They start as if shot from a cannon," and he even goes so far as to dispute Forester's assertion that they, on first taking wing, seem to hang heavily in the air, which I find more or less true. Now, do these writers ever take into consideration the ground the ruffed grouse is hunted on? Very brushy and rough country, isn't it? or around an old deserted orchard or cabin, overgrown with brush. Is it any wonder they get up and out of sight so quickly, with all the brush between you and them? A great many you cannot see it all, yet they are close enough to make you shudder when they rise. It is true a large bag of ruffed grouse is something to be proud of. But why? Because they do not generally go in coveys, and you have to find them one or two at a time, and may not be able to get a shot at them. Take them in the opening and they are not hard to kill; or even in the thicket, unless there are forty-seven bunches of brush before you. Take the easiest bird there is and put it in the same place, and see if it is not hard to kill. It is not the bird but the place wherein it is found that makes the trouble. I think if "Lutron" and "Au Sable" would compare notes they would find it to be rather an exception about the ruffed grouse flying off and falling dead after being struck. Would they not find that they lose a great many more of other birds the same way? Still, I will not say they are the most easily killed birds in existence, yet I do think they are not so hard as some would make them out to be. I do not find much trouble in killing them when I can get a shot. I do not use No. 5 shot, but from No. 8 to 10, never wanting larger than eights. No. 5 chilled shot is as large as I would ask for the hardest of ducks.

Portland, Oregon, Feb. 11, 1878. OCCIDENTAL.

CAPTAIN BOGARDUS.—Captain Bogardus has gone to the West, his home, prior to his visit to England and France some time this summer. Eugene goes with his father abroad. Bogardus will give three exhibitions in Liverpool, London and Paris, breaking 1,000 in eighty minutes. Among Captain Bogardus' engagements is one to shoot at the State Fair of the Agricultural Society of Minnesota, to be held at St. Paul's in September next.

PENETRATION OF CHILLED SHOT.—We have had sent us three sheets of No. 1 tin, penetrated by Messrs. Tatham's improved chilled shot, No. 7. The same number of soft shot traversed one sheet. Distance 100 feet. The action of chilled shot on lead is peculiar, and at once the difference between chilled and soft shot can be seen. The Tatham chilled shot, at 30 yards, inserted themselves in the lead, while the soft shot apparently rebounded, not making much of an indentation.

GAME ON THE ARKANSAS RIVER.

HUTCHINSON, Kansas, April 2, 1878.

EDITOR FOREST AND STREAM:

For some days past I have been in this vicinity and have become interested in the game of this locality. Wishing to go to Denver from Kansas City a few days ago I was advised to go via. the Arkansas River route because of the game, which, it was said, would be seen by the way. Accordingly I took my friend's advice and, reaching the river at this point, I got the first glimpse of the wild geese; not a few hundred, but thousands. A resident of the valley said to me that they did not estimate them by count, but by the acre. The hunters are out after them continually and they are easily brought down as they fly over the land. I noticed several varieties of duck on the river and I was told they are found here all the season, a hint which our Eastern sportsmen can make a note of.

This country abounds in prairie chicken and plover, and during the shooting season I have determined to pay the place a visit. This is my first visit up this valley, and I am not sorry that I took my friend's advice, for the sight of water and game will enliven the way, even if you cannot stop to indulge in the sport; and the distance being no greater by this route than over the mountainous plains and the railroad fare no higher this should have the preference. The buffalo have mostly disappeared north of the Arkansas, but they are still found on the south side. Once in a great while a small herd crosses to the north side, but they are soon killed by the settlers who have taken possession of our old hunting grounds on the plains. The antelope still abounds in the upper Arkansas valley and the juicy steaks are still served at some of the hotels among the foothills of the Rocky Mountains. C.

—Messrs. Holberton & Co., of the Sportsmen's Emporium, 117 Fulton street, N. Y., have published their third annual catalogue. It is a very complete pamphlet of sixty-three pages, containing not only a full list of sportsmen's goods, but also much valuable information. The first section comprises an illustrated list of camping outfits, followed by an interesting chapter on how to camp out; the next, tales of fishing, etc. The article on glass ball shooting has two sets of rules, including Bogardus', and the chapter on archery is particularly interesting and useful to beginners. Archery is rapidly gaining favor in this country, and we hope to see that elegant, healthy pastime in general practice this coming season. Altogether this valuable little book is well worth the nominal price asked for it.—[*See advertisement.*

PIGEON MATCHES.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

PAINE'S PIGEON SHOOTING.—On the 29th of last month, Capt. Bogardus, at Deerfoot Park, L. I., failed in his attempt to kill 85 out of 100 pigeons, double rises, killing only 63. Monday last Mr. Ira A. Paine attempted, at the same place, to kill 75 birds out of 100, 21 yards, 100 yards boundary, making a score of 62, or 13 less than he essayed to kill.

Our correspondent, J. H. Batty, writes: "Mr. Paine succeeded in killing sixty-four birds, though two were not given him. One was said not to have left the ground, which was at least two feet from it, and the aim was said to be above the elbow when the other bird was killed, and scored as missed." The following is the score:

Score—11 10 11 10 10 11 11 01 10 00 10 11 00 01 11 01
11 11 11 11 11 10 10 11 11 10 01 00 10 11 10 10 00 10 10
10 10 01 10 10 11 11 10 10 00 10 11 00 11 10—62.

WOODS VS. WISNER.—The second pigeon match at the grounds of the Brooklyn Gun Club, April 5, resulted in the following score:

	Single.	Double.
Woods	1 0 0 1 1 1 1 1 0—7	11 00 11 01 11 10 11 11 10 11—15—22
Wisner	0 0 1 1 1 0 1 1 0 1—6	11 00 10 11 10 10 11 10 11 01—12—18

STAPLETON SHOOTING CLUB.—*Stapleton, S. I., April* 3.—Regular weekly shoot for champion badge; 30 balls, 18 yards rise; first shot from Bogardus' stationary trap, second from Bogardus' revolving trap and behind a screen; trap pulled at the report of first shot:

W H Bostwick.....11 10 11 11 11 11 11 10 11 11 10 11 11 11 11—27
A Post.....00 11 11 10 10 11 11 11 11 10 11 11 11 11 11—25
W Robinson.....11 11 01 11 10 11 01 00 10 11 11 11 10 10 11—22
M S Tynan.....10 10 11 11 11 11 11 10 10 11 10 01 11 11 10 23
J. W.

PROSPECT GUN CLUB.—Regular weekly shoot last Thursday at Williams' Brooklyn Driving Park on the Bodevard. The match was at 10 pigeons each at 21 yards rise:

A F Apel.....0 1 1 1 1 1 1 1 1 1—9
F W Hansen.....0 0 1 1 1 1 1 0 0 1—6
C Feschland.....1 1 0 1 0 0 1 1 0 1—6

The club is gaining members quite rapidly, and the next shoot will show more contestants.

FOUNTAIN GUN CLUB.—At the club shoot of the Fountain Gun Club, of Brooklyn, April 3, Mr. E. H. Madison became the possessor of the club medal, having won it three times. He headed the list with a clean score of seven birds at twenty-five yards rise. Mr. Madison in all his matches used an E. Hackett choke-bore breech-loader.

JERSEY CITY HEIGHTS GUN CLUB.—Fourth monthly competition for the gold badge; Marion, N. J., April 6; Bogardus' traps and rules:

F M Thomson... 18 yds.....1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1—18
J H Teackle.....18 .....1 0 0 0 1 1 1 1 0 1 0 1 0 1 1 1 1 0 1 1—13
J J Tolley..... 10 .....1 0 0 0 1 1 0 1 1 1 0 0 1 1 1 1 0 1 1 0—12
Geo B Eaton.....16 .....1 1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 0—10
Al Heritage.....19 .....1 0 0 1 0 0 1 1 0 0 1 1 1 1 1 0 1 1 1 1—13
Wm Hughes.....18 .....1 0 1 1 1 0 1 1 1 1 0 1 0 1 0 1 0 0 0 0—12
J B Burdett.....16 .....1 0 1 1 1 0 1 0 1 0 1 1 1 1 1 1 1 1 0 1—15
J A Van Gelder..15 .....0 0 1 0 1 1 1 0 1 0 0 1 1 0 1 0 0 0 0 0— 8
F Cummins.....10 .....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 1—16

A BUFFALO BALL BREAKER.—S. A. Roberts, of the Audubon Club, did some novel shooting the other day. A man stood behind the shooter and threw glass balls with as much velocity as possible, and in any elevation, so that they fell in front of Mr. Roberts. The score made was:

1 1 1 1 1 0 1 1 0 1 0 0 1 0 1 0 0 1—11

PENNSYLVANIA.—*West Chester, March* 25.—Shot by the Amateur Cope Club; 24 balls, 18 yards rise, Pardy trap:

Ben Few.....0 0 1 0 1 0 1 1 1 0 0 0 1 0 1 0 0 1 0 1 0 0 0 1—10
G Supplee.....1 0 0 0 0 0 1 0 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0— 3
John Few.....0 1 0 0 0 1 0 0 0 0 0 0 1 1 1 0 1 0 0 0 1 1 1— 9
Hib Ingram.....0 0 1 1 1 1 0 1 1 1 1 0 1 0 0 1 1 1 1 1 0 1 0 1—16
J G Cope.....1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 0 1 1 0 1 1 1 1—20
F Hoops.....0 0 0 1 0 1 0 1 0 0 1 1 0 0 0 1 1 1 1 1 0 1 0 1—12
T S Cope.....0 0 0 1 0 1 1 1 0 1 1 1 1 1 1 1 0 1 1 0 0 1 1 1—10
Allen Cope.....1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—22
R. FRENCH.

PENNSYLVANIA—*Troutman.*—The following are scores recently made at the Gruber farm, by sportsmen of Troutman and Green; 18 yards, glass balls:

J Thompson.....0 0 1 1 1 1 1 1 1 1—8
C Rowe.....1 1 0 0 1 0 0 0 0 0—3
S H Altice.....0 1 1 0 0 0 1 1 1 1—6
Geo Tadder.....1 1 0 0 0 1 0 0 1 0—4
R McConnel.....0 0 1 1 1 0 1 0 0 0—4
Tadder won third.

Second match:

Thomson.....0 1 0 1 1 1 1—5 Tadder.....0 0 1 1 0 1 0—3
Rowe.....0 1 1 1 1 1 0—5 McConnell.....1 1 1 1 0 1 1—6
Altice.....1 1 1 1 1 1 1—7
Thompson won third.

Third match:

Thompson.....0 1 1 1 1 1 1—6 McMasters.....0 0 0 1 1 1 1—3
Altice.....0 1 1 1 1 1 1—6 McConnell.....1 0 1 1 1 1 0—5
Pringle.....1 0 0 0 0 0 0—1
Altice won first.

Match at double balls:

Altice.....11 10 01 00 11 11 11 11 11 11 11—18
Calkins.....10 11 10 10 11 11 11 01 10 01 11—16
Herrick.....00 11 10 11 11 10 01 11 01 11 11—16
Calkins won second.

SEMPER FELIX CLUB.—Fourth day's shooting for championship; 30 balls; screened trap, and at pullers' option:

H Wright—1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 0 0 1 1 —26.
Dr C T Smith—1 1 1 1 0 0 1 0 1 1 1 1 0 0 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1—23.
Dr W A Wood—1 1 0 1 0 1 1 1 1 0 0 1 1 0 0 0 0 0 1 0 0 0 1 1 1 0 —16.
G. H. S.

HOWELL (MICH.) SHOOTING CLUB.—Glass balls; Bogardus' rules:

R H Ramsey.....1 1 0 1 0 1 1 1 1 1 1 1 0 0 1—11
C G Jewett.....1 1 1 0 0 1 1 1 1 1 1 1 1 1 1—13
Homer Beach.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
B H Rubert.....1 1 0 1 1 0 1 0 0 0 1 1 1 1 1—10
E D Golloway.....1 0 0 1 1 0 1 0 0 0 1 1 1 1 1—11—60
F J See.....0 1 0 1 0 0 0 0 1 1 1 1 0 1 1— 8
E G Angel.....1 0 0 1 1 1 0 1 0 0 0 0 1 0 1 0— 7
E F Milliken.....1 1 1 1 1 0 1 1 1 1 1 1 0 0 0—11
E Fisher.....0 1 0 0 1 0 0 1 1 1 1 1 1 1— 9
H McKinly.....1 0 0 1 1 0 1 1 1 1 1 1 1 1 1—11—46

—A Louisville, Kentucky, correspondent writes that a gentleman of that city (name not given, but undoubtedly the writer himself,) recently killed 66 pigeons out of 72 at double rises, missing only six. This is a most excellent score.

VIRGINIA CITY SHOOTING CLUB.—Quarterly meeting at Virginia City, Nev., March 31; 10 single, 5 double rises. First prize, gold medal and cartridge case; second, shooting coat; third, a dram flask. Score:

Ernesh Schultz	0 1 1 1 1 1 1 1 0 0—7	00 11 11 11 01—7—14
Dr Schnable	1 0 1 1 1 0 1 0 1 0—6	00 10 11 01 11—6—12
Cooroy	1 1 1 1 1 1 0 1 1 1—9	00 10 00 10 10—3—12
Pratt	1 1 1 1 1 1 0 1 1 1—9	10 11 *0 11 00—5—14
McCaully	1 0 1 1 0 1 1 1 1 1—8	00 1* 10 11 10—5—13
Diamond	1 0 1 1 1 1 0 1 1 1—8	11 01 11 11 10—8—16
Kneen	1 1 1 1 1 0 1 0 1 1—8	11 00 11 11 10—7—15
Wm Gibson	1 1 1 1 1 1 1 1 1 1—10	01 11 11 11 00—7—17
Kruiser	1 1 1 1 1 0 1 0 1 1—8	*1 10 00 10 00—4—12
Jackson	0 1 0 1 1 0 1 0 0 0—5	00 10 11 10 00—4—9
Ernest Harris	0 1 1 1 1 1 1 1 1 0—8	10 11 *0 10 11—6—14
Dr Robinson	1 1 1 1 1 1 1 1 1 1—10	11 11 11 00 11—8—18
Hooper	0 0 0 1 1 0 1 1 0 0—5	01 10 11 11 11—7—12
Parker	1 1 1 1 1 1 1 1 0 1—9	11 00 00 01 11—5—14
Dormer	1 1 1 0 0 1 1 0 1 1—7	01 00 11 10 00—4—11
R W Harris	1 1 0 1 1 1 1 1 0 1—8	11 11 11 10 11—9—17
Shoneman	0 0 0 0 * 1 * 0 1 0—2	00 00 10 11 00—3—5
James	0 1 0 0 1 1 1 0 1 0—5	01 00 10 00 00—2—7

Gibson and Harrison tied again on four at 26 yards; shoot off at 31 yards won by Harrison.

New Publications.

We have received from T. B. Peterson & Bros., Philadelphia, "The Rival Belles, or Life in Washington," by J. B. Jones.

THE CADET BUTTON.—A tale of American army life. By Brevet-Captain Frederick Whittaker. New York: Sheldon & Co. Price $1.50.

The American army life of the frontier affords a field for fiction writers which has hitherto unfortunately been appropriated, almost exclusively, by the writers of flash literature. Finding their inspiration in the bottle, their materials in the escapades of red skin savages and equally savage pale face they have surrounded frontier romance with the very repulsive atmosphere of powder, smoke and whisky fumes.

We had war novels. The heart of the nation was in that conflict. We followed imaginary heroes and heroines to the front, went with them through the perils of war and welcomed them back to home and peace as we had never followed characters of fiction before, because in the life there depicted was that of our own real heroes and heroines. But if we except the few short sketches of Miss Woolsen and some of our other popular magazinists there is nothing in current American literature which faithfully represents frontier army life as it is. For this reason, if for no other, we are glad that Captain Whittaker has selected this field for his work. His book aims to picture a higher type of garrison life than commonly finds its way into fiction and must, at least for this, meet the appreciation of the boys in blue.

The "Cadet Button," as those who are at all familiar with West Point must know, is suggestive of any amount of romantic incident, and with what truthfulness the author has depicted the varying fortunes of a soldier's life we must leave for the reader to determine.

The strategy of the Indian scouts in the closing chapters is very neatly conceived and outlined. May the author never find himself in as tight a place.

—Promptly with the first of the month comes to us the *Nuttall Bulletin*, with an unusually attractive list of articles. The *Bulletin* has always been warmly welcomed by us, and its recent increase in size causes a corresponding addition to the satisfaction felt on receiving it.

The April number opens with an article by Dr. T. M. Brewer, entitled "Changes in Our North American Fauna." In this paper, Dr. Brewer brings forward some evidence, showing that three species of birds, *Totanus schropus*, *Larus canus* and *Egialitis hiaticula*, have undoubtedly been taken in North America, and thus deserve a place in our fauna; while *Podiceps cristatus* should be omitted from our lists, as there is no proof that a specimen has ever been taken on this continent, all the references seeming to be based on *Podiceps grisseigena*. Mr. C. Hart Merriam, whose "Review of the Birds of Connecticut" has already been noticed in these columns, contributes some interesting "Remarks on Some of the Birds of Lewis County, Northern New York." This locality is one of unusual ornithological interest from the fact that here the Canadian and Alleghanian faunas meet. Mr. Merriam's notes contain an unusual amount of new facts, and are to be continued. Mr. Brewster continues his "Descriptions of the First Plumage in Various Species of North American Birds," which are a most valuable addition to our knowledge and should be carefully studied by all collectors. In addition to the articles already mentioned we find in this number, "Notes on some of the Birds of Calaveras County, California, and Adjoining Localities," by Mr. Robert Ridgway; "Notes on the Breeding of Hutton's Vireo (*Vireo huttoni*) and the Gray Titmouse (*Lophophanes inornatus*), with a Description of Their Nests and Eggs," by William A. Cooper; "A Description of some Highly Developed Plumages of Birds of New York," by Mr. Edgar A. Mearns; "Notes on *Junco Caniceps* and the Closely Allied Forms," by Dr. Brewer and others.

The Recent Literature in this number is especially interesting, and we would call particular attention to the translation of Dr. Louis Bureau's work, "On the Mouth of the Bill and Palpebral Ornaments in *Fratercula Arctica* at the Close of the Breeding Season." The discoveries of this investigation are of the utmost importance. General Notes are as varied and interesting as usual.

No review can give an idea of the contents of the "Bulletin," which has become a necessity to any one who tries to keep up with the progress of ornithology.

—So much nonsense has been written and published concerning the relations existing between the prairie dog, burrowing owl and rattlesnake, that it is a pleasure to call attention to an accurate and matter-of-fact article on this topic. Such an article, from the pen of Mr. S. W. Williston, appears in the last number of the *American Naturalist*. In it the writer gives the result of several years' experience in the West, and contributes a very competent *resume* of interesting facts. "The Transformation and Habits of the Blisters Beetle (with a plate)," by Prof. C. V. Riley, is an interesting account of a group of insects whose earlier stages of development have been, until recently, quite unknown. It is an extremely valuable contribution to our knowledge of entomology. Other articles in this month's *Naturalist* are, "Traces of Solar Worship in North America," by Edwin A. Barbour; "Rambles of a Botanist in New Mexico," by Edward Lee Greene; "Amorpha Ptotens," by Dr. Joseph Leidy, and several others.

Recent Literature and General Notes contain much that is attractive; in the latter we have a note on the "Nesting of the English Sparrow," "The Occurrence of *Bassaris Astuta* in Oregon," "Notes of Two New Genera of Fresh-water Fishes from North America," and other items of interest.

RANDOM CASTS.—Odds and ends from an angler's notebook. Derby Brothers, 27 Park Place. Price 50 cents. A pleasant sketch of 176 pages, written in a pleasant gossipy style, evidently to beguile a leisure hour. Will be read with pleasure by the author's immediate party and personal friends.

WALLACE'S ADIRONDACK GUIDE.—A new edition of this valued book is announced as forthcoming, the old edition being nearly exhausted. We have two dozen on hand which we will dispose of at reduction. Price $1.50 with complete map of the wilderness.

NEW YORK POST-OFFICE GUIDE.—Strangers who visited the New York Post Office April 1, were all directed to a room on one of the upper floors, known in Post Office parlance as "Eden," and the young ladies there employed held an unwilling April-fools' levee all day. No such gulling could have been perpetrated had the visitor been armed with one of the very complete and perfect Post Office Guides published by Gustav Lauter, 64 Ann st.

THE ROCKY MOUNTAIN TOURIST.—We have received from Mr. W. F. White, Gen. Pass. and Ticket Agt. A. T. and S. F. R. R., Topeka, Kan., a copy of the new "Rocky Mountain Tourist." This is a work of sixty-four pages, full of all practical information and entertaining reading. There are sixteen of Thomas Moran's exquisite drawings, among them his famous reproduction of the Mount of the Holy Cross, his drawings of Grand, Glen, Marble, Knab and Boulder Canyons, Twin Lakes, Teocalli Mountain, etc. Joseph Beard is represented by characteristic hunting sketches, Bisbing by several exceedingly attractive mountain sketches, Lancelot by spirited drawings of the remarkable rock-sculpture on White River, and Henry Worrall by full-page views at Vein Pass and Wagon Wheel Gap, as well as a large number of other very finely executed sketches in different portions of the Western country. Mr. White sends these beautiful books free to all who apply to him for them. We don't understand why he does this, or how he does it, but he does. Send for one.

National Pastimes.

NEW YORK ATHLETIC CLUB.—At the opening handicap games of the season, at the club grounds last Saturday, the first trial heat of the 100 yards race was won by H. Inman in 10 seconds; the second by W. C. Wilmer in 10¼ seconds; the third by J. M. Delaney in 10¾ seconds; the fourth by G. P. Work in 10 1-5 seconds, and the fifth by R. La Montagne; the final heat, G. M. Delaney and G. P. Work came in together, R. La Montagne second. Next was a one-mile walk, with seventeen entries, which was won by H. A. Cohen, of the Manhattan Club. After this was a half-mile run, with eighteen starters. It was won easily by W. R. Whitmore, of the New York Club, in 2m. 16s.

—In a game of Lacrosse between the Ravenswood and New York Clubs, two goals were won by the latter.

NEW YORK RIDING CLUB.—The fifth anniversary of the New York Riding Club was celebrated by a very pleasant exhibition of equestrian skill at Dockrill's Riding Academy. The riders were: Mr. N. Storer, Director; Messrs. A. Bender, P., C. and O. Knauth, A. Schwab, Charles F. Becker, E. Werner, G. F. Eisenmann, E. Kaeppel, A. Schmeisser, A. F. Miller, J. Simon, J. T. Williams and Geo. C. Clausen. The feats were, many of them, difficult, and the exhibition highly creditable to the horsemen.

RACKETS.—Three games of American Rackets were played in Hoboken, March 30, between Oscar Manning, of Philadelphia, and T. B. Meisler and William Punch. The first two games were won by Manning. Score, 21 to 7 and 21 to 12. The third was won by his opponents. Score, 21 to 20.

—The championship games of the New York Racket Club have been postponed to the 15th inst. The contest will begin with games between Mr. O. Adams and Mr. Fred May; Mr. J. C. Allen and Mr. D. Lydig; Mr. J. T. Soutter and Mr. E. Lamontagne, and Mr. G. T. Dixon and Mr. R. S. Thorp.

AMATEUR RACING.—A race of 100 yards was run at the New York Athletic Club's grounds between M. La Montagne and E. J. Wendell for a silver cup. M. La Montagne had three yards start. Wendell won by two yards in 11½s. M. La Montagne, W. Stebbins and S. Burton had a spin of 100 yards. The former won in 13s.

HARRY HILL'S "UNKNOWN."—The man whom Harry Hill thinks can beat O'Leary's time is John Hughes. He is to walk, at Central Park Garden, a time match, to make more than 520 miles in six days.

O'LEARY'S BELT.—O'Leary is to bring his belt to America, and if any one wants it they must come over here and get it. The prizes in the late match have been distributed. O'Leary received $3,750, Vaughan, $1,300, and Brown $525. The other contestants got various smaller sums.

—Professor Stover, of St. Albans, Vt., completed 102 miles in 20h. 42m. 1s., April 3.

"TRAMP, TRAMP."—A ten-mile walking match came off at the Fifth Regiment armory, Baltimore, between members of that regiment, April 2. They finished as follows: Edward Bell, of the drum corps, 2h. 30s.; Taylor Gregg, private Co. C, 2h. 10m. 30s.; Lee Goldsborough, 2h. 18m. 30s.; E. Pennington, 2h. 19m. 20s.; Charles McPherson, Co. B, 2h. 21m. 12s.; Weston Lilley, 2h. 27m.; Joseph Fifer, Co. B, 2h. 28m.; Edward Henry, Co. B, 2h. 28m. 30s., and Charles Bradenbaugh, Co. C, 2h. 34m. 30s.

ST. GEORGE'S CRICKET CLUB.—The club uniform consists of white pants, red and white jackets and red and white caps.

ANOTHER CHAMPIONSHIP WALK.—A thirty-six hours' contest for the long-distance walking championship of America will begin at the American Institute, N. Y., May 10 and 11. The prizes, a magnificent championship belt and $400, which will be divided between the first second and third men. The winner of the belt will hold the trophy subject to challenge.

—John Haydock finished his walk of 100 continuous hours at Nassau Hall, Boston, last Saturday, and then fainted.

EMPIRE GYMNASIUM AND ATHLETIC CLUB.—This is a newly organized association, which will have for its headquarters the gymnasium in Thirty-fourth street, formerly occupied by the Police Athletic Club.

PENINSULA CRICKET CLUB—The officers of the Peninsula Cricket Club, of Detroit, Mich., for the ensuing year are: Pres., George E. Hand; Vice-Pres., R. B. Ridgley; Sec. and Treas., C. B. Calvert; Managing Com., Joseph Taylor, H. G. Habbin, E. C. Borrowman, J. McLoughlin, C. R. Calvert, F. C. Irvine, F. Bamford; Match Com., J. W. Waterman, William Milward, William White.

COACHING.—The Coaching Club will drive, May 4, from this city to Philadelphia, a distance of 95 miles, which will be made in 10 hours and 45 minutes, with nine changes of horses

NATIONAL BASE BALL LEAGUE.—The following schedule was adopted at the meeting of the League, held at Buffalo, April 1: "Chicago opens at the Indianapolis grounds and Milwaukee at the Cincinnati grounds, both on May 1; Cincinnati opens at Milwaukee, and Indianapolis at Chicago, both on May 14; Boston opens at Providence May 1, and Providence at Boston May 4. The Western clubs play three games all round before going East. Chicago and Milwaukee go East together, followed by Cincinnati and Indianapolis.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of his column.

L. G., Pittsburgh, Pa.—No law for crow-blackbirds.

B. P., Pittston.—Copy of Catalogue and form of black entry sent you.

H. W. C., Attleboro.—For chilled shot merits see previous issues of this paper.

F. C., Cleveland.—May is a close season for game. Bears and cats may be shot then, though.

H. H. A., Westminster Hotel.—We send you catalogue and black. It contains full information.

J. W., Boston.—The price of the Orvis perforated reel is $5. Other german silver reels vary from $1 to $10.

SNIPE, Germantown.—For good snipe shooting go and inquire of John Krider, Walnut and Second streets, Phila.

G. H. W., Titusville.—For glass eyes for natural history specimens write to Wallace, 19 North William street, N. Y.

G. H. T., Albany.—The auxiliary barrel is made precisely of the same material, and worked the same as the Winchester rifle barrels.

G. C. W., Canada.—We never guarantee the character of goods advertised by us, but the firm publishing the prints stands very high.

F. P. H., Syracuse.—For guide to New York write to Chas. J. Dillingham, 678 Broadway. Price, 50c. We can send you a map of the city.

M. A. S., Louisville.—Is there any such maker as ——— in Birmingham, England, or is it a fictitious name? Ans. Yes, and a celebrated one.

T. W. F., Rochester.—The killing of woodcock and other migratory birds by unwittingly flying against telegraph wires is of common occurrence.

G. McF., Long Branch.—Is there any way to prevent a cedar fishing boat from checking by the wind and sun? Ans. Would advise a coat of boiled linseed oil.

QUESTIONERS, Phila.—You will find Staunton, Augusta Co., Va., a good initial point for your fishing and hunting expedition. Write to Capt. W. L. Bumgardner, at Staunton.

T. H. M., Crown Point, N. Y.—What can I do for my English foxhound? He froze his foot last January and it does not get well. Ans. Wash regularly in strong salt and water.

C. E. W., Troy, N. Y.—When does season for wild doves open in Virginia? Ans. If by wild doves you mean wild pigeons there is no provision for them in the game laws of Virginia.

J. W., Pittsburgh, Pa.—What is the best time to go fishing for general fishing and gunning on the Jersey shore? Is August, or September a good time? Ans. August and September are excellent.

R. O., Hackettstown, N. J.—Will the Remington revolving rifle take extra long 38 cal. copper cartridges? I have been using the "long," but would use the "extra" if the cylinder will take them. Ans. Yes, perfectly well.

TUCK, Portland.—Will you please give name and price of best works on rifle shooting? I have Wingate's Manual. Ans. We know of nothing better and can advise you of no other sound work. Will be very glad to hear from you.

D. N. A., Fulton, Ill.—Is the ——— a gun that you would recommend to a purchaser? Is the manipulation as good as other maker's? Ans. Excellent gun every way and has some peculiarities of breech-movement which we think very highly of.

ROCKY, Animos City, Col.—Where and at what price can I get Prof. Hayden's reports on ornithology and fur-bearing animals? Ans. Apply to F. V. Hayden, U. S. Geographical Survey, Washington, D. C., or to Dr. Elliott Coues, same address.

ONTARIO, New York.—For snipe go to the Big Piece, N. J. See our game column this number. For ducks keep watch of our game reports from week to week. For glass ball shooting go to the Jersey City Heights Gun Club grounds, at Marion, N. J.

S. W. P., St. Louis.—Have a 10 bore breech-loading gun, 32 inch barrel pistol grip, London, five twist, marked ———. Are any of ——— guns so marked? Ans. Yes, but the single name, though made by the firm indicates that it is not their highest grade.

C. M., Otsego Lake, Mich.—1. Can you inform me if the two-banded U. S. Springfield needle gun 50 cal, 70 grs. is now used by the U. S. regular army? 2. Do you know who keeps such guns for sale and price? Ans. 1. Yes. 2. Messrs. Remington & Son have them. Price, $16.

G. J. B., Volcano, W. Va.—Englehardt's "American Rowing Almanac and Oarsman's Companion" contains a concise treatise on training, besides other matter of interest to you. Waters, Balch & Co. issued a more expensive work in 1871. Price $6.50. Can procure either for you.

TAXIDERMIST, Lebanon, N. H.—Where can I send to get specimens of Canada geese, snow geese and brant in suitable condition for stuffing? I refer to the dead bird, not the dry skin. Ans. Better send to Robbins & Co., Fulton market, New York, or to some dealer in Faneuil market, Boston.

H. W., Georgetown, D. C.—How far from the muzzle of choke-bores does the choke begin? How far modified choke? Ans. Could not give an understandable explanation, as all makers vary so much. It may commence three to five inches from muzzle, or only in the last 1½ to ¾ of an inch.

D., Concord.—1. I have a $65 breech-loading Remington shot-gun, weighs 8 lbs. 14 ozs., 12 bore, barrels 30 inches. Tell me the best load for ordinary shooting and duck shooting? Ans. 1. For ordinary upland shooting 3¼ drs. powder, 1⅛ oz. shot; for ducks, 4 drs. powder, 1¼ oz. shot.

J. B. H.—Please inform me through your paper when weakfish and bass begin to run around New York, Newark Bay and New York Bay? Ans. The best season for weakfish is from middle of June until first of September; striped bass, June first to end of October; sea bass, all summer and early fall.

J. D. M., Ovid, Mich. 1. Will you forward the address of some dealer in taxidermist's supplies? 2. Would Texas be a good locality for a first-class gunsmith to open a shop, one who is used to fine work on breech-loading guns? Ans. 1. A. B. Covert, box 237, Ann Arbor, Michigan; A. M. Decker, 113 Third st., Chicago. 2. Texas offers an excellent opening for a good gunsmith.

W. T., Philadelphia.—My setter dog, 10 months old, never had distemper. As I hunt him he gets wet. When he comes home he seems drowsy. He seems to be passing blood, and strains a good deal. Ans. Give him small doses of castor oil and tandanum; a teaspoonful of the former, and 20 drops of the latter.

A. J. J., N. Y.—1. Do you know of any shooting and fishing at Lake Hopatcong in New Jersey, if so what kinds and how is it? 2. Is a dog by a red Irish out of a Gordon a good dog? Ans. 1. Pickerel, perch and salmon trout are found there. We have had no advices of the sport there this spring. 2. Yes; it will make good a cross.

SHTUT, St. Louis.—One of our customers in Nebraska writes us that he wants the best book to be had on bass and salmon fishing. Could you give us any information on the subject and give price of such a work? Ans. "Halloek's Sportsman's Gazetteer," 900 pp. Price $3. One hundred and eleven pages devoted to fishes.

SMILAX, New Hamburgh.—Will you please give me the address of responsible parties who have yearling trout for sale? What time does the law allow us to angle for black bass in New York State? Ans. H. P. DeGraff, President of the Bowery Bank, will furnish you all the yearlings you want. Black bass fishing allowed May 29.

F. H. S., Rochester.—Dixon Kemp's English work on yacht designing gives ample information on sails, their cut, etc; price $25. "The Yacht Sailor," by Vanderdecken, price $3.75; "Yachts and Yachting," by the same author, price $10.50, and "The Sailing Boat," by Falkard, price $8 50, are all useful books on sailing and managing a yacht.

T. C. H., Philadelphia.—1. I have a setter pup about 4 months old; at what age should I have him broken? 2. Have also taken a piece off tail and it does not seem to heal, what should I put on it? Ans. 1. Summer woodcock and fall shooting will be the time for him. 2. The tail will heal in time if properly cut, if not cut it again properly.

TOP SNAP, Byron, Mass.—1. Please state how the numbers of Curtis & Harvey's powder run in regard to size? For instance, is No. 1 the largest or smallest grain? 2. What would be the right size grain of the above to use in a 10 gauge 32 inch breech-loader? Ans. 1. No. 1 is the finest. The numbers increase in size. 2. Either No. 6 or No. 7. Prefer 7.

W. P. A., Fagundus, Forest Co., Pa.—Do you know of any one that would like to have a pet bear? Is about one year old, weight about 150 pounds; is tame as a kitten, and about as playful. I will take no less than $25, delivered at Truckeyville Station. Ans. An advertisement costing $1 will probably bring a customer. By-laws for rifle club sent as requested.

DEXTER, Albany.—In your "Gazetteer" you say that an able authority will soon give his opinion on the difference in the black and cinnamon bears, or rather, that they are identical. Has he done so? Who is it? Ans. The authority referred to is Dr. Elliott Coues, whose "History of North American Mammals" is in progress. He has not yet treated the bear family.

THICKS, Sandy Spring, Md.—For jackass-rabbits address W. F. Carver, Cheyenne, Wyoming Ter. He deals in wild animals, or did recently. Also, address Chas. E. Aiken, Colorado Springs, and J. P. Lower, Denver, Col. English rabbits are no good for coursing; they are burrowers, and not runners; their habits are much like those of our domestic rabbits.

MILLER, Milford, Wis.—What is first-class pattern for 10 gauge, 10 lb. gun, cylinder, medium choke, or full choke, 4½ drs. powder, 1¼ oz. Tatham's soft shot, 40 yds., 30 in. circle, of Nos. 2, 4, 6, 7 and 8? Ans. For cylinder—No. 2, 42 pellets; No. 4, 60; No. 6, 101; No. 7, 139; No. 8, 187. For medium choke, one-half of counted shot; for full choke, two-thirds of counted shot.

M., High Point, N. Carolina.—I have a setter who for the last three days has acted unwell. Dropping saliva from the mouth, which he holds half open as though it hurt him to close it; eyes rather red and inflamed, and drowsy actions. He is an old dog passed distemper. Ans. Chain up your dog at once. Await further developments. Rabies may commence in way you describe.

R. A. C., Rockland, Maine.—I have a Gordon setter pup 13 months old. She was in heat in December and was kept in close confinement during the time. I see that her teats have milk in them now, they are not very large. Can you explain this? Some say that she ought to be milked. Ought this to be done? Ans. The case is not an unusual one. She ought to be left alone.

C. F. M., Newark.—1. Which is the best part of Kansas for agriculture? 2. What kind of game will I find? what can land be bought for? 3. What is the cheapest gun made by ——, and is it a reliable gun? Ans. 1. For full particulars of Kansas farming lands write to J. D. Brown, Gen. Pass. Agt., M. K. and T. R. R., St. Louis, Mo. 2. Deer, turkeys, ducks, grouse, etc. 3. Fifty dollars, and very reliable.

C. L. S., New Haven, Conn.—While hunting grouse in the latter part of Dec. and first of Jan., although we had a good dog, he could do nothing because the grouse could not be persuaded to come from the trees. Is not this something unusual, especially in a place well hunted? Ans. In wet or threatening weather we have often known grouse to remain in the trees throughout the day. But does our correspondent shoot grouse in January?

H. C., Baltimore.—West Indian and other woods for fishing rods are usually sent to this city on consignment and find sale among the leading rod makers. You may be able to obtain small lots from the latter. The leading makers are J. B. Crook, Conroy, Bissett & Malleson, Fulton street, and Abbey & Imbrie, Maiden Lane. Cork floats are made from the root of the cottonwood tree. Mr. Terhune, to whom we referred you, we find has gone out of the business.

F. L. C., of Hone's Point Club.—I must be in Neilsville, Clark Co., Wis., third Monday in April to attend Circuit Court, and would like to know the best and most likely hunting for shot-gun or rifle? Ans. There is no legitimate shooting in April, except ducks and migratory fowl. As there are plenty of bears and cats, would advise taking a Winchester repeating rifle. Plenty of bass and pickerel in interior waters, with trout in the northern part of the State.

WAUSEON SHOOTING CLUB, Ohio.—1. In off-hand shooting is it proper for the shooter to rest his elbow against any part of his body? 2. A ball strikes the circle between 4 and 5, Creedmoor, so that it cannot be determined that there is any more in the one than in the other circle; what does that count? Ans. 1. There is no objection to the elbow resting against the body, provided the little finger of the left hand is in front of the trigger-guard. 2. It counts to the higher score, and is a 5. We take great pleasure in sending you rules, etc.

C. P. C., Jr.—1. In cleaning a gun, when you have oiled it thoroughly, should you go over it again, and with a dry rag rub the oil off? 2. Are precautions necessary in mixing Dittmar powder with black? 3. What is the best mixture in regard to pattern and penetration for the Dittmar and black powders? Ans. 1. Always rub down with a soft rag after cleaning. 2. and 3. If made uniform, which we suppose it is now, equal bulks of black powder and Dittmar will give the best results. (See F. and S. of Feb. 21 and March 21.)

O. D. H., Urbana, O.—What shall I do for my pup? He is five weeks old, and yesterday morning he appeared to be weak in his front legs, and they would not sustain his weight. I suppose he has sprained his ankle, but it has not swollen any as yet. Is there hope of recovery? He was not born in this condition. I have bandaged and spliutered his legs. What else shall I do? Ans. Give him time and proper nourishment, and he will come round.

G. A. G., Danville, P. Q.—I have a pair of cocker spaniel dog pups, nearly six weeks old. Discovered to-day that one was ruptured, the intestine pressing out about the size of a large English cherry. The pup has always been, and is now, apparently well and healthy, and fond of play. Have separated the pups, and keep the ruptured one in the house, where he is pretty quiet. What shall I do for him? Ans. The operation for hernia can only be performed by a skilled surgeon. No other cure for the dog.

A. B., Manchester.—1. Please inform me in regard to the —— breech-loader. Do they rank as first-class makers? Is the gun they make together, snap-action extension rib patent simplex, independent extraction, rebounding bar locks a first-class gun? 2. What is the price of the first and second quality? 3. Where can I buy the guns? Ans. 1. Yes, a first-class arm in every way and of a celebrated maker for shooting and high finish. 2. Messrs. John P. Moore's Sons, 300 Broadway, N. Y. 3. First grade $300, second $250; but an excellent gun can be bought for $150 to $200.

W. J., Richmond, Va.—In reducing a Creedmoor 200 yard target I find that a one inch bull's eye is proper at 25 yards. Will the margin around the bull's eye, when using an aperture sight, present the same appearance on both targets? Or in other words will the same aperture answer for both bull's eyes—8 inch and 1 inch at the 200 yards and 25 yards? Ans. As a general thing it will, but there are some men's eyes which require a special sight, say with a smaller or larger sight according to the eccentricities of their vision. It might require some experimenting on your part to get it right to suit you.

D. F. E., Strasburg, Va.—1. Is there any way to prevent moccasins from making the feet sweat? 2. A miller some miles below us has placed a high dam across the river without any fishway, thus preventing the bass ascending the river. Can he not be obliged to place a fish way in his dam? Ans. 1. A roomy moccasin should not make your feet sweat. This is, however, in great measure constitutional. Some persons are troubled in this way where others experience no trouble. 2. We know of no law in your State which can help you. Stir up your representatives to enact suitable statutes.

BOUNCE, Augusta, Me.—1. Please give a description of a pointer dog. 2. For what purpose are a cat's so called whiskers? Ans. 1. A pointer is a straight-haired dog, with a keen scent, used for discovering game birds. Will weigh from fifty to seventy pounds. We should think any fellow knew that. 2. Certain animals have such a growth of bristles in order to add to their sense of touch. It is said that a rabbit may be blindfolded and find his way out of a tortuous alley made out of books without throwing down any of them, but when his whiskers are shaved and he is blindfolded he blunders.

J. B. H., Plymouth, N. H.—Would it be asking too much of you to republish an article on dressing flies? I think it was by Thos. Norris, and appeared in F. and S., I think in May '74. You must have his details of readers that it would be new to. Ans. The article referred to occupies fifteen pages of "Halloek's Sportsman's Gazetteer," and is illustrated with diagrams showing how to dress trout and salmon flies. It is too long to reprint in our paper, but parties wishing it can obtain the Gazetteer at this office, or the four numbers of the FOREST AND STREAM which contains it. It contains the most complete instructions yet printed.

H. M. S., Pittsburgh, Pa.—1. I want a gun and am tired of large bores. Can I get as good penetration out of a 7½ pound 14 gauge as out of a 12 gauge same weight? Will pattern also be as good. I want said gun for upland shooting only. 2. What would be proper pattern for such a gun with 3 drs. powder, 1 oz. No. 8 shot, modified choke? Would 175 and 200 be too much at 40 yards, 30 inch circle? 3. Would such a gun handle as well with 31 inch barrels as with 30 inch? Ans. 1. Relatively, taking differences of charge, the 14 produces excellent effects. Of course their being less shot in the diminished load there cannot be, at long distances, as high patterns. It is proportional. 2. 175 would be a good pattern. 3. Thirty inch the proper portion, over that out of balance.

T. A. S., Macon, Mo.—1. What make of gun does Capt. Bogardus use now, since he has laid aside his "old reliable" Scott? 2. Was the Daly gun exhibited at the St. Louis dog show? 3. How long would it take to have a gun made by Scott, Birmingham? 4. Do vents in breech of muzzle-loading shot-guns do any good? 5. I have a muzzle-loader 10 bore 30 inch barrels, 11 pounds. Could I trade it for an $85 Remington second-hand gun? Ans. 1. Capt. Bogardus is still using his "old reliable Scott gun" and will continue until the new one, an exact duplicate of the one he is now using, is received. 2. Yes. 3. It requires from four to six months to have gun made to order by W. & C. Scott & Son. 4. Not thought to be of any use. 5. Could not tell you that.

W. P. S., Indianapolis.—I bought, or traded for, a dog some two weeks ago. She suddenly disappeared, and after a long search, I found her in the hands of a butcher. He says he bought the dog, and I guess he did from what he says. I want you to tell me how I can get her. I bought her first, and he bought my dog. Now, how can I get her with the least trouble? She is a fine dog, and I don't want to lose her. He says that he will let me have her if I will pay him what he paid for her and what she has eaten, but I won't do that. Ans. The butcher must return you your dog, any court of law would make him do it. No one can hold stolen goods. If he has fed your dog that does not entitle him to remuneration for such board. Fairness and justice are all on your side The butcher is the victim of his misfortunes, not of his faults.

J. L. H., Huntingdon, Tenn.—A friend's foxhounds are strangely and fatally afflicted. Four have died within two days. Symptoms—Dogs become restless, then begin to rub side of the head with his fore feet; then comes a violent itching, and he wildly claws his head and appears determined to tear it to pieces; suffering intense. In ten or fifteen minutes he becomes quiet and remains so for ten or twelve minutes, when the same symptoms return, apparently more violent with each successive return, which is kept up at tolerably regular intervals for about twelve hours, when the dog expires in the greatest of agony. Food—Corn bread baked for the purpose. A few days before dying the dogs had eaten a hog which had died with the cholera which seemed to fatten them. General condition previous to attack, good; coat, glossy and fine. What is the matter? Ans. It may be that the dogs have been poisoned through the unhealthy meat, and this is probably the case.

W. E. L., Cincinnati.—1. Can a duck cloth suit be washed without spoiling it? 4. Please give me the charge of shot and powder for a muzzle-loading 12-gauge 7¼ lbs. shot gun? What is considered a good target at 40 yards with such gun? 5. How high should a glass ball be when shot at out of a trap? 6. Did "——" ever write for your paper? 7. Is "D——" an Englishman? Ans. 1. Yes, but not in too hot water, not more than barely tepid. Do not dry in the sun. 2. As to your dog, about May probably. 3. Do not breed pointer, there are enough improved animals to be found at present. No harm in the cross, but it is better to keep the strains separated. 4. 3½ drachms powder, 1¼ of shot, about 280 to 300 according to size of shot. 5. The trick to hit a glass ball is at the moment of apparent rest, at the height of its rise, and about to fall. Distance varies—about 25 feet high is usual. 6. Yes, and is the same person. 7. Think he is.

A. T. F., Oshawa.—1. In the first trial of my Creedmoor Remington rifle I was obliged to use at 600 yards 1 min. and 31 sec., whereas Remington's table of elevation says the elevation is 1 min. and 13 sec. I use 95 grains of F. G. Hazard, Weber's formula, made expressly for the Creedmoor Remington. Is this great difference of elevation owing to the formation of the gun, or is the powder not the proper kind? If not what brand is better? 2. How often can a Remington shell be used without cleaning? and give me a receipt for cleaning. Ans. 1. This greater elevation is owing to the difference in shape of gun with which table was made. Your powder is right as to quality and quantity. 2. Can be used over and over again, but must be cleaned every time. Use warm water in which bi-carbonate of soda has been dissolved. Would advise you to write to the Messrs. Remington who will send you an excellent treatise on rifle shooting, covering the whole subject of shells, rifles, etc.

O. E. S., Bloomfield.—1. How many leaves of a *Harper's Magazine* would be considered good penetration for a fine gun, 7¼ lbs., 12 bore, to break with charge 3¼ drs. powder, 1⅛ oz. No. 6 shot, at 40 yards? Also, how many newspapers folded in a pad 6x9 ins.? 2. Some of your correspondents say small shot require more powder than large. 3. What would you consider correct charge of powder in shooting nine buckshot out of a 7½ lb., 12 choke-bore? Gun first quality, shoots 3½ drs. powder, 1⅛ oz. No. 6 shot, without any disagreeable recoil. Ans. 1. It is impossible for us to give penetration with magazines. We have to give it up, because there is variation, depending on quality of paper. In fact, unless the Denmead pad is used, we can give no opinion. It is something like judging of size, when a man says, "About as big as a bit of chalk." 2. Our correspondents are in error, we think. 3. 4 drs.

C. E. F., Calaveras, Pa.—1. Describe, in a few words, the process of making laminated steel for gun barrels. How do laminated steel barrels differ from Damascus barrels? 2. Will tea lead answer for rifle balls? 3. How can I ascertain how much tin or other alloy the above metal contains? Ans. 1. Laminated barrels are made of what are called "mild steel scraps," such as saw cuttings, old springs; are cleaned and placed for fusion in a furnace. Blooms are made, then these blooms are forged, and, under the hammer, made into rods These rods are bundled, welded, and drawn through a rolling mill. Damascus barrels are made of the finest qualities of iron, and all depends on the twisting, braiding and manipulation of the long filaments of metal. Such convolutions of the wire give the pattern. 2. It will. 3. Lead is insoluble in sulphuric acid, and is soluble in nitric acid; tin is soluble in sulphuric acid, and is insoluble in strong concentrated nitric acid. If lead is wanted, tin can be removed by alkali also.

SUNSCHIRM, Montreal.—Your question, we think, never came to hand in regard to St. Bernards. We hasten to reply. Two styles of St. Bernard's are shown—the rough and the smooth. The rough-coated has the following characteristics: A large dog to weigh as much as 180 lbs., and to stand 34 inches high at the shoulder; head, resembling that of a Newfoundland, but with more crown; ears very little feathered, like those of a mastiff; lips pendulous; eyes very thoughtful; the hair seen, and the red portion of the eye, characteristic; body, massive and muscular; chest wide, deep, with strong loins; legs perfectly straight, this up and down of the leg a strong point; foot, large and flat; dog ought to have deer claws; coat, brindle or tawny, white blaze on the face not out of the way. The smooth-coat is generally of a lighter build, rather narrower at chest, and more leggy. We think that judging St. Bernards in the United States has not been strictly up to the English rules. We are afraid that before many years this superb dog will be lost as to purity, as the monks of the Hospice require his services no longer. It may be worth mentioning that the St. Bernard is slow of growth, some two and a half years must elapse before he matures.

F. M., New York.—1. Where does the authority come from, to call sail-boat made of boards, a "canoe," as the Rob Roy canoe? On the American frontier there are "canoes" and "dug-outs," the former of bark, and the latter a hollowed log, although the last are sometimes spoken of as "log-canoes," or "dug out canoes." 2. In my boyhood, to scull a boat meant to use only one oar at the stern; within the past twenty years the oarsmen apply it to rowing. How can we tell what is meant if the speaker is not an oarsman, and why don't we have racing with a scull proper, i. e., a single oar? 3. Where do the poets in FOREST AND STREAM get their authority for rhyming coyote with note? When I was on the frontier it was pronounced ky-o-te, with accent on the second syllable. Ans. 1. The Rob Roy canoe is not a "sail-boat made of boards," but a boat propelled by a paddle instead of oars. It is the use of the paddle that distinguishes a canoe from a rowboat. The Rob Roy's sail is merely auxiliary. 2. An oar and a scull differ in size. Oars are so large than a man can pull but one, while sculls are so small that a man can pull two at the same time. A boat is rowed by either oars or sculls. Strictly speaking, it is sculled only when a single oar or scull is used at the stern. 3. As to kyote or ky-o-te, the latter with the accent on the penultimate is the proper pronunciation. Our correspondent, "F. M.," who is a poet himself, should understand that the Eastern rhymster, who has never seen a ky-o-te, might write

"On thee I dote,
My fond kyote."

Of course, blandishments lavished on the hyena of the plains may not be strictly true, yet the verse, as he must confess, is highly meritorious. Now, your Western verse-slinger, never sacrificing sense to sound, might smash out something like the following:

"Thou mangy, sneaking ky-o-te,
Thou nasty cuss—thou high old C!"

We invite a few rhymes, if not more than four lines, on ky-o-te, and challenge the poetical "F M" to enter the lists.

FALL RIVER LINE.—The travelling public will learn with pleasure that this favorite line has placed upon the route their magnificent steamer "Providence." She has been thoroughly overhauled, and is now in splendid condition for her season's trips.

ELM CITY AND CONTINENTAL TO NEW HAVEN.—These fine boats, which run every day between the metropolis and the Elm City, are spacious, well fitted up, and admirably managed. Between the two points they go to and fro unceasingly, and keep up the time of arrival with the regularity of a chronometer. Now, that spring and summer are coming, there can be no more pleasant method of traveling. Perhaps there never was a captain more popular than the veteran of the Elm City, who has navagated the Sound, man and boy, for the last forty years.

FOREST AND STREAM ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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*** Any publisher inserting our prospectus as above one time, with brief editorial notice calling attention thereto, and sending marked copy to us, will receive the FOREST AND STREAM for one year.

NEW YORK, THURSDAY, APRIL 11, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager.

S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Thursday, April 11.—Miniature Yacht Race, Boston. Massachusetts Rifle Association: Amateur Series at Walnut Hill. Base Ball: Providence vs. Yale, at New Haven; New Bedford vs. Matesmet, at New Bedford. Running Meeting at Mobile, Ala.

Friday, April 12.—Oxford-Cambridge sports. Running Meeting as above.

Saturday, April 13.—Boston Bicycle Club Run to Arlington; New York Scottish-American Club Games; Oxford-Cambridge Race. Rossmore Rifle Club, at Staten Island. Creedmoor: Sharps Rifle Company Badge, at 11:30 A. M.; *Turf, Field and Farm* Challenge Badge, at 1:30 P. M.; *Spirit of the Times* Medal, at 3 P. M.; Seventh Regt. Rifle Club Match; Irish-American Mid-range Badge; Creedmoor, Jr., Prize Match. Base Ball: Harvard vs. New Bedford, at New Bedford. Running Meeting as above.

Monday, April 15.—English Amateur Athletic Championship Meeting, Empire vs. New York Rifle Clubs. Base Ball: Auburn vs. Picked Nine, at Auburn.

Tuesday, April 16.—Creedmoor, Jr., Prize Match. Auburn vs. Rochester, at Auburn; Harvard vs. New Bedford, at Fall River; Cricket vs. Hornell, at Hornellsville.

Wednesday, April 17.—Manhattan Cricket Club, at Prospect Park. Creedmoor: Ballard Rifle Mid-range Badge, at 1:30 P. M.; Appleton Prize, at 3 P. M. Base Ball: Rochester vs. Utica, at Utica; Auburn vs New Bedford, at Auburn.

ANSWERS TO CORRESPONDENTS.—We answered last week one hundred and thirteen questions of seventy-one correspondents in fifteen States. There were besides these many which we received too late for insertion, and some rejected as silly. The space devoted to this part of our paper is constantly increasing to meet the pressure, and innumerable letters testify to the popularity and value of these columns.

—Capt. Ducaigne promises us copies of some unpublished autograph letters of Henry Wm. Herbert, which we shall frame in memory of the subject and the donor.

WHERE OUR PAPER CIRCULATES.—A Warsaw, Ill., subscriber wonders how the impression has got abroad that the FOREST AND STREAM circulates chiefly at the East, when he finds it all over the Western country. The impression is perhaps a natural one, because our publication office is at the East, but it is altogether erroneous, as a statement which we published last week shows. Leaving out the State of New York, where we are distributed among 300 post-offices, we find that our Eastern circulation, including Canada, embraces 701 post-offices, while our Western circulation reaches 725. It is quite likely, however, that we send more *copies* of our paper to the Eastern offices than we do to the Western, although if the Western clubs keep coming in as they have been doing the past two weeks, they will soon overhaul the East lap, and carry by—that's all.

By the way, our post-office circulation in Pennsylvania was given in our last issue as 61; it should have read 161.

ANOTHER LARGE ADIRONDACK PARK—A MOVEMENT WHICH IS LIKELY TO BE BENEFICIAL.—Dr. W. W. Durant, President of the Adirondack Railway, with Messrs. Cheney and Rosekrans, of Glens Falls, N. Y., own and control about 700,000 acres of land in the choicest part of the Adirondack region, and they have a plan in mind to add enough more land to make 1,000,000 acres, form a club, get a charter, and make an effort to protect the game and fish. Then say to the guides, "You may hunt or fish on this land or these waters as much as you please *in season*. If you hunt or fish out of season, or we hear complaints from the people that you guide into the woods of overcharge for service, or anything else unbecoming a guide that will make the Adirondacks a by-word and reproach, you must seek other fields and pastures new. We'll have none of you." The move is to be for the protection of the game and protection of people who frequent the woods. As some some of the best fishing and hunting is on or in these very woods and waters, it would be for the interest of the guide to do right. It is not the intention to make a park in the sense of Blooming Grove Park, but rather a mutual protection society.

THE ALLIGATOR INDUSTRY.—We know not how many fortunes encased within the hide of the Florida alligator have been permitted to bask in the sun of summer and sleep in the mud of winter. But now that, like the unshapely casket pulled from the sea by the fishermen in the Arabian Nights, this ungainly monster's armor is found to contain gold—or silver—the alligator industry is assuming important proportions. It may be that the "Florida Swamp Crocodile Hide Tanning and Oil Refining Company, Limited" will be in the prime of its power when its northern prototype, the Hudson's Bay Fur Company, shall have become a thing of history. The hides bring seventy-five cents each, and the revenue accruing from the oil adds to the profit. Three men in Louisiana, last winter, killed 9,000, and will soon, we should suppose, retire from the business, and adopt for their family coat of arms an alligator rampant.

GOOD ORANGES TO BAD HOUSES.—Some of our correspondents have informed us that consignments of oranges, forwarded to certain parties in New York, have been reported by the receivers as having been all damaged, and returns for charges have been made. We have been the recipients of quite a number of packages of oranges from Florida this season, and all of the parcels came to hand in prime order. It is our duty to warn our Southern friends to be careful as to whom they ship their goods. It is wiser not to be carried away by flaming and specious advertising circulars. Find out reliable old houses—there are plenty of such—and make consignments only to them. The *Sun* exposes rascals on the consignment lay every week.

NOT SPORT.—Running a horse down at the rate of 100 miles in ten hours at the Prospect Park track, the pounding of a plucky man nearly to death by a superior antagonist, who scarcely received a scratch, and the shooting at an apple on a woman's head in a theatre, missing the apple and killing the woman—these doings are not sport, although so designated in the placard of announcement.

"ANOTHER STATE HEARD FROM."—Last week, in giving the number of towns to which the FOREST AND STREAM AND ROD AND GUN finds its way, the types made us say "Pennsylvania, 61." It should have been "Pennsylvania, 161," which looks better, reads better and pays better.

—In our issue of March 28 we printed an article from Dr. Kenworthy entitled, "Marooning," detailing a coastwise trip in Florida. The Doctor complains, with good reason, that the types made him say "lug a cruise" instead of "lay a course." In one place, where he wrote "eight miles to the east," the printers had it "to the *west*." Such is the bitter fruit which this author is made to pluck from his choicest planting.

—The first illustrated lecture of B. Waterhouse Hawkins, S. D., on Natural History and Art, is delivered at Chickering Hall this evening.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.

New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.

Connecticut State Sportsmen's Association, Hartford, May 15.

Iowa State Sportsmen's Association, Des Moines, May 28.

Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.

National Sportsmen's Association, Wilkesbarre, Pa., June 11

Illinois State Sportsmen's Association, Quincy, June 11.

The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.

Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.

Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President.

Missouri State Sportsmen's Association.

MESSINA QUAIL.

Quite a number of letters having been received by us from clubs, members of which were desirous of importing the Sicilian quail, we have addressed a correspondent in Messina, who has kindly furnished us with the following:

MESSINA, March 21, 1878.

EDITOR FOREST AND STREAM:

Your favor of 2d to hand, in answer to which we beg to give you all information relative to quails. The cost is 5d. each bird. They must be put in proper cages, which cost 12s. 6d. each, containing 100 birds. Feed for every hundred for at least thirty days' passage, about one bag and a half of hempseed, 2s. 15d.; freight for a cage, 2s.; fees to the steward of the steamer to feed them during the passage, 2s. If you wish any birds, please write to me at once, otherwise I cannot be in time, as the season is from the 10th of April to the 10th of May. You would have to deposit the amount of invoice to Messrs. Phelps Bros. & Co., of your city. I am, dear sirs, yours truly, DR. BONANNO.

—The Waltonian Club of New Haven, Conn., offers a reward of fifty dollars for any evidence that will lead to the detection and conviction of any person or persons violating the trout law. All reliable information given to any member or the Secretary of the Waltonian Club, P. O. box 1613, New Haven, Conn., will be immediately placed in the hands of their attorney and suit brought against the offenders forthwith.

NEW YORK ASSOCIATION.—At the monthly meeting last Monday, Senator Alfred Wagstaff, Jr., of the Committee on Game Laws, reported that a bill in the Assembly in relation to the appointment of State Game Constables was progressing favorably. It was proposed to amend the law for the incorporation of associations of all descriptions by inserting the words, "Association for the Protection of Game." Mr. Whitehead drew the attention of the association to the fact that a number of bills providing for the modification of the game laws in the interest of certain localities had been introduced in the Legislature. They were detrimental to the general laws for the protection of game, which had been passed after so much labor, and should be condemned. The following were elected members: District Attorney Benjamin K. Phelps, J. Harson Rhoades, Paul Thebaud, Dr. Frederick G. Winston and Perry Belmont. Mr. Whitehead made a satisfactory report on the condition of the lawsuits in progress. The proposition to establish a club-house and game preserve outside of the city was tabled.

PROTECTION IN KENTUCKY.—Through the energetic President of our State Commission, Mr. Wm. Griffith, of Louisville, and four accomplished Senators, Hon. Henry Bruce, member of State Fish Commission, an appropriation of $3,000 for artificial propagation of fish in Ky., was made in the Legislature. Some wholesome and greatly needed amendments to our State Fish Law, were projected by those enterprizing commissioners, and have been passed, we hope, as seining, netting and *spodging* have been practiced with impunity by many of the don't-care-a-d—n ilk, because an affectionate regard for out-buildings, hay stacks and fine stock restrains riparian farmers from procuring warrants against violators whom they detected. An amendment which will develop violations before Grand Juries will work wonders in the protection of our streams by constraining to observance of the law through fear of the penalty of violation. KENTUCKIAN.

Stamford, Ky.

—The Howell, Mich., Shooting Club have rigidly enforced the game and fish laws and effectually stopped the wholesale spearing of pike and bass in the streams and lakes of that vicinity.

—The Grand Jury of Knox, Ind., have indicted parties for illegal seining.

The Rifle.

MASSACHUSETTS RIFLE ASSOCIATION.—The Massachusetts Rifle Association opened the season April 3, at Walnut Hill range, by a competition in the "shot-gun match," begun last fall. There were seven entries. The following are the scores, which are good for the first meeting:

W H Jackson	800—5 5 4 4 3 5 5 5 5 5 5 5 5 4 5	70
	900—3 5 5 5 5 5 5 4 5 3 5 3 5 4 3	67
	1,000—5 5 5 4 3 4 5 5 5 5 4 3 4 5 5	67—204
A H Hebbard	800—5 5 5 4 5 4 5 5 4 5 5 5 5 5 5	72
	900—5 5 4 5 5 5 4 4 5 5 3 3 4 5 3	65
	1,000—3 3 4 4 4 5 4 5 5 5 5 4 5 5 5	66—20
Salem Wilder	800—5 5 5 2 4 3 3 3 5 5 5 4 4 4 4	61
	900—3 5 5 5 3 5 5 4 5 4 5 5 5 5 5	64
	1,000—5 4 0 5 3 3 5 5 5 3 5 5 5 5 4	62—187
N Washhorn	800—3 4 4 4 4 4 3 4 5 5 2 4 R 3 5	54
	900—4 4 4 5 5 5 5 3 5 5 4 3 4 3 4	63
	1,000—0 5 4 3 5 4 3 4 5 5 5 4 5 5 5	62—179
J S Sumner	800—4 4 4 3 4 5 5 5 5 5 5 4 5 5 5	68
	900—3 5 4 4 5 5 4 5 5 0 3 5 5 4 4	61
	1,000—4 0 0 3 4 2 4 4 4 5 5 3 4 5 4	49—178
C C Hebbard	800—4 5 5 4 5 5 4 5 0 5 5 5 5 3 4	63
	900—4 3 5 4 5 0 4 5 5 4 5 5 4 3 3	59
	1,000—5 5 5 3 3 5 0 4 5 4 5 0 5 0 5	54—177
H Tyler	800—5 3 5 4 3 5 5 5 5 5 3 5 3 5 5	66
	900—5 3 4 4 5 2 5 3 4 5 3 5 4 4 4	60
	1,000—3 3 5 5 5 5 5 0 5 4 R 4 4 0 3	51—177

NEW HAVEN.—On the third the regular monthly meeting of the New Haven Rifle Association took place at the Quin-

nipiac range. Major Stetson carried off both prizes. The following were the scores:

Military Match.

	200 yds.		500 yds.	
J E Stetson	4 4 4 4 3 3 4	—26	4 4 4 4 5 5 4	—30—56
P O'Conner	3 4 4 3 4 4 4	—26	5 2 5 3 4 5 4	—28—54
F J Colvin	4 4 4 3 4 3 4	—26	0 4 3 5 5 5 5	—27—53
S R Smith	4 3 4 3 4 4 4	—27	2 4 5 5 4 0 0	—25—52
F Bronson	3 4 4 4 4 4 4	—27	4 5 5 3 0 4 4	—25—52
A Z Downs, Jr	2 4 3 3 4 4 5	—25	3 2 4 3 4 4 5	—25—50
L O'Brien	4 4 5 5 4 3 3	—28	3 3 3 0 3 5 0	—17—45
W F Smith	0 4 3 4 3 2 3	—19	3 1 4 5 2 3 5	—24—43
S J Fox	3 5 4 4 2 4 3	—25	5 2 2 2 3 3 2	—18—43

All-Comers' Match.

J E Stetson	4 5 4 4 5 5 4 5 5 5	—46
W E Storey	5 5 4 5 5 3 5 4 5 4	—45
Dr A Ruickholtz	4 5 4 5 5 5 5 4 5 3	—45
C Gordon	4 4 5 4 4 4 4 4 4 5	—43
Charles Gerner	4 4 4 3 4 4 4 3 4 5	—39
Frank Tiesing	0 4 4 3 4 4 4 4 3 3	—34

The team from the Second Regiment, which is to contest with the team from the First Regiment for the possession of the trophy won by a joint team from both regiments, in the inter-State match at Creedmoor in 1875, has been decided upon, its composition being as follows: Captain Kennedy, Sergeant Crampton, Privates Whitlock and Smith, Co. A; Corporal Walker, Privates Folsom, Tinkey, Jorey and Nicholas, Co. E; Sergeant Craig, Co. H; Lieut. Lane, Co. I; Sergeants Mix and LaBarnes, and Corporal Keene, Co. K. Of the above named, Sergt. Craig of Co. H, and Corp. Keane of Co. K, will act as reserves, the other twelve being the regular team.

MASSACHUSETTS RIFLE ASSOCIATION.—The competitions in the two unfinished matches of 1877 were resumed this week. Yesterday the long-range match, for a valuable shot-gun and other prizes, was contested, and on Saturday a score in the "no cleaning" match, at 200 and 300 yards, will be shot. On Thursday, April 11, there will occur the first competition at 200 yards in the "Amateur series," limited to those members who did not win first prizes in 1877. On the same day there will be a match at 600 and 900 yards, five shots at each distance. The dates of the spring meeting have been fixed for Wednesday and Thursday, May 8 and 9. On these days there will be six or seven matches, at various distances, the prizes in each match aggregating upward of $100 in value. The official programme will be issued soon.

CONLIN'S GALLERY.—The distribution of prizes for the winter open tournament took place at Conlin's gallery, Saturday. The shooting for two months past was at the ready measurement targets, 110 feet, 22-calibre rifles. Ninety-six marksmen participated, making 400 targets. To the best forty, prizes were awarded. Ten rounds per man were fired, the score being determined by aggregating the distance of the points struck from the centre of the bull's-eye. Mr. Charles E. Blydenburgh, of the long-range team, took first place with the low string of 3 15-16 inches. The prizes, consisting of revolvers, meerschaum pipes and ornaments, valued at $200, were distributed to the winners. The following is the record:

	Inches.		Inches.
C E Blydenburgh	3 15-16	V Daly	6 15-16
D Banks	4 3-8	C Judson	6 5-16
Wm Hayes	4 3-8	L Bird	6 3-8
W M Farrow	4 11-16	C G Zettler	6 3-8
J B Blydenburgh	4 7-8	F O'Dowd	6 7-16
M M Maltby	4 1-8	W H Chaddock	6 7-16
Fred Adler	4 7-8	T Fitz	6 1-2
S W Sibley	4 7-8	C A Cheever	6 1-2
L M Rigga	5	A E Moore	6 1-2
P Fenning	5	J F Murch	6 5-8
Dr Dudley	5 3-16	N B Thurston	6 5-8
M B Engel	5 7-16	F A Dugan	6 13-16
A J Howlett	5 1-2	P Lorillard	7 1-16
M O'Donnell	5 11-16	J P Treackle	7 1-16
F H Holton	5 3-4	H D Blydenburgh	7 1-16
D E Vannett	5 13-16	F Hootten	7 1-8
Jas Ross	5 15-16	E Holtzmann	7 1-4
C H John	6 1-4	F A Greenburgh	7 1-4
F Kessler	6 1-4	A E Long	7 3-8
Jas Shand	6 1-4	H B Leckler	7 7-16

FISHERVILLE.—At a match made between teams of the Fisherville, South Cayuga and Selkirk rifle clubs, seven men in each team, on the 8d of the month, for a field glass, to be won three times, the following was the result. Conditions—Five shots at 200, 400 and 500 yards:

	200 yds.	400 yds.	500 yds.	Total.
Fisherville	123	99	105	327
Selkirk	128	81	116	325
South Cayuga	133	92	86	311

ROSSMOOR RIFLE CLUB.—This club will hold matches on April 13, May 11 and June 8 and 22, July 20, Aug. 17, 31, Sept. 4, for a rifle badge presented by Mr. J. R. LeRoy. Distance, 200 and 300 yards; seven rounds; two sighting shots. Prize to be awarded to the competitor winning it three times (not necessarily consecutively) in any one year. Pool matches will take place on Oct. 12, Nov. 16.

Pool matches—Distance, 200 yards; position, standing; rifle, any; rounds ten, with privilege of two sighting shots. Entrance fee fifty cents. First prize, three-eighths of entrance money; second prize, one-quarter of entrance money; third prize, one-eighth of entrance money. The rifle badge and pool matches are open to the members of the club, and to all members in good standing of any rifle club or association in the world. The latter must bring with them proofs that they are members in good standing of their respective clubs or associations. Rifles to conform strictly with Section II (Rifles), paragraphs 1 and 2, of the regulations of the National Rifle Association, and of the Rossmoor Rifle Club. No previous practice allowed within 15 minutes of a match. In case any competition shall be prevented from any cause, the captain of the club may appoint a day, of which due notice will be given in the local and sporting papers. An officer of the club will be present at all matches, and will have entire charge of the range.

Range Committee—Geo. W. Ellis, C. Alfred Grymes, J. Rutgers LeRoy.

Train boats leave foot of Whitehall street, Staten Island R. R. Ferry, at 9 and 11 A. M. and 1 P. M., connecting with trains at Clifton or third landing for Huguenot Station. Range, eight minutes walk from cars. Fare each way, 25 cents.

SEVENTH REGIMENT RIFLE CLUB.—On Saturday next, at 3 o'clock, there will be a competition for The Rifles. Distance, 200 yards; seven scoring shots, off-band.

CREEDMOOR, JR.—The 100-yards range, at 260 Broadway, offers its patrons another prize match similar to the one which proved so popular last month; $100 in gold will be divided as follows: First prize, $20; second, $15; third, $10; five prizes of $5 each, and ten prizes of $3 each. The match began Saturday, April 6, and will be continued on each succeeding Tuesday and Saturday till completed. The range will be open during the evenings of Tuesday to enable those who cannot compete during the day. Conditions—10 shots, position standing; competitors can enter any number of times, but can take but one prize; entrance $1; 150 entries to fill.

A CORRECTION.—In our last issue we stated that the challenge of the Empire Rifle Club had been accepted by the N. Y. Rifle Club. The secretary informs us that such is not the case.

MEETING OF THE N. R. A.—At their last meeting the special committee on railroad transportation reported that the railroad company would run each day of the meetings trains at twelve o'clock noon, two o'clock and three o'clock in the afternoon, and more if necessary. As to rates of fare, the committee reported that the company would sell packages of 100 tickets at thirty cents each, which was a reduction of five cents from the rate of last year, but these tickets would only be good for members of the association showing their badges of membership and for members of the National Guard appearing in uniform. Major Henry Fulton, of the committee on the selection of the American team, reported, for the committee, progress, and requested that the committee be allowed to add two more to their number, thus making the committee consist of five members. The report was adopted, and Major Holland and Judge Gildersleeve appointed.

A letter having been received from General Ord commending the organization, Col. McKenzie, of the Fourth U. S Cavalry, was elected an honorary member. Mr. Richard Oliver, of New York, offered to the association a silver trophy, worth $100, to be shot for by teams of four men, noncommissioned officers or privates, from every company, troop or battery of the National Guard of this State. Seven shots (no sighting shots) to be allowed; position standing; to be shot for in both spring and fall matches. The offer of Mr. Oliver was accepted. The secretaries of the rifle associations of Ontario and Prince Edward Island notified the board that their associations had as yet taken no action toward the international match. Inspector of Rifle Practice Wingate moved the following:

"*Resolved*, That for the purpose of developing public interest in rifle association with military weapons an international rifle match be announced to take place at the annual prize meeting of this association to be held at Creedmoor in September next to be open to teams from each of the States of the Union, the Provinces of Canada, the kingdom and dependencies of Great Britain and from all other countries, each county having a national guard or militia distinct from the regular army to be entitled to send a separate team to represent each."

The resolution was adopted. Messrs. Frederick S. Young, Lloyd D. Waddel, Robert Johnston, G. Henry Wittbaus and Col. Robert Olyphant, of the Governor's staff, were elected life members of the association. Inspector of Rifle Practice Wingate moved that the convention of riflemen be held at Creedmoor on Friday, May 24, at two o'clock in the afternoon, and Major Henry Fulton moved that a committee be appointed to establish a basis of representation at the National Convention. Major Fulton's motion was carried.

NATIONAL RIFLE ASSOCIATION OF GREAT BRITAIN.—The Secretary of our N. R. A. of America is in receipt of a communication for E. St. John Mildway, declining on the part of the N. R. A. of Great Britain the contest for the Centennial trophy at Creedmoor next September.

FOR THE SCHUETZVEREIN.—We are informed that at the great meeting of the German rifle clubs, to be held on June 16 to the 24, a body of Swiss riflemen, from Sant Gall, will be present, and will compete for prizes. We can promise them a hearty welcome. We are glad to mention that Gen. Dakin has been elected president of the committee of honorary members, and is already actively at work arranging the business of the contest.

MARYLAND RIFLE CLUB.—The following gentlemen were elected officers of this popular rifle club, at a meeting held April 2: President, Dr. W. H. Keener; Vice-President, Joseph S. Smith; Secretary, A. V. Canfield, Jr.; Treasurer, W. B. Oliver. Executive Committee, J. J. Turner, Jr., L. Warrington, Edward Melchoir, H. B. Coulsen and Augustus Roeder. Rifle shooting will take place every Wednesday and Saturday at Patapsco range. The range will be opened for the season of 1878 on Saturday, April 13. At 4 P. M. the sixth monthly competition for the Remington revolver will take place. Glass ball shooting will be introduced on the range this season. A. V. CANFIELD, JR., Sec.

CALIFORNIA—*San Francisco, March* 27.—Practice for the regimental team for the match which is to take place at San Bruno on the 11th of April, has already commenced. Competitors are in charge of Capt. H. J. Burns of the Sumners, and Lieutenant A. Close of the Nationals. Shooting, 200 yards, off-band. The following is the first practice score made:

Lieutenant J Robertson	4 5 5 5 5 4 4 5 5 4	—40
	4 5 5 4 3 4 4 5 5 5	—44—90
W F Leeman	5 4 5 4 4 4 4 4 4 4	—42
	4 4 5 5 4 4 5 4 5 4	—44—86
Sergt C P Le Breton	4 4 5 5 4 4 4 4 4 4	—42
	5 5 4 5 4 5 3 4 3 5	—43—85
M A McElhinny	4 5 4 4 5 4 5 5 4 3	—43
	4 4 4 4 4 4 4 4 4 4	—40—83
J W Maher	4 4 4 4 4 5 4 4 4 4	—41
	4 5 5 4 5 4 3 4 4 4	—42—83
Captain H J Burns	4 4 4 4 4 4 4 3 5 5	—41
	4 4 4 5 4 4 4 4 4 4	—41—82
Lieut A Close	4 3 4 4 4 4 4 4 4 5	—40
	4 5 4 4 5 4 4 4 3 5	—42—82
J Biggy	3 5 5 4 4 4 4 4 4 4	—41
	4 4 4 4 4 3 4 5 5 4	—41—82
H T Sime	4 3 4 4 4 5 4 4 3 4	—40
	4 4 5 5 4 4 5 3 4 4	—42—82
T E Carson	3 4 4 4 5 4 4 4 4 5	—41
	4 4 4 4 4 4 4 4 4 4	—40—81
J E Klein	4 4 5 4 3 4 4 5 4 5	—42
	2 5 4 4 4 4 4 4 4 4	—39—81
O M Shaff	4 3 4 3 4 4 4 5 4 4	—39
	4 4 4 5 4 5 4 2 4 4	—40—79
A H Hentz	4 4 4 4 4 4 4 4 4 4	—40
	4 3 4 4 4 4 4 4 4 4	—39—79
J S Duncan	3 3 4 4 4 3 4 4 5 4	—38
	3 4 4 4 5 4 4 4 3 4	—39—77
T Moeller	4 4 4 4 4 4 3 4 4 3	—38
	4 3 4 4 3 5 4 5 4 2	—38—76
J S Campbell	3 3 4 4 3 3 3 5 4 4	—36
	4 5 4 4 2 5 4 3 4 4	—39—75
C B Preble	3 4 3 4 3 4 4 4 4 4	—37
	4 3 4 4 3 2 4 4 4 3	—35—72
H B Wilson	4 4 3 3 3 3 2 4 4 4	3—34
	4 2 4 2 3 0 4 3 3 4	—29—63
Lieut L R Townsend	4 3 5 2 3 0 0 2 4 3	—26
	3 4 3 5 4 4 4 2 0 4	—33—59

—A friendly match between Messrs. Strecker and Farrow took place at Schuetzen Park, Alameda, the first-named gentleman using a California-made muzzle-loading rifle, made by A. Browning, and Mr. Farrow firing with a Ballard breech-loader. Mr. Strecker won. Fifty shots each were fired at a target 36 inches in diameter, divided into 25 three-quarter inch rings—the bull's-eye counting 25 points—allowing of a possible 1,250. The distance was 200 yards; position, off-hand:

Strecker.....1,009 Farrow.....971

String measurement gives Mr. Strecker 204¾ inches, and Mr. Farrow 243 inches.

SACRAMENTO PISTOL TEAM.—The team held their usual weekly match on Wednesday evening, March 20. Range, 60 feet; circular target, 10½ inches in diameter, with rings counting from 1 to 11, and bull's-eye, one inch in diameter, counting 12. Out of a possible 120, the following scores were made:

Atkinson	12	10	10	10	7	9	9	8	8	9—92
Bullard	10	10	8	8	2	12	8	8	8	8—77
Brewer	12	11	11	11	10	12	12	11	9	7—106
Byers	11	11	11	11	7	11	10	10	10	11—102
Farrer	12	10	10	9	7	11	9	9	9	6—92
Gerber, H	5	10	9	8	8	11	10	8	8	6—83
Gerber, W E	6	10	10	11	5	1	6	10	11	7—77
Grimtts	12	12	10	9	10	9	11	11	11	12—107
Kane	12	11	11	10	9	11	9	8	7	12—100

DR. CARVER.—A correspondent having asked us about the pull of Dr. Carver's rifle, a gentleman of Virginia City very kindly writes us as follows: "Dr. Carver does not use a set trigger nor a hair trigger. His Winchesters pull off at about three pounds. His Ballard, .22 cal., pulls about four. Yesterday he shot glass balls with an army musket, .45 cal., six and a half pound pull; a gun he never saw before. It seems to make no difference with his shooting whether a gun pulls three pounds or ten pounds, so long as it pulls hard on the trigger, he claiming such steadies him in sighting. Very respectfully, W. A. PERKINS.

"*Virginia, Nev., March* 30, 1878."

MINNESOTA—*Minneapolis.*—In the match reported in your issue of March 28, Quam and Slotten, who tied on the very fine score of 49 out of 50, made a second tie on one shot apiece, each making a bull's-eye; and on the third shoot off, at 200 yards, Quam won, making a score of 36 to 35. M. B. R.

THE DENNISON TARGETS.—These targets are rapidly coming into use. The autumn shooting of the Massachusetts military at Framingham have used no other for the last two years. So with the "Independent Cadets" and other organizations of the kind too numerous to mention. The targets made by Messrs. Dennison & Co., of Boston, are of the same class of stock that is used in the construction of paper boats, and if properly put on to the target board will last the season through if required to.

ALL ABOUT EXPRESS RIFLES.

EDITOR FOREST AND STREAM:

In reference to the questions asked by J. N. B., in your issue of the 28th of February, with reference to the trajectory of the Express rifle, I would say that from an experience of seven years' big game shooting, using three Express rifles of different calibres, I have ascertained that the point-blank range of the .45 Express is 100 yards; that of the .50 Express 140 yards, and that of the .577 120 yards, requiring no raising of sights whatsoever up to those distances; beyond this a full front sight is sufficient up to 200 yards, the range of an Express bullet. If the Express be required for longer ranges, a reduced charge must be used and a solid bull, and then of course it ceases to be an Express. The .45 uses a charge of 4½ drachms, the .50 a charge of 5 drachms, and the .57 a charge of 6 drachms, without any unpleasant recoil. So much so that I have run buffalo with an Express rifle, and used it with one hand. The 12-bore Express, mentioned in the issue I have referred to, is, in reality, not an Express at all, but simply one of the large rifles used in India before Express rifles were invented; indeed, it does not carry as much powder as they did, seven drachms having frequently been used in a 12-bore rifle. If it were a true Express it would require a light hollow bullet, and from 14 to 16 drachms of powder, and must therefore weigh some twenty pounds for this reason. No Express is made of larger calibre than .577, the bore of the Sneider rifle. The very fact of its using a round ball is sufficient to prove its not being an Express, as a round ball, having a very slight hold on the grooves, requires a very slight twist in the rifling, or it will strip and lose all accuracy with a large charge, whereas an Express, hollow, conical bullet requires a rapid twist and an immense charge. For this reason a rifle cannot be made to shoot both conical and spherical balls with equal accuracy, if both are used with their proper charges. In India, where many men devote their lives to big and dangerous shooting, the Express rifle has almost entirely superseded the 12 and 10-bores, which were formerly used there, and I have been assured by a friend who has killed over 200 tigers, besides many bears, that he never owned a perfect rifle for dangerous game till he got an Express. The expanding bullet seems to paralyze an animal instantly, doubling a tiger up like a rabbit. For American shooting I consider the 45-bore large enough, there being no really dangerous game shooting, grizzly bears being so slow that they only require a man to be cool to make a certainty of killing them. I have killed about thirty with the old style of rifle, and have been told by a friend, who killed one in Utah with a small Express, that there was no fun in it, as the bear died instantly after one shot. Let me advise those ordering Express rifles to do so from a riflemaker, and not from a gunmaker. Almost all the latter advertise Express rifles, but I have learned, by sad experience, that not one in twenty can make such a weapon. Let me explain, in conclusion, that when I say that 100 yards is the point-blank range of a small Express, I mean that from twenty yards up, no rise or fall of any consequence will be discovered up to that distance; and this cannot be said of any other rifle in the world. I hear there are some Express rifles being made now by Turner, of Fisher & Co., Birmingham, which carry much larger charges than those I have mentioned, though they are of the same calibres; and in this case they will have even a longer point-blank range, but not having as yet tried one I cannot speak of them from experience.

I am much obliged to your correspondents, "G. S." and "Ptarmagan," for their letters in answer to my inquiry as to the efficiency of the Winchester rifle for big game shooting, etc. I should very much like to know whether the cartridge mentioned by Mr. Winchester can be obtained from any gunmaker. I think that "Ptarmagan" cannot have used an Express rifle, or he would not speak of it as he does. In the first place, not one deer in twenty, when struck by an Express bullet with 120 grains of powder behind it, requires a second shot. A friend of mine, who killed sixteen tigers in a fortnight's trip in India, told me that no one took a second shot, and a charging tiger, which must be not only mortally wounded, but annihilated on the spot or he will kill you, is a much more dangerous animal than a grizzly bear. No conical ball rifle made in America would be of any use for tiger shooting; and before Express rifles were invented, 12 and 10-bore round-ball rifles were used with charges of six and eight drachms of powder, and even then were not as effective as a 45-bore Express. "Ptarmagan" seems to think that, if required, an Express bullet could be used in a Winchester rifle, whereas neither is the rifling suitable nor the charge of powder sufficient. A great deal of game is missed, as H. W. C. says in your paper of the 14th, from over and under shooting, and all this is avoided by the use of the Express, which has a practically level trajectory up to 200 yards, requiring only a full or fine sight up to that distance. I shall hope to report the effect of Express bullets on grizzly bears some time before next Christmas. I may say, in conclusion, that I hit a panther (or rather, puma) with an Express ball in Texas, and on removing the skin I found it on the opposite side of the neck, making only one hole (another advantage of the Express rifle). VIATOR.

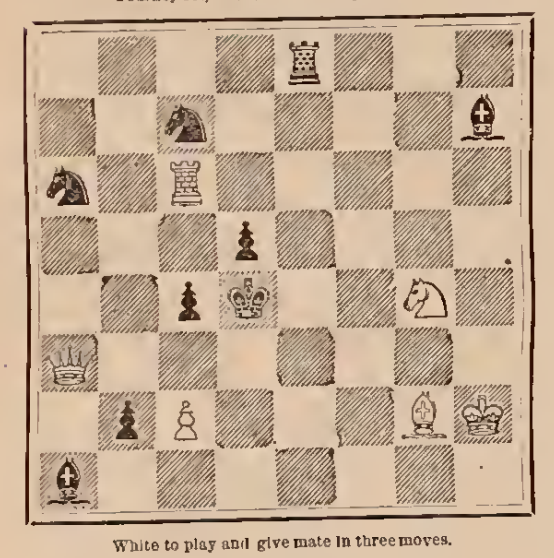
[Though holding the Express rifle in high estimation, we must differ from "Viator" when he states that, "No conical-ball rifle made in America would be of any use for tiger shooting." We have now in type a most interesting communication from India, which shows how a tiger was done for with a ball from a Maynard, .40 calibre.—ED.]

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 13.

Tourney set, No. 9. Motto: E pluribus duo.



White to play and give mate in three moves.

Game No. 44.—PETROFF DEFENCE.

This game was the first of a match between two amateurs at the Athenæum, Philadelphia:

White. Dr. J. W. Knox.	Black. Gen. J. A. Congdon.	White. Dr. J. W. Knox.	Black. Gen. J. A. Congdon.
1—P-K4	1—P-K4	20—B tks Kt	20—B tks B
2—Kt-K B3	2—Kt-K B3	21—P-B5	21—Q-B3
3—Kt tks P	3—P-Q3	22—P-Q Kt3?	22—K-R K
4—Kt-K B3	4—Kt tks P	23—B-B2	23—B-Kt5
5—P-Q4	5—P-Q4	24—R tks R	24—R tks R
6—B-Q3	6—B-K2	25—Kt-B3	25—R-K5
7—Castles	7—P-K R3 (a)	26—Q-R5	26—R-B3
8—B-K3 (b)	8—Castles	27—Kt-R4?	27—B-K2 (f)
9—P-B4	9—Kt-K B3	28—P-Kt3	28—R tks Q P
10—Kt-B3	10—P tks P (c)	29—R-Q	29—R tks R
11—B tks B P	11—Q-Kt Q2 (d)	30—Q tks R	30—Q-K4
12—P-K R3 (e)	12—Kt-Kt3	31—Q-K	31—Q tks Q
13—B-Kt3	13—Q-B B4!	32—B tks Q	32—B tks Kt
14—R-B	14—P-B3	33—P tks B (g)	33—P-B3!
15—R-K	15—B-Q3	34—B B2	34—P-K3
16—K-Kt R4?	16—B-K2	35—B-K16	35—B-K5
17—P-B4?	17—Kt K5	36—P-Kt4	36—B tks P
18—Kt tks Kt	18—B tks Kt	37—K-R2	37—B-B7
19—Q-Kt5	19—Kt-Q4!	After a long struggle Black wins.	

NOTES BY MR. D. M. MARTINEZ.

(a) Thus far every move is classical. The Philadelphia chess players are so fond of this move that it is hardly possible to find one of them not acquainted with the leading variations of this opening. The 7th move of Black is a novelty. (The best authorities advise 7—Castles, or Q-Kt B3.) It strikes us very favorably. We cannot pronounce at once on its merits, although at first sight it looks sound; and, at all events, it is not easy to find the correct way to sustain the attack.

(b) Too defensive at this moment; it gives the attack away. I would prefer R-K sq or P-B4.

(c) B-K3 would be better, in conformity with that principle of putting our pieces early in action, and leaving the adversary's cramped.

(d) This move is made with the purpose of placing, subsequently, the Kt at Q-K3, to strengthen the centre; it was first adopted, in an almost similar position, in a consultation game that Messrs. Whiteman and Elson lost, against Messrs. Reichelm and Congdon (*Schach Zeitung*, 1872).

(e) Lost time; Q Q3 would have been more effective.

(f) Why not 27—R tks B, and after 28—K tks R, 28—Q tks Q P ch; 29—K-B sq (if any other mate in a few moves), 29—Q-K B5 ch, taking the White R next move, with winning position. The game was then virtually lost for White.

(g) From this point the game might possibly have been drawn by White with perfect play, as the B's are of opposite colors.

Game No. 45.—KING'S BISHOP'S GAMBIT.

Played between Messrs. Anderssen and Kelseritzky:

White. Herr Anderssen.	Black. Mr. Kelseritzky.	White. Herr Anderssen.	Black. Mr. Kelseritzky.
1—P-K4	1—P-K4	13—P-R5	13—Q-S4
2—P-K B4	2—P tks P	14—Q-B3	14—S-S1 (f)
3—B-Q B4	3—P-Q S4 (a)	15—B tks K B P	15—Q-B3
4—B tks P	4—Q-R5 †	16—S-Q B3	16—B-Q B4 (g)
5—K-B1	5—S-K B3	17—S-Q5 (h)	17—Q tks S P
6—S-K B3	6—Q-R3	18—B-Kt5 (i)	18—B tks R
7—P-Q4	7—S-R4 (b)	19—P-K5 (j)	19—Q tks K †
8—S-R4 (c)	8—P-Q B3	20—K-K2	20—S-Q R3 (k)
9—S-B5	9—Q-S1	21—S tks S P †	21—K-Q1
10—P-K S4 (d)	10—S-K B3	22—Q-R6 †	22—S tks Q
11—R-S1 (e)	11—P tks B	23—B-K7 mate (l)	
12—P-K R4	12—Q-S3		

NOTES BY G. H. SELKIRK.

(a) This is the "Kelseritzky Defence" to the King's Bishop's Gambit. The object of the sacrifice of the Pawn is to prevent the attack of the Bishops upon the K B P, and eventually by P-Q B3 and P-Q4, to break up White's position in the centre.

(b) Intending S-S6 †, and whether P tks S or not, winning the exchange.

(c) If S-S6 †, P tks S supporting S; and if Black then reply P-K S4, White moves R-R3, with the advantage.

(d) Finely played, commencing a beautiful combination.

(e) To protect the Pawn. The object of the sacrifice of the Bishop soon becomes apparent.

(f) To save the Queen, otherwise lost.

(g) Hoping White would pause in his attack, to save the Rook, giving time for S-K2, allowing Black to Castle in safety.

(h) Time is everything now. White dare not relax, even for one move, and Black in turn is compelled to defend himself.

(i) A splendid continuation of the attack.

(j) A most admirable move, effectually shutting out the adverse Queen. Black's position is deplorable.

(k) This, of course, is intended to prevent B-B7 mate, but it enables White to finish the game in a beautiful style.

(l) A fitting termination to, perhaps, *the most brilliant game ever played.*

CHESS IN ENGLAND.

Game No. 46.—COUNTER GAMBIT—K KT'S OPENING.

A pretty little game played in London between Dr. W. and Mr. Boden:

White. Dr. W.	Black. Mr. Boden.	White. Dr. W.	Black. Mr. Boden.
1—P-K4	1—P-K4	14—Q-R4	14—R tks Kt (a)
2—Kt-K B3	2—P-K B4	15—P tks R	15—K Kt Kt5 (b)
3—Kt tks P	3—Q-R B3.	16—P-K R3 (c)	16—P-K6
4—P-Q4	4—P-Q3	17—P tks Kt	17—P tks P ch
5—Kt-Q B4	5—P tks P	18—K-Q sq (d)	18—B tks P ch
6—P-Q5	6—B K2	19—B-K2	19—P-B3 (Queening) ch
7—Kt-Q B3	7—B-K B4		
8—Q-K2	8—Q Kt3	20—R tks Q	20—B tks B ch
9—K-Kt Q2	9—Kt-K B3	21—R tks B	21—Q tks P ch
10—Q-Q Kt5 ch	10—Q-Kt Q2	22—K-K sq	22—R tks R ch
11—Q tks Kt P	11—Castles K R	23—Kt tks R	23—Kt-B6 ch
12—Q tks Q B P	12—Q-R B sq	24—K-Q sq	24—Q tks Kt checkmate (e)
13—Q-R5	13—Kt-K4		

NOTES BY CHESS EDITOR "LAND AND WATER."

(a) A beautiful sacrifice, which imitates a remarkably fine combination.

(b) Black could not have entered upon this attack before capturing the Kt, as White in reply could have taken off K P with the Kt.

(c) If White rejoins with Q-Q1, Black plays B-B3, threatening to win the Queen.

(d) If he takes the P with K, he evidently loses the Queen.

(e) A pretty ending to a singularly brilliant little game.

CHESS DIRECTORY.

The following is the locale of the several chess clubs and chess rooms of New York and Brooklyn:

New York Chess Rooms.—101 East 11th st., corner of Union Square; Captain McKenzie, Manager.

Turner Hall Chess Club.—Nos. 66 and 68 East 4th st.

New York Chess Club.—Cafe Cosmopolitan, No. 1½ Second ave.

Manhattan Chess Club.—Cafe Logeling, No. 49 Bowery.

The Brooklyn Chess Club meets Wednesdays and Saturdays at 7 P. M; in the Mercantile Library Building, Montague st.

Williamsburgh Philidor Chess Club.—No. 212 Graham ave.

Yachting and Boating.

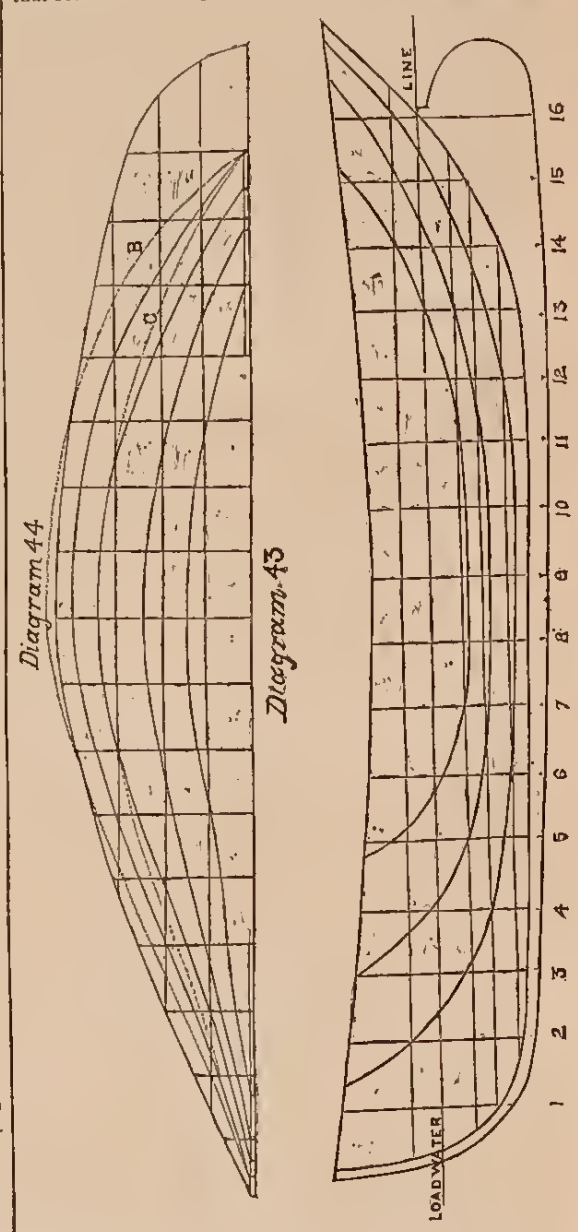
HIGH WATER FOR THE WEEK.

Date.	Boston. H.	Boston. M.	New York. H.	New York. M.	Charleston H.	Charleston M.
April 12	6	40	3	17	3	01
April 13	7	42	4	23	4	04
April 14	8	38	5	22	4	32
April 15	9	33	6	14	5	53
April 16	10	27	7	97	6	39
April 17	11	23	7	55	7	26
April 18	M		8	47	8	17

BOAT AND YACHT BUILDING.—A KEEL YACHT.

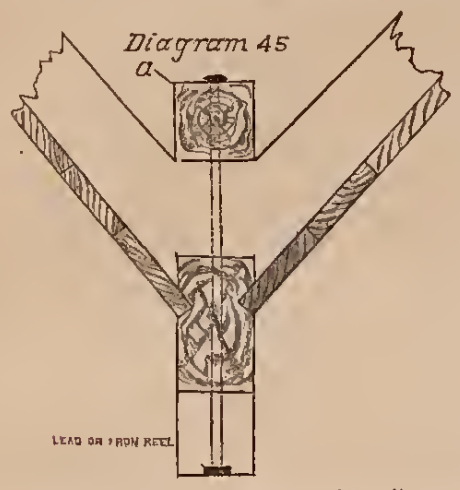
BY NAUTICUS.

DIAGRAMS 42, 43 and 44 give the model of a keel yacht twenty-four feet long on the water-line, twenty-six and one-half feet long over all, eight feet beam, and two feet six inches draught of water. The dimensions may be larger or smaller to suit individual requirements. This model presents some peculiarities of form, and is designed for speed. The midship section is small when compared with the area of the load water-line and the general dimensions of the vessel, thus giving a small hull under water and small direct resistance, enabling the yacht to sail close to the wind. The ballast must be carried as low down as possible, and is best of iron, cast to fit between the timbers and fastened securely in place so that it cannot shift its position. A lead or iron keel may be used with advantage. Diagram 45 shows the method of fastening a lead or iron keel, A is a longitudinal timber—called a keelson—fitted on top of the floor timbers; iron bolts are run through the iron or lead shoe and the keel, and fastened on top of the keelson. The keel shown on the sheer plan is curved on its lower edge, and is called a rocker keel. The centre of lateral resistance is marked on the sheer plan by a dot enclosed in a circle. The centre of gravity of the displacement is just back of the centre of lateral resistance, between it and cross section number nine. The inclined water-line for an inclination of ten degrees—is marked on the half-breadth plan by dotted lines, the dotted line B represented the immersed and the dotted line C the emersed side of the vessel. The dotted lines on the body body plan show the method employed to obtain the inclined water-lines on the half-breadth plan, measurements of width being taken on each cross-section of the body-plan—along the dotted lines—and transferred to the corresponding sections of the half-breadth plan and a batten bent to take in all the points in its curve. The area of the midship section is about nine and one-half square feet for the dimensions of the yacht as given above, requiring a sail of six hundred and fifty square feet area, equal to seventy square feet of sail to every square foot of midship section. Centre of mast seven feet nine inches, to eight feet back of the rabbet of stem; rake of mast one half inch to a foot; the sail measures on boom twenty-seven feet; along gaff, eleven and one-half feet, hoist, twenty feet; leach of sail, thirty-one feet and three inches; from mast to point of bowsprit, eighteen and one-half feet; rise of the outboard end of boom, two feet and nine inches. These measures will bring the centre of effort of the sails from nine inches to one foot back of the centre of lateral resistance of the vessel. The reefs should be arranged in such a manner that the centre of effort of the sails will preserve its proper position, and I may be pardoned if I add that reefs are made to be used; do not let fool hardiness or the fear that folks will think you are afraid deter you from reefing



sail when necessary, if the vessel inclines to such an extent that water comes on deck, or if the wind is flawy reef. Indeed, if speed is an object, I would not let the vessel incline more than fifteen degrees, and a less inclination would be desirable. The planking for this yacht may be three-fourths or seven-eighths of an inch thick; ribs from one to one and one-fourth inch thick, two inches wide at keel and one inch wide at deck; ribs placed nine or twelve inches apart; the other timbers in proportionate size. The keel may be five or six inches thick at the mid section and tapered toward the ends—if a lead or iron keel is used—otherwise, as shown on the diagrams. The stern of the yacht is represented in the diagrams as round. If the ordinary yacht stern is preferred the alteration is easily made. If the keel and lower part of the model is cut off at the water-line marked D on the body-plan, and an eight-feet centre-board provided, the yacht would be suitable for Florida waters and would draw but one foot of water; the area of the midship section would be reduced and the sails must be reduced in like proportion. This model has more sheer aft than is usual, the high stern giving better form to the inclined water-line and not adding much extra weight to the top side. Another peculiarity is the shape of the ribs or timbers, straight or nearly so under water with the greatest curves at the bilge, consequently easily formed. The water-lines run out at the stern without any hollow, and the planks are easily fitted. This model will make a good schooner by placing the cross-sections farther apart so that the proportion of width to length will be about one to four; very little alterations in the lines will be required. To calculate the area of the midship section, the load water-line, or any irregular figure, divide the enclosing parallelogram into squares of one foot, one inch, or any known measure, and the sum of the squares and fractions of squares—enclosed by the figure of which the area is required—is the area. This is the simplest method for an amateur. Another easy method is described in the

paper on drawing, viz.: by weighing paper or thin sheet lead, cut to the outline of the figure of which the area is required, and comparing the weight with a square foot or inch of the same substance. If a delicate ballance is used this method is very accurate, for very irregular figures more accurate than any method of calculation. Diagram 46 will serve to explain some methods of finding areas by calculations: The triangle A, B, C represents the half section of a vessel, and its area is found by multiplying the length of the side A C by the length of the side C B, and dividing the product by 2, this gives the area of the triangle A B C. If the half-section nearly approaches the triangular form, and the curved side from A to B is nearly straight, the following rule may be used: Divide the section into a number of equidistant ordinates, add half the sum of the first and last ordinates to the sum of the remaining ordinates, and multi-



ply their sum by the distance between the ordinates. Applying this rule to the diagram we divide the side C B of the triangle into four equal parts by parallel lines; these lines are called the ordinates, and are numbered 1, 2, 3, 4 and 5. No. 1, as shown in the diagram, is a point without lineal length, but in practice its length would be equal to the half thickness of the keel; to simplify the diagram and calculations thereon it is represented on the diagram as a point. The length of ordinate No. 1 is 0; of No. 2, is ½ ft.; of No. 3, is 1 ft.; of No. 4, is 1½ ft.; of No. 5, is 2 ft. The distance between the ordinates is one-half a foot. Apply the rule and we have: one-half the sum of No. 1 and No. 5 ordinates equals one foot; the sum of ordinates Nos. 2, 3 and 4 equals three feet, which, added to the half sum of ordinates 1 and 5, equals four feet; four feet multiplied by one-half foot, the distance between the ordinates, equals two feet, which is the area of the triangle A B C. When the sections

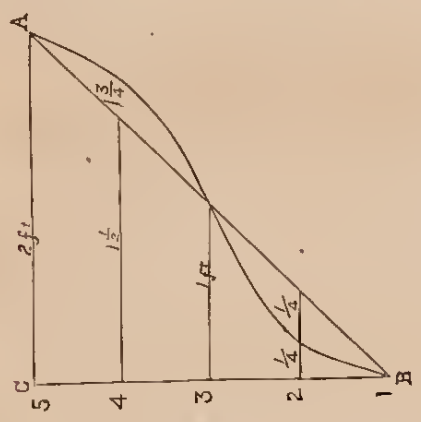
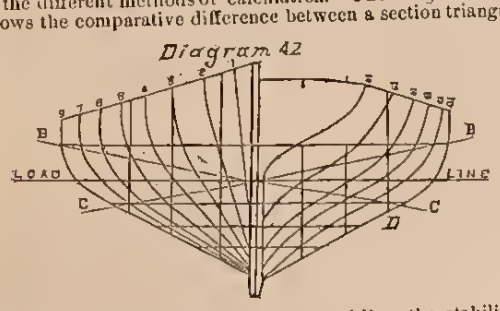


Diagram 46.

have considerable curve the foregoing rule is not accurate, and we employ Chapman's rule: Divide the section into an odd number of equidistant ordinates (five in the diagram) and to the sum of the first and last ordinates add the sum of the odd ordinates multiplied by two, and the sum of the even ordinates multiplied by four. Multiply the sum by one-third of the distance between the ordinates and the product is the required area. Applying this rule to the section represented by the curved line in the diagram we have ordinate Nos. 1 and 5 equal two feet; ordinate Nos. 2 and 4 equal two feet, this multiplied by four equals eight feet; ordinate No. 3 multiplied by 2 equals two feet; the whole amount equals twelve feet, which amount multiplied by one-third the distance between the ordinates (one-sixth of a foot) equals two feet, which is the required area. This diagram shows by mere inspection the correctness of the results of the different methods of calculation. The diagram also shows the comparative difference between a section triangu-



lar in shape and one similar to the curved line, the stability in either case being about the same; the triangular section carries the ballast lower down, while the curved section has more width near the water-line. The area of direct resistance is the same for both sections, but the resistance due to friction of immersed surface is about six per cent. less in the triangular section. The triangular section is the easiest and cheapest to build, and will make the strongest hull. To calculate the displacement of a vessel after the areas of cross-sections are calculated (the cross sections must be odd in number as 5, 7, 9, etc.) to the sum of the areas of the first and last section add the sum of the remaining even numbered sections multiplied by four, and the sum of the remaining odd numbered sections multiplied by two, and multiply the sum of the whole by one-third of the common interval or distance between the sections, the product equals one-half the displacement of the whole vessel in cubic feet. Multiply by two for whole displacement, to which must be added the area of the keel and deadwood; this last sum divided by thirty-five will give the displacement in tons, not the tonnage which is an arbitrary and variable measure of no accuracy or utility except as a measure of comparison. The builder's measurement is to multiply the length, breadth and depth together, and divide by ninty-five, the product being the tonnage. To calculate the distance of the centre of gravity of the displacement from number one section: Multiply the area of each section by the number of its place from number one section; if then the sum of the areas and the quotient is multiplied by the distance between the sections the product will be the distance that the centre of gravity of the displacement is back of number one section. Note—Number two section is one remove from number one section, and is therefore multiplied by one; number three section is two removes from number one section, and is multiplied by two, etc. Other centres are calculated on the same principle. As before intimated, calculations of stability are lengthy and of little practical use. The most important calculations in yacht construction have now been given. In the next paper various details of rigging, sail making, etc., will be given, also the model of a yacht with a midship section similar to that of the celebrated yacht Sappho.

CENTENNIAL YACHT CLUB.—A new club just organized in Jersey City with twenty-five member has adopted this patriotic name. May it live for a hundred years to come.

NEENAH YACHT CLUB.—On last Tuesday, April 2, the Neenah Yacht Club elected officers as follows: S. F. Henry, Commodore; Alex Billstein, Vice-Commodore; E. W. Clark, Fleet Captain; Chas. H. Colton, Secretary; Hugh Wilson, Treasurer; H. O. Clark, Measurer; Regatta Committee: J. N. Stone, Geo. Kingsbury, Geo. Kellogg. The annual cruise will commence about May 14 and continue one week or more. The first regatta will be about July 4, and the annual regatta will come off the first of August. The exact day was not decided on. The prospect is very good for a splendid season for yachting, as there have been eight or ten fine yachts built on the lake, and all others are under repair and improvements, which will make yachting very lively on Lake Winnebago.
C. H.

SAVANNAH, GA., YACHT CLUB.—The officers and committees of this club, whose membership, we are glad to learn, is rapidly increasing, are as follows: Com., Geo. L. Appleton; Vice-Com., Wm. Hone; Sec. and Treas., F. C. Wylly; Stewards: S. P. Goodwin, J. C. Haskell, R. B. Habersham, John W. Anderson, C. M. Cunningham, T. M. Newell, T. D. Bertody. T. L. Kinsey, C. G. Eglinger, J. Rauers, J. W. Schley, Jas. T. Stewart. Finance Com: Vice-Commodore W. Hone. Chairman; T. D. Bertody, J. Rauers, John W. Anderson, C. G. Eglinger, James B. West. Sailing Com: S. P. Goodwin, Martin Tufts, T. C. Wylly, T. L. Kinsey. Timers: L. H. Gibbs, D. C. Bacon. Measurer: J. C. Haskell.

NOTES

Capt. McClelland will be in charge of the Skylark steamer, Mr. E. S. Jaffrey owner.....Commodore Baker, of the Columbia Y. C., has altered his sloop Emily. She is now 55 ft. long and 14 ft. beam. Desmond, of Peck Slip, will furnish a gig for her.....Desmond is also to build a racing sloop for Mr. Richards, of 71 Wall st. She will be an open jib and mainsail craft. Length, 22 ft; beam, 9 ft. 6 in.; hold, 2 ft. 6 in.....Mnmm, of Gowanus, has finished Mr. James Smith's sloop. She is 33 ft. long over all, 13 ft. beam and 3 ft. 6 in. hold with 5 ft. 6 in. between decks. The amount of cabin room in this boat is something remarkable. About 3 tons of ballast will be needed to bring her down to her lines.....Dr. May's new ship Julian has been put overboard. It will be remembered that her lines were furnished by A. Carey Smith, Esq., and that in general she resembles the once famous Comet turned out by Archie Smith of former days. She is deeper than usual, and will have to stow away something like 4½ tons of pig. Her performance alongside of sister vessels will be watched with interest.....Our readers will be somewhat relieved to learn that the new marine railway now building at the foot of Court st., Brooklyn, will not be allowed to fill in across the inner harbor known as Gowanus Basin, but that the city authorities are now clearing away the wreck which so long obstructed the fairway, and are also dredging out a regular channel of entrance. Yachts will therefore find as snug a harbor as before about the same old grounds..... Capt. Jones, of the Intrepid, has been putting together some boats for her.....Richard Wallen has in frame his seventh order this season—a racing clipper 25 ft. long. Sawyer is getting out a suit of muslin for her. She is to join the new tral Hudson River Y. C., and make things warm for the Brown, Fidget and others.....Gorman's biggest undertaking, a yacht for Mr. Pearce, of the A. Y. C., will be turned out of the shop this week.....Steam yacht Vedette, Philip Phœnix, Esq., was successfully launched by Ward & Stanton, at Newburg.....Fitting out—Sloops: Alice, B. Y. C., H. J. Steers, Esq., at Providence, R. I; Kate, B. Y. C., Geo. F. Randolph, Esq., at Greenport, L. I.; Active and Gracie, at Wallabout Bay; Addie Voorhis, altered to schooner at Northport, L. I; Alert, fitting out at Greenport; Chrystine, at Nyack; Elaine, at Providence; Eugenie, at Hoboken; Onward, at Islip; Vision, at Nyack; cutter, Volante, at Port Jefferson; Windward, at Islip; Regina, at Gowanus; Dudley, at Hyde Park; Sadie, and Vindex, cutter, will not go into commission .....Schooners fitting out: Sea Witch, Frank S. Stott, Esq., at Greenpoint; Tidal Wave, Daniel Cook, Esq., of San Francisco, foot of Sixth street; Alarm, at Fair Haven, will be bipped; Ambassadress, at City Island; Clio, at Islip; Clytie, at Stamford; Eva, at Bordentown, N. Y.; Louisa, at Hyde Park; Madeleine, at Essex, Conn.; Nettie, at Eight street, Brooklyn; Rambler, at South Brooklyn; Restless, at New London..... The Columbia will fly the broad pennant of the commodore, B. Y. C.....Comet will not race this season.....Estelle will come out in racing trim again.....Faustine, built by Poillon of Brooklyn, is receiving her engines at Cowes, Isle of Wight .....Idler will go into commission to retain, if possible, the Brenton's Reef and Cape May challenge cups.....Nereid is having her right lung doctored at Bergen Point.....Nettie will go to Europe.....Resolute is for sale at Newport.....Vesta will not go into commission.....Steam-yachts Ibis, Ideal, Lurline, Skylark, Ocean Gem, Vedette, and many smaller ones, will form the steam fleet for the year.....The proposed match for catamarans, at the New York Bay regatta, has received favorable attention, and quite a fleet of these double-barrelled performers will assemble.

—The Nereid Boat Club, of Brooklyn, composed of some of the best young men of Brooklyn, gave their opening entertainment April 6, at their club house. Their entertainments are always looked forward to with pleasurable anticipation, especially by the ladies.

Sea and River Fishing.

FISH IN SEASON IN APRIL.

Speckled Trout—*Salmo fontinalis.* Land-locked Salmon—*Salmo glovert.* White Perch.—

FLIES FOR APRIL.

BLACK GNAT, OR MIDGE.—No. 13.—Body and feet black, wings subhayaline.

DARK CLARET GNAT.—No. 13.—Body dark claret, foot black, wings subhyaline.

BRIGHT CLARET GNAT.—No. 13.—Body bright claret, mixed with red fox face, feet ginger, wings of one sex hyaline, the other ocherous.

GRAY GNAT.—No. 13.—Body dark fox, mixed with dark claret, feet gray, wings hyaline.

DARK FOX.—Nos. 10 or 11.—Body and feet dark fox, mixed with lemon colored mohair, wings subhyaline, tail three fibres of dark gray hackle.

POOR MAN'S FLY.—Nos. 9 and 10.—Body and feet, hare's ear and yellow mixed, wings slightly mottled gray, tail the mottle of the wood duck.

OLIVE GNAT.—No. 13.—Body dark olive, mixed with bright claret, feet ginger, wings hyaline.

RED FOX.—Nos. 10 and 11.—Body fox cub face, mixed with yellow, feet red (chicken red), wings pale gray or subhyaline, tail mottled feather wood duck.

BRIGHT FOX.—Nos. 10 and 11.—Body and feet brightest part of the fox, mixed with yellow, wings brightest hyaline, tail pale yellow.

BLACK HACKLED FLY.—Nos. 9 and 8.—Body orange, ribbed with gold tinsel, hackle black wings, tail of the American partridge.

GENERAL FLIES.

IRIS.—No. 8.—A hackle fly, ribbed with silver tinsel, body hackle, wings and tail scarlet.

PEACOCK PALMER.—No. 8.—Body peacock herls, hackle black and red mixed.

GRAY PALMER.—No. 8.—Body peacock herl, dark gray hackle.

PROFESSOR.—Nos. 8 and 9.—Body bright yellow, feet golden brown, wings wood duck and mallard, dyed yellow, mixed, tail scarlet ibis.

QUEEN OF THE WATER.—Nos. 8 and 9.—A hackled fly; body orange ribbed with gold tinsel, hackle chicken red, wings bright mottle of the mallard.

GRIZZLY KING.—Nos. 8 and 9.—A hackly fly; body green, hackle dark gray, tail scarlet ibis, wings mottled feather of the pin-tail.

FISH IN MARKET—RETAIL PRICES.—Our quotations are as follows: Striped bass, 20 cents; large do., 15; smelts, 15; blue fish, 15; frozen salmon, 35; green do., $1; mackerel, large, 25; Southern shad, 50; native, 60; Connecticut River, $1; white perch, 15; Spanish mackerel, 35; green turtle, 15; halibut, 15; haddock, 8; codfish, heads off, 8; do., heads on, 6; black-fish, 15; flounders, 10; do., small, 8; eels, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 25; turbot, 25; scallops, $1.50 per gallon; soft clams, per 100, 30; do., large, 60; whitefish, 18; pickerel, 15; salmon trout, 15; Canada brook trout, 25; Long Island do., $1; pike, yellow, 10; hard crabs, per 100, $3; soft crabs, per dozen, $3.

Of Connecticut River shad very few caught as yet. Catch of North River shad very light, and it looks as though there was to be a very slim season. A few fresh mackerel were taken off Cape Henry last week. Large arrivals are expected daily. A monster cod, weighing sixty pounds, taken off Sandy Hook, and a salmon trout, from Weathersfield, Wyoming County, N. Y., were received by Blackford, and forwarded to Professor Baird at Washington.

The past week has been an extremely good one for business in the fish trade, the trout display having brought thousands of visitors to the fish market, and provoked an appetite for fresh sea food. Large bass, weighing from thirty to seventy pounds each, have been taken in great numbers during the past week in the Chesapeake Bay.

MOVEMENTS OF THE FISHING FLEET.—Bank arrivals at this port the past week, 13, bringing 545,000 lbs. halibut. Prices fair, but much less than in previous years when the receipts were no larger. The Georges arrivals, 53; catch small for the season; receipts about 1,325,000 lbs. round. The codfish do not seem to visit their old haunts in such numbers as formerly, and we have nothing to show in the way of the big stocks that used to mark the March trips.—*Cape Ann Advertiser, April 5.*

CONNECTICUT—*Windsor, April 7.*—A salmon was caught in the Farmington River in a net, which weighed about 3 pounds, this last week. No shad have been taken here yet, but one was taken in Weathersfield cove that weighed 4 pounds. A good many lamprey eels are taken in nets, which to-day are selling for fifteen cents each, retail. BALSAM.

LONG ISLAND, *April 9.*—I had the pleasure last week of a day's good trout fishing on Long Island. I arrived at the pond at 6 P. M.; weather cool and cloudy, and the water rough. To my surprise a few trout were yet rising at that late hour. As it was all but dark, I only made the circle of the pond with the boat, taking one fine fish on the "Professor," weighing ¾ lb., my friend with me also taking one. Next day we commenced fishing at 8 A. M., taking sixty-four fish of fair size, but none very large. Weather clear, but very windy, varying from west to north. The favorite flies were the "Grizzly King," Coachman, Golden Spinner, Brown Adder, Grizzly Hackle and Queen of the Water. They took best from 10 A. M. till 12 o'clock in the morning. The fish were bold and easily hooked, but in the afternoon they were shy and rose short. The fishing this season on the island is excellent and all report fish large and in good condition. Next month though, it will be much pleasanter. W. HOLBERTON.

—Mr. Seaman, of Ridgewood, Long Island, (not New Jersey, as was printed in our fish report of last week) has some fine speckled trout for sale; also, fishing privileges to let—[*See advertisement.*

KEESEVILLE—*Essex Co., April 5.*—The Saranacs are still firmly blockaded with ice, and although the outside world

has a touch of gentle spring, its balmy breezes have not reached the Adirondacks yet, and I do not think but that we will have to wait until about May 10 before we can seek the trout safely without freezing to death. As usual, I will notify the impatient readers of the FOREST AND STREAM when I learn that the ice is out of the Saranac. DR. J. R. ROMEYN.

THE TROUT SEASON FAIRLY OPENED.—Ludlow Trout Co., in Ludlow, McKean County, Pa. FOREST AND STREAM Publishing Co., in New York city. Express. Box of trout. Thanks.

VIRGINIA—*Leesburg, April* 3.—Bass are being taken now daily with red worm and with the minnow by men fishing for suckers. T. W.

Strasburg, April 3.—Bass are thick ten miles below here. One man caught forty, but they often catch (*i. e.*, one person), fifty or sixty. D. F. E.

HOW THEY SUFFER IN KENTUCKY.—Our Stanford, Ken., correspondent gives this diagnosis of the afflicted ones in his vicinity:

"Angling has broken out in these "regions round about" in a form of mania, which is startling to the old front-door loafers, whose energy rarely inspires a rash venture into the wilds (?) beyond the town limits. Balmy west and south winds, accompanied by sunshine, have produced an epidemic of spring fever, which would, without doubt, result fatally in many cases, but for heroic treatment—large doses of country air being specific and inevitable—rod and minnow-bucket betray an intent to blend fun with physic. A few nice strings of small fish have been exhibited, but a large majority of the sportsmen find the rear entry more convenient on return, and have carefully deposited their tackle and doffed old clothes before exhibiting themselves. While a party of young anglers were lunching to-day, their valet, a negro lad, chanced to be convenient to a rod when a black bass seized the bait, and he yanked out a fourteen incher—by far the largest catch of the day. One of another party submitted to our inspection a tinmouth which measured sixteen inches, and weighed two pounds—the largest we ever saw, save one captured from Cumberland River. KENTUCKIAN.

TENNESSEE—*Nashville, April* 4.—Rain fell last Wednesday, and the rivers and creeks are in first rate condition for fishing, parties are putting out. Big Harpeth, Turnbull and White Oak are excellent localities. The latter stream is said to be well stocked with trout (bass) and black perch, and from its inaccessibility is but little fished. There have been some good catches in the South Harpeth, including a trout weighing 2½ pounds and one of 3½ pounds. Our market is abundantly supplied with buffalo, drum, suckers and catfish from the Cumberland, and bass and perch from Reelfoot Lake, besides a good supply of salt water fish. J. D. H.

Knoxville, April 6.—Our principal sport hereabouts is with black or striped bass, which abound in the tributaries of the Tennessee River. We have mountain, or speckled trout, in the little mountain streams on the border of North Carolina, but the fish are too small to afford much sport. Mr. E. S. Sanford, of this city, and myself, spent three days in the mountains last June, and captured upward of 800, varying from 2½ to 13 inches long. We take black bass (fishing with line bait) from one to five and six pounds. MoC.

Columbia, March 30.—The creels taken of trout at Ashton's Dam, in Duck River, half mile north of city, are unusually large and numerous. In three mornings' fishing (about two hours) there were taken somewhere between thirty and fifty trout, one gent catching eight, another seven, another six, weighing from one to two and a-half pounds. VAL.

FLORIDA—*St. Augustine, April* 4.—Drum fishing has been the sport for two weeks past. Other finny prey give us much sport. W.

—Mr. S. B. Miller has taken charge of the Minnewanken House, of Spirit Lake, Iowa, and offers extra inducements to sportsmen to visit him. Good fishing and shooting all around.

—The bone of international contention is a fish bone.—*Boston Post.*

GUT FROM NATIVE SILKWORMS.

EDITOR FOREST AND STREAM:

I noticed in two of the late numbers of your paper a letter from Prof. James H. Richardson, of Totonto, also one from Dr. E. Sterling, of Cleveland, in reference to silk gut made from native silk-worms, both letters referring to conversations with me on this subject. I had entirely forgotten that I had ever spoken to either of these gentlemen on this subject. I have drawn silk gut from four to six feet long, sufficiently strong for salmon fishing, from one of our native silk-worms—the larva of the *Atticus cecropia*, the largest of our native silk-worms. The moth (which is the perfect insect) is very large, the female often measuring full six inches across the wings when spread out, and of great beauty. As Dr. Sterling says, the larvæ feed on the leaves of the button bush, *Cephalanthus occidentalis*, which is a favorite food for it, no doubt, as the cocoons are found in great abundance on these shrubs. But it feeds equally well on the leaves of any of our cultivated or wild plum trees, as it does on the leaves of some other shrubs and trees. But the button bush and plum, I think, are its favorite food; but it never feeds on the leaves of the sassafras, as stated by Dr. Sterling. It is another native silk-worm, and a very fine one, that feeds on the sassafras, the *Atticus prometheus*, named after one of the fabled Cyclops of the Greeks. The larva, or worm, of the *Atticus cecropia*, spins an immense cocoon, the inner shell of which could be reeled. The outer shell is rather thin, and the space between the outer and inner shell is filled with strong floss silk.

This moth has a wide and extended habitat. I have found its cocoons from Vermont to Ohio, and, no doubt, they are abundant in Canada, as Dr. Sterling states. In order to rear this silk-worm, the cocoon should be secured in the fall of the year, and kept in a cool room until the leaves of such trees as you wish to feed the worms with begin to make their appearance, at which time the moths will leave the cocoons. As soon as the sexes conjugate—which will take place very soon after they leave the cocoons—the females (which are known by being the largest, with smaller antennæ) should be placed in pasteboard boxes, where they will deposit their eggs, and the young larva will make their appearance in ten or twelve days, the incubation being hastened or retarded as the weather is warm or cold. They should be fed for some time in the pasteboard boxes, but after they attain considerable size they may be placed on such trees as you intend they shall feed on. I much prefer the plum tree. Just before they spin their cocoons, they cease to feed, which is the time to spin, or draw, the silk gut, the process being the same as in drawing it from the ordinary Italian silk-worm. That process has already been described in your paper.

Very truly yours, T. GARLICK.
Bedford, O., March 30, 1878.

THE BLACK BASS ROD.

CYNTHIANA, Ky., March 14, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Several years ago, while living in Wisconsin, I wrote a series of articles on black bass fishing for the FOREST AND STREAM over the *nom de plume* of "Oecuomowoc," and I then expressed the opinion that the black bass would eventually become the game fish of the United States. In order to divest the sport of black bass fishing—as it then existed—of some of its disagreeable features, and give it a higher place in the catalogue of noble sports, I described at some length the proper rod, reel, line, hook, etc., and mode of using them in order to render this not only feasible but practicable.

The said articles were afterward revised for Hallock's "Sportsman's Gazetteer," under the head of "Black Bass," in the chapter devoted to Western Fishing, and I am constrained to say, right here, in strict justice, that no lover of the rod, gun or dog, or student of natural history, should be without this invaluable book: it is an inexhaustible mine of information pertaining to these subjects, and information, moreover, of an entirely practical nature.

At the time when the articles mentioned were written not much attention or importance had been given to the subject in the various books on fishing, and it was an impossibility to purchase a suitable rod at the tackle stores. This was the more surprising as the black bass inhabited so many of the waters of the Union, from New England to Florida, and from Maryland to Missouri. He was, moreover, the acknowleged peer of the brook trout for gaminess by those who knew him best; and it was "a consummation devoutly to be wished," that as much skill should be displayed in his capture, and as elegant and suitable tackle employed for the purpose as in the case of his speckled rival. I therefore took some pains to describe, under the caption of "The Coming Black Bass Rod," what I considered from long experience to be the proper rod. Mr. C. F. Orvis, of Vermont, an ardent fisherman, at once saw the point and began the manufacture of the rod from those suggestions, and I understand that he has sold a very large number of them. Other manufacturers seeing the necessity for a "new departure" from the old beaten path, also began to make a short and light black bass rod, more in accordance with the spirit of the age, and the demands of their customers. This, I consider a great triumph for the FOREST AND STREAM, for to its columns alone is due the credit of completely reconstructing the black bass rod and of replacing the former long, heavy and clumsy affair by the elegant, light, short and pliant rod of the present day. The black bass rod for bait fishing should be from 8 to 8½ feet long, and should weigh from 8 to 9 ounces—no more, and not much less. It should be well balanced, pliant (not withy) and elastic. Practically it would, of course, be better if constructed of one entire piece, but this could not be done with any kind of wood and preserve the requisite conditions of weight, balance, pliancy, strength and elasticity. The natural cane or bamboo is the nearest approach to it, in its natural and entire state, but this lacks balance, pliancy and elasticity, three of the most important factors. The rod for general convenience, portability and ease of being repaired, should be made in three pieces, with ferruled joints; the but should be ash, and the second piece and tip constructed of lancewood; this forms the best known combination of material for a durable and satisfactory rod. The standing guides on the but and second piece should be light and made of brass wire, either nickel or silver plated; there may be guides of the same on the tip or rings, I incline to the latter. For my own use I prefer a rod made of two pieces, each about four feet long, the but of ash and the top of lancewood; this, however, adds somewhat to the expense. I am also partial to the spliced joint, but this necessitates too much carefulness in putting together for most anglers. Mr. Orvis, however, makes the best ferruled joint I have seen, in the fitting of which he discards the dowel and boring entirely. He is the only rod maker, so far as I know who agrees with me in this respect. The boring not only weakens the joint, but the tapering dowel, acting like a wedge, will cause the joint to separate by the continual springing of the rod.

A few years ago a gentleman in this State, living, I think, in Lexington, proposed in the columns of the FOREST AND STREAM the "parasol" joint, which occasioned some sarcastic and humorous remarks and comments. This, however, is "not so bad as it seems," for if the connecting hinge was nicely fitted, and the single, investing ferrule properly adjusted, it would be as good as any ferrule joint for use; still I do not fancy it, and a rod would be rather more difficult to repair than with the usual style of joint.

Mr. Orvis informs me that some of his customers ordered rods, with the but extending below the reel clamps a foot or more, so as to reach under the elbow and thus form a *point d'appui*. This demand is founded upon laziness, carelessness, or pure cussedness, which was first induced by using the old style rods, which were so heavy and long as to require either this support, or, what was worse, the holding of the rod with both hands. Now, the object of the modern black bass rod is to dispense entirely with this ungraceful and clumsy style, and enable the rod to be used with the hand alone as in trout fishing. I sincerely hope that my brother anglers will not thus handicap their skill, nor encourage this needless extension of but. It will be well to remember in this connection, that no excellence is gained but by great labor, and no skill attained but by careful practice. There may be born poets, but I doubt if there are born fishermen—the love may be innate, but its confirmation requires patience, perseverance and elbow grease. J. A. HENSHALL, M. D.

FISHING REELS.

EDITOR FOREST AND STREAM:

A fishing reel is made in accordance with the special service required of it, the objects of said service being two-fold. The first and most important is the proper delivery of the bait in a manner and at a distance commensurate with the mode of fishing; and the second is to play and land the fish after he is hooked, or to reel the line for another cast. The reel which practically fulfills these conditions with the greatest ease and facility—in the method of fishing practiced—is the best reel to use; thus in fly-fishing

THE CLICK REEL

is unexcelled. It is the simplest form of reel, from the fact that the service required of it is simply a slow and gradual lengthening of the line with each subsequent cast; the delivery of the fly being accomplished by pulling off from the reel a few additional feet of the line after each cast until the desired or maximum distance is reached, while the click offers just enough resistance to the rendering of the line to allow this to be done without confusion or over-running. The handle or crank is connected directly with the axle or shaft, and, consequently, "reeling in" the line would be slow work were it not obviated by the reel being made very narrow so that the coil of line upon the shaft enlarges rapidly, and the reeling is thus accomplished with greater facility. As the click reel is intended to "take care of itself" in casting, it is very properly placed at the extreme but, in which position it adds much to the balance and working of the rod. The click reel should always be used underneath the rod.

THE ORVIS REEL.

This is a click reel, but narrower, and therefore takes up line more rapidly. It is perforated freely to make it lighter, and to favor the drying of the line and the escape of sand or dirt. It answers admirably for fly-fishing, and it is just the reel in bait-fishing for black bass for those who cannot control the casting of a multiplying reel; the click exerts just the right amount of resistance for short casts, from 30 to 75 feet, though the click should be evenly tempered to stand this rapid work. I consider it the best reel manufactured for the price.

THE MULTIPLYING REEL.

This reel is a decided improvement on the old single action English reel or winch. It is made of metal or vulcanized rubber, and of various styles and sizes, from a striped bass reel to a perch reel. In shape and construction it differs materially from the click reel, having a different office to perform, or rather the same object—the delivery of the bait—to perform in a different manner. Being intended for natural bait-fishing it requires an easy running and freely rendering action in order to deliver the bait as far as possible at a single cast. As there is no click to control the running off of the line, the thumb must be used for this purpose, by effecting a gentle and even pressure upon the spool, and for this reason the multiplier is made much wider than the click reel, or of the barrel or drum shape. In its construction a small cog or spur wheel is placed at one extremity of the axis or shaft, into which a larger cog wheel is fitted, and to the latter is attached the handle or crank. One revolution of the handle produces two or more revolutions of the central shaft. The reel most generally known and used is the "New York Multiplier," which is manufactured for the trade in large quantities, with the retailer's name stamped on one end. It is called by some of the correspondents of the FOREST AND STREAM the "balance reel," from the fact, I presume, that it has a balanced handle, which by some is thought to add to the rapid working of the reel; but this fancied advantage exists in the imagination only; it causes the gearing to wear out, and the handle soon becomes shaky and wabbling. A simple crank handle is better.

THE FRANKFORT REEL.

This reel is made by B. C. Milan at Frankfort, Ky., and is frequently referred to as the "Meek," "Meek and Milan" and "Kentucky" reel. It has been manufactured to a limited extent for thirty years, and has been used by many of the best anglers of the South and West for that length of time, but it has only been brought to the general notice of the angling fraternity through the columns of the FOREST AND STREAM, and first, I believe, through a communication of mine a few years ago. It is as great an improvement on all multiplying reels as they are upon the old single-action reel. It multiplies four times, is perfect in its action, and with it an expert can cast a minnow from 75 to 150 feet. In shape it is not a bit too wide (as has been suggested) and those who cannot cast without tangling or snarling the line, or who cannot reel the line evenly upon the spool, must look for the fault in themselves and not in the reel. *Me judice*, I consider it the best reel in the world. The "alarm" is intended for an alarm only, and should not be used as a click to retard the rapidity of the reel's action, for this it can do to a very limited extent only, and that to to the eventual detriment of the reel. By using the drag or rubber, it answers tolerably well for fly fishing. Indeed, I know some veteran anglers in Cincinnati who have frequented the Nepigon for the past ten summers, who prefer it to any other reel, and they are good fly fishers, too.

NO REEL.

Those who from any cause cannot manage a multiplying reel might adopt the "Nottingham" style of angling, which is much in vogue in England, in which the reel is dispensed with. The line is made fast to the but of the rod, and carried through the guides or rings. When ready for cast, the line is pulled back through the guides and laid in coils at the feet of the angler, leaving twelve or fifteen feet of line hanging from the tip of the rod. Our angler then grasps the line a few feet from the sinker and bait, and gives it a few rapid whirls around his head and casts it as far as he can, the rod in the meantime being held firmly in the left hand, and pointing toward the water. Longer casts can be made in this manner, and the line retrieved more rapidly, than by the aid of any reel, but to the expert reel angler the game would not be worth the candle. We can teach England something in regard to reels as well as rifles.

POSITION OF THE REEL ON THE ROD.

In order to allow the thumb to be used in controlling the cast, a multiplying reel should never be placed less than six inches from the extreme but of the rod, and should be so placed as to be underneath when reeling up the line. I am aware that some prefer it on top, but the former mode is preferable for the following reasons: The weight of the reel naturally takes it under the rod, enabling the rod to be held steadier when reeling the line or playing the fish; the strain of the line falls upon the guides, causing a uniform working of the rod; the line is more easily reeled up, and it was intended to be used in this manner. The left hand should grasp the rod immediately over the reel, the thumb and forefinger embracing the rod above the reel and as close to it as possible, the ring and little fingers clasping the under surface of the reel, while the middle finger is left free to guide the line on the spool and prevent hunching. I have noticed that all anglers who prefer to have the butt of the rod extending a foot or more below the reel, always use the reel on top, and when reeling in a fish, they invariably rest the but against the stomach. *Ohe! jam satis.* J. A. HENSHALL, M. D.

Cynthiana, Ky., April 2, 1878.

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Nickel-Plated, $2; Polished, $1 75; Japanned, $1 50.

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For wing shooting—always shoots proper distance in advance of flying birds. More birds can be killed in the field or at the trap. Cross shots are made as easily as straight away. In use by best Western sportsmen. Prices—Brass, 50 cents; nickle, 75 cents; silver, $1, post paid. Give length of barrels and distance between hammers. O. E. DAY, Waterloo, Iowa. april 1t

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March21

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Samples of the Hammerless Gun now on exhibition, and orders taken by our agent. Guns to be delivered June 1.

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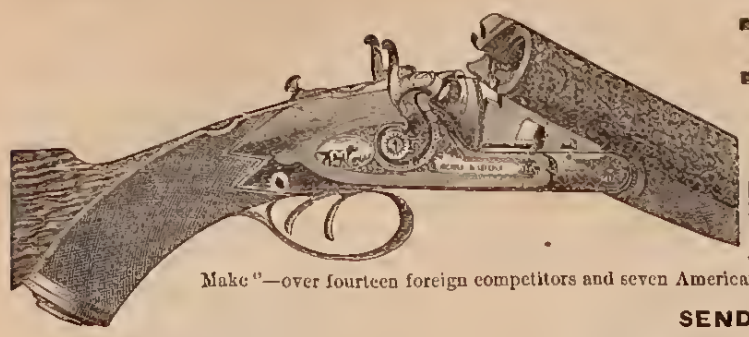

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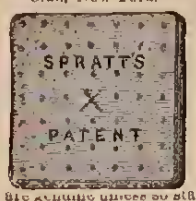

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mar28 4t

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Liver color, weighs about 57 lbs.; is a first-class field dog both on coveys and single birds; has great speed and endurance, and is not afraid of briars. Was shown at Baltimore in the same class as Sensation, and was highly commended.

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Lemon and white, weighs about 60 lbs; litter brother to Till, who took first premium for Native Pointers at New York, May, 1877.

Fee for Either Dog, $20.

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The Kennel.

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Champion Rock, Rum, Tory, Silk, Liz and Cora. We have just received from England additional copies of the above renowned setters, painted in the most artistic and lifelike manner on 8-inch tiles, and suitable for framing. The original copies sold from the collection of Minton's Tiles, at Centennial Exhibition SHARPLESS & WATTS, Agents for Minton's Tiles, 1 325 Market street, Philadelphia. april 1t

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FOR SALE—The largest and one of the finest-looking setter dogs in America; two years old, orange and white, black points, about 28-in. high, weighs 79 lbs.; dam, Horace Smith's Gildersleeve Flora; sire, One-eyed Sancho (full pedigree); never been exhibited; partly broken, staunch, mild disposition, good retriever; will make a grand stock and field dog; guaranteed; sent on approval to responsible parties paying expenses; price low. Address W. H. PIERCE, Peekskill, N. Y. april 1t

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THE WESTMINSTER KENNEL CLUB offer for sale a draft from its kennels, comprising the best pointer stock in the country. All the animals will be sold at a reasonable price. They consist of three lemon and white bitches, one year two months old, by Sensation, out of Whiskey; one lemon and white dog, eight months old, by Sensation, out of Whiskey; one liver and white bitch, ten months old, by Sensation, out of Daisy; also one lemon and white dog pup and two lemon and white bitch pups, by Sensation, out of May, and two liver and white bitch pups, by Sensation, out of Flirt. Address the SECRETARY, 22 West Thirty-second street, New York. april 2t

FOR SALE, $20—A brace of Dachshunde puppies, out of imported Fawn. Now 7 weeks old. H. FISCHER, Box 1,095, N. Y. april 1t

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WANTED TO EXCHANGE—A red Irish setter dog, by Rufus II., Moll II., partly broken, for a good bred setter bitch. W. J. TRIOL, No. 1,024 Dakota street, Philadelphia. april 1t

WANTED—By a man of experience, a situation with a gentleman to break and care for his dogs. Address, JAS. B. ARNOLD, Bellefontaine, Ohio. april 1t

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FIELD, COVER AND TRAP SHOOTING.

BY CAPT. BOGARDUS.

New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Miles Johnson. For sale at this office. Price $2.

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American Standard Diameters.

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Gives greater penetration and better pattern than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found free from shrinkage, more spherical, more uniform in size, harder, heavier and of brighter and cleaner finish than any other. SEND FOR CIRCULAR.

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The house is roughly finished, has eight sleeping rooms, and is located a half mile from Pine Point Station, B. & M. R. R., 2½ miles from Oak Hill Station, E. R. R. Boating, fishing, bathing and shooting. Plovers, ducks, snipe, etc., on the famous Scarboro Marshes. Fine sea-fowl shooting in autumn, winter and spring. Woodcock covers within a few miles. This place has a commanding view, and is desirable for a summer resort or residence, or for a small club of sportsmen. An unusually favorable locality for raising fowl. For full particulars, address EVERETT SMITH, Portland, Me. mar21 tf

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New Styles! For sale cheap! A fine, No. 10 cal., Scott's (Eng.) best shot-gun, cost (imported) $500; will take $175 cash. One new style Sharps Creedmoor, model 1877, Ex. No. 1; cost, with ammunition, $175. Also "Mid-Range," model 1877, new; neither gun used except on trial. All are perfect, but must be sold at once! Address, P. O. Box 305, Atlanta, Ga. april 2t

FOR SALE—Excellent 12-gauge Tolley B. L., with case and apparatus; built to order; modified choke; pattern 175; No. 6 English in 30-inch circle; handsomely engraved. Address J. EGAN, gunmaker, Halifax, Nova Scotia. april 1t

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W. & C. SCOTT & SON, premier quality, made to his special order at a cost here of $400, top snap-action, extension rib, double bolt, compensating lump, Damascus barrels, rebounding locks, choke-bore; length of barrel, 29 inches; 10 gauge, 2 7-8 in. chambers, 3¼ in. drop—price, $200. English setter dog Ripple, by Pride of the Border out of Jessie; litter brother to Dr. Spier's St. Elmo; color, white, with liver and liver ticking; guaranteed his breaking. Price, $125. English setter bitch Nellie, by a crack native field dog out of an imported bitch; color, liver, with little white; yard broken; aged two years, and ready to be taken on game. Price, $75. One liver and white puppy from above stock, aged 5 mos., partly trained. Price, $50. One pointer puppy, Austin White's stock, liver and white ticked, 5 mos. old. Price, $30. This pup was selected by me as the best in the litter after his litter brother had taken first prize in pointer puppy class. Inclose stamp for reply. E. S. WANAMAKER, Pusack, N. J. april 2t

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Wanted.

WANTED—One or two children to board, by a lady having a pleasant country home, thirty-three miles from New York, in a very healthy locality; reasonable terms and best of care for satisfactory parties; reference, the Editor of this paper. Apply to Mrs. H. E. WALKER, Talmans, Rockland County, N. Y. ap4 2t

WANTED—One hundred fresh prairie chicken eggs; at least one-half warranted to hatch. Apply, stating price and particulars, to RAMON, this office. april 4t

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WANTED—By an English veterinary surgeon—thoroughly competent—an engagement to take charge of a large stock farm or stud of racehorses. Is a fine horseman, and has had great experience in the training of flat race and steeple chase horses. Address DR. TALSOT, 612 Greenwich street, New York.

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FARMING.—A man of many years' experience in extensive farming operations in the northwest, desires to make the acquaintance of a capitalist of considerable means, with a view of opening a wheat and stock farm on a large scale; land of the best quality for this purpose already secured. For particulars call on the editor of this paper. mar28 3t

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Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of 1 lb. *only*.

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Nos. 1 (fine) to 5 (coarse). In 1 and 5 lb. canisters and 6¼ and 12½ lb. kegs. Burns *slowly* and very clean, shooting remarkably close and with *great penetration*. For field, forest or water shooting, it ranks any other brand, and it is equally serviceable for muzzle or breech-loaders.

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FFFG, FFG, and "Sea Shooting" FG, in kegs of 25, 12½ and 6¼ lbs, and cans of 5 lbs. FFFG is also packed in 1 and ½ lb. canisters. Burns strong and *moist*. The FFFG and FFG are favorite brands for ordinary sporting, and the "Sea Shooting" FG is the standard *Rifle* powder of the country.

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No. 1 to 7, strongest and Cleanest made, in sealed 1 lb. canisters. Higher numbers specially are recommended for breech-loading guns.

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For water-fowl, strong and clean. No. 1 to 5 in metal kegs, 6¼ lbs. each, and canisters of 1 and 5 lbs. each.

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The best for rifles and all ordinary purposes. Sizes, FG, FFG and FFFG, the last being the finest. Packed in wood and metal kegs of 25 lbs., 12½ lbs. and 6¼ lbs., and in canisters of 1 lb. and ½ lb.

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Just the thing for Taxidermists to collect specimens. There is no report or danger attending its use, or any auxiliaries required to operate it. It can be loaded with ease and rapidity. It is extremely simple, and has no delicate parts to get out of order or wear out. For sale by the Trade generally. Sent upon receipt of price or C. O. D.

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Hart's Sportsman's Favorite Metallic Shells.
FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

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MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

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ORDERS FOR THE NEW MILITARY AND LONG-RANGE RIFLE ARE NOW BEING FILLED.

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NEW YORK WAREROOMS, 177 BROADWAY.

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This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44, as desired. Length of barrel, twenty inches. Any central-fire metallic cartridge can be used. Also, the EVERLASTING SHELL or shells can be loaded by the person using the rifle. Send for a Circular and Price List.

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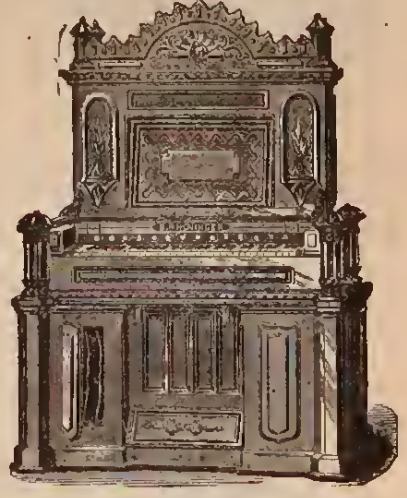

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Japanese Company of Jugglers, Acrobats, Magicians and Athletes, and their
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BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING NOVEMBER 26, 1877.

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

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By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 383 Washington St., Brooklyn.

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Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

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From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

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For all particulars, illustrated guide, &c., apply to

MURRAY, FERRIS & CO.,
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FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad.

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FOR PIKE, PICKEREL, BASS, Etc,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

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Shooting season expires December 15. For information as to routes, ratio and best points for the various kinds of game, etc. Apply to

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VIA THE
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To Boston and Return, $5.

Magnificent Steamers NEWPORT and OLD COLONY leave New York daily (Sundays excepted) at 4:30 P. M. This is the only Sound Line giving passengers a FULL NIGHT'S REST. Passengers take any one of the FIVE MORNING TRAINS from Fall River to Boston.

BORDEN & LOVELL, Agents. GEO. L. CONNOR, General Pass Agent.

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FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

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QUICKEST, CHEAPEST AND BEST!

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Liberal arrangements for transport of Dogs for Sportsmen.

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Brook Trout, Grayling and Black Bass Fisheries of Northern Michigan,
VIA THE
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Sportsmen who have cast a fly, or trolled a spoon in the

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will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

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Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

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is midway between the Capitol and the White House, and the most convenient location in the city. It has been re-fitted and re-furnished throughout. The *cuisine* is perfect; the service regular, and charges moderate.

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FOR WINES, LIQUORS AND CIGARS.

Outfits for yachting. The camp or field specialty. Olives by the case, gallon or bottle.

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Sept27

GULF HOUSE, Gaspe Basin, Gulf St. Lawrence.—A favorite resort for sportsmen, invalids, tourists and artists. Rates for room and board, $1.50 to $2 per day. Salmon, trout, mackerel, cod and lobster fishing; duck, beach birds, caribou and moose shooting abound. E. GEO. STRACKER, Proprietor. mar7 tf

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OLD KENTUCKY BOURBON & MONONGAHELA
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Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison Square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

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HUNTING SUITS,

which attracted great attention and were much admired by all Sportsmen.

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300 BROADWAY,
The Best in Use.

ONLY ONE QUALITY MADE, AND THAT IS THE VERY BEST.

Flexible Waterproof, Tan-Color Duck,

Each article—coat, trousers, vest and hat cap—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

We make no discount except to the trade. The price of the suit complete is $13.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are copper-riveted, and nothing is neglected to make the whole suit complete in every way.

This is what one of our best sportsmen says of it, writing from camp: "Although I had been nearly eight hours under incessant rain, laboring and striving along under adverse circumstances, yet I found myself comparatively dry, and my clothes without a tear. For the benefit of our brother sportsmen, let me advise one of Messrs Simmons' (of Boston, Mass.) Waterproof Suits. Oh! what a relief it was to find one's tobacco was dry, and that one could light a pipe; that you could laugh at your miserable friend, who stood shivering and shaking as if he had the palsy; and then, next morning, oh! what fun it was to see him mending his clothes, while I had not a tear to complain of! Ventilation, that great bugbear of waterproof suits, is legislated for in the most ingenious manner. No sportsman should fail to supply himself with a suit which is at once cheap, practical, and will last an almost indefinite time."

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Suits, $60 — Coat $32 00; Pants 15 00; Vest 12 00; Cap 5 00; Leggings 6 00

An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

OUR HUNTER'S TENTS made of tan-colored duck; light; easily transported. Size, 7 ft. x 9 ft. Price, $10, complete. Made on the umbrella principle, folding into a neat roll, 3 ft. long.

OUR PATENT DECOYS have entirely superseded the old-fashioned, cumbersome, wooden decoys. The birds are hollow, and six of them occupy about the space of one wooden decoy.

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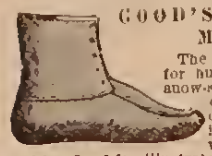

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The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S. HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

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Cheap and Elegant Colored Pictures.

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Size of paper, 13½x17½. Price, 20 cents each; six for $1. Sent per mail, post-paid, on receipt of price.

Address CURRIER & IVES,
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Cleans fifty shells in ten minutes. No water used. Knives elastic, self-adjusting, prevent the slipping of wads. Is unequaled as a breech wiper by covering with an oiled cloth. For sale by all gundealers, or sample sent free by mail on receipt of price, $1.50; 10 and 12-bore. J. F. RONAN, 388 Shawmut avenue, Boston, Mass. Liberal discount to the trade.

For Rifle & Shot-Gun Practice.

DENNISON'S TARGETS.

25 to 1000 yds. range.

Target Pasters and Score Cards.

ALSO.

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For testing the pattern and penetration of SHOT-GUNS

Sold by Dealers in Sporting Goods.

On receipt of **Ten Cents a 100-yd. Target** will be sent by mail, with Circular, containing *Major Henry Fulton's* RULES FOR PRIVATE PRACTICE, by

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BECAUSE HE HAD NO

COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

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The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 10 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. BARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

J. H. BEHRENS, Cor. Sec., 37 Bowery, New York.

United States Cartridge Company,

LOWELL, MASS.,

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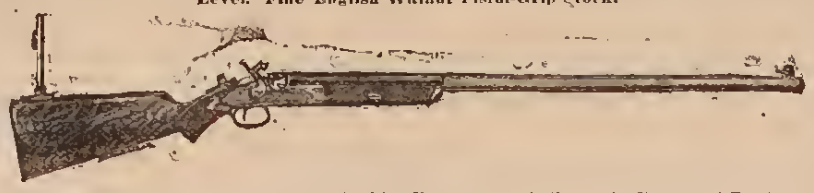
Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

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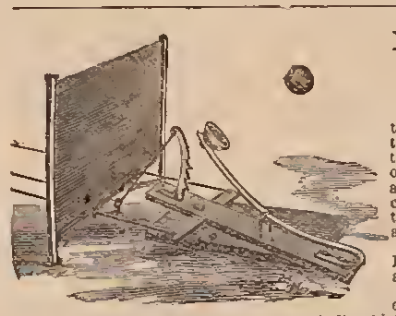

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PATENTED OCTOBER 23, 1877.

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For NIGHT HUNTING Deer and other animals, SPEARING FISH. Indispensable on any Boating, Yachting or Camping Trip.

Not affected by Wind, Rain or Jolting. Burns kerosene safely without a chimney. Throws a powerful light 200 feet ahead. As a DASH LAMP for CARRIAGES it has no equal. Fits on any shaped dash or on any vehicle.

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To Trout Fishermen.

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19 Beaver St., (up stairs) N. Y. City,

For his lists of TROUT FISHING OUTFIT offered for

FIVE DOLLARS, ($5), Retail Price from $8 to $10
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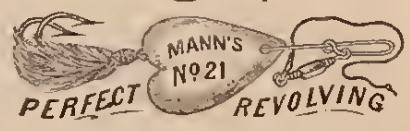
Trolling Spoons.



Our Trolling Spoons have been sold by the Trade, and used by the best fishers in the United States for fifteen years.

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has proved to be the best Trolling Bait ever manufactured.

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THE ORIGINAL HEXAGONAL RODS.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy. | NEW YORK, THURSDAY, APRIL 18, 1878. | Volume 10.—No. 11. No. 111 Fulton St., N. Y.

JACK IN THE SADDLE.

"My Kingdom for a Horse, Sir."

I'M a sailor and I've pitched and tossed upon the troubled ocean
For several years and visited the shores of many a land,
And wind may blow, and storm may rage, I care not for the motion,
But how to ride on pony-back I cannot understand.

Not long ago I thought I'd try, and having found a stable,
"I want a horse," said I, addressing one who chewed a straw,
And why all hostler men do that, to find out I'm not able.
"Here's one," says he, "a pretty thing that hasn't got a flaw."

How to get upon his back at first I was quite puzzled,
For he kept going round and round and throwing out his feet,
But soon I seized the leather thong with which he had been muzzled
And aprang aloft and off he flew full gallop down the street.

"Look out," cried all the people, "here's a sailor on a filly,"
"Stop," shouted out the hostler man, "your stirrups are too long;"
But I could neither stay nor speak, but went on willy nilly,
Like some good ship without a helm when tide and wind are strong.

I rushed into the market and upset a woman's stall there,
And scattered all the butter, fowls and fruit about the place,
I clung hard to the horse's mane or I'd have had a fall there,
But as it was the noise did but increase my charger's pace.

I next dashed through a herd of swine, young piglings and old grunters,
And drove into a crockery shop a pair of blundering sows;
Then having gained the country I beheld some hounds and hunters,
And hoped that they would pass in time to clear my pony's bows.

Alas! he heard the "View hallo" and turned the chase to follow,
Fast bolting on the starboard tack, and clearing hedge and ditch,
As swift as wind through meadow, shady copse and ferny hollow,
While every moment from his back I feared that I should pitch.

My hat was flying far behind, my stirrups idly swinging,
Like drowning man to floating wreck I held on by his mane,
The hounds did merrily give mouth, the huntsman's horn was ringing,
And every step my gallant steed upon the pack did gain.

"Come back, you sailor chap, come back," I heard a farmer calling,
"Be's you a going to trample down the hounds beneath your feet?"
'Twas all in vain, they might have spared their shouting and their bawling,
I could not stay my fiery steed, I could not check his heat.

For all this time with all my might the bridle I'd been sawing,
But 'twixt his teeth he'd got the bit and didn't care a fig,
I'd coax'd him and I'd yelled at him, he didn't mind my jawing,
But seemed to think it a great joke to lead me such a jig.

At last he tried a flying leap across a ditch, but stumbling,
He reached land with his foremost feet, while I slid off his back,
And wallowing in the nasty mire I had good cause for grumbling,
And do declare I'd had enough to satisfy, yours

—*Bermuda Royal Gazette.* JACK.

Leaves from My Journal.

MY FIRST DEER IN THE SNOW.

IT was a score of years ago, in the northwestern part of the State of Maine. It had been a cold winter night in the month of March, when the snow laid on the ground to the depth of four and a half feet in sheltered places, but less over tracts exposed to the wind, when Nay Bennett and I clambered out of our pit below the crust under the lee of Emery Mountain, where we had passed a very comfortable night, with our feet at a good log fire, and slipping on our snow shoes, commenced our journey toward Parmachene Lake, in search of moose.

We had not proceeded more than a couple of miles over the crisp, sparkling crust, which was sufficiently firm to sustain us, and were about entering a tract of black-growth timber, near the summit of a moderate hill, when we observed numerous deer tracks and fresh-bitten shrubs, which indicated that we were in a deer yard. It is the habit of these animals, as well as of moose, in northern latitudes, when the snow is deep and crusty in the month of March, to atop and yard until the snow melts away, or becomes soft enough for them to travel about without cutting their legs. This is done by selecting a spot where there is an abundance of undergrowth and shrubbery, which, in the warm days of that month, throw out their swelling buds in anticipation of more favorable weather. Upon these sweet and tender buds the deer will browse contentedly until the snow is nearly gone. By running over the snow as the crust begins to form in the spring, and by depressing it, a firmer crust is formed than in the surrounding forest, which enables them to run about more readily in quest of food. Sometimes the area of a yard is more than two or three hundred acres, but generally less, depending upon the number of deer yarding together. In this instance we found the yard to be a large one, and although we were in search of moose, we concluded, in the absence of venison or other fresh meat from our larder, to take in some, if possible. We therefore prosecuted our search up and down and across the yard until nearly two hours had passed, and we were seemingly no nearer our game than at the commencement of our search, although the signs were most encouraging.

As we had been traveling briskly, we concluded to take a short halt, and let our dog Zip make the search alone for a while. Zip was a veteran in this line of exertion, and immediately put himself out vigorously at the order from Nay. Hardly had he disappeared in advance before his quick running yelp announced the finding of our game. We speedily followed, and found that we had halted in close proximity to a number of deer, which Zip had started from their beds in the snow. We saw plainly the hollows or resting places from which they had been so suddenly startled, and down the hillside we saw the road or plowed furrow by which they had escaped. It was wide and deep, and indicated the hurried passage of a dozen or more. We could plainly hear the yelping of Zip not far ahead, who apparently was not making very rapid progress.

I hastily gave Nay my pack and gun, and rushed down the hill in pursuit as rapidly as my snow shoes would allow me, leaving Nay to follow as soon as he could with his increased burden.

An important object after starting deer in this manner is to hurry them up as much as possible at first, which increases their alarm and occasions more floundering and fatigue than would result from a slow following. Deer, when closely pursued at first, will soon lose courage and strength if the traveling is difficult; but if allowed to get over the first flurry, will settle down into a more cool and steady exertion. I soon came up with Zip, who was doing all he could with his short legs, but who found the crust too soft to fully sustain him. I left him behind, which annoyed him very much, as evinced by his redoubled exertions and yelping. A mile more of rapid traveling brought me in sight of the deer—a splendid drove of thirteen—led by a large buck, which I mentally resolved should be mine.

At my near approach their exertions were increased, but only to still more hopelessly flounder in the snow; and upon my reaching them they separated from each other, as usual in such cases, each taking care of himself. Singling out the big buck, I brought him to bay, the others soon being lost to my sight. The old fellow would turn and face me upon my near approach; but, finding himself let alone, would exert himself to escape until again crowded. My object was to detain him until Nay or Zip should come up. Finally Zip arrived and immediately commenced a furious onslaught, after the manner of dogs of his class, which, being trained to hunt moose, do not close in but keep up a perpetual springing and barking which serves to annoy and hold the game at bay until the hunter arrives with his gun. A dog of good metal and hold-fast qualities would most likely lose his life in endeavoring to seize and hold a full grown moose, owing to the effective manner this animal has of striking out with his fore-feet; and the dogs employed by moose hunters in these latitudes are of an ordinary character, and are effective in their way. Zip was one of this sort, and, although the animal we had at bay was much inferior to a bull moose, I could not get him to lay hold, while the buck was gradually working his way to a hill side not far distant, where the snow was partially blown away, which I feared he might reach and perhaps escape before Nay came up with the gun.

I therefore kept very close and urged Zip on continually. The buck would start on as speedily as possible until Zip's running nips would bring him around, when he would charge in a gallant manner, but Zip's ability to keep out of harm's way was only too evident. In vain I urged him to hold, but hold he would not, though most noisy and persistent in his peculiar warfare. The buck finally became very furious at this continual goading, and employed nearly all his time in charging and striking at Zip, giving out in his fear and rage an angry, hissing sound. In the excitement I had approached within ten or twelve feet of him, when suddenly, disregarding Zip, who as usual made good his escape, came upon me so quickly that in my efforts to retreat I locked my snow-shoes and came down upon my back.

I saw his leap, and his body coming down upon me with his fore feet close together in striking condition. I had barely time to twist my body a little on one side, when down in the snow close beside my waist, came his cleaving feet. I had in my right hand a buck-horn-handle knife with a thirteen-inch double-edged blade running to a point. I had drawn this out on my near approach to the buck, and as I felt his breath on my face, I suddenly threw both arms around his neck to detain him from coming down upon me again with his sharp feet; but his strength was so great that he instantly rose in the air with myself hanging to his neck, while Zip, now more courageous grown, seized him firmly by the rear. The buck was now in a decidedly bad fix, which fact he seemed well aware of, and I was very much astonished at the rapidity with which he leaped up and down, despite the heavy burdens he carried in the front and rear. I came to the immediate conclusion that his strength would outlast mine, unless abated by some extreme action. So finally compressing my left arm, which was hooked over his neck, and rapidly seizing his throat with my left hand, I liberated my right arm and brought my knife blade down to the hilt in his neck; it seemed like butter, it slipped so readily. Down came buck, dog and myself in a confused sort of way, myself underneath; but the buck had ceased to struggle, and I pushed aside his head to keep off the hot red blood which spurted from his wound and nostrils and rose to my feet. The buck was dead and I had not received a scratch. Nay soon arrived, and we dressed and hung up the buck in a tree above the reach of animals. Cutting from him enough meat to supply our immediate wants, we pursued our way toward Parmachene lake. When we returned, two weeks later, we found his frozen carcass hanging as we left him. Nay rigged up a rough sled and hauled him out to the settlement, where we found his weight to be one hundred and eighty-nine pounds. WHITNEY.

For Forest and Stream and Rod and Gun.

NICARAGUA.

FROM several long interviews with an acquaintance just returned from Nicaragua, whose experience and travels extend over a period of nearly three years there, we have gathered the following facts:

It lies between Honduras on the north and Costa Rica on the south, extending from latitude 10 deg. 45 min. to 15 deg north, and from Caribbean Sea on the east to the Pacific Ocean on the west, with an area of 50,000 square miles. The country is traversed by two nearly parallel ranges of mountains, running almost due northwest and southeast. These are the cordilleras or main backbone of the isthmus, and the coast range or volcanic mountains of the Pacific. The latter range extends from Guatemala through San Salvador and Nicaragua, terminating in the great mountain group or nucleus of Costa Rica. This range does not vary from more than ten to twenty miles from the Pacific coast. Between the two ranges of high mountains is formed a great interior basin of nearly 300 miles in length by 100 in breadth, in the centre of which is situated the broad and beautiful lakes of Nicaragua and Managua. The first named is about 130 miles long, and from 20 to 30 miles wide, interspersed with a number of large islands, many of them rising several hundred feet above the water, and perpetually clothed in tropical verdure and affording range for large herds of cattle. The whole country is considerably elevated above sea level, if we except a small strip lying along the Pacific, and about 20 miles inland from the Caribbean Sea, which has a rather humid and unhealthy climate, but the remainder of the Republic is entirely healthy. The Segovia country, lying north of Lake Nicaragua, is elevated and mountainous, and enjoys a delightful climate throughout the year. Wheat has been successfully raised here, and corn grows throughout the country. Bordering on the shores of the lakes and Pacific, are to be found plantations of coffee, cocoa, sugar, indigo and vanilla. Many residences are embowered with a rich profusion of flowers, vines, shrubs and tropical trees, and near by are to be found growing pineapples, oranges, bananas, cocoanuts, limes, plantains, guava and other fruits unknown to the more temperate climate of the United States. There are two seasons—the rainy and dry. The rainy season lasts from May to October; yet, during the whole of this season, rain rarely falls until late in the afternoon, continuing through most of the night. During the dry season but little rain falls. The thermometer throughout the year varies only from about 68 deg. to 86 deg. Fah., but seldom reaching 90 deg. in the shade. A greater portion of Nicaragua is covered by dense growth of forest, including mahogany, logwood, lignum vitae, gutta percha, Peruvian balsam and numerous dry woods, gums and drugs. All kinds of wild animals are to be found, and birds and reptiles in profusion. Deer are plenty, and are only killed for their hides.

The population of the Republic is chiefly confined to the towns and villages, with the exception of the different Indian tribes living in the remote districts bordering on Honduras and the eastern shore. The smallest and better class are made up of native Spanish and their descendants; the balance are largely composed of Indians and mixed races. All good citizens from the United States are gladly welcomed in Nicaragua, and but little trouble is experienced in acquiring sufficient of the Spanish language to be understood. The inhabitants are mostly indolent, as is common with all tropical countries. They dress in linen or other cool material, and are fond of spending the heat of the day swinging in their hammock in some cool shaded spot. The Indian and other laborers employed on coffee, sugar and other plantations, go naked from the waist up, and wear broad Panama hats. The country has been that of a cattle raising one for upwards of two hundred years, and fine herds of stock that would do credit to many of our Western prairies are to be seen grazing along the lake shores and throughout all Segovia. Many thousand hides are annually exported, while the meat is cut in slices, jerked or dryed, and sold at a good price far down the coast to South America.

The outlet of Lakes Managua and Nicaragua are through one river—the San Juan—whose length from the lake at Fort San Carlos to the Caribbean Sea at Greytown, in its windings, is one hundred and fifteen miles. It is a beautiful river, but is obstructed by the rapids del Castillo, de los Valos, Machuca and others of less note that are a serious impediment to navigation, except with canoes, which the Indians pole around by keeping close to the north shore. There are two small steamers that ply above and below the rapids, which are conducted as a monopoly from the government by a rather pompous Frenchman residing at Greytown, who, from the privilege of

his monopoly, charges exhorbitant rates of passage from the port of Greytown to the inland towns on the lake. Greytown was made a free port by the English some years ago. All import duties to Nicaragua are collected at St. San Carlos at the head of the San Juan, and go toward sustaining the general government. The duty imposed on all foreign goods entering the republic are from 45 to 55 per cent., and there is a reciprocal duty between the other States of Central America of 4 per cent. The religion is a liberal Roman Catholic—all monasteries have been abolished by a voice of the people—and there are a number of instances where the priests are married. Strangers arriving in the country worship after their own form without fear of molestation. The whole of Nicaragua is a grand study for the naturalist, and for a party of several sportsmen no finer or more pleasant place for a few months' vacation could be found in the whole of North America.

SELTHAR-BOZNAI.

ON THE LOWER RIO GRANDE.

THE MEXICAN METHOD OF HUNTING DEER.

YOUR very interesting paper keeps me informed as to the sports in other portions of the land, and I am constrained to give a short sketch of how we do it on the lower Rio Grande. The game along the river consists of deer, turkey, chiacalaca, peccary and duck and goose, with quail of two kinds in the back country. The chapparal, for some ten miles back from the river, is very dense, in some places positively impenetrable, every bush heavily armed with strong, sharp thorns. Occasionally one finds an open glade, but they are not frequent. Turkey have been quite plenty, and we have had some good sport. They are much more shy here than in other parts of the State, and we do not make the large bags mentioned by "Bushwhacker"—who, by the way, does not locate Fort Clark properly. It is west, not south, of San Antonio. About the middle of January, the moon being full, Lieutenant W. and I left camp about 7 P. M., to look up some turkeys W. had seen in the afternoon of the same day. They were supposed to be roosting in a grove of large hackberry trees, and when near the spot we separated some fifty yards and entered the wood on parallel lines. In the midst of the grove is a beautiful grassy dell, devoid of underbrush and surrounded by tall trees, their branches heavily hung with gracefully drooping moss. On this moonlit night the scene presented was sufficient for the moment to make me forget my errand, but I was brought back suddenly to mundane affairs on perceiving a huge form approaching me from out the shadow of a tree. If elephants were to be found in this country I would have been positive that this was the largest of his kind. At first it seemed immense, but as it came nearer dwindled down to a large sized peccary. Raising my carbine to fire, I caught sight of another moving object on my right. Thinking it better to look to the rear in case I wished to move in that direction, lo! there was another within ten feet. Knowing that the squeals of a wounded pig would bring the whole herd upon me, I hesitated a moment before firing. There was a tree not far off on my left which could be reached easily, so selecting the nearest peccary, I fired, executing an instant after a "vault to the rear," in anticipation of a charge; but piggy was "very dead," and the rest scampered off. While cleaning and hanging him up I heard the report of W's gun, followed a moment after by the dull thud of a dead turkey as he struck the ground. The flock scattered about through the wood; one of the birds alighting on a tree near me was soon hanging alongside of the peccary. We hunted diligently, but killed no more birds that night. It is very difficult to distinguish them from the bunches of moss.

The flesh of a young peccary is very excellent if the animal is skinned soon after killing. About the first week in January we tried the Mexican method of hunting deer during the rutting season. Provided with a pair of buck's antlers, which had been sawn apart, and armed with carbines, we struck out through the brush until we came to a small glade in which were two or three large mesquite trees. Selecting one easily climed, we mounted up, one on either side, seated ourselves comfortably as possible and facing in opposite directions. With our hunting-knives we clipped off all little twigs that might interfere with our guns. We were about twenty feet from the ground. All around the glade the chapparal was quite thick. W. then took the horns, one in each hand, and struck them together after the manner of bucks fighting. One or two hard clashings together, and then the scraping and twisting of tangled horns. After resting a minute this was repeated. The sound can be heard a long way off, and, if the imitation is perfect, any buck hearing the noise will come up on a run. If he suspects anything wrong he will steal around to leeward and come up against the wind. We had been in the tree some fifteen minutes when I caught sight of a pair of horns moving along above a bush some distance off. A word to W., who very quietly dropped the horns and took his gun. The buck came on slowly, moving around to leeward and stopping occasionally behind a bush. He seemed to see us, but did not connect us with the noise. When about forty yards away I covered him, and, as he came in full view from behind a cactus plant, let him have it.

Hanging him up we went on further, tried a number of trees, but failed to call up any deer until near evening, when a fine young buck came up with a grand rush—mad—full of fight. He was within twenty yards of us before he discovered his mistake, and then it was too late. Four hundred and five grains of lead through his heart was more than he could stand and live.

This seems murderous work, taking advantage of the chivalrous instincts of the animal—shooting him down at the moment when he is prepared to do battle against all odds in order to gain favor in the sight of some soft-eyed doe. But it is no worse than calling moose or imitating the turkey-hen and slowly coaxing the proud old cock-bird within rifle shot. Then, too, it is only during the rutting season, which down here begins about the 15th of December and ends the 15th of January, though the bucks do not shed their horns until the latter part of February. Besides, in this part of the country, the chapparal is so dense that it is almost an impossibility to shoot bucks unless some advantage is taken of them. The does do not suffer—they never come up at the call, and the number of deer is not materially decreased. As with calling the turkey, the imitation must be exact, the hunter must be still as death; the slightest movement in the tree, if detected, will send the buck off. I have never heard of the above method being tried elsewhere than along the lower Rio Grande. Would like to know from the readers of your paper whether it is new to them.

In the FOREST AND STREAM for January 31st I noticed, in "Answers to Correspondents," the question as to whether Kit Carson served during the rebellion. In justice to the memory of a brave man, I wish to say that Kit Carson was colonel of a New Mexico regiment of volunteers, and, though he took part in none of the great battles of the war, was ready and willing to do his share. "He also serves who only stands and waits."

"HIDALGO."

For Forest and Stream and Rod and Gun.

HOW A QUAIL SAVED A MAN'S LIFE.

"OLD UNCLE JOHN SMITH, who was one of the most famous Indian fighters and trappers on the plains of by-gone days, was once saved by a quail. "Uncle John" was acquainted with almost every creek and canyon from the Yellowstone to the Red River, and it was while a party was camping with him one evening in 1868, on the Washita River, that he related the story in question. Some of the party had shot several quail during the day, which had been cooked by being spitted on willow twigs over a bed of hot coals; but much to the surprise of all, Uncle John declined to partake of them, though he had often said he could eat anything from dried buffalo hide to a tender antelope steak.

"Boys," said he, "I don't touch quails. I hain't touched one for nigh twenty-five years. One of the little cusses saved my life once, and I swore then I would starve before I would ever eat one, and I have kept that oath ever since, though I've seen the time when I could 'a killed 'em, when all I had to chew on war the soles of a pair of greasy moccasins."

Of course, all were anxious to know how the old trapper's life had been saved by so small a bird, and, after supper, gathered round the fire to listen to old Uncle John's story.

"Well, boys, it war a good many years ago—I think in June of 1847—I was coming in from way up the Powder River country whar we'd been trapping, and war on our way to Independence with our pelts. There was with me a man by the name of Thorp, one named Boyd, two more whose names I don't remember, and a nigger wench we had for cook. Everything went on all right till we got down on the Arkansas, somewhere near Pawnee Rock. The next morning before we broke camp, Thorp and Boyd started out for the horses, which war picketed a little ways off, and while they war gone I seen some buffalo a little off to their right, and picked up my rifle to go after one. The grass war pretty tall on the bottoms, and I got in easy shooting distance and pulled up my rifle to take a shot. Just as I war running my eye along the barrel, a quail jumped up from the grass under my feet and lit right on the front sight, and, of course, I couldn't get aim. We didn't shoot reckless in those days, and every shot had to count or a man war the laughing stock of his comrades for a month if he missed his game. So I shook the little critter off and brought up my rifle again, when the durned bird lit right on the same place, and at the same time my eyes kind of got hazy, and I couldn't see anything for a minute. But when I came to the quail was gone, and right in front of where the buffler had stood, and close to Thorp and Boyd, half a dozen Injuns jumped up and fired at them, killing Thorp instantly and wounding Boyd. He and I, however, got to camp, and, with the other two men, kept the Injuns off, who soon went away. Thorp was, of course, scalped and his body left for the wolves, as we couldn't get it, because we had to pull out as soon as the Injuns left. Boyd died, and we buried him there. You see, if I had fired at the buffler the Injuns would have had me before I could have loaded my rifle again, and as they knew I had not fired, they kept at a respectable distance. That quail saved my life by interfering with my sights, and that's the reason, boys, why I never eat quail."

GEORGIA.

Fish Culture.

MIGRATION OF FISHES.—No. 3.

BY G. BROWN GOODE—READ BEFORE THE AMERICAN FISH CULTURAL ASSOCIATION.

CONCLUSION FROM STRUCTURE AND KNOWN HABITS OF THE FISH CRITICISED.

Professor Hind lays much stress upon the presence of a "film" over the eyes of the spring and the autumn mackerel and upon their alleged capture in winter in the waters of the Dominion, and also quotes arguments for hybernation, based upon the resemblance of the mackerel to the batrachians (which are known to be capable of hybernation) in color, and upon its resemblance to embryonic forms of other fishes, which is supposed to "prove him low in the scale of intelligence" (Part I., p. 79). To the latter it is needless to refer. The so-called "film" on the eye is not peculiar to the mackerel. Many fishes, such as the shad, the alewife, the menhaden, the bluefish, the mullet, the lake whitefishes, and various cyprimoid fishes, have a thick, tough membrane covering the anterior and posterior angles of the orbits, narrowing the opening to the form of an ellipse, with a vertical major axis. This possibly becomes somewhat more opaque in seasons of decreased activity. It has never been observed to cover the whole eye. Until the fact has been established that "a skin forms over the eye" in winter, it is quite unnecessary to propose the theory that such a skin "is probably designed to protect that organ from the attacks of the numerous parasitical crustaceans and leaders which infest the external portions of the bodies of fishes, and are also found internally, as in the gills of codfish" (Hind, op. cit., Part II., p. 11.)

A number of instances are cited to prove that the mackerel schools remain on the Dominion coast throughout the winter season. If this can be well established it is a very strong argument in favor of hybernation. Let us analyze this testimony.

Dr. Gilpin is quoted to the effect that, during some seasons, they linger on the Nova Scotian coast until December, and allusion is made to a mackerel obtained by him at Halifax, Oct. 27, 1875 (Part I, p. 79.) Mr. John Rue remembers that his father used often to speak of mackerel "coming on shore like squid, with scales on their eyes and blind, about Christmas," about forty years ago (Part I, p. 78.) Mr. Jabez Tilley states that they have been taken in November in Trinity Bay. Prof. Hind also states that they are to be found on the whole coast from Quirpun to Cape Spear during November and December. He gives no authority for this statement, and it is to be inferred that it is founded upon personal observation. Then there is the vague statement of Mr. Ambrose, already quoted, that mackerel have been speared on muddy bottoms under the ice.

Now, this testimony does not, by any means, tend to prove that the mackerel remain near the coast in winter. In the first place, there is no satisfactory proof of their occurrence later than Oct. 25, since that is the only evidence fortified by a memorandum of date, and the memorica of fishermen are not more certain than those of other men. In the second place, it is not impossible that mackerel linger in these waters until November, or even December, in the case of a warm autumn. The temperature necessary for the menhaden cannot be many degrees below 50 deg., while the mackerel appears to endure a temperature of 40 deg. or less. Menhaden linger in Maine waters till November, and in Massachusetts Bay and the Vineyard Sound till December.

Finally, the undoubted capture of many individuals in winter on the coast of Newfoundland, would, by no means, prove that the great school were there throughout the season. Disabled, blind or diseased individuals would naturally be unable to accompany the departing school. Such fish would naturally grovel on the bottom in a helpless state, and might easily become impaled on the eel-spears, or might occasionally be accidentally detained. Mr. Peter Sinclair, a well-known fisherman of Gloucester, stated to Prof. Baird that, some years ago, a school of mackerel were detained all winter in a small river in Nova Scotia and were speared out of the mud. This is, doubtless, hearsay testimony, and is given for what it is worth. I do not doubt that there have been individual cases of this kind, but I maintain that no generalization should be founded upon them.

The preceding paragraph is devoted to the refutation of the idea that sea-fish hybernate. This is regarded as the least probable of the three hypotheses stated in paragraph 85. In paragraph 84 it is stated that the sea-herring and many other fishes have two kinds of migrations, one bathic or from and toward the surface, the other littoral or coastwise. Now in some species the former is most extended, in others the latter. The anadromous species very probably strike directly out to sea without coasting to any degree, while others, of which the mackerel is a fair type, undoubtedly make extensive coastwise migrations, though their bathic migrations may without any inconsistency be quite as good as those of the species which range less. Upon this point I cannot do better than to quote from a manuscript letter written by Professor Baird to the Hon. Hamilton Fish, Secretary of State, dated July 21, 1873. Having expressed the views concerning the migration of the herring and shad already quoted in paragraph 84, he continues:

"The fish of the mackerel family form an exception to this rule. While the herring and shad generally swim low in the water, their presence being seldom indicated at the surface, the mackerel swim near the surface, sometimes far out to sea, and their movements can be readily followed. The North American species consists of fish which as certainly, for the most part at least, have a migration along our coast northward in spring and south in autumn, as that of the ordinary pleasure seeker, and their habit of schooling on the surface of the water enables us to determine this fact with great precision. * * * Whatever may be the theories of others on this subject the American mackerel fisherman knows perfectly well that in the spring he will find the school of mackerel off Cape Henry, and that he can follow them northward day by day as they move in countless myriads on to the coast of Maine and Nova Scotia."

It is difficult to estimate to what extent the advocates of the hybernation theory have been influenced by patriotic motives in their efforts to prove that the mackerel remain in the waters of the Dominion of Canada throughout the entire year. It is certain that all recent treatises on ichthyology by Canadian writers have appeared in the form of campaign documents, apparently intended to influence the decisions of Diplomatic Commissions.

I am by no means prepared to maintain that mackerel do not pass the winter in the American domain of her Imperial Majesty. It seems important, however, that the subject of the migration of fishes should be restored to its proper position as a question of abstract scientific importance. Let us glance at the argument of Mr. Whitcher and Professor Hind against what the former is pleased to style the "American Theory."

In the report of the Minister of the Marine and Fisheries for the year ending the 30th of June, 1871, Mr. W. F. Whitcher, Commissioner of Fisheries, published a paper entitled "American Theory Regarding the Migration of the Mackerel Refuted" (pp. 186-189).

Mr. Whitcher opens his letter by claiming that the theory of north and south migration was invented solely in support of a claim advanced by citizens of the United States to participate in the Canadian inshore fisheries. "This ingenious but traditional theory of annual migration having gained local credency amongst some of the Nova Scotia fishermen engaged in United States fishing vessels, has been sagaciously indorsed and circulated by American Authors." He also refers to evidence "supposed to have been procured among the fishing population of the New England States."

I need only say that these claims are unjust, and that the theory of the annual north and south migration of the mackerel is time honored, and was held conscientiously by ichthyologists of the United States and the Provinces long before the question of fishery treaties assumed its present aspect. It is manifestly unfair to state that while the theories which prevailed respecting the habits of herring and mackerel were formerly similar, that, "in the former case it is probable that traditionary and imperfect information formed the basis of error, while in the latter instance it is most probably founded on misinformation dictated by sectional interests." Mr. Whitcher's own paper upon migration is the only one of American origin in which I have seen scientific method sacrificed to partisan spirit.

Having read Mr. Whitcher's introduction, one might readily predict what sort of an argument he will wrench out of the statements of "such disinterested authorities as may be readily quoted." First he gives extracts from Mitchell and the Edinburgh Encyclopædia regarding the habits of the herring. Granting all that is claimed about the herring,

without reference to the reliability of these authorities, what do we find? Merely a *petitio principii!* The habits of the herring and the mackerel are not known to be the same. In many particulars they are diametrically different, for the former loves cold water, the latter warm water.

Various provincial writers are now quoted: Mr. Perley, who says that "naturalists now tell us," and "it is now considered settled," that the mackerel is not migratory, but draws off into deep water at the approach of winter; and Mr. Knight and Mr. Forbin—though the reason for these quotations is not apparent, since no reference to the winter habits of the fish can be found therein. He does not refer to the writings of Mr. Ambrose and Mr. Johnston, Canadian writers, who advocate the migration theory. Yarrell and Couch are next quoted, but neither of them ventures to give a decided opinion. Finally, we have a paragraph compiled from five French Encyclopædias, good and bad, no means being afforded of distinguishing the opinions of Cuvier from those of Chenu's literary staff. Mr. Whitcher's conclusion is this: That "it is clearly neither necessary nor accurate that mackerel should perform the migrations ascribed to them by American writers." The migrations of the mackerel are neither proved nor disproved by special pleadings of this description.

The spirit of Prof. Hind's publication is very different. He writes from the standpoint of an investigator, and his book is an important contribution to our knowledge of the habits of fishes in relation to temperature and currents. I feel obliged, however, to call attention to a very serious flaw in his chief argument against the annual migration of the mackerel. In the chapter on the "Relation of the Supposed Migratory Movements of Mackerel to Isothermal Line" (Hind, op. cit., Part II., pp. 15-17), it is claimed that a migration to the north in the spring "presupposes the movements of bodies of the same great schools of mackerel" which are alleged to pass Massachusetts Bay from the waters of the coast of Virginia and New Jersey, not only through from ten to twelve degrees of latitude, but it assumes that they are able to cross in the early summer, and frequently before spawning, numerous isothermal lines in descending order. He then refers to the article upon the Gulf Stream in "Petermann's Mitthelunger" for 1870, in which the marine isothermals for the different months are shown by means of a chart. A table is given showing the isothermals for July. That of 68 degs. would touch the coast at Delaware Bay; that of 63 degs. 5 mins. at Long Island; that of 59 degs. at Boston; that of 54 degs. 5 mins. at Cape Sable, N. S.; that of 50 degs. at Cape Race, and that of 45 degs. 5 mins. at the Straits of Belle Isle.

From this he concludes that "a school of fish moving rapidly from Delaware Bay to the Straits of Belle Isle, would pass in July from a mean temperature of 68 degs. to a mean temperature of 45 degs., a difference of more than 22 degs. Fahrenheit."

This theory would be very satisfactory if it could be admitted that the isothermals for July indicate the actual temperature of the sea from day to day. In reality the marine isothermals are constantly varying, and in this respect are different from those printed upon a chart, as no one knows better than Professor Hind. A glance at the tables in appendix F, and the conclusions deduced from them in regard to the menhaden (paragraph 85) will show that schools of fish do not find it necessary to force their way through walls of sea temperatures, but that their movements from south to north are exactly correlated with the seasonal rise of temperatures. As soon as the water at a given point reaches a certain temperature, which for the mackerel on our own coast appears to be as much as 45 degs., the fish make their appearance, and with the advance of the season they appear further and further to the north. Mackerel do not appear on the coast of Maine until the water there is as warm as it was off Cape Hatteras at the time of their first arrival. This is the case whether we suppose their general movement to be parallel with or vertical to the coast line.

I have entered the discussion of this question, not with any idea of attempting to prove that mackerel migrate south from the Gulf of St. Lawrence, but to show that a comparatively rapid northward movement in May and June does not necessitate a "sudden plunging from high to low zones of temperature."

(Concluded in our next.)

BROOK TROUT IN NEBRASKA.

North Platte, Nebraska, April 5, 1878.

Editor Forest and Stream:

Mr. Editor: At our last regular monthly meeting of Our Sportsmen's Club we proposed to stock the streams and small lakes near here with trout. As no trout has ever been seen here, I should like first to ask: First, do you think they will grow here? If so, of whom can we procure trout spawn, and at what price? Should like to purchase them as near home as possible. We would like you to publish this letter, as it may attract the attention of some one who will answer as we desire. You will confer a favor upon us if you will answer by letter. Respectfully.

W. W. Conklin,
Sec., North Platte Sportsmen's Club.

[We cannot tell whether trout would thrive in Lincoln County; but probably they would if you can change those natural conditions which have hitherto prevented trout from thriving in the rivers after they leave the mountains. Overflows, shifting sands, deposits, change of temperature, and especially the three former, totally prevent the reproduction of trout from the ova (after the rivers enter the plains), while the *Cyprinidæ* inhabiting the river will prey upon the fry. You can, however, set aside and confine the water so as to raise trout artificially, but this will not stock the rivers. If your tributaries are not subject to the same contingencies, to an appreciable degree as the main river is, you may succeed then. The experiment is worth trying. The nearest place would be in Iowa. Apply to the Fish Commissioners, say, to B. F. Shaw, of Anamosa.—Ed. Forest and Stream.]

Grubs and Worms in Fish.—Almost every living creature has its peculiar parasite, and the fish family are not exempt. Indeed, almost every variety of fish is liable to be infested with some kind of external parasite at certain seasons of the year, though it does not follow that such parasite damages the health of the fish or its edible qualities. There are also internal parasites in fish, which seriously affect their bodily health and comfort, and doubtless impair their fitness for food. The *teniæ*, or tape worms, are not uncommon, especially in the *salmonidæ*. Only last week a gentleman of this city, known as a naturalist, discovered five tape worms of several inches in length in the stomach of some pond-raised fish, which came from Pennsylvania. He reported the fact to us. What we have said is corroborated by that careful observer, Seth Green, Esq., as well as all students of science. Quite recently a Mr. St. John, of Port Jervis, mentioned having found small grubs, or worms, in the black bass caught in the Delaware last season, and applying to Mr. Green for information, elicited the following reply:

Rochester, N. Y., April 5, 1878.

C. St. John, Jr.

Dear Sir: It is not a very uncommon thing to have small worms or grubs in fish. I have often seen them. They do not do any hurt if you do not see them. They are like skippers in cheese. It is all cheese, if you do not see the skippers. Because they are affected that year it is no sign they will be this year. Yours Seth Green.

One of the most noteworthy examples of wormy fish was reported in our paper last week (and previously) referring to the wormy trout of the Yellowstone. These worms are in the flesh, just as the *trichinæ spiralis* infest pork. We do not know that their presence has been scientifically accounted for by Professor Leidy, or any one else.

Crawfish Culture.—The following note from a recent number of *Nature* is not only very interesting, but also supplies some information for which we have long been waiting. Will our California correspondent who asked for information on this subject please take notice:

"The Piscicultural Institution of Schwerin has recently made some important experiments, with a view to ascertain whether the artificial culture of the river crawfish (*Astacus fluviatilis*) is possible on a large scale. The experiments are entirely successful. In the spring of last year some seven hundred crawfish, with ova, were placed in two circular ponds, of only six feet in diameter, and for each animal a separate hole had been constructed. At the end of November the ponds were drained in order to separate the young crawfish from the old ones. It appeared that of the latter only three or four were crawling about at the bottom of the pond, while all the others had occupied their respective dwellings. The young were of the size of a bee, and extremely lively; they were taken out of the ponds, and already on the following day could be fed artificially with carrots and meat. Many a land or garden proprietor could thus make crawfish-culture a lucrative pastime at very little cost, particularly since the consumption of these crustaceans increases largely every year."

From Mr. Wilmot.—G. S. Page, Esq., Vice-President of the American Fishcultural Association, has communicated to us the following from a letter just received by him from Sam'l Wilmot, Esq., of Newcastle, Ont.:

"I have been most successful this year in my Dominion operations, having already turned out upward of twenty-five millions of whitefish fry, mostly in the Detroit River. So, you see, your people will get equal benefit from this great crop, as I am doubtful whether I have infused into them Canadian sentiments sufficiently strong to induce them all to come back on the Canadian side of the lake again. We shall turn out very shortly some seven millions of salmon and salmon trout fry."

Another Salmon in the Delaware.—We are indebted to Major E. J. Anderson, Commissioner of Fisheries of the State of New Jersey, for the interesting communication that a fine salmon was caught last week in the Delaware River, some two miles above Trenton. Major Anderson writes: "This settles the question as to whether salmon will live in our waters. The fish was three feet six inches in length, and weighed twenty-three and a quarter pounds. This salmon undoubtedly owes its origin to young fish placed in the Delaware some four or five years ago." It would materially assist the Commissioners, Messrs. E. J. Anderson, of Trenton, N. J., and Theodore Morford, of Sussex Co., in case other salmon were caught in the Delaware or its tributaries, if these gentlemen should immediately be apprised of the fact. This salmon was caught in a shad net by Mr. Jacob Booz, of Trenton.

Fish for the Susquehanna.—A. T. Clapp, Esq., of Sunbury, informs us that 3,000 salmon trout, and the same number of brook trout, were deposited in the streams adjacent to Sunbury. A plant of 8,000 California salmon has also been made recently in the upper waters of the west branch of the Susquehanna, above Renovo, and 2,000 in Paddy's Run, a tributary near that place.

Shad Propagation in Virginia.—The United States Fish Commission commenced the work of shad propagation in the Albemarle Sound last week, having distributed nearly a million young shad in the rivers and streams of Virginia, North Carolina and Alabama. For a month to come the work will continue on equally as large a scale. The apparatus for shad hatching is more extensive than the Commission ever used before.

The Susquehanna Fishways.—The committee appointed by the Legislature to report on the Columbia dam have reported that the only possible way to restore the fish to the Susquehanna is to remove this dam.

—Theo. Morford, Esq., cashier of Sussex National Bank, Newton, New Jersey, has just been appointed Fish Commissioner of the State. His coadjutors are E. J. Anderson and B. F. Howell, the latter reappointed.

Land-Locked Salmon in California—*San Francisco, Cal., March* 28, 1878.—I learned to-day through Maj. E. W. Leonard that they have land-locked salmon in Clear Lake, Lake Co., Cal., which weigh from one and a half pounds to seven pounds, and that they are an exact counterpart of the land-locked salmon in Maine. They take them with a spoon bait, therefore they will not have to look for land-locked salmon spawn for this State from the East any more. The State Commissioners have just put in the lake a large number of land-locked salmon fry. They are taking whitefish from their spawning beds in Lake Tahoe that were put in two years ago. They are also taking shad from five to eight inches long here in the Bay of San Francisco, supposed to be one year old—they take them while seining for herring. This should not be done. B. B. P.

The Prussian Fishery Law.*—Although the Prussian fishery law has been in force for four years and a half, its clear and distinct regulations are nevertheless transgressed in many places, not only because the privileged fishermen and local authorities themselves are the transgressors, but chiefly because people seem loth to abandon the old accustomed way of fishing, leading to the final extermination of fish. It is especially paragraph 50 of the law, which imposes a fine of $35.70 for fishing during the season of protection (Schonzeit), which has been transgressed, and great damage has undoubtedly been inflicted on the fisheries by the neglect of firmly upholding the letter of the law in this matter. No less damage has been inflicted by the frivolous destruction of young fish. In view of these evils the committee of the German Fishery Association has undertaken to do all in their power to further a strict observance of the fishery law, and at its last session, of the 4th inst., it was resolved to promise a reward to all those persons who would show special zeal in detecting such transgressions, and thus enable the authorities to punish the transgressors. The report should be made to the Fishery Association and examined by them, and, if necessary, the reward might be certified by the local authorities. All information regarding transgressions of the fishery law should be addressed to the German Fishery Association, Berlin, W. Leipziger, Platz 10, and all the necessary steps will be taken for punishing the transgressors.

Natural History.

DEER SHEDDING THEIR HORNS.

Newport, Ky., March 18, 1878.

Editor Forest and Stream:

In reference to the shedding of deer horns, and the statement of Mr W. H. Cassell, Superintendent Park Police, Baltimore, I beg leave to venture the following remarks, based on experience which was gathered in Europe (Germany), where I, from earliest youth, had ample opportunity to study the habits of deer there existing—*Cervus rufus, C. dama* and *C. capriola*. As to the manner of shedding their horns I fully coincide with the opinion of the contributor signed "Pennsylvania," expressed in the last number of Forest and Stream, and wish to add that I myself have shot, and have seen others shoot, deer with their old horns at a season when other deer commenced again to rub off the velvet of the fresh horns. Disease, or partial loss of the genital organs was, in every instance, found as the cause of this irregularity. I have no reason whatever to doubt the correctness of Mr. Cassell's observations regarding the burying of the shed horns, having witnessed the same operation in small inclosed parks, and, compared with the habits of deer in the unbounded forest, or in large parks, extending over an area of 5,000 to over 15,000 acres, as exist in Europe, and wherein the deer cannot feel the imprisonment, this action appears as a display of *ennui* or ill-temper, which the deer in confinement will show toward anything strange or in his way. So will the deer only in small parks—buck as well as doe—abrade the bark from trees with their teeth, not for the purpose of eating it, but to dispel *ennui*, often causing great damage in the woods. Frequently I have observed deer in parks playing with their shed horns, pounding them with their feet, even turning up the ground, but I never witnessed the actual burying of the horns. This would have been often a matter of but small exertion in soft ground and under decayed leaves.

More circumstances, based on observations, prompt me to contradict the assertion that deer bury their horns, viz.: In the deer parks of Europe, within a short time after the shedding of the horns, they are sought for, mostly with good success. A small gratuity is paid to the finder for each pound of horn delivered. Hundreds of pounds are thus collected, and the cash realized by their sale forms an item in the keeper's accounts. I myself have searched, morning after morning, on grounds where the herds nightly used to feed. I have searched the path of animals with uncommonly large or irregularly formed horns (especially *Cervus capriolus*), and I found those freshly shed horns lying openly on the top of the ground, sometimes nearly together and sometimes a mile or more distant from each other. I have seen deer drop their horns—in most cases only one at the time—either in consequence of a jump or a violent motion of the head, sometimes coming accidentally in contact with some obstacle, as a branch of a tree, but I never observed that the animal was looking after the horn, or tried to conceal it. Such is my observation in the open forest and in large parks. The reason why not all shed horns can be found, may be easily accounted for. The separation of the horns from the head in consequence of absorption causes pain and irritation. The animal, therefore, seeks during the day, in that season, the retirement of the most isolated places—when in mountainous regions, the summits; when in a populated country, the thickets, and when in the quiet forest, the high woods. In the first two places named the hunter will seldom intrude nor have a good chance to find the lost burden, while in the last mentioned place the horn will soon disappear in the soft ground, under moss, decayed grass or leaves. The observing forester can tell you how soon a broken down branch of a tree will become invisible.

Finally, I can state the correctness of the remark, that the spike buck will, in every instance, get out of the way of a buck with larger horns.

Paper Shell.

[We regard the above as a most interesting addition to the literature of this subject, and admire especially its mild and fair tone.—Ed.]

The Boston Buck—*Editor Forest and Stream:* Since my note in reference to the buck on Boston Common, I have watched his lordship, and perhaps your readers might wish to learn that he dropped his horns on the 23d and 24th of March.

* Das Fischereigesetz fur den Preussischen Staat," from a Berlin daily paper; translated by H. Jacobson.

The buck is six or seven years old, weighs about one hundred and fifty pounds, and is a very good specimen, although in confinement he seems to lose none of the characteristics of his race, having killed last fall no less than six of his companions during September and October. When once his relations were established with one of the flock, his jealousy and rage were unbounded at the approach of any other, whether buck or doe. Being confined in such close quarters, they were unable to protect themselves by flight, and if they once lost their footing they seldom got up under his fierce onslaught. In this condition, one doe, two years old, was literally disemboweled by him. M.

Bromfield House, Boston, April 3, 1878.

DANVILLE, Quebec, March 22, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

My three year old cow caribou has just dropped her horns. Her six months old buck calf still carries his two little pegs. It seems they do not shed their horns as early as deer. Yours truly, M. W. CLARK.

PROF. JORDAN ON CHARACTERISTICS OF TROUT.

BUTLER UNIVERSITY, *Irvington, Ind., April* 5, 1878.

EDITOR FOREST AND STREAM:

I thank you heartily for the suggestion to your Western correspondents to send on specimens of the Idaho redfish to Prof. Gill and myself for identification, and to enlarge on the suggestion. I hope that whoever catches, not only a red trout, but any singular trout, or any common trout in a singular place, or any "spearing" in Canada or speckled trout in Texas, or, in general, any fish anywhere, will think it as important to send a specimen to the Smithsonian as to send an account of it to the FOREST AND STREAM, and will attend, with equal faithfulness, to both duties. I have some time suspected that the Idaho and Oregon redfish were *Salmo kennerlyi* (Suckley), *Hypsifario kennerlyi* (Gill), but I do not know. May not the Texas speckled trout be *Salmo pleuriticus* (Cope)? That species ranges from the headwaters of the Arkansas and Snake rivers to the San Joaquin. By the way, the silver trout of Dublin Pond or Monadnock Lake, New Hampshire, somewhat noted among anglers, seems to be a silver-gray variety of the common *fontinalis*, not visibly different except in color. The statement in the report of the U. S. Fish Commissioner for 1872-73 (p. 372), that it belongs to the group of lake trout, probably closely related to what Dr. Prescott called *Salmo symmetrica*, is erroneous. The so-called species of lake trout, *namaycush, amethystus, pallidus, confinis, adarondacus, symmetricus* and *toma* are, beyond any reasonable doubt, forms or varieties of *Salmo namaycush*, differing in some trifling respects in the different waters.

Very truly yours, D. S. JORDAN.

[We have a full length portrait of the Rio Grande trout, to which scientists have assigned the name of *Salmo spilurus* (Cope); but it may prove to be a well-marked variety of *S. pleuriticus*, both being found in the same streams. It has a blood-red band on each side of the chin.—ED.]

BLACK BEAR HABITS.—The following interesting record of personal observation adds more testimony to the curious fact noted by a correspondent, Corp. Lot Warfield, in our issue of Feb. 7:

"These hot days remind old hunters that the bears are about awakening out of their long winter sleep. They go into den at different times in different years, according to the abundance or scarcity of berries. In years of plenty, they prowl about until the last of December, and even the first of January; at other times they have been known to den up in November. Sometimes they make their quarters in a nice, snug room in a ledge; at others, in hollow logs, in hollow standing trees, under the bottoms of trees partly turned up by the roots, and even under large brush heaps, after the snow gets deep. They often come out in mid-winter, in a heavy thaw, and take a round turn of a mile or more and return to their old quarters again, thus showing that it is the warm weather which brings them out, and not because they have got their nap out. I have often seen where the bear has camped on the snow crust by breaking bows of evergreen or tearing dry-rotten logs to pieces for a nice, warm bed. They sometimes leave their winter quarters early in March, and make some other place a temporary abode until spring opens. I have known them to lay themselves away for six months at a time in a cave in a ledge in the deep recesses of the forest, in utter solitude, where the dampness of the rocks only added to the dismal surroundings. They are supposed by many to suck their claws during their long isolation, but they do not; neither do they require any nourishment, for the exhaustion of the system is so little, that they usually come out in the spring in as good condition as they enter their dens in the fall—generally fat.

"Before going into den, they eat but very little for some time, and so prepare themselves by degrees for their long fasting; and, when they come out in the spring, they are very dainty for a long time. They first eat spears of green grass, then frogs and fish as soon as the little brooklets open.

After the snow is gone and fish work up the little streams in the woods and herbage begins to spring up, the bears begin to follow the shore of ponds and streams in search of food and other bears. At this season they rub their feet deep into the ground and make deep steppings, and all other bears that happen along in these paths will step in the same foot-marks. So hunters set their traps in one of these deep tracks and cover it so that they all look alike, and they are sure of the first bear that comes along. At this time, which is about the first of June in Northern Maine, the bears will stretch up against a fir tree and bite large strips of bark and wood from the tree. Some people suppose this is to obtain balsam to heal their toes which they have sucked all winter, and so made tender. I suppose it is done because they feel savage and want to try their teeth. Others suppose it is done to let other bears know that they have been there. The next move they make, after a week or two of this tramping, is to traverse second-growth land, or where a few years before extensive forest fires have destroyed the original trees, and much down timber is the result. Here they finish up the summer tearing rotten logs to pieces for the ants and grubs they can find, until berries begin to ripen.

"The female bears naturally drop their young in the month of March, but they never leave their den before they drop them. If they are disturbed in mid-winter they will then drop them before coming out. They seem to have the power to discumber themselves of their young on the first scare. They naturally carry their young seven or eight months, and while the cubs are small the mother is very dangerous to intruders. She will defend her young with her life. They have from one to three at a birth, and sometimes four, but not often; the more common number is two.

"The cry of the bear varies according to the circumstances which occasion it. If in a trap, the adult will make a grunt squeal or coarse noise, very loud and long; if calling their cubs from some distant point where they have left them, the sound is like the voice of a woman calling loudly, and if they are merely giving notice to each other while feeding or in company and not far apart, they whistle quite sharp and loud, and if suddenly startled by man or beast, they usually make a loud snort, which is like three or four coarse whistles together. J. G. RICH."

Bethel, Me., March 12.

SCIENTIFIC EXPEDITION AND SUMMER TRAMP.—The Butler University expedition, which was so successful last year, as may be read in *Harper's* for March, will make another trip this summer, leaving Indianapolis June 20, going by rail to Livingston, Ky., then on foot via Rock Castle River, Wild Cat Mountain, Cumberland Gap and Clinch Gap to Morristown, Tenn., exploring the caves and seining the rivers; thence up the Big Pigeon River, over the Great Smoky and Great Balsam Mountains, summits higher than the White Mountains and far more beautiful and wild: thence over the mountains of Chilowee and Nantahala (see Christian Reed's "Land of the Sky"), up the Little Tennessee River to Estatoah Falls, through Rabun Gap to Tollulah Falls, the wildst and most beautiful series of cascades east of the Rocky Mountains. At Toccoa Falls, Georgia (about July 17), the party will divide, a portion "marching through Georgia" to collect fishes, the others remaining in the mountains, returning as they please. The directors are Professor D. S. Jordan and Messrs. A. W. Brayton, and C. H. Gilbert, of Irvington, Ind.

THE ENGLISH SPARROW.—Prof. Baird has kindly called our attention to a published letter from Mr. John Akhurst, of Brooklyn, which is the strongest bit of evidence lately brought forward in support of this bird's usefulness. It is suggested that precisely the same diversity of opinion, in regard to the value of the sparrow's services, has existed in Europe, but at present, on the whole, the sentiment is in his favor. Mr. Akhurst is well known to all ornithologists and entomologists of New York as a careful and painstaking observer. He dislikes the sparrows because they destroy insects and he cannot procure specimens of the larvæ of *Lepidoptera* to rear for his cabinet. At present we think the case hardly proven against the sparrows, although the weight of evidence is certainly against them. Mr. Akhurst, as will be seen by his letter, an extract from which we print below, evidently dissents from the verdict of the Nuttal Ornithological Club. He says:

"In regard to the sparrows destroying insects and larvæ, I am surprised that any one claiming to be a student of ornithology should deny that the English house sparrow feeds on insects and caterpillars. Especially in the breeding season insects are its principal food, and when it has young almost any caterpillar is greedily sought after, except those thickly covered with hair. Spiders they are very fond of, and during the last few warm days every nook and corner has been explored in search of them around my two-story workshop.

"In a large Ailanthus tree in my yard I have a number of boxes, each having a tenant; I therefore have a large number constantly under my observation; many species of *Lepidoptera*, formerly plenty in Brooklyn, have very nearly disappeared, among these the ones which feed on the Ailanthus, and which nearly destroyed the foliage of that fine shade tree, have been nearly exterminated by the sparrows.

"I believe the sparrow to be a very useful little bird, and I should be very sorry to see him destroyed. I am now speaking only of the city. If it should become very abundant in the country it may do some damage to the grain crops. But that is the only harm it will do.

"In regard to its driving away native birds from the city, we never had any remain in it except a few chipping sparrows, martins and swallows, and these are all as plenty now as ever. A chippy built its nest last summer in my tree within two feet of a sparrow house. JOHN AKHURST."

Another friend of this much-talked of bird, writing from Houston, Texas, over the signature "Noranside," asks us:

"Will some of your naturalists please explain why the English sparrows do not drive away small British birds as they do American ones (or are said to)? I must confess to being a little skeptical. I was raised where there were hundreds of sparrows, and certainly there were more small birds of other sorts than I have seen close to dwellings anywhere in America. They are destructive to small grain, also to green peas, as I have no doubt some of the dwellers in your suburbs have found out. Fruit buds they did not trouble; at least, if so, I never found it out, and I made my living by fruit. Bullfinches were very destructive to fruit buds, and the thrush family to fruits."

FELINE INSTINCT.—A correspondent who writes from Northern New York sends us the following interesting note:

A few days ago some corn meal mixed with arsenic was set in my yard to exterminate the many rodents which were infesting it. The plate of poison was soon surrounded with rats, each one eager to obtain its full share. At length one much larger and apparently much older than the rest made his appearance, walked cautiously around the festive group, snuffed the air, then advanced closely, tasted the morsel, and by a significant wave of the nose caused the other members of the party to withdraw to a respectful distance until his appetite was satisfied.

The next day a neighboring cat took her accustomed position on the dividing fence, where she had been frequently seen to pounce upon the unwary vermin and carry them across the fence to her family. She was not stationed long before her tail began to twirl nervously from side to side, and every muscle in her system seemed to be in motion. She glided softly down the side of the fence and across the yard until she confronted a rat; with their heads not more than eight inches apart both cat and rat stood motionless and coolly surveyed each for a minute or two when the rat started for its hole unpursued. The rat showed signs of sickness by its ruffled coat, and there is no doubt but that the feline's instinct was sufficient to warn her of the danger of taking the poisoned rat.

DOMESTICATED WOOD DUCKS.—A correspondent, "Tonic," of Berlin Heights, Ohio, takes exception to a statement made by "B.," of Shakopee, Minnesota, to the effect that wild ducks will not live long in confinement, and then adduces as evidence to the contrary two wood ducks, which he says he has kept in confinement for two years. Without entering into the merits of the question here, we will say that wood ducks are very unlike most wild ducks, their habits being entirely different, and their habitat local. Strictly they do not migrate in our latitude. What our correspondent states with regard to his own experience in raising wood ducks is very interesting. We know of parties who raise wood ducks for sale. He writes:

This pair came into my possession when quite small, and were raised in a broad pen about 20 feet square. W. H. Todd, the noted breeder of land and water fowl of this vicinity, amputated the right wing of each at first joint when about two-thirds grown. I have them in a park about 50 feet in diameter with a pond in the center supplied by a spring, and though migratory in habit they stand the severest weather without shelter. Last year one pair nested in a hollow log which was provided for them and let to project a couple of feet over the water, and hatched four young, which, however, soon died, I think from eating or being stung by bees. When but two days old they would leave the park and wander in search of insects in the field adjoining. I consider the wood drake one of the most beautiful of birds, and I shall be proud indeed if I succeed in raising them. Have any of the readers of FOREST AND STREAM had any experience with them?

TONIC.

THE FUR SEALS OF THE ISLANDS OF JUAN FERNANDEZ.—Prof. Baird has kindly brought to our notice a long published account of the seals of Juan Fernandez, which is very interesting and certainly seems worth calling attention to again. The splendid animals of this family, once abundant almost everywhere on the west coast of America, have been so persecuted by man that at present they are nowhere found in considerable numbers, except in Alaska, where they are carefully preserved. They belong to the *Otariidæ*, or eared seals, which differ widely from the common hair seal of the Atlantic, and include, besides the fur seals, the sea lion, sea elephant, etc. The note is as follows:

"Mr. Selkirk says that, in November, the seals come ashore to whelp and engender, when the shore is so full of them that it is impossible to pass through them, and they are so surly that they will not move out of the way, but, like an angry dog, run at a man, though he have a good stick to beat them. So that at this and their whelping seasons it is dangerous to come near them; but at other times they will make way for a man, and if they did not it would be impossible to get from the water's side. They lined the shore very thick for above half a mile of ground all round the bay. When we came in they kept a continual noise day and night, some bleating like lambs, some bowling like dogs or wolves, others making hideous noises of various sorts, so that we heard them aboard, though a mile from the shore. Their fur is the finest that ever I saw of the kind, and exceeds that of our otters.' An account of the sea lion follows. All that is said of birds is this: 'We found no land bird on the island but a sort of blackbird, with a red breast, not unlike our English blackbird, and the humming bird, of various colors, and no bigger than a large humble-bee.'—*Harleian Miscellany*, Vol. II., p. 44, 45, 8vo edition, London, 1810."

It is most interesting to compare this account with those of recent writers on the same subject and to note their close agreement. See especially Captain Seammon's Marine Mammalia and Mr. H. W. Elliott's Monograph of the Pribylov Islands.

INABILITY OF AMERICAN QUAIL TO FLY ACROSS WIDE RIVERS.—A correspondent of the *Scientific American*, writing from a town in Louisiana, situate on the Mississippi, where the river is about 1,200 yards wide and about fifty feet above tidal water-mark, says that he has seen whole coveys of quail (or partridges as they are termed in some of the States) go down into the water at 600 yards, though while shooting he remarks that he has seen single birds go nearly as far to windward, until they rose to the height of forty feet, and then follow the wind to cover. In one instance he observed a covey starting from immediately below Natchez, Miss. (an altitude of 260 feet) to fly across the river, at that point 1,000 yards wide. They came "like a shot," almost describing a "bee line" from the altitude to the bed. They were unable to perch, and what were not killed by striking the houses were picked up exhausted. This was in month of October, and the birds were of the May hatch. The writer adds that he has seen coveys fly from drift pile to drift pile, and accomplish their migrations in that manner.

[We are very much disposed to doubt the accuracy of the above statement, but if it is true that a quail cannot fly 1,000 yards from an elevation of a tenth of the distance, the fact is certainly worth knowing. Have any of our correspondents anything to offer on this point?]

WE MOURN HIS LOSS.—Obaysch, the hippopotamus at the London Zoo., is dead. This fine beast made his first plunge into the White Nile in the spring of 1849, and was caught as a gentle suckling by a party of hunters sent out by Abbas Pasha, then the Viceroy of Egypt. Obaysch first smiled on an English audience in 1850, when he was the lion of London. In 1853 the pretty Adhela was brought to him as a spouse, and several young hippos was the result of this happy union. But the majority or part of them could not stand British institutions, so but one hippo, born in November, 1872, is now living.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING APRIL 13, 1878.—One purple Gallinule, *gallinula martinica*, from Brazil, presented by Mr. J. L. G. Cannon, Westport, Conn.; one hybrid fowl, presented by Mr. Edmund Orgill, Brooklyn; one larger hill mynah, *Gracula intermedia*, presented by Mr. Chas. S. Wright, N. Y. City; one red-wing blackbird, *Agelaius phœniceus* presented by Mr. J. B. Ambrose, N. Y. City; one prairie wolf, *Canis latrans*, presented by Dr. A. Lindard, N. Y. City; one black-eared marmoset, *Hapale penicellata*, presented by Mr. W. R. Tice, Brooklyn; one megapode, *Megapodus pritchardii*. W. A. CONKLIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN, FAIRMOUNT PARK, APRIL 9, 1878.—Two white rabbits, *Lepus cuniculus*, presented; eight garter snakes, *Eutania sirtalis*, presented; two water snakes, *Tropidonotus sipedon*, presented; two alligators, *A. mississippiensis*, presented; one common bittern, *Botaurus minor*, presented; one red fox, *Vulpes fulvus*, presented; one kangaroo rat, *Hypsiprymnus rufescens*, born in garden. ARTHUR E. BROWN, Gen'l Supt.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

WILD FLOWERS.

OWING to the earliness of the season, the wild flowers appear in wood and glen—by the brook and on the mountain side, and the lovers of nature are already haunting her secret recesses, exploring dingle and hosky dell, and making friends with each wildwood blossom that is awakened by the kiss of the advancing spring. We give a partial list of plants that may be looked for this month, in the hope that it may be of service to those who are disposed to treat themselves to the pure and deep delight of studying wild flowers the coming summer, hoping that, even if they do not form a herbarium, they will faithfully register these long names of their woodland friends. This is essential to the true enjoyment and understanding of this delightful pursuit. In April, about thirty species should be found:

Anemone nemorosa, Wind-flower; Hepatica triloba, Liverwort; Ranunculus fascicularis, Early Crow-foot; Ranunculus micranthus, Small-flowered Crow-foot; Thalictrum anemonoides, Rue Anemone; Thalictrum dioicum, Meadow Rue; Caltha palustris, Marsh Marigold; Heleborus viridis, Green Helebore; Aquilegia canadensis, Wild Columbine; Sanguinaria canadensis, Blood-root; Viola pedata, Bird's-foot Violet; Viola rostrata, Long-spurred Violet; Geranium maculatum, Wild Geranium; Anemone nuttalliana, Easter-flower; Tiarella cordifolia, mitre-wort; Amelanchier canadensis, Shad-flower; Fragaria virginiana, Wild Strawberry; Saxifraga virginiensis, Early Saxifrage; Chrysosplenium americana, Golden Saxifrage; Asarum canadense, Wild Ginger; Dicentra cucullaria, Squirrel Corn; Claytonia virginica, Spring Beauty; Epigaea repens, Trailing Arbutus; Pyxidanthera barbulata, Flowering Moss; Arisæma triphyllum, Jack in the Pulpit; Potentilla canadensis, Cinquefoil; Myrica gale, Sweet Gale; Comptonia asplenifolia, Sweet Fern; Prunus maritimus, Beach Plum; Zanthoxylum americanum, Prickly Ash; Acer rubrum, Red Maple; Erythronium americana, Dog's-tooth Violet; Taraxicum dens-leonis, dandelion.

AMERICAN WILD RICE IN ENGLAND.—We have the subjoined letter from Mr. Jackson Gillbanks, a well known authority in England on natural history subjects, which will much interest many of our readers, especially those sportsmen who are endeavoring to cultivate wild rice with a view to attracting wild fowl to localities which they do not frequent. Mr. Gillbanks is correct in his views that fresh seed is necessary for propagation. We have always pressed this point upon our readers' attention. Time seems to dry the vitality out of it. It should be gathered before the milk has quite disappeared from it, and sown as soon thereafter as practicable. While wild rice may be easily procured in a thousand localities, those localities are generally so remote from lines of transportation that the price is greatly enhanced by the time it reaches its destination. One must be on hand, too, to gather it just at the proper time. Rice Lake, in Canada, is the most accessible point we know of, having direct communication by rail. Manitoba is less accessible.—ED.:

WHITEFIELD, Carlisle Co., England, March 23, 1878.

EDITOR FOREST AND STREAM:

Any one would suppose, judging by analogy, that all the vegetable products of Canada and its southern boundary would prosper and increase when brought from an inclement climate and placed in a better one—the similarity of soil and habits being duly observed. Thus we have had Canadian oats, potatoes, and many of our best shrubs, which have been a great boon to us. But this does not seem to be the case with the wild rice of that part of the world. Several notices have appeared in American papers that good and fresh gathered seed can be obtained of so and so. By this one would infer that there was no difficulty in its propagation—but there is. I having had much experience in the matter I find it my duty to say a few words thereon.

Some years back the British Government had a large staff of the Ordnance Survey (formerly we called them sappers and miners) setting out the line of demarkation between our territory and the United States; some of them on furlough reported that when they arrived at a district about the Red River settlement, the wild water fowl of all sorts swarmed to such a prodigious extent as to damage and interfere with their levelling operations, and they evidently came to feed on a peculiar and luxuriant wild corn of some sort, which abounded in the swamps and marshes. This circumstance was brought before a meeting of some learned society in London, and some of the seeds produced which many there thought the discovery of an entirely new grain. I was at home at the time, and had heard nothing about it, but it was agreed that the matter should be put into my hands, as I lived among our Lakes, if I would bother with it, and the seed was sent me, O. H. M. S., for experiment and distribution. I had applications for and sent parcels to all parts of Europe at a great expense—not a single applicant inclosed stamps. I then consulted Moore (Moore & Bro., Ferns,) who seemed to suspect what it was, and was first applicant, Dr. Hogg, of *Journal of Horticulture* (who detected it immediately), and others, who gave me all the assistance in their power. About the same time I had to go up to Cambridge to assist at a great entertainment we gave to the Prince and Princess of Wales. During that time I went fully into the subject with Professor Babington, who is a member of my own college, and an old friend. As he is Professor of Botany for the University, he had all the records of this plant, and dried specimens. The botanical name is *Zizania aquatica*—"Wild rice of Canada;" but I hold strongly that it is not a rice at all (the botanical name of that family being *Oryza*) but an aquatic wild oat. It seems from our books that it was first noticed by Sir Joseph Banks, the great botanist sent out with Captain Cook. None of the seeds I planted ever vegetated, though tried in every mode, nor was any one else successful. We found that Sir Joseph failed three seasons running in preserving the vitality of the seed till it reached England, and did not succeed till the King put a small Government vessel at his disposal, after which he brought over a lot of it in barrels of mud and water. After that he had a lot of it which did well at his residence near Lootoo, but was lost after his death. Prof. Babington also told me that they had a nice plot of it in the Old Cambridge Botanic Gardens. These had to be removed on account of the railway. A new pond was formed, which broke loose at the bottom, ran dry, and they lost it and all the rest of their rare aquatics. We found mention of it in several other places, but on inquiry it had all disappeared. We all came to the following conclusions: That, being an annual and a complete aquatic, it would not stand being dry for a moment—no longer than a fish out of water. Some very good authority wrote lately—I forget who and where—that simply bringing the grain in water alone did not answer, as the grain rotted and turned to a mass of converva and fungus.

This is the result of my own experience with the seeds of other water plants. It sheds its own seed when ready, which seems to germinate immediately, but must have some soil for the rootlets to strike into there and then, or the fibres will all rot off and perish.

Another point worth notice is, that though the winter of the Northern parts of America are much colder than ours, the summers are much hotter, and grain and every sort of vegetation ripens and comes to maturity in an incredibly short time. This may have a good deal to do with the difficulty of establishing this cereal in England. Still it is well worth another trial. Surely, if Sir Joseph Banks could do it in the reign of George III., English and American botanists, with their advanced opportunities and skill and appliances, should do it easily now. What we all insist on as a *sine qua non* is that it should never receive a check. Collectors can bring the rarest and most gorgeous plants from the tropics, but not one of them like common wild oat grass from Canada. Shame on us all! I think open jars or tubs, with its native soil at the bottom, and floated sufficiently with soft water, would be the best mode. I am also much surprised that, as all agree any quantity of it can be gathered for nothing, it is not sent to England as an article of trade, as poultry and game food. What I had sent me was far better and offered more meal than many a stack of oats after a bad harvest. There must be something prohibitory in the carriage from the swamps it grows in.

Any one who succeeded in establishing this grain about his lakes and marsh land would have all the wild ducks in the district, beside cheap food for game and poultry. JACKSON GILLBANKS.

QUITCH-GRASS.—Several correspondents have made inquiries about quitch-grass as a corrective for young dogs, wishing seed, methods of planting and so forth. We will enlighten them.

We don't know of any one familiar with the plant who wishes to propagate quitch-grass. On the contrary, they would prefer to root it out, except for pasturage. Properly named, it should be quick-grass, and is so called from its vigorous growth, or possibly from the difficulty of eradicating it. In the east it is known as knot-grass or joint-grass, but it is not the blue-joint of the West. It is very wiry, although succulent, and spreads by sending roots out of the knots into the ground. Botanically, it is known as dog-grass or couch-grass. Its leaves and stems are broad and green in spring; in the summer they turn reddish-brown and purple. It can be readily detected as it is composed of bunches growing out of the knots. It is the best corrective for dogs, cats and fowl which we know of, and it would be well worth while to cultivate a small patch of it, if it be not allowed to spread. The seeds can possibly be obtained at a botanic drug store.

FARMING IN MINNESOTA.—The very carefully prepared estimates of the cost and profit of starting and operating a 10,000 acre farm in Minnesota are attracting earnest and widespread attention. Such honest estimates, bearing on their face the evidence of experience and truth, and covering so fully the entire question, have never before been printed. We have been honored by applications for copies by the Governor, the Secretary of State, the State Statistician, and several other prominent parties in Minnesota. The gentlemen who prepared that estimate invite the co-operation of capitalists upon the basis given, and beg to refer to the advertisement printed in our paper under the title $30,000.

A BLACK LILY.—The Bermuda *Royal Gazette* has this announcement of a rare flower, a black lily:

"The spadix, some 6 inches long, is perfectly black, with a spathe of a rich black tinge, afterward becoming maroon in color. This Lily has a much richer spathe than the one that opened a fortnight ago. These two plants, which flowered about the same time last year, were raised from bulbs, which Thos. S. Reid, Esq., procured in Jerusalem, in the spring of 1876, and sent to Bermuda the same autumn. The Lily, which resembles in a certain measure the Lords and Ladies found in the English hedges in the spring, Mr. Reid discovered growing wild in the waste paths between Hebron and Bethlehem."

A GOOD PLACE TO SETTLE IN.—Our Nashville, Tenn., correspondent writes that a lady by the name of Hopkins, living in Greene County, Tenn., has arrived at the great age of 117 years. She has three sons living who are aged respectively 98, 95 and 90 years.

—William Calcraft, the veteran English executioner, is very fond of flowers, and has a great many rabbit pets.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

Baltimore Kennel Club's Show, Baltimore, Md., April 23, 24, 25 and 26. L. R. Cassard, Secretary.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 14, 15, 16 and 17. Dr. W. Seward Webb, Secretary.

RAILROADS AND DOGS.

Dear Editor: We all know how constantly sportsmen are traveling over the various railroads accompanied by their dogs. Of some few of these railroads we do not complain, as the managers have been far-sighted enough to allow the dog a free ride with his master, and to give the proper orders to baggage masters that they shall not extort a fee to suit his own idea at his demand, or throw the dog off the train. In your valuable journal, heretofore, you have used your influence to correct this gross abuse of the dog and sportsmen by the railroad companies; and through that influence the few roads have made the better rules, and such roads are fully appreciated and patronized by brother sportsmen. But certain roads, which we could name, still allow the baggage masters to run the dog department of the road, and to do just as they please. Such roads are doing a great injustice to a good class of patrons. We are willing to pay a fair established rate, and only want to be informed what that rate is. We are not willing to be subjected to the whims of a baggage man, who can demand a dollar for a ten or twenty-miles' ride for a dog. I hope you will continue your kind efforts to bring about some better regulations, especially in regard to roads in the vicinity of New York. SPORT.

[This question of dog transportation is still a vexatious one, as our correspondent justly states. On a great many roads a dog is quite at the mercy of the employees. Quite fortunately, many baggage masters are something of sportsmen themselves, and take the best care of dogs, but we have more than once had reported to us cases of culpable negligence and even cruelty. There should be a charge made for dog transportation, so much a mile, and a proper place made for their carriage. To leave the sportsman to pay a fee at his option ought to be considered as humiliating to any railroad employee. It is not of course as much a case of revenue with a railroad company in regard to the dogs as a fixed price known before hand, and a good place for the dog, induces sportsmen to travel on the roads. We are acquainted with a certain good range of country in Virginia where there was a comfortable house kept by an obliging landlord, which has been shunned for the last two years on account of the exactions of a baggage master on a branch road. Sportsmen's clubs might agitate this question of transportation of dogs, and we should gladly give them all the aid in our power in order to set matters right. We are certain that it never will do to consider the charge of transporting a dog as one of the perquisites of a railroad employee. —ED.]

WESTMINSTER KENNEL CLUB—SECOND ANNUAL N. Y. BENCH SHOW.—The special prize lists will be ready for distribution this week. Many of them will be given to "Native Setters" only, and will be of the same value as those given in the regular classes. All the express companies have agreed to carry dogs at their usual rates to the show and return them free. The rates must in all cases be prepaid. The railroads are responding nobly to the solicitations of the committee, to carry dogs free when accompanied by a passenger. A full list of them will be sent you as soon as completed. The entries already received are sufficient to make up a good show. It is anticipated that long before the 30th the numbers will have reached the limit—viz., 940. The judges will be as follows: For English setters, pointers, mastiffs, St. Bernard's, Newfoundlands, bloodhounds, greyhounds, deerhounds, fox terriers, bull dogs, bull terriers, Skye terriers, Pugs, Scotch terriers, black and tan terriers, Dandie Dinmont terriers, Yorkshire terriers and toy terriers—Wm. Lart, Esq., of England.

Black and tan setters, red or red and white setters, Irish water spaniels, retrieving spaniels, clumber spaniels, cocker spaniels, field spaniels and collies—John Davidson, Esq., Monroe, Mich.

For Siberian or Ulm dogs, Chesapeake Bay dogs, fox hounds, harriers, beagles, dachshunds, coach dogs, Blenheim spaniels, King Charles spaniels, Japanese spaniels and Italian greyhounds—Dr. L. H. Twaddell, West Philadelphia, Pa.

CHAS. LINCOLN, Sup't.

DOG TRAITS—*Muirkirk, April 5.*—Reading Mr. Eyrich's article in this week's FOREST AND STREAM calls to my mind several times when my dogs have backed out from a covey of birds and returned to inform me of the fact. The first time was in Nov., 1874. I was hunting with my black pointer bitch Meg, about eight years old, and liver pointer dog Ponto, 15 months old. The dogs had gone over a fence in advance of me, and on my entering the field after a slight delay, they were out of sight. Thinking I could easily find them, I looked all over the open fields, but no dogs. I then whistled for them, as if they were pointing game, I knew they would not return. The dogs did not come back, so I proceeded to search for them in a thicket of pines. I must have searched fully twenty minutes for them, every few minutes whistling and calling for them. I had about given up the job, when Meg came toward me, and when I asked her where she had been, started forward, but turned to see if I was

coming. She kept just ahead of me, and led me about 100 yards, alongside of a branch covered with brambles, to a crossing place, crossed over, and then back on the other side, about twenty yards, where the pup Ponto was pointing. On walking up to him a covey of partridges got up. I am sorry to say that I did not do as well as the dogs, for I only bagged one. Poor old Meg! She now lies buried in my lawn, under the shade of some fine oak trees. Since that time Ponto has very often returned to me after finding a covey of birds and finding that I could not make him out. He is not a field trial dog, but for a man who wants to have sport in the field, he cannot be beat—at least, that is what all my friends say who hunt with him. Yours truly, CHAS. E. COFFIN.

TO CURE DOGS OF KILLING CHICKENS.—A correspondent kindly sends us the following: "Take the chicken that has been killed by the legs, and, after beating the dog with it, pass the legs each side of the dog's neck and tie the feet together, so that the chicken hangs securely fastened to his neck. After carrying the chicken around for a day or two the dog will be so thoroughly disgusted with chicken that he will not be apt to trouble them again. O. K.

WHELPS—*Claremont, N. H., April.*—Mr. W. Jarvis' imported Irish setter Rose (champion Palmerston's Flora) has seven puppies—five bitches, two dogs—by Elcho. They were born April 5, 1878.

Boston, April 12.—T. T. Sawyer, Jr's, black and tan bitch Nelly, presented to him by the Massachusetts Kennel Club, has whelped nine puppies, by Allen's Reuben, he by champion Lang out of Ruin; six dogs and three bitches. Nelly is by Stoke's Shot, out of Major Elwon's bitch of old champion Reuben stock, and was brought to this country by T. H. Scott, Esq.

—The Nebraska State Association will convene May 21, sitting two days. An effort is being made to inaugurate a dog show at the same time and place—Fremont. BOB WHITE.

THE BALTIMORE DOG SHOW.—The list of entries reached over 600 several days ago. There are many new exhibitors and much fine stock never before entered.

THE TIFFANY CUP FOR THE BALTIMORE SHOW.—This cup arrived too late to be included in the printed list of special prizes, but the club have decided to take entries for it on the first day of the show, and to give it to the best setter or pointer exhibited.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
April 19	0	41	9	39	9	03
April 20	1	34	10	36	9	54
April 21	2	27	11	32	10	49
April 22	3	21	M		11	44
April 23	4	16	0	54	0	11
April 24	5	15	1	47	1	08
April 25	6	16	2	40	2	05

DOINGS AMONG THE YACHT CLUBS.

Yachting matters in New England are very brisk, and the outlook for the season a most promising one. The Boston Yacht Club, the oldest organization of the kind in the East, was organized in 1866, incorporated 1868. There have been added to the fleet this year: Sloops *Adrianne, Comfort, Riviera, Undine, Seabird*, and new schooner for Mr. John B. Mears; also the catamaran *Tarantula*. The squadron comprises seventy-seven sail, fifteen schooners and sixty sloops, including two steamers; number of members, 250. The spring regatta has been fixed for June 17, the fall regatta some time in September. The opening cruise, a very commendable feature of the club's programme, takes place June 13. Officers of the club for 1878: Commodore, F. H. Peabody; Vice-Commodore, Nathaniel Wales; Rear-Commodore, Andrew Robeson, of Fall River; Secretary, Thos. Dean; Treasurer, Aug. Russ; Measurers, D. J. Lawlor and J. B. Smith; Trustees, Hon. Benjamin Dean, Wm. B. Merrill, E. B. Phillips; Regatta Committee, F. E. Peabody, Clarence W. Jones, Wendell Goodwin, W. H. Bangs, Jr., and W. W. Kellett.

—The Eastern Yacht Club has a membership of 250, and a fleet of twenty-nine schooners, fourteen sloops and one steamer. Among its craft are the largest in Eastern waters, as well as many belonging to New York and Brooklyn. It is to Boston what the N. Y. Y. C. is to the metropolis. *Enterprise*, keel-cutter, *Undine* and *Ariadne*, sloops, have been added to the lists this year. The club's regular matches are to take place in June and September. Officers for 1878: Commodore, T. D. Boardman; Vice-Commodore, C. W. Emery; Rear-Commodore, David Sears; Secretary, Henry B. Jackson; Treasurer, Pat. T. Jackson; Measurer, Clarence W. Jones; Regatta Committee, Wm. Whitney, John Jeffries, R. F. Clark, R. H. Stevenson and R. Rollins Morse.

—The Beverly Yacht Club was organized 1872, and has now sixty-one boats flying its pennant. The membership is over 100, all active sportsmen, and practical hands at sheet and tiller. Their regattas have been fixed for the following dates: At Nahant, July 6; off Swampscott, July 27; off Beverly, Aug. 17; at Cotuit, Aug. 3; and again off Nahant, Sept. 7. Officers: Commodore, Arthur Burgess; Vice-Commodore, Geo. A. Goddard; Secretary and Treasurer, W. Lloyd Jeffries; Measurer, H. H. Buck; Regatta Committee, Wm. D. Hodges, G. P. Gardner, J. G. Minot, P. Grant, Jr. and W. L. Jeffries.

—The Dorchester Yacht Club has its club house at Commercial Point on Dorchester Bay. The club numbers 125 hands, and owns ten schooners and forty-seven sloops. It will hold its spring regatta off Nahant, June 17. Commodore, F. E. Peabody; Vice-Commodore, S. P. Freeman; Secretary, G. H. L. Sharpe; Treasurer, Coolidge Barnard; Fleet Captain, Geo. F. Clark, Measurer, H. Davenport; Trustees, C. E. Folsom, W. T. Adams, W. H. L. Smith; Regatta Committee, Coolidge Barnard, H. S. Mann and P. Dexter.

—The South Boston Yacht Club will hold a grand union regatta on Fast Day afternoon, open to yachts of all clubs, another on May 30, and on June 17 a match race to Marblehead. The club was organized in 1868, incorporated in 1877. Its members number 133; its fleet counts one steamer, seven schooners and thirty-nine sloops. Judges for union regattas, Wm. Morris, J. M. Flynn and Chas. Griffin. Officers for 1878: Commodore, M. J. Kelly; Vice-Commodore, L. S. Pond; Fleet Captain, Wm. McCormack; Secretary, Wm. Morris; Measurer, T. Christian; Trustees, J. H. Giblin, W. H. Lafield, Dr. R Dishrow; Regatta Committee, M. J. Kelly, Wm. Morris, J. G. Chambers, F. Copeland, H. P. Elwell, F. G. Cooley and J. Reagan.

—The Quincy Yacht Club is in a flourishing condition, and its prospects for a lively season are good. At a recent meeting the following gentlemen were elected: Commodore, H. A. Keith; Vice-Commodore, W. H. Nicholson; Secretary and Treasurer, Geo. W. Morton; Fleet Captain, Joshua Binney; Measurer, Peter B. Turner; Regatta Committee, B. F. Bass, Geo. W. Morton, Jas. T. Penniman and E. B. Souther.

—The East Boston Yacht Club has its headquarters at Island Ward and numbers about sixty members, with twenty-one boats. Preparations for the season are actively going on.

—The Portland Yacht Club, it gives us pleasure to announce, shows renewed signs of vigor. It has been incorporated recently, and a new club book is about to be issued which will show a creditable condition of the club's affairs. The squadron consists of ten schooners, fourteen sloops and two steamers. The annual club cruise is to come off in June. At Custom-House Wharf the club house has been refitted and renovated all through. Officers for the year: Commodore, J. P. Thomas; Vice-Commodore, H. K. Paul; Fleet Captain, John E. Bradford; Secretary, W. Winthrop Root; Treasurer, F. H. Jordan; Measurer, A. K. P. Cobb; Trustees, J. P. Thomas, C. W. Goddard, A. M. Smith, W. W. Goold. Regatta Committee, J. P. Thomas, J. H. Boyd, B. J. Willard, E. F. Willard, Th. K. Jones.

—The Atlantic Yacht Club has adopted the following classification of yachts for the coming year: Class A, schooners over 75ft. long; Class B, schooners under 75ft.; Class C, cabin sloops over 45ft.; Class D, cabin sloops under 45ft.; Class E, cabin sloops under 35ft.; Class F, open sloops; Class G, cat-boats; Class H, catamarans. In classes A and B, when not more than two yachts are entered for a regatta, or do not put in an appearance at the starting line, all schooners shall sail in one class, except in pennant or challenge races. Only fore-and-aft sail will be allowed, as heretofore customary. Yachts will give and take time according to length of measurement; this to be taken from a plumb at intersection of stem and water line to the extreme after end of counter or overhang. With the new rule in force, poor *Orion* and other craft of the fan-tail persuasion will pay dearly for their bustle attachments.

—The Williamsburg Yacht Club enters upon the present year's sport with a future full of hope and expectations. At the last meeting held in the club's snug boat-house, at Pottery Beach, Greenpoint, L. I., the question of prizes for last year's racing came up for final action. It was voted to expend $60 in the purchase of suitable presents to the victorious skippers. The following yachts were declared entitled to the prizes: *Nettle, Cricket, Pluck and Luck, Rosina* and *Mary Gibson*. The proposition to hold this season's matches on the 4th of June was accepted by the yacht owners, subject to ratification by the club. The course will be from the club house to Stepping Stone's Buoy and return. The Regatta Committee is to be appointed next meeting, and a full attendance is sure to call forth the best efforts of Mr. John C. Van Brunt, the club's very able president, who has parliamentary law at his tongue's end, and who is quite equal to keeping within bounds any superabundant enthusiasm likely to develop in half a dozen members or more under exciting influences. The membership of the club is ninety-seven, fortunate in not owing a dollar, their financial craft with decks clear for action in '78. The club house, large and commodious, is built upon a scow, and is composed of a two-story building, the lower deck being devoted to lockers and storage, the upper to the debating-room. The latter is handsomely fitted up, and contains many pictures in oil and water colors, representing decds of derring-do of many a famous clipper with the club's burgee at the peak. Near headquarters, the smooth, sandy beach of the cove, running along for nearly a mile, gives all that a yachtsman can desire for hauling out his boat, while the handy shops of "Jake" Smith are equal to any kind of a job on hull or spar Only recently his famous turnout, *Pluck and Luck*, was bought for her speed and sent to Southern seas to weave new wreaths of victory around her builder's brow in contests with smart ones of *Bella's* stripe, who have hitherto had things too much their own way down on Crescent City waters. The lists show the following yachts enrolled in the Williamsburg Yacht Club: *Sorceress*, 34ft., Commodore Goodenough; *Julia G.*, 42ft., T. Merritt, Esq.; *Melvina*, 42ft., A. Barker, Esq.; *Nettle*, 26ft., A. Pannock, Esq.; *Endeavor*, 27ft., Smith & Billard, Esqs.; *Rosina*, 19ft., G. Barker, Esq; *Inspector*, 24ft., Wm. O. Davis, Esq.; *Martha M.*, 24ft., Geo. Munn, Esq.; *Pigeon*, 21ft., Peter Luth, Esq.; *J. N. Manfield*, 22ft, A. J. Brush, Esq.; *Katy*, 23ft., Vice-Commodore Coleman; *Maggie*, 28ft., G. W. Forbes, Esq.; *Gilbert J. Orr*, 18ft., W. O. Davis, Esq.; *Jane*, 16ft., Chas. Bulk, Esq.; and several new craft to be added. The club colors consist of a triangular burgee, blue ground, red border, and white star in blue field.

COLUMBIA YACHT CLUB.—On North River, at the foot of 86th st., the Columbia Club is busily engaged preparing their fleet for all business in the way of speeding that may come along. The members propose to meet among themselves some time between the 15th and 22d of June and take a competitive spin over the usual course, club house to Yonkers and return, a distance of 23 miles. Their annual regatta is an event looked forward to with happy anticipations by society in the neighborhood, the day of the match being to the families and friends of the members a red-letter day of the year. The club-house has been built on a stone pier jutting out into the river about 100ft. The pier belongs to the city, but the right to use it has been granted the Columbias by the Dock Department, and a finer location for them it would be difficult to find. The house is a two-story frame structure, 36x22ft. The lower floor is occupied by lockers and storage room, the upper being set apart for meetings and the ladies. It is tastily furnished, the ceiling frescoed and walls decorated with yachting pictures. Among the latter is an English lithograph dating back into the thirties, representing a match between two olden-time cutters, with their bluff bows and square tucks and counters, a reminder of the sport in its most youthful days, and a relic as suggestive as it is valuable. A balcony runs across the front of the building, affording a fine view of the entire course and a breezy retreat warm summer evenings where to spin yarns without end on the inexhaustible topics so dear to sporting amateur tars. The officers elected for 1878 are: Jerry S. Baker, Commodore; R. McWhinny, Vice-Com.; L. Wigman, Acting Secretary; J. A. Weaver, Treas.; J. Greason, Measurer, and Ph. Houseman, Steward. The fleet includes the cabin sloops *Emma T.*, flying the Commodore's broad pennant; *Emma* and *Clara E.*, and the open boats *Lilly, Journeyman*, carrying the Vice-Commodore's signal; *Nettle, Laurel, Lydia T., Au Revoir, J. McCready, Gem* and *Columbia*. Among them several well known crafts will be recognized. *Emma T.* is a speedy boat, and can hold her own with most anything of her size, while as a cruiser and sea-boat she leaves nothing to be desired. Her skipper has been reducing her spars this spring, but it is to be hoped that this is not intended as equivalent to the withdrawal of his racing colors from the line of starters in his club. Her hull will remain as before, and is not undergoing alterations as previously reported. *Journeyman*, one of the fastest of her class, is receiving her third suit of canvas, and her owner expects to put her through a course of lively doings in the next few months. This famous boat, though in her seventh year, has preserved her lines perfectly, and her skin and seams are as fair and smooth as when she first left the ways at Richard Wallen's. Her length is 28ft. 8in., and beam 11ft. 6in. The new rig will consist of jib and mainsail, length on boom, 35ft.; head, 17ft.; hoist, 24ft.; jib, 22ft. 6in. on leech and 42ft. on luff. Eight ounce duck, double-highted, will be used, making the bights about 8in. apart. *Journeyman* has a fine record, and her plate locker contains among many others the club prizes for 1873, '74 and '76. Last year she was beaten owing to carrying too much ballast, which she was obliged to lug over the course in accord with one of the sailing rules, allowing no dumping of ballast after the starting gun. Usually she stows away about 1,400 pounds in her floors for cruising purposes, aside from shifting sand bags. Ex-Com. Nobles may give *Journeyman* and others some tough work ere long with the new flyer Wallen has in hand for him, for the latter has a wholesome looking form and ought to be a good one in a breeze and the short lop of the Hudson. The *Laurel* is new likewise, and though a handsome piece of workmanship, it remains to be seen what speed she will show, her great beam rendering her chances for a cup somewhat questionable. *Nettle* was built by Wallen, South Brooklyn, and measures 24ft. 10in. The club's burgee consists of a swallow-tail with blue triangular field at mast and two similar ones in red forming the tails and a white star in each field.

—The Empire Yacht Club met at their club-house, foot of 104th street, Harlem, and settled upon June 19 for their annual regatta. Thirty-five sail will enter for this race. The course will be from the club-house around the spindle buoy off Throgg's Neck, and return.

—The Brooklyn Yacht Club, at its last regular meeting, elected Mr. R. K. Huntly, of the sloop *Niantic*, their Rear-Commodore, in place of J. B. Norris, deceased. Mr. H. H. Lamport, Vice-President of the Continental Insurance Company, was elected a member, and ex-Commodore G. L. Haight was chosen an honorary member. The location of the new club-house was referred to the trustees, with power. Section 8, of the sailing regulations, was amended to read: "The allowance of time for second and third class boats to be based on length only, one-half of overhang aft included in measurement." The majority of clubs seem to be laboring heavily under the task of settling upon a clear, concise and equitable rule for measurement, for at every other meeting the matter is brought up by some member. A desultory discussion ensues, and those present are only too glad to get the whole subject off their hands by consenting to the proposition made and allowing the too inquisitive member to have his way—anything to keep the thing quiet and to save too much headwork. It is not our purpose to enter at length upon this very protracted question, but as long as a club has fixed upon length as the basis of measurement, it seems very simple to arrive at the only system which will really represent the length of a yacht, and that is the plan which does not result merely in giving time on any one particular length, but on the average length of the boat in all respects, keeping in view the only plea upon which mere length measurement is admissible—that of simplicity. To attain the average length, no matter to what class a yacht may belong, add the length of load line to that over all and divide by two. That is the whole operation in a nutshell. If the question arises as to what constitutes length on load line or overall, the answer is as readily given, admitting of no circumvention or doubt. Length on load line is the length on the normal line of flotation, from forward side of stem to after side of stern-post or counter, if immersed. Length over all includes the distance from forward side of stem, at deck height, to extreme after end of yacht, be it rail or counter or deck. Half the sum will represent about as fair an estimate to grant time on as such a crude and haphazard system will admit of. We hope, however, that the day is not far distant when a little more equitable and rational rule of measurement will be enforced. At present each club follows its own particular bent, with nine out of ten of them all at sea.

ROYAL HALIFAX YACHT CLUB.—Our Canadian friends, short as their season is, so near the Frigid Zone, manage to get a good deal of sport out of their craft, and it gives us pleasure to announce an increase to their membership and sail. The following officers have been elected for this season: Com. His Excellency the Earl of Dufferin, K. P., K. C. B., P. C., Governor-General of Canada. The Commodore will hoist his colors at the masthead of the *Dauntless*, cutter. Vice-Commodore, S. A. White, Esq., of the *Kestrel*, yawl; Rear Commodore, J. W. Stairs, Esq., *Torpid*, schooner: Secretary, F. C. Sumichrast, Esq., of the *Mystery*, sloop; Sailing Committee, Flag Officers and Secretary *ex officio*, Lt. Col. Clerke, D. Cronan, Esq., of the *Albatross*, schooner, G. A. Black, Esq., of the *Petrel*, sloop, G. E. Capel Cure (Twentieth Reg.) and L. Briand; Measurers, J. E. Butler and W. H. Throop. The following are the fixtures of the club: Opening cruise, June 15; spring match, June 21; harbor cruise under Flag Officer,

July 20; same, Aug. 3; summer match, Aug. 24; harbor cruise under Flag Officer, Aug. 31; fall match, Sept. 7, and closing cruise, Sept. 21. From this varied programme the members will manage to get all the sport they want, while the mixed nature of the fleet, composed as it is partly of British cutters and yawls and partly of American sloops, will render the matches of the most interesting character and very instructive in their results. We will keep our readers advised of the season's doings among the fleet.

—The New Jersey Yacht Club has elected the following officers: Commodore, E. W. Ketcham; Vice-Commodore., J. H. Rogers; Recording Secretary, A. Jeannerett; Financial Secretary, B. Kirch; Treasurer, C. F. Rogers; Measurer, G. E. Gattland.

YACHTING ITEMS.

A SEA-GOING SCHOONER.—Schooner *Nettie*, well known in connection with her former owner's cruise to Nova Scotian waters, and soon about to put to sea for Europe, measures, since her rebuilding by the Poillons, 84 91ft. over all, 71.6ft. on load line, 22ft. beam, 8ft. hold, 8ft. 2in. draft of water aft. Her tonnage N. M. is 1f6.27; foremast deck to hounds, 57ft., head, 7ft.; mainmast, trunk to hounds, 57ft., head, 7ft. 6in.; foretopmast, 27ft. 6in., pole, 18in.; maintopmast, 28ft. 6in., pole, 18in.; bowsprit outboard, 14ft.; flying jibboom, 14ft. outside of cap; pole, 3ft. 6in.; fore-boom, 22ft. 9in., gaff, 22ft. 6in.; mainboom, 53ft., gaff, 25ft. 10in. From these figures it will be seen that the *Nettie* is well prepared for her foreign voyage. Her model is in accord with sound principles, for she has only moderate beam and a reasonable amount of depth, and her spars are of modest dimensions. She is one of the few yachts we possess which may really be designated as "sea-going,"

—Everson is nailing together a catamaran 21ft. long, which he proposes to sail in the N. Y. Bay Regatta. Too small to stand much of a chance.

FLYERS UNDERWAY.—*Tarantella*, one of the new-fangled Siamese twins, made sail Sunday, the 7th inst., during the stiff blow, her owner, F. Hughes, Esq., at the helm. The way this double huller ran the line off the reel was truly a caution. At times it wasn't so much what she was logging as what was the best way to catch breath and to keep your hair on. Like the rest of her peculiar breed, the weather hull had a predilection to circus performances, and once in a while would attempt to veritably walk off on its ear. This superabundant ebullition of temper was cured by stationing one poor unfortunate at the after end of the weather hull, who, while soaked with the briny, had to console himself with the consciousness of his noble self-sacrifice at the altar of terrific speed. At times the catamaran was fairly lifted from the water and shot ahead with astonishing rapidity. When flying before a puff she must have run off as high as 18 knots and more. To what extent this kind of craft will find favor among the public remains to be seen; though since there is always in the community a large class who love everything bordering on the wonderful, we expect soon to see quite a fleet of these marvelously fast ones about our bays and rivers. *Tarantella* met another of her ilk, the *John Gilpin*, Mr. Fish owner, and gave her a lively brush down the bay, round Fort Lafayette and return to Gowanus. The *Tarantella* lapped *Gilpin* by about a length at the finish. Time, 44m.; distance 12 miles.

HANDICAPPING CATAMARANS.—Mr. N. G. Herreshoff, inventor and builder of the independent universal-jointed catamarans, in his letter to the N. Y. Bay Regatta Committee, suggests 5s. per foot per mile as time allowance for double hullers. So far as the data at hand enable us to form any conclusions, Mr. Herreshoff's proposal seems about equitable, at all events until a greater variety of matches will have afforded more ample and specific reasons for adopting another schedule. Right here let us correct a misapprehension that has got abroad concerning the letter in question. It seems that the proposal for including the length of course has been overlooked by many, and consequently an adverse verdict too hastily rendered, while on the contrary the allowances proposed seem fair enough.

NEW YORK BAY REGATTA.—At the meeting of the N. Y. Bay Regatta Committee, held April 10, it was concluded to have the committee boat, *Fort Lee*, go around the course. The latter has been adopted as follows: Stake-boat off Hunt's Dock, Gowanus, around channel buoy off Robin's Reef, thence around stake-boat in Gravesend Bay, opposite Bath Hotel, ¾ mile off shore, and return to starting point direct—in all, a spin of 20 miles. To be sailed over twice for the first three classes. The fourth class will round a boat anchored off Fort Lafayette, instead of reaching out into the rougher water of Gravesend, otherwise the course for fourth class to be same as for others. Catamarans will have to work their way through the narrows like the first three classes, and if there is a little chop on outside there will be some lively dustings aboard those wicker-work phantoms. An excellent and much needed opportunity would also be presented of comparing their performances alongside the old-fashioned boats with bottoms in them, but alas! hopes for a snorter are slim, fickle breezes and slants the probabilities for June. Time allowance for catamarans 1½m. to the foot. Only cat-boats allowed in the fourth class, limited to their mainsails.

—Sloop *Addie Voorhis* is being altered to a schooner at Northport, L. I., according to sad plans furnished by A. Carey Smith, Esq. She will come out under a new name.

NEW YACHT ENGINE.—Harson's patent yacht engine is a neat and compact arrangement for small yachts and launches. All parts are so arranged that a single hand can fire, run the engine and steer at the same time, everything being within his reach. The engine is of the single inverted cylinder type, and has the feed pump placed in between the frame supporting the cylinder, the connecting rod being forked or dotted in wake of the pump. In rear of the cylinder is the feed water heater, all valves being within handy reach of the engineer so that he can send the exhaust up the chimney or into the heater, while the pump will either work directly to the boiler or first through the heater as desired. The engine is fitted with one eccentric only, it being reversed by means of prolonging the shaft and connecting the latter by means of a ratchet and spur-wheel to an upright shaft with a lever handle on top. By working the lever the position of the eccentric is easily shifted and the engine reversed. Should it be caught on the centre it can readily be thrown off by a clutch lever working by friction on the end of the shaft next the engineer. The whole design is ingenious and of considerable practical utility for yachts, steam cutters and small launches.

—*Sloop Sadie*, owned by John B. Norris, Esq., deceased, was sold by auction last Saturday to Mr. Wm. A. Cole, President N. Y. Produce Exchange. The bidding started at $500 and rapidly ran up to 2,375, the well known character of the boat bringing for her a fair price under the circumstances. *Sadie* is 36.58 tons; length, 50ft. 9in.; on load line 47ft. 5in.; beam, 16ft. 2in.; hold, 6ft. 3in.; built in 1867 by J. B. Herreshoff, of Bristol, R. I.

—From our Kingston, N. Y., correspondent we learn the following:

"Mr. Dwight Knapp is altering his square stern yacht *Annie*, and is putting a projecting stern on her. Wm. Devlin is also altering his yacht, the *Kate R.*, and running out her bow. They are getting ready for the Newburgh regatta in the latter part of June, and the New York Bay regatta in July. The *Annie*, a 30ft. yacht, is under the command of Commodore Wm. Mackay, and the undersigned one of the crew. OUR HARRY.

YACHTING DRIFT.

A new racing jib and mainsail, the *Wm. Lovare*, is being built foot of 18th st., E. R., to enter the lists for the N. Y. Bay Regatta. Length, 27ft. 6in.; beam, 12ft. 2in.; hold, 3ft. 2in.....Another one, the property of Mr. R. B. Hartshorne, was launched at New Rochelle. Length, 27ft. 4in.; beam, 12ft. 2in.; hold, 3ft.....*Promise*, steamer, has received her engines. They are compound. High pressure cylinder, 13½in. diam.; low pressure, 21in.; stroke, 16in.....Fearon, of Yonkers, has got out a catamaran. Length of hulls 26ft., 35in. wide and 22in. deep. They are placed 15ft. apart between centres. Her mast is 26ft. deck to truck; boom, 26ft.; hoist, 19ft., and gaff, 14ft. She carries no jib.....New Bedford Yacht Club has a fine club house on Fish Island.....Mr. J. Bell, of the N. J. Y. C., is having a new racing jib-and-mainsail built at foot of 5th st., Hoboken. She is 24ft. 10in. long .....Sloop *Addie Taylor* has been re-rigged. Mast, deck to cap, 30ft.; bowsprit outboard, 16ft.; boom, 28ft. Sawyer is to fit her with muslin.....Mr. F. P. Osborn's schooner *Nettie*, N. Y. Y. C., has been on the ways at City Island for an overhauling preparatory to making sail for Europe.....The sloop *Wave* was the first to show the Atlantic colors aloft this spring.....*Atlanta* schooner will cruise to Labrador this summer.....*Susie S.*, the famous crack jib-and-mainsail, will not appear under racing colors this year. That will give some of the rest a chance. *Susie* was decidedly too smart for the rack.....Launched at Tottenville, S. I., Tuesday last, the s. s. yacht *Gilbert C. Deane*, owned by Mr. C. Walker, her builder. She is 50ft. keel, 57ft. on deck, 12ft. beam and 5ft. hold, drawing 3ft. 6in. aft. She will receive a vertical boiler and inverted single cylinder engine. Propeller 42in. diam.....The new steam-yacht *James Sampson*, built by Eugene Smart, has been launched at Dover, N. H. She is a handsome and staunch little vessel, and her christening attracted considerable attention in the neighborhood. A description of this steamer will be found in a previous number.

THE OAR AND PADDLE.

DETROIT ROWING MATTERS.—Our regular Detroit correspondent sends us the following Western news: At a meeting of the Naval Board of the Detroit River Navy, held at the Russell House, April 9, with Commodore Allen in the chair, permanent designs for prizes were adopted. The Michigan Boat Club was admitted to membership of the Detroit River Navy, and the Board then adjourned. Subsequently the River Navy held its meeting, when seventeen delegates submitted their credentials. Ten clubs are now enrolled in the Navy. The treasurer reports a flattering condition of the finances, and the organization looks forward to an interesting season.

THE CAMBRIDGE-OXFORD RACE.—The thirty-fifth race between the university crews of Oxford and Cambridge took place on the date fixed, April 13, during the forenoon on the last of the flood. The morning broke hazy and the day was somewhat sultry, but calm, and the Thames smooth until near the close of the race, when a slight breeze caused a little lop, but not enough to interfere with the oarsmen. The course was the usual one, from Putney to Mortlake, four miles and two furlongs. Cambridge had the best side of the water, the Middlesex, while Oxford was on the Surrey shore. Betting was heavily in favor of the Isis crew, the odds being as high as four to one. Cambridge caught the water first and went off with a quick stroke, and soon took a slight lead. At Bishop's Creek they were half a length ahead of the Southern men. Three furlongs above, at the lower end of Craven Cottage Garden, the Oxfords made a spurt, having hitherto kept well within themselves, and rapidly overhauled the Cantab crew, both passing Rosebank Villa, how and how alike. But the dark blues had the best of it; the Cambridge crew showed signs of being used up, and off the Crab Tree, one mile and two furlongs from Putney, Oxford drew out ahead, the light blues pulling wildly and irregular. Off the Soap Works the Isis crew were rowing right away from their opponents, and led under the famous old Hammersmith Bridge by about two lengths. The race was now completely in hands of the Oxford crew, and they apparently took matters easily, as the time of the race also shows. Passing Chiswick Church, two miles and five furlongs from Putney, the lead had reached half a dozen lengths, and at Barnes Bridge about ten. At the finish, Oxford crossed thirty-five seconds ahead, beating the Cambridge crew by many lengths. Time, 23m. 17s. The crews were very evenly weighted, Oxford bringing down the scales at 1,477 lbs. and Cambridge at 1,481 lbs. This makes, in thirty-five contests, eighteen victories secured by Oxford and sixteen by Cambridge. Last year's race, it will be remembered, resulted in a dead heat.

WATKINS' REGATTA.—The representative races of the Watkins' Regatta Association will be open to amateurs, and comprise starts for four-oared, pair-oared and single-scull shells. Winners of these races will be sent to England and France at the expense of the association. Course will be one and five-sixteenths of a mile straight away, two boats to start or no race. Entrance fee for fours, $20; pairs, $12; singles, $8. The laws of N. A. of A. O. will be observed, excepting rules 13 and 14, which may be suspended at the discretion of the meeting, May 23. These rules, it will be remembered, relate to awarding the prize to a crew not first in, should others have fouled; but the Watkins' Association, in order to insure sending the best crews abroad, may suspend this rule should it be evident that one of the crews fouling is superior to the crew winning, if rules 13 and 14 were in force. In that event the race will be rowed over again. Boats and their crews will be taken free over all lines of railroad leading to Seneca Lake. Hotel charges are very reasonable at Watkins, and no doubt the event will come off with considerable *eclat*. All information can be obtained by addressing J. H. Drake, chairman reception committee, Watkin's.

—The Schuylkill Navy Regatta, for 1878, will be held at Philadelphia, Saturday, June 8, and will be conducted under the rules of the N. A. of A. O. Race over the National Course, one and a half miles straight away, for the well-known challenge prizes of the Schuylkill Navy and presentation medals for each of the winning crews. Entries from clubs only; entrance fee for fours, $15; pairs and doubles, $10; singles, $5, which will be returned to all boats starting. Entrance lists close May 25. Quarters for boats free.

The Henley International Regatta is evidently a misnomer. Henley National Regatta, limited, is the proper title for a match in which the international feature has, through the interferences of a few barnacle conservatives and narrow-minded, straight-laced sticklers for ancient caste, been virtually thrown out altogether. Our latest information still fails to show any retractions of, or disposition to retract, the obnoxious, not to say ridiculous, stipulation of an extra six-week's notice required by the Henley stewards from American crews desiring to enter for the Steward's Challenge Silver Goblet and Diamond Sculls. Since the Watkins' trial races take place May 28, 29 and 30, and the Henley regatta July 4, it is simply impossible for American crews to give the notice so unjustly and unwisely called for. The Henley stewards, through their action, seem to take no very complimentary view of American oarsmen or their qualifications as gentlemen; a willful slight which Americans, were they less generous and forgiving in their natures, would not be slow to resent. The definition of what constitutes an amateur is far more strictly enforced in America than the pseudo acceptations in vogue in England, where the only condition demanded seems to be that of a certain social status by birth, no matter how unworthy a person, or how ungentlemanly in his affiliation with professionals this fledgling of a decaying aristocracy may be. But it is not necessary here to enter further into the amateur question at all; suffice it to say that the rules of the N. A. of A. O., and the many provisions based upon them, are within the reach of English authorities, including the Henley fossils, for the small sum of twenty-five cents; and if Englishmen take umbrage at the manner in which their recent actions have been received by Americans, and the burst of indignation, not to say contempt, they have called forth, let them bear in mind that willful perversion of the truth in their prints, by irresponsible correspondents, cannot any longer be accepted by Americans as grounds excusable, exculpating the British authorities from the responsibility of affront to the American rowing public, and of the insinuations current here of predetermination, through fear, against oarsmen from this side of the Atlantic. We believe the whole questionable proceedings at Henley can be directly traced to the machinations of the badly discomfited and sour-tempered individuals from the Thames who lost their laurels at Philadelphia in 1876. If the Henley stewards wish to retrieve their blunders, and not allow the stigma of cowardice to settle upon the fair name of English oarsmen, as it most assuredly will do under the present state of affairs, they must cease their irresolute policy at once, and welcome to the starting line all who come within the limits of the universal acceptation of the meaning of the word "amateur" in sports.

NEW YORK CANOE CLUB.—The New York Canoe Club, which was established in 1872 with seven members, has gained great deserved popularity, and now has a membership of thirty-six, with twenty-eight canoes. The Executive Committe are now negotiating for the purchase of a suitable club house, the popularity of the club warranting such a move. The regatta of the season will be held at Flushing Bay late in June. We give below a list of the members: W. L. Alden, Montgomery Schuyler, M. Roosevelt Schuyler, New York; J. H. Kidder, Charles H. White, W. T. Burwell, John Rich, R. P. Paulding, U. S. N.; J. E. Roosevelt, A. Roosevelt, F. Sherman Smith, L. F. Timmerman, C. L. Norton, W. O. Strong, J. A. Bayley, W. T. Cameron, W. C. Southwick, S. B. Pomeroy, John Habberton, D. B. Lee, T. H. Upton, J. Stillman, E. B. Bronson, Herbert Hazard, D. C. McEwen, H. G. Piffard, A. L. Smidt, John L. Logan, Chas. E. Chase, New York; J. S. Mosher, Albany, N. Y.; G. L. Morse, Yonkers, N. Y.; L. W. Ledyard, Cazenovia, N. Y.; J. Hyde Sparks, England; W. O'Sullivan Dimpfel, Baltimore, Md.; Andrew Devine, Brooklyn; Eugene A. Guilbert, Dubuque, Ia.

ARGONAUT ROWING CLUB.—The Argonaut Club, of Toronto, has elected the following officers: Pres., Mr. Henry O'Brien; Vice-Pres., M. Roger Lambe; Capt., Mr. W. H. Perram; Sec. and Treas., Mr. T. W. Fisher; Ass't. Sec., Mr. J. L. Capreol; Com., Messrs. C. E. Ryerson, Dr. Spragg, Philip Todd, L. H. Robertson, J. A. Healy, R. P. Palmer, Geo. F. Galt.

ROWING RIPPLES.

—The Columbia crew is having a new ship put together by Fearon, of Yonkers, and Donoghue, of Newburg, is whittling out some spoons for them. They will be 12ft. long and 74lbs. weight. Messrs. Sage, Eldridge, Ridabock, Edson and their excellent captain, Goodwin, are putting in some good daily work.....Mutuals, of Albany, will send a four to Seneca Lake. Boat, by Fearon, 41ft. long 20in. wide.....The Carmansville four will be made happy with a new paper shell by Waters & Sons.....Nereus Rowing Club, of Flushing, have elected the following officers: President, L. M. Franklin; Vice-President, Chas. Lever; Treasurer, C. A. Willetts; Secretary, J. Q. Thompson; Captain, J. A. Walker; Lieutenant, F. A. Guild.....Scharff is ready to accommodate Hanlon, of Toronto, "at the proper time," whatever that may mean..... Yale has declined to compete at Watkins, so that any crew they may send to Europe cannot go as the American champions. Queer course Yale has taken.....Harvard and Yale have agreed to the terms proposed by Mr. Bently on the part of the New London public and railroads, and so the great 'varsity race will be pulled on the Thames this year. Rather a curious coincidence with the name of the river that yearly sees the greatest of aquatic meetings in the old country, and between its own universities too.....Silver Lake Regatta, Boston, takes place May 30 and June 17. On the latter date amateur six-oared crews will pull for the Boston *Herald* cup; N. A. of A. P. rules govern.....Trickett will row any one who will go to Australia for £500 to £1,000 a side, allowing £150 to £300 for expenses, win or loose..... Wm. Elliott, Robt. W. Bayd, Wm. Lunsdale and Wm. Nicholson form a new team of crack professionals on the Tyne, Eng. Look out for them.....Columbia Freshmen turn their noses up at a challenge from Harvard, in revenge for Harvard's action toward the Columbia University crew last year .....Chicago Barge Club propose putting up their new house, foot of Peck Court.....Eurekas on the Passaic are training actively.....James Reilly, of Saratoga, is in training, waiting for some one to turn up against him.....Vesper Boat Club on the Merrimac numbers over 100 members.....Boston City will give its regular annual contests July 4. Could not New York's sleepy City Fathers be stirred up to similar laudable undertakings?..... Rutgers College hopes to send a strong crew to Watkins?.....Never was the outlook for boating brighter than this spring.....Atlantic Boat Club, of Hoboken, have elected the following officers: H. Offerman, Pres.; J. Hagemeyer, Treas.; J. A. Reed. Secy., and Chas. Erlenkotter, Captain.

Sea and River Fishing.

FISH IN SEASON IN APRIL.

Speckled Trout—*Salmo fontinalis.* Land-locked Salmon—*Salmo glovcri.* White Perch.—

FLIES FOR APRIL.

BLACK GNAT, OR MIDGE.—No. 13.—Body and feet black, wings subhayaline.

DARK CLARET GNAT.—No. 13.—Body dark claret, feet black, wings subhyaline.

BRIGHT CLARET GNAT.—No. 13.—Body bright claret, mixed with red fox face, feet ginger, wings of one sex hyaline, the other ochre-one.

GRAY GNAT.—No. 13.—Body dark fox, mixed with dark claret, feet gray, wings hyaline.

DARK FOX.—Nos. 10 or 11.—Body and feet dark fox, mixed with lemon colored mohair, wings subhyaline, tail three fibres of dark gray hackle.

POOR MAN'S FLY.—Nos. 9 and 10.—Body and feet, hare's ear and yellow mixed, wings slightly mottled gray, tail the mottle of the wood duck.

OLIVE GNAT.—No. 13.—Body dark olive, mixed with bright claret, feet ginger, wings hyaline.

RED FOX.—Nos. 10 and 11.—Body fox cub face, mixed with yellow, feet red (chicken red), wings pale gray or subhyaline, tail mottled feather wood duck.

BRIGHT FOX.—Nos. 10 and 11.—Body and feet brightest part of the fox, mixed with yellow, wings brightest hyaline, tail pale yellow.

BLACK HACKLED FLY.—Nos. 9 and 8.—Body orange, ribbed with gold tinsel, hackle black wings, tail of the American partridge.

GENERAL FLIES.

IRIS.—No. 8.—A hackle fly, ribbed with silver tinsel, body hackle, wings and tail scarlet.

PEACOCK PALMER.—No. 8.—Body peacock herls, hackle black and red mixed.

GRAY PALMER.—No. 8.—Body peacock herl, dark gray hackle.

PROFESSOR.—Nos. 8 and 9.—Body bright yellow, feet golden brown, wings wood duck and mallard, dyed yellow, mixed, tail scarlet ibis.

QUEEN OF THE WATER.—Nos. 8 and 9.—A hackled fly; body orange ribbed with gold tinsel, hackle chicken red, wings bright mottle of the mallard

GRIZZLY KING.—Nos. 8 and 9.—A hackly fly; body green, hackle dark gray, tail scarlet ibis, wings mottled feather of the pin-tail.

FISH IN MARKET—RETAIL PRICES.—Our quotations are as follows: Striped bass, 20 cents; large do., 15; smelts, 15; blue fish, 15; frozen salmon, 30; green do., 75; mackerel, large, 25; do. small, 15; Southern shad, 25; native, 35; Connecticut River, 75; white perch, 15; Spanish mackerel, 25; green turtle, 15; terrapin, $15; frost fish, 6; halibut, 11; haddock, 6; codfish, heads off, 6; do., heads on, 5; black-fish, large, 15; herring, Newfoundland, 6; flounders, large, 10; do., small, 6; eels, large, dressed, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 25; turbot, 20; scallops, $1.75 per gallon; soft clams, per 100, 30; do., large, 60; whitefish, 20; pickerel, 15; perch, yellow, 8; salmon trout, 15; Canada brook trout, 25; Long Island do., $1; hard crabs, per 100, $3; soft crabs, per dozen, $3; prawns, per gallon, $1.

The yield of shad from the North River here has been so far very slight, and the fish from the Connecticut have not been plenty. On Monday two schooners arrived with the first fresh mackerel, and on Sunday four more. Fish quite small. The consequence was that the price of shad fell immediately.

WHITEBAIT IN NEW YORK.—As early as 1873 it was announced in the FOREST AND STREAM that whitebait was not foreign to our waters. This statement was made on the authority of J. Carson Brevoort, Esq., who, as early as 1854, had declared that fish precisely like those in which Prime Ministers delight at Greenwich, had been brought to him by an English fisherman, who had caught them in New York Bay. Yesterday some of these same fish were given to us by E. G. Blackford, which were caught in New York Bay, and we now revel in the idea that it is not only on the banks of the Thames that the superlative whitebait can be eaten, but that before long, beside the Hudson, epicures may enjoy their good little fish. Of course we may expect a long discussion on this subject, "What are whitebait?" It was sometime in 1828 that Yarrell first threw the bone of contention into the icthyological arena. Before an article of Mr. Yarrell's, published in the *Zoological Journal*, whitebait were thought to be either the young of the shad (*Clupea alausa*) or of the carp or bleak. Yarrell insisted that whitebait were the young of the herring. After a careful examination of the fin rays of the specimens given us by Mr. Blackford, we find these rays to correspond exactly with those given by Yarrell, as belonging to the whitebait, D., 17; P., 15; V., 7; A., 15; tail, 20. In all other descriptions the fish follow closely the English whitebait, save that the tongue had grayish tints on the edges. Prof. Spencer F. Baird is also an authority for the statement that whitebait are found on our coast, and are the young of the herring. We believe too, that whitebait are merely nothing more than young herring, perhaps of the ale-wife, and not a special fish with characteristics of their own. We notice that quite lately a discussion has been held in England on the subject of whitebait, as to whether they were herring or not. Some of the whitebait having been placed in an aquarium, the little fish grew to be good sized herring. We suppose that this crucial experiment can be made with us, and the Broadway Aquarium might get some whitebait and let them grow. All scientific speculation being, however, put aside for the moment, we are only too glad to believe that some of these fine days at Delmonico's, Sutherland's or Cable's a dish of crisp whitebait, with the necessary concomitants, will be furnished to epicures.

MOVEMENTS OF THE FISHING FLEET.—The market for fresh halibut has proved very dull the past week, although the receipts have not been large for the season, only five arrivals being reported, bringing 240,000 lbs. The number of Georges arrivals reported has been nineteen, but the average catch for the season is very small, and the receipts have not exceeded 375,000 lbs. Whole number of fishing arrivals for the week, 24.—*Cape Ann Advertiser, April* 12.

CONNECTICUT—*New London, April* 15.—Trout season opened with a perfect day, and the brooks have yielded well, and repaid one's efforts. The fish bit well, and large catches and heavy fish promise much sport. F. L. A.

NEW YORK—*Meacham Lake, April* 15.—The trout are biting freely. Seem just as anxious to get from the water to the frying-pan as ever. A. R. FULLER.

—The Saranacs were clear of ice on the 12th of April.

PENNSYLVANIA—*Milford, Pike Co., April* 6.—Trout fishing good this season. Amos J. Cummings and party, who stopped at F. E Garrison's farm on the Sawkill, took 80 pounds of fish on the 1st, 2d, 3d and 4th instant, the average was seven to the pound, and the fish were game, in good condition and of exquisite flavor; ninety per cent. of them are taken with a fly on Hamilton's, Peroz's, Comte's, Garrison's and Pinney's preserves, which average three-quarters of a mile, the fee being from 25 cents to $1 per rod per day. Anglers should stop at Le Clerc's hotel or Fanny Dimlniek's hotel, Milford, or at Garrison's Farmhouse. At the latter place excellent board and first-class accommodations at $1 a day. The Sawkill is now strictly preserved, and the vagabond poaching element is routed. Boarders at Sbanoe's farm, at Loveaux's on the Raymondskill, are entitled to first-class fishing, the catches averaging five to the pound. Here board is from $9 to $12 per week, but the table is equal to Delmonico's. At Nyce's homestead at Tom's Creek, thirteen miles from Milford, is some rare fishing as strictly preserved as in Great Britain. The large trout in the Shohola will be anxious for the fly by May 1st. First-class accommodations at Moses Westbrook's hotel, Blooming Grove, from whence the preserves of the Blooming Grove Park Association are easily accessible. Flies for Pike county: Grizzly King, coachman, Pritchard's Van Patten, silver gnat, March brown and cow dung. The best east is a coachman stretcher and grizzly king and Van Patten droppers. S.

TENNESSEE—*Columbia, April* 6.—Fishing excitement at its height. Large "creels" taken, and every one happy. Mr. L. P. P. still heads the score with a four and a half pound trout. Was shown some speckled trout taken from Buffalo Creek, the first caught in our streams, and their coming is heralded with gladness, as it gives a chance to compete with our Northern brothers of the rod in casting the fly, an accomplishment we have been anxious to attain. VAL.

KENTUCKY—*Stamford, April* 10.—A bushwacker speared a pike in Castle, a few days since, which weighed twenty-eight pounds. B.

A TRIP TO BUFFALO CREEK.—On the morning of March 25, Mr. T. and myself left Columbia, with horse and buggy, for a week's fishing in Buffalo Creek, Lawrence County, thirty miles west of Columbia. The road, a smooth pike, lay through the garden spot of Tennessee, as that portion of Maury County is called. Fine old mansions, situated in large parks of twenty and forty acres of oaks, beeches, maples, etc., built during the "flush times" of the South, with their large white pillars, broad stone steps and spacious halls, which bring to mind the hospitable planters and good old times of the days gone by, when the young people would gather for a gallop after the hounds or a canter through the fields. Alas! those are by-gones which one cannot think of without a sigh. Two miles west of Columbia we passed Gen. Gideon Pillow's large plantation, with a large brick mansion, built in "ye olden time," in the centre of a large park; a few of the negro cabins are still standing. Four miles further we came to Ashwood, the homestead of the Polk's, the nobility of Tennessee. Here is also found the property of Countess De Chavete, *nee* Miss Antoinette Polk. Six miles further we come to Mount Pleasant, a neat little town on Little Bigbee, which abounds in trout and bass fishing. Twelve miles further brings us to Summertown. A thriving colony of Northern men have settled here for the purpose of stock raising and fruit growing. Here we met Mr. F. H. Watkins, a subscriber and occasional correspondent to F. AND S. Mr. W. has bought a large tract of land, and intends to make a fish pond and hatchery on it, as a crystal stream of freestone water flows within fifty yards of his house. Mr. W. is a thorough sportsman, and in the evening gave us a treat in the shape of a run with the hounds after hares. Bunny was too cunning and holed. We then repaired to the house and partook of an excellent supper, consisting of fish (trout and pike), venison, etc. We spent the night with Mr. W. Daylight found us on our way to Buffalo, six miles distant. We reached the stream by sunrise, and all our dreams of Buffalo were verified. Buffalo Creek is a stream of clear, cold freestone water, about fifty yards wide, current swift and strong, with rocky bed and banks, with pools, out of which are caught trout, bass, pike, jacks, perch, etc. We did not have time to take many notes, as our lines demanded our attention, for our minnows had scarcely disappeared before they were struck and carried down stream with a vim. Their headlong career was soon checked, and our fish landed; one was a pike weighing about three pounds, the other a trout of about two pounds weight. This sport continued about an hour, when we had landed some ten or twelve fine fellows; it then began to rain and thunder and lightning, and continued the balance of the week, our "off time," and we had to return to our business without making another cast. We were very much pleased with the trip, notwithstanding our luck. We return thanks to Mr. Garner and others for courtesies extended. In conclusion, I would say that any one wishing to have a week's sport and roughing it, can find it on Buffalo Creek; snipe, quail, hares, and occasionally a deer, are found in the vicinity. VAL.

Columbia, Tenn., March 30.

CALIFORNIA—*Placerville, April* 6.—Have been on a fishing excursion up in the Sierras, along the American River. The first day I caught forty-three beautiful trout, some weighing a pound and a half and two pounds. Strawberry Valley is a very good fishing place. The woods all along the route abound in game, of which we got a very good supply. There are also lots of fish in the ditch of the El Dorado Water and Gravel Mining Company, a great many of which get into the hydraulic pipes of the company and get dashed against the rocks. At Smith's Flat there is being built a reservoir for the preservation of fishes. S. L.

THE SALMON RIVERS OF CANADA.—Anglers will please refer to the list of salmon rivers for lease by the Canadian Government, as advertised in our columns by Fish Commissioner Whitcher, of Ottawa.

THE NORRIS FLY RODS.—Those who wish to purchase some memento of the lamented Thaddeus Norris, Esq., can obtain one of his beautiful rods by addressing his son, Richard Norris, 2,550 Gray's Ferry Road, Philadelphia. See advertisement in our columns.

LINEN FISHING LINES—*Chicago, April* 9.—*Dear Editor:* Noticing the letter of C. C. in last week's FOREST AND STREAM on "Instructions in Bass Fishing," is it not the prevailing opinion that bass are somewhat shy, and that a white line will scare them? How then can G. C. recommend a twisted or cable-laid linen line? I have always found linen lines to wash white in fishing. Let us have more of such letters from other fishermen, for in the multitude of counselors there is wisdom. NORMAN.

[Linen lines can be readily dyed of a permanent color.—ED.]

AN IMPROVED REEL-SEAT.—Dr. J. T. Bohon, of Stanford, Ky., has called our attention to an improved reel-seat, invented in Central Kentucky, and in use by many of the anglers there. It is a simple bed-plate of sheet brass or silver to screw down upon the but of the fishing rod, with a pair of clamps into which the reel-plate slides. It is much more convenient and secure than the rings used to hold the reel on.

CAUGHT ON A FLY.—Our old friend, Will Clarke, of Harrisburg, a short time since, handsomely perpetrated a little feat, which is as novel as it was amusing to his companion. Angling for bachelor perch with long rod and line without a reel, he threw an unfortunate high above the water, fully twenty feet distant, and discovered that the hook had been torn from its mouth, but not before a momentum had been given to the fish which would hurl it ashore, so he hastily set his rod against a convenient tree, and gracefully caught the game in his hands, observing to his friend, "That's one on the fly." Will is the life of every fishing party that can boast of his connection, and is as handy to have about camp as were Mrs. Toodles' varied purchases about the house. He wields his reel rod as elegantly as an accomplished swell twirls his rattan, and handles a whale with an ease, a *nonchalance* and success which are exasperating to all of us would-be's, and we know that he is not a slatherer (our localism for a greeny), but just how he chanced to impart such an impetus to the flight of that fingerling is more than even his boon friend and eye-witness to above achievement, "Tige," can explain.

Stanford, Ky., March 20. KENTUCKIAN.

"THE GROUND HOG CASE ANGLER."

MIDDLETOWN, Conn., April 5, 1878.

Mr. Editor—I notice in your issue of 4th inst., an inquiry as to the definition of the phrase, "A ground hog case angler."

One day, about twenty-five years ago, so runs the tradition, in the palmy time when "circuit-preaching" flourished in the zenith of its glory, a Methodist divine of one of the backwoods circuits announced, by *avant coureur*, that upon the next day—Sunday—he would expound the Scripture to the faithful at a little settlement in one of the Western States. (Having heard the identical story in seven different States, and each claiming the exact and original locality of the scene to have been within its limits, I refrain from specifying any particular one, for fear of giving offense to the others.) At the same time, a certain member of the congregation at this "clearing" was notified that he was expected by "his reverence" to furnish bed and board for the minister and his horse, as was customary on such occasions, during his brief sojourn in the settlement.

It happened, unfortunately, that the backwoodsman's larder, like "Mother Hubbard's" cupboard, was absolutely bare of any kind of meat; and the man was at his wits' end to devise some means of supplying this deficiency, especially as the minister was momentarily expected to "heave in sight." There was no time to hunt up a deer. At length, a happy thought flashed across his perplexed brain, and calling up his son and heir, a youth of twelve, he hurriedly explained his desperate state of affairs, and dispatched young hopeful with the injunction to catch a ground hog, the parting warning ringing in the boy's ears: "You better not come home without one."

Meanwhile, the worthy man of God was nearing his destination, doubtless regaling his mind with visions of "chicken fixin's," etc. which awaited his coming; when, chancing to look up from the bridle-path in which he was riding, he espied a small boy, spade in hand, frantically digging in the earth, as if for life or death.

"What are you digging for, sonny?" he patronizingly inquired, accompanying the interrogatory with that benign smile, of which only the circuit preacher is capable.

Without suspending his labors in the least to scrutinize his questioner the boy laconically replied, "A ground hog."

"Well, but what is the necessity of such a hurry? Can you not let the ground hog alone long enough to show me the way to Mr. ——'s?" (the boy's father's.)

Judge of the holy man's consternation when the urchin rejoined, "No, I can't, 'cause there's a durned preacher comin' to our house this evenin', and dad says it's a ground hog or no meat!"

As to the *denoument* of this story, history remains silent; but certain it is, that from this origin the expression "A ground hog case" has passed into circulation as a synonym of *un dernier resort*. *Ergo*, I presume that by a "ground hog case angler," "Val" meant to designate a "hard up pot-fisherman," if such a term exists. J. T.

[Two other correspondents have kindly helped us out on this case.—ED. F. AND S.]

Answers to Correspondents.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

PULL, Peoria.—Don't.

C. A. B., S. Norwalk, Conn.—Form, etc. sent you.

D. B. F., Frankfort, Ky.—Do not think it would suit you.

H. P., Somewhere (?), Wis.—The fire-arms company you wish the address of is in Norwich, Conn.

J. S. B., Pittston.—What would you use to kill lice on dogs? Ans. Rub in kerosene, or any stiff grease, thoroughly.

C. S. B., Lock Haven, Pa.—We do not know where to find the dog you want. We will, however, advertise some soon, we think.

G. W. C., Montreal.—Pope's "Upland Game Birds of the United States" is published by Scribner, Armstrong & Co., of this city. The 4th part (eight plates) is now out.

O. K., Boston.—Regret we cannot give you the information. An advertisement would bring you, we suppose, what you wanted.

W. O. W., Charlottesville, Va.—There are no rules for gallery practice. We send you, however, something which might help you.

LEH FISHER, Flemington, N. J.—For T. Todd Stoddart's knocks address Claxton, Remsen & Haffelfinger, Philadelphia. Don't know the prices.

SUBSCRIBER, Phila.—An excellent paint for boats' bottoms is Ingersoll's verdigris. Write to him at 162 South St., N. Y., for it. Price $4.00 per gallon.

J. H. V., Newport, Ky.—What is the difference in price of chilled and soft shot as made by the Messrs. Tatham? Ans. Soft shot, 7½ c.; chilled, 10 cents.

T. H., Utica.—In describing the tin perforated by the Tathams' chilled shot will you mention more particularly the size? Ans. The brand of the tin was IX.

A. J. W., Brooklyn.—You will find the address of the secretary of the N. Y. Canoe Club in the columns of this issue under heading "The Oar and Paddle."

N. K. P., Westchester, Pa.—You will probably find in Oregon Co., Mo., bears, panthers, wild-cats, deer, turkeys, geese, ducks, swans and other wild fowl.

W. D. T.—Where can I get a picture of the land-locked salmon, either printed or lithographed? Ans. Send to Endicott & Co., lithographers, 57 Nassau St., N. Y.

E. C. S., Harrisburg, Pa.—Where is the "V. Chr. Schilling" breech-loading gun made? Is it Belgium? Ans. The maker is not Belgian, the address is Suhl, Prussia.

ALLIGATOR PLANT, New York.—The wood you bought was what is known as the sweet gum tree, or *Sequidambar*. You are not the only one who has fallen into that alligator trap.

B. L. H., Hollidaysburg, Pa.—My setter scratches himself a great deal. Skin not broken, nor hair falling out. Ans. Use kerosene once a day to itchy spots, and give two or three doses of castor oil.

J. S. G., Elizabethtown.—Have a pointer pup one year old. He has red spots on his body which itch him. What is it? What shall I do for him? Ans. Rub in kerosene oil once or twice a day for a week.

F. G. B., Framingham, Mass.—In a late *Tribune* s writer, speaking of the game of Virginia, mentions "boomers." What are boomers? Ans. Common red squirrels are called boomers, or mountain boomers.

A CORRECTION.—In our last issue, in describing the St. Bernard dog, the printers mistook haw for hair. The haw of the St. Bernard, otter-hound or bloodhound, is the redder portion of the inner eye-lid of the dog.

E. T. P., Washington, D. C.—What species of salmon is found in the Susquehanna in the neighborhood of Harrisburg, Penn., and the method of capture with the rod? Ans. Black bass are called Susquehanna salmon.

JOHN, Newport.—Some three months ago I mashed my thumb nail. The old nail is shedding off, but the new nail is not half grown yet. How long will it take to grow on? Ans. The human nail grows about an inch in six months.

E. C. R., Boston.—Will you please give me information in the F. and S. on revolver-shooting off hand and target, penetration, length of barrel (32 and 38 short and long)? Ans. Buy "How to Use the Pistol," Industrial Publication Co., 176 Broadway.

Pomeroy, Iowa.—I failed to find an answer to my queries in the last issue regarding aquarium cement, gold fish, etc. Please answer in next. Ans. Would advise you to send direct to Fred Kaempfer, 127 Clark St., Chicago, who will furnish the complete outfit.

H. M. P., Boston.—1. What is the proper charge of powder for a 28-inch barrel, muzzle-loading rifle, throwing a ball of 45 to the pound? 2. Would Dittmar powder work well in it? Ans. 1. 65 grs. of powder. 2. Yes, providing your ball fits very closely. Try same bulk of Dittmar.

E. H., New Paltz.—I have a red setter pup six months old that has two small lumps on each corner of his mouth and one on his tongue. They look very much like warts. What shall I do to remove them? Ans. Touch them a few times with nitrate of silver slightly moistened.

W. L. T., Bridgeport.—The balling of the shot you describe, we are certain does not arise from the chilled shot, but from some peculiarity of your gun. Sometimes there is a shoulder in the chamber, just beyond where the shell terminates, which has a tendency to make chilled shot ball.

JOHN.—There have been several books printed relating to the Florida war, but the best history is "Sprague's Florida War," printed, we believe, in 1842. We do not know where it can be had now, but you might inquire of Houghton, Wiley and other leading booksellers here, or in Boston.

D. R. G., New York.—What is the minimum and maximum age at which a dog should be broken, and is there any difference in this respect between a pointer and a setter? Ans. Any age may answer your query. Least time is from six months to one and a half years of age. No special difference.

WILD TURKEY, Brooksburg, Indiana.—Could not give you an opinion. Theoretically there may be something in it, but it is questionable whether practice would support theory. If you want a gun for turkey shooting use 10. The extra long barrels in no way improve the shooting. 30 to 32 inches is long enough.

J. A. D., Boston.—My Newfoundland dog kills pigeons and kigs up flowers. What shall I do? Have thrashed him. Ans. Can only advise a repetition of the whipping. He will understand it after a while. Try what has been recommended. Tie a pair of pigeons around his neck and he will get sick of them.

SECRETARY.—Will you give me address of some brother sportsmen at, or near Asheville, N. C., and also near the duck hunting grounds of eastern N. C.? Ans. Theo. F. Davidson, Asheville and Charles N. Dudley, Pungo Ferry, Norfolk Co., Virginia; or Peter L. Tatum, Bel Island, Currituck P. O., North Carolina.

VOYAGEUR, Goshen.—Would a person be charged duty on an English gun which had been used several years, and had passed through different custom houses abroad, and would duty be charged on its return to this country? Ans. If the owner of the gun brought it back, and made affidavit to that effect, no duty could be charged.

INQUIRER, Phila.—What reputation has the —— breech-loading shot-gun? 2. What advantage, if any, does a 10 bore possess over a 12 bore? Ans. 1. It is no name at all, and in the trade is adopted to mean a third-class gun, or worse. 2. The advantage of carrying a heavier charge. Where large game is found a 10 is preferable to a 12.

T. E. O., New Haven, Conn.—1. My setter is five years old. His hair, though fine and silky, is of a dead color. Is in good spirits. What shall I do for his coat? 2. Have a three months' old puppy with a running from his eyes. Ans. 1. The setter seems to need no treatment. Give him plenty of exercise. 2. Give the pup a little castor oil.

F. W. B., Green Bay, Wis.—I have a copy of your "Gazetteer" in which you mention "quilch" grass for your dogs. I have a fine young four month English setter and he seems to want something like it, as he eats grass occasionally. Would you tell me where I can get some seed? Ans. A full reply will be found in our kennel column this week.

S. G. V. G., Lancaster, O.—Inform me whether an old army Spencer repeating rifle would be reliable for deer? It shoots with most satisfactory accuracy at 150 yards; but is the force there, and will the gun answer the purpose above indicated? Ans. Would answer quite well. There is all the penetration necessary to kill an animal much larger than a deer.

E. O. M., Knox, Ind.—Which is the best dog for general hunting? I want a dog for cover shooting, retrieving ducks, and one which will hunt for rabbits and such. How would the cocker spaniel do? Is a clumber spaniel superior to the cocker, and where can they be procured? Ans. Cocker best for your purpose. We advertise some very good cockers.

F. S. G., Syracuse.—1. What part of New York is most interesting for visitors. 2. Who is the best shot of the world with a rifle? 3. Where can I get a good second-hand rifle cheap? Ans. 1. Consult Osgood's Guide Book to the Middle States. It contains full directions for "doing" the city. 2. He has requested us not to mention his name. 3. Consult our advertising columns.

G. H. B., Augusta, Me.—1. Please give me the proper charge for glass ball shooting for a 16 bore muzzle loading gun? 2. The proper size of shot for above kind of shooting? 3. Where can I obtain Capt. Bogardus' rules for Trap Shooting? Ans. 1. 2½drs. powder, 1 oz. shot. 2. No. 8. 3. In Bogardus' "Field, Cover and Trap Shooting," price $2. Can send you a copy.

I. L. C., Boston.—Give me name of any party this way from whom I could get the frame of a canoe. What preparation is used to paint the duck after the canoe is covered? Ans. We know of no one who makes the frame alone. See answer to J. K. O. Perhaps some of the canoe makers mentioned there would make frame. We advise a coat of boiled linseed oil and then thin coat of paint.

J. H. P., Augusta, Me.—Where can I obtain two short rifled barrels suitable to make into rifles for using the bulleted caps? 2. Which are the best bulleted caps, the American or the imported? 3. At what distance are they tolerably accurate? Ans. 1. Send to the Remingtons at Ilion, N. Y. 2. American bulleted caps are better because of form of shell fitting better in guns and pistols. 3. About 75 feet.

C. G. J., Howell, Mich.—In glass ball shooting, Bogardus rules, ought the three traps to be placed on a parallel line in a position to throw the balls in the same direction, or in a semi-circle, and so placed that each trap throws the balls directly from the shooter? Ans. There is no provision in Bogardus' rules for position of the three traps, save that they shall be "ten yards apart, eighteen yards rise."

H. C., Worcester, Mass.—Please name the price of Vols. 1, 2 and 3, of FOREST AND STREAM. I have from 4 to 8 bound. I want the best map of Florida. Is there one that is reliable and minute enough to be of any practical benefit? Ans. Three volumes $12—the first two very scarce and hard to get. Send to this office for Aplhrop's Map of Florida, price $1.50—a most excellent and complete map.

TOP SNAP, Cazenovia, N. Y.—We have had a dispute and the answer in paper don't settle it. What is the extreme diameter that white holly grows to? Ans. If you mean *Ilex opaca*, or American holly, it grows from twenty to forty feet high, with a diameter of from nine to eighteen inches, and at say two feet from the ground level. Have never heard it called white holly. Perhaps you mean some other tree with a local name.

C. O. P., Boston, Mass.—I notice in your paper of Jan. 24, page 473, an account of a rattlesnake having been killed, measuring fifteen feet in length. Was that a misprint, or do they attain the length mentioned? 2. What is the reputation of ——, of London? Ans. 1. We have no reason to doubt the authenticity of the statement, though, of course, a rattlesnake of that size is a giant of his kind. 2. The makers rank among the very best in England.

H. H. V., Valparaiso, Ind.—Inform me of some way of saving our maple shade trees from borers? Ans. Killing the borer by means of a wire run up the hole gouging them out, or putting a piece of camphor in the hole and plugging it up with a piece of soft wood are the means most in use for the extirpation of the apple and peach borer. We have had no experience with the borer on the maple. Perhaps Prof. Riley could enlighten you fully on the subject.

H. J. T., Boston.—Have a setter ten months old whose coat is somewhat curly. Is there any way that I can make it lie straight? The dog is one of a litter of five, has a clear pedigree back and is the only one of the litter that has anything wrong about their coats; in fact this litter have so far won three first prizes at bench shows, which shows that they must be pretty good dogs. Ans. Coat will probably come right in time; at least you cannot do anything to straighten it.

H. F. A., Colorado Springs.—Will you please tell me the best boat I can procure for a trip down the Arkansas and Mississippi Rivers to New Orleans? Wish one that will not weigh over seventy-five pounds. Also probable cost of same? Ans. Cannot conceive of a better boat than the paper canoe made by Waters & Son, of Troy, 50 pounds, in which Mr. Bishop made his Island voyage from Albany to Cedar Keys, Florida. Read his book, look out, and judge for yourself. Price of boat $125.

P. H., Bloomsburg, N. J.—1. Where is the best place for trout fishing in the Big Bushkill of Pike Co? 2. Is this stream, or any part of it, within the limits of Blooming Grove Park? 3. Are sportsmen who are not members of this association allowed to fish or hunt within its boundaries? 4. Where and at what price can I get a wooden case for my fishing rod? Ans. 1. The upper Bushkill and its branches. 2. No part of it? 3. Not unless they are boarders at the Club House? 4. Nail four tapered laths together, step one end and hinge a cover on the other.

H. O. T., Leland, Ill.—1. Is 379, No. 8 shot, a good pattern at 100 feet? 2. How many sheets of a Dennison pad ought a —— breech-loader, 30 inch barrels, 9 6-16 lbs. weight, 10 gauge, Damascus steel, penetrate? 3. What is the proper load for such a gun, Hazard's powder and chilled shot for glass balls? 4. Also for ducks. 5. Would you mix Dittmar powder with Hazard's No. 4 Duckling, or would you use Dittmar alone? Ans. 1. A fair pattern. 2. 75 to 80 sheets. 3. 3½ drs. powder, 1⅛ oz. shot. 4. 4 drs. powder, 1⅛ oz. shot. 5. Yes, half bulk of each.

CONSTANT READER.—I notice you say that Capt. Bogardus had shot 55,000 charges from his Scott gun. Does this mean 55,000 from each barrel, or 55,000 from both, that is 27,500 from each? Ans. The Scott gun has been shot by Capt. Bogardus over 55,000 times both barrels (not each), but both barrels fitted the same stock, hence this one Scott top-snap action has stood this great wear of two sets of barrels, or in fact of two guns? We lately saw this interesting breech-loader at William Read & Sons, Boston, who furnished it to Capt Bogardus, and the gun looked like a veteran of many battles, though in perfect order and as fit for use as ever. It is a great credit to Messrs. W. & C. Scott & Son and a proof of their strong action.

KIT, St. Louis.—1. Have a —— breech-loading shot-gun, and would like to know your opinion of the maker? 2. Does taper choke give as good results as full choke in the way of penetration and pattern? 3. Can taper choke be changed to full choke without injury to the gun? The weight of the gun is nearly 10 lbs., 10 bore, laminated barrels, and a good weight of metal at the breech. Ans. 1. Though a good maker, not classed among the best; his work is, however, perfectly safe. Could not tell you more. 2. Do not think it does. 3. You might make the change with perfect safety.

AMATEUR, Derby.—1. Is the —— rifle, 12 in. barrels, considered an accurate arm up to 250 yds.? 2. Are they allowed, and do they use them in the short-range matches? 3. Where can I get the general rules and regulations for off-hand shooting? 4. Which is considered the better title for long-range practice? 5. Are the —— Gun Works a perfectly reliable firm? Ans. 1. It is not so considered. 2. Not at Creedmoor. 3. General rules of the N. R. A. would give you the information. 4. Respectfully decline answering. 5. Any order you would send them would be filled.

P. C., N. Y.—Do you consider the Laverack setter equal in endurance to the Irish? Do you believe their power of scent is superior to the Irish, and will there be any chance of procuring a pup at the N. Y. Dog Show, and what would you consider a fair price for first-class pup? Ans. This is just one of those questions no fellow, dogwise or otherwise, can answer. For energy and fine scent the Irish are famed, for intelligence and good temper some land the Laverack. We should think you would have every opportunity of getting the pup you want at the coming bench show. Would cost from $75 to $50.

E. S., Albany.—1. Which is the safer flying pigeon, the English blue-rock or a first-class American pigeon? 2. Were the pigeons which Capt. Bogardus shot at double, at the Brooklyn Driving Park a few weeks past, English blue-rocks or American pigeons? 3. Is there any person in this country who has the genuine English blue-rock? 4. When John Taylor killed 91 pigeons out of 50 pair, was it from ground or plunge traps? Ans. 1. The blue-rock is decidedly the swifter. 2. American birds and very swift, as were Mr. Paine's a week or so ago. 3. Don't know of any. 4. Ground traps.

C. A., Minneapolis, Minn.—1. Will a —— sporting rifle, 45 cal., 30 inch barrel, using 120 grs. powder and 300 grs. lead, shoot as strong, as far and as accurate as any of —— long range rifles? If not why not? 2. Will a 45 pound gun using such a cartridge shoot stronger and recoil less than a 12 pound? Ans. 1. 120 grs. of powder is a heavy load for such a rifle. It would shoot as strong, but not as accurately as the long range rifles. Reasons would be difference in length of barrel, 30 inch barrel not burning all the powder and because the sporting rifle is not as perfectly finished as the long range (Creedmoor) rifles. 2. Not stronger shooting, but less recoil.

J. K. O., N. Y. City.—1. Is there a club devoted to canoeing? 2. Is there a journal devoted to that sport? 3. Who builds canoes after the approved Rob Roy model? Ans. 1. There is the New York Canoe Club, the Jersey Blue Canoe Club, the Newark Canoe Club and the Baltimore Canoe Club. 2. FOREST AND STREAM will, during the coming season, devote special attention to canoeing. 3. Everson, of Williamsburgh; Jarvis, of Watkin's Glen and some other builders. The Rob Roy model is inferior for general use to the Nautilus, and especially to the Shadow. All builders build Nautilus canoes, and Everson makes a specialty of shadow.

D. F. E., Strasburg, Va.—Row-locks should be placed about 7½ ins. above level of thwarts, excepting in shell-boats, where a long stretch to the legs is obtainable, when the height may be reduced to 5 inches. Position of row-locks abaft of thwart is governed by their "spread." For 5 ft. spread they should be 12 ins. abaft; for 4 ft. spread, to ins. abaft. A professional shell for Josh Ward was built with row-locks 5 ins. above, and to ins. abaft thwarts. "Eagle" oar-lock is readily fastened, unshipped, and can be used to carry the boat by. Write to Desmond, 37 Peck slip, N. Y., for them.

DUKE, Jersey City.—I have a bitch pup; crossed setter and pointer; she takes altogether after the pointer; does not carry her tail straight. Will cropping the end remedy the fault? 2. Is the cross a good one? She is very intelligent and learns easily. 3. What is the reputation of —— for getting up a serviceable gun as to shooting qualities? 4. How is Dupont's No. 2 duck powder in cleanliness and uniformity of strength? Ans. 1. It would not do any good. 2. Not a good cross. 3. We happen to know the exact gun you use, and a most excellent gun it is—none better; the maker, among the best. If the charge you use does your work, do not change. 4. Very good and uniform. Would be glad to see you at any time.

EDITOR, Ottavia, O.—A Scotch collie, just over the distemper, manifests strange movements in her action. In the evening she is in fair spirits, but is dull during the day. Seems to have no control over her hind quarters. Appetite variable, muzzle hot and dry. What shall I do for her? Ans. It is the partial paralysis so often a sequence of distemper through great loss of vitality. Recovery generally takes place, although there may always remain some slight evidences of impairment of muscular power. Quinine is probably the best remedy, with, perhaps, the addition of a small quantity of nux vomica; say a pill containing two grains quinine and one-eighth grain nux vom. given three times a day for a couple of weeks.

D. G. E., Strasburg, Va.—How can I blast rock in a river with five or six inches of water flowing over it? Would dynamite do it, if so how is it fired and where can it be obtained? Ans. You would have to drill holes in the rock, a dozen or more according to the direction, and introduce dynamite into the holes, the substance being inclosed in water-proof tubes. You would fire the dynamite by wires and a battery. See the method employed in 1876 by General Newton at Hell Gate. The dynamite may be obtained of J. R. Rand & Co., Wayne, N. J., and of the Atlantic Giant Powder Co., Drakeville, N. J.; the waterproof tin cases of Messrs. Stoutenborough, 207 Pearl st., N. Y. This latter firm furnished some 30,000 waterproof tubes for exploding Hell Gate.

R. B. P., Brooklyn—The dimensions you give for a racing cat-boat are rather small. Do not think the limited size will give you much sport. For 12ft. keel and 14 over all we would advise 5ft. 6in. to 5ft. 8in. beam, and 20in. depth from top of rail or deck line to top of keel. Size of keel, 2x7in. in wake of centre-board, tapering to 2x3in. at ends. Stem and stern post to correspond. Frames, 1x1½in.; plank, ⅞in.; centre-board, 4ft. long, 2ft. deep. Sail made of 8oz. duck, 11ft. hoist, 15ft. boom, and 7½ gaff. Mast, 3½in. diam. in centre. Fasten with 5 to 6d. copper nails, riveting heads. Deck over with ⅝in. plank. Caulk all with cotton, and putty seams. Give two coats of Ingersoll's ready mixed paint. Use clothes-line for halliards, or else ⅞in. manilla.

W. W. C., Philadelphia.—1. What kind of a line would I use for an out line 100 yards long? 2. Kind of hooks for catfish and other fish that I would be likely to catch in the Schuylkill River? 3. What kind of baits are best for catfish? 4. Would a —— rifle, 16 shots 1,000 yards range, be a good rifle to take West? 5. What part of the West do you think would be best for one to get bird skins to ship East? Do you think that one could make a living at this business? Ans. 1. Buy a laid cotton bluefish line, or cod line. 2. Buy a Chestertown or Virginia hook large enough to admit your middle finger between the barb and the shank. 3. Raw meat is as good as anything. 4. Excellent. 5. Colorado. We know of a gentleman in that section who makes it a profitable business,

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, APRIL 18, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

☞ Trade supplied by American News Company.

CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, April 19.—South Boston Yacht Club Regatta. Boston Bicycle Club Run to Squantum.

Saturday, April 20.—Convention of College Athletes at Fifth Avenue Hotel, New York. Boston Bicycle Club Run to Newton. Creedmoor: Remington Prize Competition, at 10:30 A. M.; Skirmisher's Badge Competition, at 3 P. M. Rowing Meeting at New Orleans. Base Ball: Springfield vs. Holyoke, at Holyoke; Hornell vs. Star, at Syracuse; Rochester vs. Lowell, at Lowell.

Monday, April 22.—Running Meeting as above. Base Ball: Rochester vs. Manchester, at Manchester; New Bedford vs. Westboro', at Westboro'.

Tuesday, April 23.—Baltimore Kennel Club Bench Show. Portland Yacht Club Opening Cruise; Savannah Yacht Club Regatta. Running Meeting as above. Base Ball: Springfield vs. New Bedford, at Springfield.

Wednesday, April 24.—Manhattan Cricket Club, Prospect Part. Y. M. C. A. Athletic Tournament, at Boston. Baltimore Kennel Club Bench Show. Creedmoor: Waters Long Range Competition, at 1:30 P. M.; Wylie Badge Competition, at same hour; Competition for Remington Long Range rifle, at same hour. Running Meeting as above.

Thursday, April 25.—Baltimore Kennel Club Bench Show. Running Meeting as above. Trotting at Toronto, Canada. Base Ball: Springfield as above; Rochester vs. Lynn, at West Lynn.

WHEN KIT CARSON DIED.—One of our correspondents, "R. M. B.," is kind enough to inform us that Kit Carson died in 1868 and not "three years" ago, as our paper recently stated. (How the years *do* fly!) "He died at Fort Lyon, on the Arkansas River. His coffin was made at the fort by one of the soldiers and lined by the wife of the commanding officer, Mrs. Capt. Casey. The funeral services were conducted by the Rev. Dr. Silton, now at Fort Keogh, Montana Ter. The above can be relied on, as I got it direct from Capt. Casey, now East on a furlough. He is also stationed at Fort Keogh, under Gen. Mills. He has command of Co. A, 6th Infantry."

THE ALLEGED CASE OF CRUELTY.

In a late issue of the FOREST AND STREAM AND ROD AND GUN we had occasion to dissent from the action of the Massachusetts Society for the Prevention of Cruelty to Animals, and to differ most widely from a decision of the Boston Municipal Court.

We have received from the President of the Massachusetts Society the following letter, published in the *Boston Transcript*, which we gladly print:

"THE SKINNER DOG CASE."

"*To the Editor of the Transcript:* Mr. Lucian Skinner, of this city, a gentleman, as I am informed, of wealth and high social standing, has twice, through your columns, attacked the Society for the Prevention of Cruelty to Animals for prosecuting him for cruelty.

"Will you kindly permit me to say that the complaint was first entered at Police Station No. 4, and an officer of that station was in court to enter a prosecution, but in the meantime the owner of the injured 'St. Bernard' dog had requested the society to act, and their complaint took precedence.

"The commencement of the difficulty between the dogs was not seen by Mr. Skinner. The testimony of the only witness that saw it was that the Skinner dog dropped a bone and snapped at the other dog first.

"Mr. Skinner, in defence of his dog, which was injured very little, beat the St. Bernard very severely with a cane, and then stabbed him with the largest blade of a four-bladed pocket-knife. The dogs then separated; Mr. Skinner's dog ran home, and the St. Bernard dog ran the other way.

"Mr. Skinner followed him a hundred and fifty to two hundred feet, kicked him several times, and then stabbed him again, as the evidence shows, twice, cutting a gash about three inches long. The case was tried in our Municipal Court by one of our most experienced judges. Mr. Skinner was defended by one of the ablest lawyers of the Suffolk bar, the society employing no counsel, and was fined forty dollars and costs.

"Mr. Skinner's son called upon our secretary, Mr. Firth, before the trial. He could see no reason why we should not abide the decision of the court. Messrs. Skinner, senior and junior, both called upon me subsequent to the trial, and after careful examination I could have no doubt the decision was correct.

"At Mr. Skinner's request, I brought the matter before our 'directors.' A committee of five, all widely known to the good people of this city, was appointed. They carefully investigated, and have, as I understand, unanimously reported that the society could not have refused to prosecute the case.

"The owner of the injured dog, as I am informed, has since sued Mr. Skinner for damages and recovered fifty dollars. It is alleged that the St. Bernard dog was a dangerous one, and that Mayor Prince once ordered him to be killed for an alleged attack upon a child. The evidence at the trial was overwhelming that the dog was not a dangerous one, and that in the case in question, when the facts were made known to the mayor, he revoked the order.

"The facts that Mr. Skinner first beat the dog severely with a cane, then stabbed him with a knife, then followed him a hundred and fifty feet, and kicked him several times, then stabbed him again, and that the dog, during all this time, made no attempt to retaliate, would, to dog owners, be pretty conclusive evidence, I think, of the dog's character.

"Mr. Skinner, as I have before remarked, is, I understand, a gentleman of age, wealth and high social position, and was doubtless laboring under intense excitement; but I cannot see how any of these circumstances would justify this society in refusing to prosecute. The letter of our secretary to the editor of the FOREST AND STREAM, referred to in Mr. Skinner's letter, was written in answer to a letter of inquiry from the editor, and its publication was not the act of our secretary.

"GEO. T. ANGELL, President of the Society."

To confute the arguments of the President of the Massachusetts Society, Mr. Skinner sent to the Boston *Transcript* a communication which the Boston paper declined publishing, though allowing its fairness. This communication states that there were two witnesses. We quote:

"Allow me to say there were two witnesses, namely, the small colored boy who was with the so-called St. Bernard, and a student of the Instituto of Technology, a son of one of our prominent merchants, and both testifying at the two cases in court. The latter witness, a gentleman of unquestionable character, testified twice to the effect that there was no bone whatever; that the large dog came from behind him, and immediately attacked the other one, who was in front of witness, not twenty feet from him, walking quietly along next to the wall, and threw him down. The small dog then got away and ran off at full speed, followed by the other. Mr. Angell knew of this before the case was tried at all, as my son, in the presence of Mr. Williams, stated it to him, even to the name of the witness referred to above, and Mr. Angell remarked that he knew his father by reputation.

"Second: I utterly deny having kicked the dog even once, let alone several times.

"Third: Mr. Angell states that the 'St. Bernard' was ordered to be killed by order of Mayor Prince for an alleged attack upon a child, but when the facts were made known to him the order was revoked. The order was for the dog to be killed or removed from the city within twenty-four hours, and he was removed. Mr. Utz went to the mother of the boy who was bitten, and got her permission to bring the dog back under the following conditions, *i. e.*, that the dog should be kept under chain, and when on the street should go muzzled. Mr. Utz agreed to this, and engaged that the dog should do no further mischief, and, further, paid the doctor's bills and a sum of money to the parents. All of the above was testified to in Court. At the time of the affair with my dog the 'St. Bernard,' so-called, was neither muzzled nor under chain, nor was he with any one responsible for his actions. Let the public compare Mr. Angell's assertions with the above, and judge for themselves. Your obedient servant,

Boston, April 12. "S. SKINNER."

We have received a large number of letters from prominent sportsmen and sympathizing friends who have known the defendant for thirty years as a gentleman merchant of probity and honorable position. We have not received one letter to question the action or the legal decision in the case. The verdict is, that any sportsman having a valuable dog to protect would have done precisely as the defendant did. The venerable years (seventy) of the gentleman assailed should shield him from from an imputation of impetuosity or bad blood. Aside from his uniform even temper and amiability, Mr. Ethan Allen, of Pomfret, Conn., who raised Mr. Skinner's dog, comes forward to testify that he was a timid, harmless creature of 30 to 40 pounds in weight, and not at all likely to insult or make faces at the big St. Bernard, whose record shows that he is a dangerous dog who had been once condemned to death by the Mayor for injuring a lad. Mr. James H. Bowditch, also of Pomfret, maintains that it was not the attacking dog, but the dog's master who was to blame in not having him under his control. He adds:

"Nevertheless, we maintain it was necessary to give the dog no quarter. A simple rebuff would have been entirely wasted; a vigorous onslaught was just what was needed to show the dog his duty then and in the future. Mr. Skinner most assuredly deserves the thanks of the public for his effort against canine lawlessness, and we already hear a general outside verdict of total acquittal."

From a careful reconsideration of the whole matter from the evidence before us, we are more convinced than ever of a very great injustice done Mr. Skinner. To make this sorry business even worse, the owner of a dog (lamb-like, according to the ideas of the Society for the Prevention of Cruelty to Animals, a dog, however, which from trustworthy evidence is in the habit of attacking children and dogs indiscriminately), the possessor of this gentle brute having brought a suit for damages against Mr. Skinner, this gentleman has been mulcted a second time. A very significant fact worth remembering is that Judge Churchill, a second Solomon, decided on the merits of both cases.

A perusal of the communications addressed us explains the whole unfortunate business much more clearly than would ten pages of commentary on our part.

We must decline opening our columns further for the discussion of this case, believing that it would rather tend to the discredit of the Massachusetts Society for the Prevention of Cruelty to Animals, and at the same time be a reproach to current Boston justice.

THERAPEUTIC VALUE OF FIELD SPORTS.

UNDER this caption the April number of the *Louisville Medical News* presents the subject of out-of-door pastimes and recreation to the medical fraternity in a new light. It urges upon the profession the regular employment and prescription of exercise and kindred hygienic remedies as a part of their pharmacopœia. It urges the doctors to deal less in physic and more in natural forces. It presses upon them the importance of using and stimulating those vital forces which nature has implanted in man, and which, if properly treated, will enable the invalid to recuperate and become whole. The remedies most frequently prescribed by the Saviour in curing the sick in his day were exercise and bathing. "Go to such a place and wash seven times!" The places were remote, and much muscular energy was necessary to reach them. But hope and confidence inspired cheerfulness and perseverance. Persistent effort set the blood in circulation, and the vital machinery to work; it opened the pores, threw out the poisonous secretions, and placed the patient in the best possible condition to render his bathing efficacious. Repeated ablutions made the cure complete. We do not remember that the Saviour or His disciples ever prescribed pills or physic.

We trust Dr. Cowling's appeal to the physicians will be heeded, and that the effects derived will presently manifest themselves all over the land. We shall hope to see every limp and disjointed invalid at the watering places become elastic tourists, full of vigor and enthusiasm and a desire to live. We shall wait for the spreading of the gospel of the Forest and Stream, according to the *Medical News* of Louisville, all over the land.

We believe we can, with fitting humility, take some measure of credit to ourselves for having inculcated (according to the original prospectus of our paper) a love of out-of-door recreation and sport in our true men and women; and also for having suggested to our learned contemporary the thoughts which he has placed under the caption which stands at the head of this column, and of his essay in the *Medical News*. Our reward of effort comes in the harvest gathered from the seed sown, and the following surely indicates a good crop.

We quote:

"One of the best periodicals published in this country is the FOREST AND STREAM, of New York, devoted to the chronicling of field sports, etc. It is a wonderfully well conducted paper, coming out once a week with its immense pages filled with material from the best of pens all over this country, sparklingly edited and finely illustrated. No one can read its life-like sketches and not have stirred within him the love for nature which lies at the bottom of every good man's heart. But it was not because it brought such delightful pictures of the forest and field and stream to us, who, cooped up in city life, had so little opportunity of experiencing the reality, that we have made this notice of it in our pages. It was because it reminded us to point out a valuable and neglected mode of cure, and to place the medical aspects of the interests which it advocates before our readers, that we have been led to notice it in these columns intended for professional eyes.

"The practitioners of rational medicine should take care not to narrow their armamentarium down to the exhibition of drugs. Our catholic dogma that whatever has cured may do so again recognizes many more forces than the dispensatory affords; and some of these, it must be confessed, are better handled by our heretic brethren than by ourselves. The hygiene of the water-cures and the imaginative element of the homeopathic method are not to be despised. One thing is certain, that there is no more powerful agent in the control and cure of disease than amusement. Of course one cannot laugh away a small-pox, or drive off a rheumatism by a few

well-directed jokes—such therapeutics would in fact be a little ghastly in the premises—but in the hundred ills which are included under the names of dyspepsia—the out-of-sorts, the the chronic don't-feel-wells—and even many organic troubles, which so harass the patient and puzzle the practitioner, yield oftentimes like a charm when once the mind is diverted from their continual contemplation. We are in the habit of prescribing travel for these affairs; but travel is an expensive thing which few can indulge in, and does not always amuse, but rather substitutes one labor for another. When Newport and Niagara have failed, and your alteratives get no results, and you are puzzling yourself sometimes what you will do next, try the prescription of R., Go a-fishing; or, Sig., A hunt daily for a week or two, and see if you know your man when he gets back. They are the most rational medicines that one can take. In them psychological and physiological forces combine to lift the life-machine from the ruts into which it may have fallen. You say that malaria lurks in the fields?—corduroy is a better protective than quinine; that wet feet bring on colds?—never, when dried by a camp-fire. You say that your patient has no fancy for this sort of thing? We have yet to meet one who does not like it when he has tried it. It is a part of our original nature to love it. In every one there rises at times a desire to break away from the trammels of civilization and go wild. The baby, just able to toddle, pitches its tent in the nursery, with a chair for the ridge-pole, and mother's shawl for the canvas. The older urchin cooks his dirty dough by the fire built in the back yard, and dreams of adventure. The desire is just as instinctive as love, or hope, or any other passion in the human breast; and he is the wisest doctor who recognizes the voice of nature, not only when disease is at hand, but in the warnings it gives of its approach. Talk about prophylactics and hygiene—a man may live longer and better with a week's camping on the Kankakee or Green River twice a year, than by following all other directions that the sanitary wisdom of the State can devise. It is not the time only which is actually spent in these delightful wilds which renovates him, but the memory of that which is gone by and the contemplation of that which is to come renew his life day by day. Nor is it the number of fish on his string or the birds in his bag that measures the restoration of his wasted energies. A glorious nibble may stir the nerve currents to the brachial plexus for months to come, and a winged partridge excite hopes that may never die. The fact is—as the man of elegant diction said when he put the pepper and salt and vinegar on the oysters he was eating—it is the "condignments" which make up the pleasure of the affair. It is the invigorating atmosphere of the country, the rustle of the trees, the waving of the green fields, the babble of the waters. It is the fiz of the frying-pan, the aroma of the middling. These are some of the factors of delight; but above all is the sense of security against the world, the consciousness of the merchant that the mails cannot reach him with the intelligence of bills payable, and to the doctor that the work of life and death is for a while in other hands—and the therapy of this placid feeling has no equal in the pharmacy of the world.

"Try it, brother, not only on your patient, but on yourself. Take the holiday in the glorious spring-time, which is now on us, that you have so well earned; go a-fishing or a-shooting; stay as long as you please, and be assured that not a moment is lost by your doing so. You will come back twice as strong and contented as when you went, and far abler to give health to those who look to you for it.

"And, if perchance, you know of slashes where the zig-zag snipe do preternaturally congregate, or streams where the gamey bass or the solemn goggle-eye longingly waits for the lively steel-back, send word to your friends in the *News*. Our fields are shot to death; the fish of our creeks swim only in story; and we have at least convinced ourselves that April must find us by flood or in field."

A Delightful Summer Resort for Anglers and Vacation Tourists.—We call especial attention for the first time to one of the most delightful regions in the world, and whose varied attractions have formed material for lavish embellishment in "Appleton's Picturesque America." We refer to the Blue Ridge country of Virginia. By the recent opening of the Chesapeake and Ohio Railroad, easy access is had to a panorama of romantic scenery, extending over 300 miles of railroad, and including the Natural Bridge, Weyer's Cave, Peaks of Otter and the Springs of Virginia, thirty years ago the most fashionable resorts in the country. There is every convenience and luxury for the invalid and tourist, either in cottage or hotel, some of the establishments having cost over a million of dollars each. There are plenty of speckled trout, bass, pike and pickerel in the mountain streams and lakes, besides bears, deer, turkeys, ducks, grouse, quail, snipe, woodcock, etc., in season. See advertisements of the Chesapeake and Ohio railroad in another column.

Yachting.—Hereafter our yachting columns will be edited by Mr. Chas. P. Kunhardt, late of the U. S. Navy and a graduate of the Naval Academy, Annapolis, Md. Having made a specialty of naval architecture and yachting in all its branches, the yachting department of this paper will be maintained at a professional standard.

"Passion," not "Profession."—In the leading sketch of our last issue (April 11th), the types made the author state that "angling was his profession," whereas he intended to say, and did so write, that it was his "passion." Being a most modest gentleman, he repudiates any self-assumption whatever, and looks with evil eye upon the typo who put false words into his mouth.

—Commissioner Raum would do well to study the fine article by Chas. Hallock, recently published in the New York *Herald*, entitled "Still Hunting in the Blue Ridge." It is a fine *expose* of the operations of the illicit distillers, with valuable suggestions upon the manner of suppressing that element of outlaws. The writer went through the whole district with the United States revenue officers, and is practically posted on his subject. For the rest, as the editor of the Forest and Stream, he needs no recommendation as an authority on whatever he professes to know anything about.—*Don Piatt's Washington Sunday Capitol.*

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President
Missouri State Sportsmen's Association.

The New Maine Law.—The game of this State, as well as the insectivorous birds, have in the past been wantonly and mercilessly destroyed by men and boys—our own citizens—and predatory bands from other localities and States, until the former are really nearly extinct, and the latter so decimated that our fruit trees and vegetation generally are being nearly ruined by the swarms of grubs, worms, caterpillars, etc. The attention of our Legislature has been called to this matter of late, and a law passed which we hope will put a salutary check to the business, and we are glad also to know that a lively interest is being awakened among the better class of our citizens to see that the laws are enforced. Deer and caribou must not be killed in Maine between the first day of January and the first day of October, under a penalty of $40.

Bath, Me., April 9, 1878. G. E. N.

New Hampshire Game and Fish League.—The annual meeting of this League was held at Manchester, April 2, with President John B. Clarke in the chair. A large attendance of delegates from the different parts of the State attested the growing interest in game and fish protection. The address of the occasion was an elaborately prepared paper by the Hon. J. W. Patterson, reviewing the progress of fish culture and the importance and magnitude of that industry. The officers of the League for the ensuing year are: John B. Clarke, Pres.; Charles L. Richardson, Sec.; Frederick Smyth, Treas.; Gillmen H. Tucker, Raymond; Daniel Burleigh, Wakefield; Levi W. Perkins, Wilton; George A. Hatch, Milton; W. W. Fletcher, Concord; Frank H. Pierce, Hillsborough: William Jarvis, Claremont; E. A. Crawford, Jefferson; John Clement, Troy; G. V. Pickering, Laconia; E. B. Hodge, Plymouth, Vice-Presidents.

—The Middlesex County (Conn.) Game and Fish Association have secured their first conviction of a law breaker.

Massachusetts Fish and Game Protective Association.—Officers for the coming year have been elected as follows: Pres., Dr. John P. Ordway; Vice-Pres., Hon. Thomas Talbot, Hon. Charles Levi Woodbury, Hon. Daniel Needham, C. Warren Gordon, William Emerson Baker, Henry W. Fuller, Luther Adams; Treas., George B. Brown; Rec. and Cor. Sec., Henry H. Kimball; Librarian, James A. McGee; Executive Com., Weston Lewis, D. T. Curtis, James Walker, J. W. Smith, William S. Hills; Committee on Membership, E. Delano, C. T. Jenkins, L. Prouty. Capt. Charles Stanwood and Charles E. Pierce were elected honorary members.

Wisconsin.—A game protective club has been formed at Tomah, Wis., with the following officers: Pres. J. D. Condit; 1st Vice-Pres., J. A. Wells; 2d Vice-Pres., C. A. Hunt; Sec., John A. Warren; Treas., Ira A. Hill; Cor. Sec., J. O. Warriner. A strict observance of the game laws is the object of the association.

The Rifle.

THE AUXILIARY RIFLE.

On Thursday, two weeks ago, a representative of the Forest and Stream and Rod and Gun, paid a special visit to New Haven for the purpose of witnessing a series of experiments made with what is called the Auxiliary Rifle.

Any one who may have read over our Questions and Answers may have noticed the constant character of a number of queries which runs pretty much as follows: "I am going into ..... (a State is designated where both birds and animals are found), shall I take a shot-gun or a rifle?" In some cases we have recommended a shot-gun and in others a rifle, but it is quite evident that it would be better if the sportsman could take with him both arms. The problem has been then to invent or devise some plan by which with one and the same arm a man could be prepared for all eventualities. We are quite certain that Shelton's auxiliary rifle barrel will answer exactly this double purpose. As is well known, there are certain plans already in use which do convert a shot-gun into a rifle. Still the accomplishment of this is neither rapid nor convenient. A rifle barrel the whole length of the fowling-piece has to be adjusted, which must be secured by means of nuts and screws. Between this method and a permanent arm made with one barrel as a shot-gun and the other as a rifle, there is really not much difference. The Shelton auxiliary rifle obviates all this trouble. In three seconds time, or just as quickly as a metallic shell can be chambered in a breech-loading fowling-piece, the auxiliary barrel can be brought into use. In fact just as a loaded shell can be carried in the barrel so can the rifle be made instantly effective. Of course in an invention of this character, its simplicity is its charm, and like the egg Columbus placed on end a good many wise people will say, "Why did we not think of that before?"

The auxiliary rifle consists then of a barrel some twenty inches long, formed at the breech like a shell so as to fit snugly in the chamber of a fowling-piece. There is an adjustable bearing at the muzzle of this barrel, so that it is in close contact with the barrel of the fowling-piece into which it is chambered. This barrel can be slipped in or taken out. That is all there is about it. Now as to its accuracy:

At the Cove, East Haven, some ten days ago the representative of this paper had the pleasure of meeting His Honor Mayor Shelton, the chief magistrate of New Haven; Judge Samuel Bronson, Colonel Bacon, of the 2d Connecticut regiment; Mr. J. F. Colvin, one of the leading shots of the New Haven Rifle Association; Mr. W. A. Peck, late of the U. S. Engineer Corps; Alderman John Reynolds, Mr. W. W. Blunt, and the inventors of the auxiliary rifle, Messrs. Clark R. Shelton and Arthur C. Shelton.

Now, of these numerous gentlemen, some were riflemen, but the majority of them were not. A Creedmoor target was placed at 200 yards, and the shooting commenced with a light breech-loader No. 12, weighing 6¾ pounds. Auxiliary barrels, of both .44 and .38 calibre were used, loaded on the ground with the Everlasting shell or with the ordinary Winchester cartridge. Mr. Colvin had brought a new hammerless Sharps. Some seventy-five shots were made with the auxiliary barrel, and with exceeding accuracy. There were even a larger proportion of bull's-eyes made than is usual, as a large number of the experimentalists were novices in rifle-shooting. It was quite evident that the familiarity people in general seemed to have with the fowling-piece had helped them in rifle-shooting. They were rifleshots without knowing it. His Honor, the Mayor, made a bull's-eye at the first fire. Almost every one present made bull's-eyes. Of course, the action of the auxiliary barrel on the fowling-piece was noticed. The same gun, with the same auxiliary rifle barrel, had been fired many thousand times, and no effects were visible on the fowling-piece. After having fired quite a number of rounds, paper shells loaded with shot were used in the gun (the auxiliary barrel having been withdrawn), and excellent practice was made at flying objects, one discharge of the arm, with an ordinary shell charged with shot, removing entirely the slightest deposit of powder left by the firing of the auxiliary barrel at the muzzle of the piece. In fact, the interchange of rifle to shot-gun made no possible difference, the gun performing capitally both ways.

It seems manifest to us that, equipped with one of the Shelton auxiliary rifles, the sportsman can be fully armed. The length of the auxiliary rifle is only some twenty inches, and its weight seventeen ounces, allowing it to be carried in the pocket. It can be slipped conveniently into the arm-hole of the waistcoat and the breech portion passed down to the pantaloons pocket. An adjustable sight is made which can be placed on the gun, which sight can be laid flat when not in use. The ordinary bead sight at the muzzle of the fowling-piece is not changed. As has often been repeated in our columns, shots at deer are rarely made at 200 yards, the distances being mostly very much under 100 yards. If, then, the accuracy of this fowling-piece with the auxiliary rifle was excellent at 200 yards, holding its own with a Sharps, it must certainly be very effective at 100 yards. There is no reason why, with a sufficiently heavy gun at the breech, that the Express system of a heavy charge and light ball could not be used. Somewhat chary of new things, and rather conservative than otherwise, we must, however, thoroughly indorse Messrs. Shelton's invention, believing, for practical usefulness, simplicity, accuracy and penetration, the Auxiliary Rifle must soon find its way into the hands of all sportsmen. We even think that, for range shooting at short distances, the Shelton Auxiliary Rifle may come into use. We should not be the least surprised (if it is within the Creedmoor rules) that some prizes could be won with it in matches this year. There would be something quite amusing in a man going to the front with a light Scott, Greener, Tolly, Wehley or Westly Richards, a Parker, a Fox, or a Nichols & Lefevre breech-loader, and making bull's-eyes at Creedmoor. In the United States and in England, where almost every one has a breech-loader, it is by no means impossible to imagine that a corps of men, suddenly called upon to defend their country, armed with such auxiliary pieces, would make most effective work with their shot-guns converted into rifles.

POINT BLANK.

V. M. Institute, Lexington, Va., March 25, 1878.

Editor Forest and Stream:

I am under obligations to Major Merrill for his very complimentary mention of my letter to Mr. C. P. Stokes upon the fall of projectiles, which was published in your paper. Of course it was the English point blank I defined. The Major will find by reference to paragraph I, 200 of the "New Field Artillery Tactics for the U. S. A.," that the English definition has been authoritatively adopted in this country, and I presume it was adopted from the very consideration which has always led me to prefer it, viz: That it is simple, and gives a better idea of the power of a gun than the American or French definition of point blank range. There is this difference, however, between the Major and myself, that he calls the second intersection of the line of sight by the trajectory the point blank, making no distinction between the point blank proper, the natural point blank, and an artificial point blank. I think this distinction essential to clearness. In discussing the subject in "Thiroux's Artillery" (French), and in "Roberts' Hand-Book of Artillery" (American), the natural point blank is defined to be the point of second intersection of the trajectory, with the natural line of sight prolonged, the line of metal, the intersection of the trajec-

tory with artificial lines of sight obtained by the use of a breech sight or hausse, are called artificial point blank. Now, the natural line of sight is the line passing through the highest point of the base of the breech and the highest point of the muzzle, or of the muzzle sight, if there be one. But the muzzle sight in small arms and small cannon is equal to the dispart, which is the difference between the semi-diameters of the breech and muzzle, hence the natural line of sight will be parallel to the line of fire. It will not be intersected by the trajectory, and there will be no natural point blank range, unless the English definition be adopted, as has been done. Both Thiroux and General Roberts define point blank range "as the distance from the muzzle of the piece to that point in a projectile trajectory where it cuts the prolongation of the natural line of sight the second time, the natural line of sight being horizontal." They define the natural line of sight as I have done above. Now, it is evident, as I have said, that if the natural line of sight is taken as passing through the top of the muzzle sight, and if the muzzle sight is equal to the dispart—and it should be, except for very large cannon, in which case it would be inconveniently high for a fixed sight—there will be no point blank, because the line of sight will then be parallel to the axis of the piece, and will never be intersected by the trajectory. If there be no muzzle sight, then the point blank range will vary with the shape of the piece, the greater the difference between the diameters of the breech and muzzle, the greater will be the point blank range, for the line of sight being horizontal, the angle of fire will equal the natural angle of sight, and will increase with it. The English definition relieves us of this objection, and hence is, in my judgment, preferable. Now, then, the question arises, if an object is at point-blank distance, how must one aim to strike it? The ball strikes the horizontal at point blank distance. The centre of the target may be directly over, but two or three feet above this point. The evident answer is that the line of fire must be elevated sufficiently to enable the ball to pass through centre, and not strike the ground three feet below, which illustrates what the Major says with great force and clearness, that there is no centre shooting along the axis of the piece. Now, the point blank range of a rifle is very limited. The time required for the ball to traverse this limited distance is very brief, and the space through which a body will fall in the first tenth of a second from the time it begins to fall is very much less than the space through which it will fall in the last tenth of the same second, for the spaces fallen through are proportional to the squares of the times of the fall. Because a body will fall 16.07 ft. in one second, it by no means follows that it will fall one-tenth of this distance in the first tenth second of its fall—far from it. So we see that the fall of a ball under the influence of gravity, in the time required to accomplish the point blank range is very small, and the elevation of the axis will be correspondingly minute. The only practical difference of aim will be that between drawing a fine or coarse sight. I have, perhaps, been unnecessarily minute, but I have been interrogated by one of your readers upon the questions involved in this explanation.

SCOTT SHIP.

THE RIFLE IN RICHMOND.

RICHMOND, Va., March 29, 1878.

I will take the medium of your valuable paper to thank the members of the Deutche Scheutzen Gesellschaft for the many kindnesses and courtesies extended to me while in their city, and will say that any true lover of rifle shooting will here find the gentlemen composing the club always willing to give him some sport, being themselves enthusiasts.

The range here is located on grounds adjoining Yungling's brewery, a short distance from Richmond, where, in the summer months, picnics and balls are held. Being on a hill and close beside the James River, it is a delightful place. The range is at present only 150 yards, but it is contemplated lengthening it to 200 yards. The members now shoot at a six-inch bull's-eye, and I assure you it is very frequently hit, if the shooting I saw here yesterday is a fair sample, even when the weather was all against the shooters, it being very cloudy. The members of the club are wide-awake to all modern improvements in the rifles and sights, and keep themselves thoroughly posted through the FOREST AND STREAM, and before my arrival here were all on the *qui vive* concerning the late shoot for your elegant badge at Conlin's gallery. Yesterday a telephone was fixed on the range, and worked admirably, especially in sending word what number bad been made when shooting on a string measurement target. At a meeting of the club, after the shoot, your humble servant was called upon to explain the system of handicaping used by the New York Rifle Club in shooting for their badges. The idea that the poor shots stood an equal chance with the best seemed to find much favor, and I think will be adopted by the club, as under this system the shooter making the most progress must eventually win the badge. The club here are very anxious for a match with a New York club for a team of five or eight men, ten scoring and two sighting at 200 yards; and if the New York team are willing to shoot at a reduced bull's-eye at 200 yards (making it the same as at 300 yards in appearance), ten shots, with two sighting shots at each range, the members promise any team coming here a good time, and I, myself, would ask no better guarantee. The ride here on the boat from New York is simply delightful during the summer months. Messrs. Stokes, Jenkins and Euker are amongst the best shots here, the former being credited with 48 out of possible 50, Creedmoor count, so that any visiting team must shoot well to take the "cake." Four kinds of rifles were represented on the range yesterday—Ballard, Wesson, Sharps and Remington—the preference seemingly being in favor of the Ballard, with lubricated bullets, thereby dispensing with cleaning after each shot. Although the shooting was stopped by a heavy shower, a very pleasant time was had, and on reaching Richmond I had to confess that very rarely during my life had I passed a more enjoyable afternoon. I remain, yours very truly.

THREE-POUND PULL.

MASSACHUSETTS RIFLE ASSOCIATION.—Aside from three matches limited to members of the association, there will be six matches open to all comers, the aggregate value of the prizes in each match, excepting one, being over $100. At 200 yards the United States Cartridge Company, of Lowell, offers a silver cup; in another match at the same distance, Mortimer & Kirkwood offer a shot-gun of their own manufacture; at 500 yards, off-hand, a $25 prize is offered by J. L. Stevenson & Co.; at 600 yards, cartons counting, R. M. Pulsifer & Co., proprietors of the Boston *Herald*, offer a silver cup; at 800 yards the principal prize is a silver cup, offered by Benjamin A. Hersey, jeweler; and at 1,000 yards Frank Wesson, of Worcester, offers a highly-finished breech-loading rifle of his well-known make. Thirty-five additional prizes of smaller value are contributed by friends and by the association. All these matches are arranged to make them as attractive as possible to non-members of the association. It is to be trusted that the liberality displayed in preparing this second "spring meeting" will meet with a hearty response.

MASSACHUSETTS RIFLE ASSOCIATION.—At Walnut Hill range last week a number of interesting matches were shot. The first match at 200 yards was the opening of the amateur series—all winners of first prizes in 1877 excluded.

J B Osborn	5	5	5	4	4	4	5	4	4	4—44
A W Howland	4	5	4	4	4	4	4	5	4	4—42
William Poland	5	4	4	5	3	4	4	5	4	4—42
A Higgins	4	3	4	4	5	4	4	4	5	4—41
E B Souther	5	4	3	4	4	4	4	4	5	4—41
W M Ward	4	3	4	3	4	4	5	4	5	4—40
J Langdon	4	5	4	4	4	4	4	2	5	4—40
W E Garner	4	3	4	4	5	4	4	4	4	4—40
C C Hubbard	5	4	3	4	5	4	3	4	4	4—40
C A Parker	4	4	4	5	4	4	3	4	4	4—40
William Gerrish	5	3	3	4	3	5	4	3	4	5—39
J W Frye	2	3	4	4	5	4	4	4	5	4—39
J Borden	4	3	3	4	4	4	5	4	4	4—39
L F Newcomb	5	4	3	4	4	4	4	3	4	4—39
J Wemyss, Jr	4	3	4	4	3	4	3	5	4	4—38
E C Spofford	4	3	3	4	3	4	5	4	4	4—38
J E Shepard	3	2	0	5	4	4	5	6	6	4—37
C N Miggs	3	3	3	4	4	4	4	3	5	4—37
H J Harris	4	4	4	3	4	3	4	4	4	3—37
C H Tilton	5	0	4	5	3	4	4	3	4	4—36
F R Shattucke	2	2	4	3	0	4	4	4	4	4—31
J B Parker	3	2	4	2	4	2	3	4	4	3—31
F W Stevens	3	3	3	4	2	4	3	0	3	3—28

This was followed by the "No Cleaning Match," at 200 and 300 yards, with the following results:

Two hundred yards.

I. L Hubbard	5	5	4	4	5	5—31
H Tyler	4	4	4	5	4	4—30
J B Osborn	4	5	4	4	5	4—30
J W Frye	4	4	4	3	5	4—29
E B Souther	4	5	3	4	3	4—28
J Wemyss, Jr	3	4	4	4	4	5—28
W Poland	3	4	4	4	4	5—28
W M Ward	4	4	4	3	5	4—28
Langdon	4	4	4	4	4	4—28
J Borden	4	4	4	4	3	4—28
C N Miggs (re-entry)	4	5	4	4	4	3—27
J Wemyss, Jr	4	2	4	4	4	4—27
E C Spofford	3	3	4	5	4	4—26
J B Parker	3	4	2	4	3	3—26

Three hundred yards.

L L Hubbard	4	4	5	3	5	4—29
J Borden	4	4	4	4	3	5—28
H Tyler	4	4	4	5	4	3—27
J Wemyss, Jr	3	4	5	3	2	5—26
J Wemyss, Jr. (re-entry)	3	4	4	3	4	5—25
J H Osborn	5	3	4	3	4	3—25
J W Frye	3	4	4	3	3	4—24
Langdon	4	4	2	3	4	0—21
W M Ward	5	0	3	3	4	3—21
W Poland	3	3	4	3	4	2—21
J H Parker	4	4	2	2	2	4—20
C N Miggs	3	0	4	3	3	4—16
E B Souther	0	3	0	4	4	3—16
E C Spofford	2	2	0	3	3	2—15
C A Parker	3	3	4	3	2	0—15

At the conclusion of the "No Cleaning Match," the 600 and 900 yards match was in order:

Six hundred yards.		Nine hundred yards.	
W Gerrish	5 5 5 5—25	A W Howland	4 5 5 5—24
H Tyler	4 5 5 5—24	A H Hebbard	4 5 5 5—24
E W Law	5 4 5 5—24	H Tyler	4 5 4 5—23
O N Griswold	5 5 5 4—24	J C Shepard	5 4 5 5—23
A W Howland	5 4 4 5—23	C C Hubbard	5 5 0 5—20
A H Hebbard	4 5 5 4—23	E W Law	4 4 3 5—20
C C Hebbard	5 4 5 4—23	L F Newcomb	4 5 4 4—20
J C Shepard	4 5 4 5—22	A J Philbrick	5 5 5 0—20
A J Philbrick	4 3 4 5—21	W Poland	0 5 5 4—19
L F Newcomb	5 5 5 4—21	W Gerrish	3 3 5 4—18
J A Frye	3 3 5 4—20	O N Griswold	4 5 3 2—17
W Poland	4 4 5 3—20	J N Frye	0 3 3 5—15
H F Lord	5 4 4 0—18	H F Lord	0 5 0 3—13
W M Ward	2 0 3 5—14	E C Spofford	0 3 0 4—12
E C Spofford	0 3 3 4—13	W M Ward	2 0 3 2—12

After a remarkably close contest between Messrs. Howland, Hebbard and Tyler, it was decided in favor of Howland. The following match was also shot in the Amateur series:

J Borden	4	4	4	5	4	5	4	4	5—43
W B Sargent, Jr	4	4	4	5	4	5	4	5	4—43
J L Langdon	4	4	5	4	4	4	3	3	4—39
W E Gurrier	4	3	4	5	4	4	4	4	3—39
Captain Hobbs	2	2	3	4	2	4	3	4	4—32

WAKEFIELD VS. MEDFORD—*April* 11.—At 200 yards.

Wakefield Rifle Team.

David H Walker	4	5	3	4	4	3	3	4	5	5	4	4	3	4—59
David Ogilvie	3	3	4	3	3	4	5	3	4	3	3	3	4	3—52
Owen Corcoran	3	3	4	4	4	3	4	0	4	3	3	4	3	3—49
W B Daniel	3	4	4	5	4	4	5	4	4	5	4	4	3	4—60
John W Johnson	3	4	4	3	4	5	4	4	4	4	4	3	3	3—56
Simon Paul	4	4	4	3	3	3	4	5	5	3	4	4	4	5—59
James Anderson	4	3	4	4	4	3	5	3	4	4	3	4	4	4—57
Total														392

Medford Rifle Team.

J E Richards	0	3	4	3	0	4	3	2	3	4	3	3	3	3—43
J H Whitney	4	4	3	5	5	4	4	4	3	4	4	3	4	3—58
W P Metcalf	4	4	4	3	4	3	4	4	4	2	2	4	3	3—51
N P Ames	4	2	2	4	3	3	3	3	4	5	4	4	4	3—52
George Wade	4	5	4	4	4	4	3	2	4	4	4	3	4	3—56
E S Piper	5	4	5	5	4	5	4	3	4	3	4	4	3	5—61
J R Teele	4	4	4	3	4	4	4	3	5	4	4	4	5	4—61
Total														382

—At Quinnipiac range, to-morrow, April 19, the following matches will be shot: The all-comers' short-range match, distance 200 yards; the military short-range match, distance 200 yards; all-comers' mid-range match, distance 500; military mid-range match, 500 yards, and the all-comers' long-range match, distance 1,000 yards.

CREEDMOOR—THE OPENING.—On Saturday last the first rifle matches of the season took place. There was an unusually large attendance. It was a pleasant day, though windy, with a 9 to 9½ o'clock wind. Range was in admirable condition, and everything in apple-pie order. There were three matches, one at long range and two at short range. The long-range match was the eighth competition for the Sharps' prize, $250 in gold, open to all comers; highest possible score, 225; fifteen shots at each range:

	800 yds.	900 yds.	1,100 yds.	T'l
Frank Hyde	62	68	59	189
I L Allen	64	57	63	184
Homer Fisher	58	61	52	171
B G Doughty	50	57	58	165
Thomas Lamb	56	57	51	164
J P Waters	50	60	46	156
R Rathbone	54	61	35	150
F S Sanders	46	54	43	143
N D Ward	47	44	43	134
E H Sandford	43	52	33	128

The seventh competition for the *Turf, Field and Farm* Badge took place at 1:30 P. M., at 200 yards distance; ten shots per man. There were twenty-five entries:

J R Grohmann	40	W R Livermore	35
Dr H S Dadley	40	J S Conlin	34
E A Griffin	39	R M Riddle	32
J S Paulding	39	A M Miller	32
D Banks	39	J Grant	31
N O'Donnell	38	Dr M M Maltby	31
C H Johr	37	J E Irwin	31
H W Gourlay	37	F S Eames	24
D F Davids	36	M Fitzgibbons	24
F H Holton	30	E Haynes, Jr	23
E E Lewis	35	O E Traslow	21
S F Kneeland	35	Lewis Cass	18

The third competition for the *Spirit of the Times* badge, at 300 yards' distance concluded the day's shooting. This medal was won twice last season by Mr. C. H. Johr, and as he won it yesterday he becomes the final possessor. There were twenty-six entries, and the scores were as follows, fifty points being the highest attainable score:

C H Johr	36	D Banks	28
E R Grohmann	33	M Fitzgibbon	27
D T Davids	32	Thomas Lloyd	27
F H Holton	32	E E Lewis	26
H Fisher	30	J S Conlin	25
J E Irwin	30	E A Griffin	21
W R Livermore	30	E H Sanford	21
Dr M M Maltby	29	James Grant	20
J L Paulding	28	N O'Donnell	20
J W Todd	28	S F Kneeland	18
N D Ward	28	R M Riddle	18
H W Gourlay	28	A M Miller	17

CHANGE OF TIME AT CREEDMOOR.—A special train will run to Creedmoor at 2 P. M. Matches set down on the programme at 1:30 will commence at 3 o'clock.

SHORT-RANGE MARKSMANSHIP.—The New York and New Jersey Schuetzen Corps held, on Wednesday the 10th, their sixth competition for the badge at Union Hill, N. J. The weather was most unfavorable, being foggy. The highest possible individual score was 250, and in the team of twenty, 5,000; distance, 200 yards. The New Yorkers won. The following were the scores:

New York Schuetzen Corps—Capt Geo Aery.

Captain Aery	0	14	8	3	16	4	23	16	17	8—108
Gen Thomas Dakin	24	13	17	18	16	13	23	20	20	17—181
Phil Klein	20	18	21	14	18	24	22	21	21	12—191
Wm Klein	22	17	22	20	21	17	14	23	18	24—200
Wm Hahn	20	16	15	10	18	13	12	19	24	18—170
Rob Faber	18	21	14	15	18	21	17	25	23	12—184
Theo Kilerath	20	19	18	21	19	16	20	19	16	19—180
B Zettler	17	18	19	23	17	16	25	23	21	16—195
G A Kindahl	14	12	21	18	24	16	22	24	20	9—174
Geo Baur	7	22	22	11	18	22	21	7	20	12—162
John Rome	25	15	16	21	23	18	5	18	21	24—183
J F Rathyen	21	19	23	16	19	16	20	23	21	21—199
Hy Kneid	23	19	21	19	16	17	21	25	15	23—199
G Menken	18	17	0	24	19	18	10	12	22	0—140
G Zeller	5	15	24	4	18	18	14	13	19	19—149
J H Miller	17	16	9	21	19	8	14	20	16	11—160
J Wilms	21	17	9	6	21	10	16	15	15	12—141
J Brumeshop	23	13	13	12	12	14	18	10	16	17—144
J Grohmann	19	22	21	16	23	19	23	19	24	10—196
A Meyer	14	20	4	16	12	9	11	22	17	15—140
Total										3,394

Jersey Schuetzen Corps—Capt Aug Ermisch.

H Raschen	15	16	14	21	17	9	15	16	21	22—166
W Hayes	23	18	21	18	21	19	23	22	20	21—206
J Blumenberg	22	0	18	17	23	19	24	21	8	4—150
Fliedner	20	17	20	23	21	16	23	17	18	18—193
A Lietz	17	14	10	17	22	13	11	22	19	19—170
W Weyhansen	16	0	23	0	17	8	0	10	23	8—100
F Hansen	22	15	14	23	15	18	19	22	24	18—190
J Dittmar	18	13	10	7	21	12	16	14	15	11—144
N Crueins	10	24	10	20	6	19	16	18	20	19—168
A Appel	17	18	6	18	15	5	0	9	25	12—125
H Bergmann	12	23	7	17	20	21	11	20	13	21—165
A Ermisch	19	23	20	18	16	16	24	18	20	8—182
J Rascheh	16	11	8	16	13	13	6	22	19	24—146
J Schneider	15	18	25	13	18	19	12	11	19	0—150
C Zettler	10	20	18	16	15	6	22	21	20	20—168
A Zeugner	0	0	22	21	21	20	22	12	22	15—155
C Grube	19	12	16	21	11	12	16	15	20	18—160
M Engel	19	19	16	19	14	24	24	24	28	18—205
J Cook	8	17	22	18	15	11	13	11	16	17—147
J Fleisbach	26	19	22	11	9	19	16	21	12	15—164
Total										3,260

Individual prizes were presented to William Klein, J. F. Rathyen and Henry Knebel, of the New York team, and to William Hayes and Max Engel, of the New Jersey team, for high individual scores.

ZETTLER RIFLE CLUB.—This leading club held their weekly match April 9, at Zettler's Gallery, 100 feet, off-hand, at Creedmoor target reduced to gallery distance; ten shots; possible 50.

C G Zettler	50	Theo Kilesrath	47
D Miller	49	J Levy	46
W Moore	48	H Oehl	45
P Fenning	48	R Zimmerman	45
W Kilno	48	M B Engel	45
C Judson	47	W Weigandt	45
M L Riggs	47	G A Shurman	44
M Dorrier	47	L E Beatese	44
J Jotnor	47	C Vollors	42
B Zettler	47	F Farbarus	40

The members of the Zettler Rifle Club will shoot for a gold medal, presented by the Zettler Bros., at Guttenburg. Distance, 200 yards, off-hand, ring target, on April 21, 1878.

B. ZETTLER, Captain.

VIRGINIA—We take the from the Richmond *Despatch*: "The Old Dominion Rifle Club has been recently organized for the advancement of rifle-shooting, and its membership now comprises many of the leading business and professional men not only of this city but throughout the State. A careful score is preserved of shots from the date of the club's organization, and it is interesting to note the steady improvement it indicates. The Deutsche Schuetzen Gesellschaft, which, though a distinct organization, comprises many of the "crack shots," of the Old Dominion, at a recent meeting decided to offer an elegant gold badge as a premium for the successful competitor in a series of weekly shooting-matches soon to be inaugurated on their grounds.

SACRAMENTO PISTOL TEAM.—Weekly match, April 3; range, sixty feet; circular target, 10½ inches in diameter, with rings counting from one to eleven, and bull's-eye, 1 inch in diameter, counting twelve. Out of a possible 120 the following scores were made:

Atkinson	11	10	10	10	12	6	7	9	12	12—99
Brewer	9	11	11	11	12	9	9	9	10	10—101
Byers	6	7	11	11	12	6	4	7	11	12—87
Farren	12	11	11	10	7	12	12	10	10	10—105
Gerber, H	8	8	11	12	8	11	11	10	10	9—98
Griffitts	11	9	8	7	7	10	10	10	10	11—93
Jackson	7	9	10	10	11	6	7	8	9	10—87
Kano	9	9	9	8	12	12	11	11	9	9—99
Loftus	12	12	11	11	9	12	12	10	11	8—108

CALIFORNIA.—San Rafael Rifle Club match, April 4; 200 yards, off-hand, Creedmoor rules:

Farrow	4	4	5	5	4	5	5	4	4	5—45
Pike	0	4	4	2	4	4	0	3	4	4—29
Ladd	3	4	4	5	5	5	4	4	4	4—42
Dubois	4	4	4	4	4	5	4	4	4	4—41
Parker	4	4	4	4	4	4	4	4	4	5—41
Rotche	4	4	4	4	4	w				
Berry	5	4	5	5	4	5	4	4	4	4—44
Watson	3	5	4	w						

San Francisco, April 11.—The spring meeting of the California Rifle Association opened to-day. The weather was unfavorable, with a strong, gusty wind. The military team match, 200 yards, was contested by teams from First, Second and Third Regiments, National Guard, and was won by the First, by a score of 402 out of a possible 500. The Kellog Challenge Cup, 600 yards, was won by Private Shaughnessy, of the Union Guard, by a score of 20 out of a possible 25. The Pacific Life Cup, 200 yards, was won by Brig.-General John McComb, by a score of 23 out of a possible 25.

MONTANA—*Helena*—At a match held March 30 the following scores were made:

D W Curtiss	3	4	3	4	4	4	4—25
H Hewins	4	4	5	0	4	3	3—23
Major Bartlett	2	0	3	4	4	4	3—20
Lieut Mitchel	3	2	4	4	4	4	4—25
Lieut Hale	4	3	3	3	4	3	4—24
Edward Ingersoll	0	4	0	3	3	4	3—17
Dr Jones	4	4	0	3	4	2	0—17
O Allen	3	3	3	5	5	3	4—26
S T Hauser	4	3	3	3	4	4	4—25
Major Page	4	5	5	2	4	3	3—26
G Stuart	3	2	4	4	4	4	4—25
W J Bickett	3	3	4	5	4	4	2—25

Major Page and O. Allen having tied on 26, fired three shots each to decide the winner. Score as follows:

Allen.....4 4 3—11 Page.....3 3 3—9

THE BACK POSITION.—The question of the prone and back position in rifle shooting in England has gone through the usual round of discussion. In regard to the back position, a correspondent of the *Volunteer Service Gazette* shows (there being nothing new under the sun) that the back position was in use by the English Rifle Brigade seventy years ago. In the history of the Rifle Brigade, by Sir William Cope, in the description of a fight at Cacahelos, in Spain, during Sir John Moore's campaign in 1809, it is related that:

"It was at this moment that Thomas Plunkett, a private of the battalion, noted for his excellent shooting, crept out with the expression that he would 'bring that fellow down, and, throwing himself on his back on the snow-covered ground, he caught the sling of his rifle over his foot, fired with deliberate aim, and shot General Colbert dead.' His orderly trumpeter rode up to assist him, but Tom Plunkett had reloaded, and he also fell before his unerring rifle. He had just time to jump up, and, amid the cheers of his comrades, by running in upon one of the rear sections, to escape the sabres of a dozen of troopers who spurred after him in pursuit."

—Any one wishing a good field glass to use at a rifle range will please refer to advertisement this week.

Game Bag and Gun.

GAME IN SEASON IN APRIL.

Wild ducks, geese, brant, etc.

PATENTS ISSUED IN WEEK ENDING MARCH 5, 1878.—Fire arms, nipple guard, N. Fretz, 200,999; Cartridge, G W. Evans, 200,993; Cartridge box, J. W. Frazier (r), 8,113; Cartridge loading device, E. Schenck, 200,846.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Red head ducks, per pair, $1.50; brant geese, 75; mallard ducks, 75; black ducks, 75; widgeon ducks, 50; broad bill ducks, 50; teal ducks, 50; wild geese, per piece, $1; Wilson snipe, per doz., $1.50; plover, $1.50; bay birds, large and small, 75 cents; wild pigeons, flights, $1.25; do stall fed, $2; Philadelphia squabs, $3.00; wild do, $2.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25 cents; do., fowls, 18; do., turkeys, 18; State and Western chickens, 15; do., turkeys, 15; do., fowls, 12; do., ducks, 15; capons, 50; slips, 40; spring chickens, per pair, $1.50.

SPRING SHOOTING IN CANADA.

MONTREAL, April 6, 1878.

EDITOR FOREST AND STREAM:

There has been little spring shooting in this vicinity. The very apparent reason of the utter failure of the spring duck shooting was the sudden disappearance of the ice. Birds come, as you well know, with the first opening, and our chances are in decoying from the different points of ice nearest the channel. I managed to have one tolerably good day by being on the spot in the nick of time. I bagged twenty-three only, many more having dropped, which it was impossible to pick up on account of the swiftness of the current. Further west, however, the sport seems to have been more general. Their time for decoying extends over a much longer period, namely, almost a fortnight. Our esteemed friend and skilled marksman of the Limstone City, J. G. S., says:

"Duck shooting opened unusually early this spring, owing to the thinness of the ice. In the vicinity of Kingston Mills birds were not as plenty as they have been, but one or two of the local sports got some very respectable bags, Old Jock taking the lead, of course. In the drowned lands the ice went too evenly. We generally depend on its taking a week or ten days to get out of gun shot of the shore, thus confining the birds in their flight up and down the Rideau; but it went in a few days. Muskrats took advantage of this, though; so did we of them, and all through the moonlight till early morn, could be heard their death-knells.

"On the St. Lawrence, about the Thousand Islands, things were even worse, as was proved by some of our most wiley sports returning with exceedingly few Golden eyes. Big Boy, or Wolfe Island, had its thousands upon thousands of blue bills; but, *cui bono*, they remain in the middle some three-quarters of a mile from any point at which we could put our decoys, and the law forbids our 'sunken punts' and batteries. We could scare them up with heavy shot (occasionally dropping a bird or two which happen to miscalculate the exact range of our 32-inch, No. 10, which was perfectly new to them), but round and round they would fly, and presently, down they would come at the other end of the bay, till an extent of half a mile of water was actually covered by them. Then up we had to go over two miles to get a couple more barrels off, but this was no fun, so we had soon to give it up. Reports say that in the vicinity of Sydenham and Collins Lake there were many more whistlers than usual, and that Mud Lake was well stocked, but Kingstonians seem to have got out of the way of late years of going in that direction.

"Up the Bay of Quinte, particularly about Big Island, ducks were very numerous, the fishermen in that locality having had good sport after their fishing. Great pigeon news comes from the line of the Kingston and Pembroke R. R, but this is not new, for there were always plenty pigeons in that direction in the spring." ROYAL 11.

CANADA—*Montreal, April* 13.—Weather quite damp up here just now. Ducks are reported quite plenty in the river both above and below here. J. N. P. L.

MASSACHUSETTS—*North Cohasset, April* 8.—Coots, shelldrakes, geese and whistlers are now coming along in large flocks, and some good sport will be had this week by those who are tough enough to stand the exposure. Woodcock and snipe are coming, and have commenced to nest. S. K. JR.

Salem, April 15.—A small shoot, ten birds each, Fast Day, between Messrs. Chase, Gardner and Morgan, resulting in eight, seven and five birds respectively. Several other shoots occurred, but they are "private." Scores "too good" to publish. Nothing but scattering snipe have been seen as yet, and generally wild. Some geese flying occasionally. Harbor bare of birds. R. L N.

NEW YORK—*Buffalo, April* 0.—Pigeon shooting is good around Tionesta and Tideoute, Pa. Snipe are being shot around here. The woods are full of partridges, and the prospect for fine sport is good next Sept. ED.

Kingston, April 12.—A large black bear was killed in Woodstock last Wednesday. Snipe are killed now on the Rondout Creek flats.

Good Ground, April 10.—There has been good goose gunning here this week. On Monday Lane with one man killed 17. On Tuesday with a party he bagged 33. Next week the flight of young geese is expected. The new Inlet continues fair.

Atlanticville, L. I., April 10.—Ducks and geese very plenty. Our party killed more than thirty geese yesterday. W. F. N.

Hornellsville, April 14.—*Dear Sir:* Wilson snipe and swallows arrived April 9th; not much of a flight of snipe yet, only about a dozen killed. A man at Dansville, while shooting pickerel, put the muzzle of his gun in the water. Result—an eye blown out. A crow blackbird shot here last week measured 13 inches from tip of bill to end of tail. Another specimen of rose-tinted grossbeak shot on the 10th. A magnificent specimen of the blue heron was shot at Olean the other day. JOHN.

ADIRONDACK GAME.—Mr. A. R. Fuller, of Meacham Lake, writes to the Albany *Journal* that the mild weather of the past winter has done more for the game in the North Woods than all the enactments of the Legislature. A good season may be expected by Adirondack visitors.

In a letter just received by us Mr. Fuller says:

"Ducks and geese in great numbers going North. Nearly all of the spring birds have arrived. From the drumming one would think the woods full of partridges, and well they might. I never saw them so plenty in the spring. The open winter and great quantity of feed last fall has kept all kinds of game in good condition."

NEW JERSEY—*Pine Brook.*—Three Newark gunners made the unusual bag of 72 snipe at Pine Brook one day last week.

WEST SIDE GUN CLUB.—At the annual meeting of the West Side Gun Club, of this city, the following officers were elected for the ensuing year: Edward Schweyer, President; G. Boucsein, Vice-President; D. Simpson, Treasurer; Francis J. Dugro, Secretary; J. Radley, V. Solnowski and Matthew Hettrick, Executive Committee. The club is in a flourishing condition, having fifty active members.

PENNSYLVANIA—*Maple Lodge, Pike Co, Pa., April* 12.—The streams here are pretty high and cold, and though muddy, are in excellent condition for fishing. One afternoon last week I took fifty-three fine trout from a branch of the Panpack River near by. FRED W. JONES.

DELAWARE.—A correspondent reports good snipe shooting at Lewes, Dela. The snipe grounds are almost inexhaustible, and the walking good. Quail shooting in season. Reached via. Old Dominion Line steamers from New York direct, and from Philadelphia via. P. W. & B. R. R. Write to Wm. Tell, proprietor United States Hotel, Lewes, Delaware.

OHIO—*Cincinnati, April* 12.—We are having an early spring, and some snipe, but in small quantities as compared with some other States. R. E. DUGAIGNE.

Pomeroy, April 9.—Snipe came about a week ago, and are getting tame and more plenty. Plover and yellow-legs are also beginning to arrive in fair numbers. ABE. DACOTAH.

HOCKHOCKING SHOOTING CLUB.—This is the name of a club recently formed at Lancaster, O., with the following officers: Dr. George W. Boerstler, Pres.; Chas. R. Richards, Vice-Pres.; S. G. V. Griswold, Sec.; George W. See, Treas; Directors and Executive Committee, J. C. Tuthill, William Davidson, H. W. Carpenter.

ILLINOIS SPORTSMEN'S ASSOCIATION.—This society holds their fifth annual convention and tournament at Quincy, June 11, under the auspices of the Quincy Shooting Club. Among the list of prizes offered are the following: The Audubon Club, of Chicago, donates a gold medal valued at $150; S. H. Turrill, a gold medal; Nichols & Lefever, of Syracuse, a breech-loading shot-gun, $150; Parker Brothers, of West Meriden, Conn., a breech-loader, $150; Russell & Hayden, Jacksonville, Illinois, a breech-loader, $75; Jesse Sherwood, of Edina, Mo., a hunting dog, $50; the Dupont Powder Co., a silver medal, $50; the St. Louis Shot-Tower Co., shot to the value of $100; the St. Louis Shell Co., 4,000 conical base brass shells; the Union Cartridge Co., Bridgeport, Conn., 400 shells; the Union Cartridge Co., Bridgeport, Conn., 2,000 paper shells, 4,000 wads, and 2,000 primers. There are fourteen other prizes, ranging in value from $35 to $10. The meeting is to continue four days. The convention of the society to sit at the Quincy House on the evenings of Tuesday and Wednesday, the 11th and 12th. During the tournament an exhibition shoot will occur between W. B. Hanworth and Capt. Stubbs, at 100 pigeons each, single rises, for the championship of the West. It is announced that Capt. Bogardus and E. T. Martin are barred from all shoots. ROVER.

IOWA—*Creston, April* 7.—There are lots of prairie chickens here; see them by the hundreds every day; have shot a few when I could not help it; they set so close to the house it is hard to keep from getting hold of my gun and shooting them. There are lots of plover here, and some ducks. Have seen five prairie wolves since I settled here one month ago. N. D. M.

INDIANA—*Brazil, April* 6.—Snipe abundant. Yesterday two men brought in 81 jack snipe, and to-day two men got 87 snipe and five ducks. Snipe are plentier than ever known about here before. J. J. S.

NEBRASKA—*Omaha, April* 9.—Immense numbers of wild geese along the Platte River; all kinds of ducks in the marshes and ponds. Some good bags reported. As high as 56 head for an evening and morning shoot. *Scolopax wilsonii* have arrived, and number nines are thrown at them without regard to sex or condition. A bag of 39 was brought in yesterday. BOB WHITE.

THROUGH BOSTON—THE GUNS, THE RODS AND LINES.—Boston has the best peculiarities of an English city. In it may be found that highly cultured class of gentlemen sportsmen, who are capable of fully appreciating what is really good work, and who look critically at such guns, rods, reels, flies or lines as they may want to use. Such persons abhor shams, and hold in mortal horror that *scamping* which produces flashy, but unserviceable goods. What is wanted in Boston must be of the greatest excellence as to make and finish, nothing must be slighted. Gentlemen, then, who want good sporting goods of Boston make, are perfectly willing to pay a good price for such, fully aware that a conscientious workman must be fairly remunerated for his services. If foreign goods are wanted, the Bostonian wants the very best. Your Brummagen goods find no market in Boston. Now, there is that old established firm of Messrs. Wm. Read & Sons, 13 Faneuil Hall square, Boston. This is a house which has been over a half-century in the same business. Messrs. Read & Sons is the headquarters for the guns made by W. & C. Scott & Son, of England. As is well known, Bogardus uses these guns entirely. Shown by Mr. Read over all their extensive establishment, we saw all the many varieties of guns made by Scott & Son, from the premier gun to those of larger and cheaper grades. The Messrs. Read now sell for $50 a top-snap action breech-loader; Scott, for $50, with side action guns from $30 to $35. Here, too, were guns by all leading English makers, with a fine collection of double guns—one shot barrel with a rifle—an arm we are often asked about. The Messrs. Read & Sons keep the fullest possible stock of all loading implements and ammunition. Long established as are these gentlemen in their special branch of trade, they are known not alone in New England for their probity, but have a reputation which extends throughout the country.

At the Centennial the remarkably fine line of goods exhibited by Messrs. Bradford & Anthony, of Boston, claimed particular attention. For all kinds of angling implements, this firm has a merited reputation. Their catalogue comprises every variety of hook and line used for halibut off the Georges to the finest hook for fly tying. Their rods were the perfection of art. Rods can be had costing a few dollars up to those miracles of lightness, suppleness and strength worth some $72. In flies, their collection was most varied. If the peculiar idiosyncracies of the trout or the angler could not be satisfied amid one hundred different varieties of flies shown us, well, Messrs. Bradford & Anthony would carry their fly-making, if necessary, even further. We never could have believed that so many varieties of reels could be produced. We have long been preaching that good reels (not running in ruby centres) ought to be furnished at reasonable prices. Here we found that at a small outlay a good, honest, serviceable metal reel could be had. Messrs. Bradford & Anthony showed us patent adjustable floats and sinkers, which were as novel as useful. You can put on or take off one of these floats or sinkers at will without knotting or tying the line, and once on it will stay until you want to remove it, which can be done in an instant. There is nothing in the sportsman's outfit for angling or camping that the Messrs. Bradford & Anthony do not keep.

At Messrs. Lincoln & Hopkinson's we found Gale's patent lawn and camp tent. Here was repeated over again what we have perhaps frequently heard before, that advertising in our columns does bring goods most particularly into notice. Constant orders had come to Messrs. Lincoln & Hopkinson from the publicity given to the Gale tent in our columns. Briefly described, the Gale tent, weighing only 25 pounds, can be stored in a wagon or in a boat, and when opened on a kind of strong umbrella frame, is 8 feet high by 7 feet square, and will lodge quite comfortably some 4 to 6 persons. For croquet or cricket on the lawn, for the bather on the beach, or for the hunter, or general sportsmen, we have yet to see a better, more compact or more readily adjustable tent.

Our remarks at the beginning of this article in regard to the care taken of leading Boston houses with their work has its fullest explanation when we examined the really fine guns made by Mr. W. R. Schaefer, of No. 61 Elm st., Boston. Mr. Schaefer is truly what he represents himself to be, a manufacturer of first-class guns. A certain number of guns we saw at Mr. Schaefer's shop in process of manufacture. There is no slighting done. Portions of guns which one never sees have as much conscientious good work put on them as have the outsides. Every working part is finished to a hair. All that good judgment dictates as to choice of material to be used in a gun is followed up with patient skill. Now, what is the the consequence of such good work? Why, exactly this: When Mr. Schaefer sells a gun of his make, say in Bangor, Maine, some one there on a visit from Portland, Oregon, orders another just like the one he has seen. Mr. Schaefer is now making guns for all parts of the United States, never is without orders, and obtains good prices for good work. It is just one of those cases where a manufacturer setting out to build only the best guns for first-class customers, even in these dull times has a multiplicity of orders.

To draw a long visit in Boston to a close we must speak of the fine hunting suits made by G. W. Simmons & Co., Boston, of which Fowler & Fulton are the agents in New York. Here were shown all the varieties of sportsman's clothing, ranging in price from $13 to $60.

At the American Arms Co., No. 103 Milk st., whose motto is "a price to suit the times," we examined Fox's patent breech-loader, a style of gun which is rapidly gaining in public favor. Excellent breech-loaders, with twist barrels, can

be had here at $50. The mechanism of the Fox gun is of the simplest character, and must make an arm perfectly close fitting at the breech. The American Arms Company, from the crowded condition of their office, seemed to be doing an excellent business. The Fox gun is finding purchasers as far off as Yokohama, some orders from Japan having been traced to their advertisement in this paper.

Whether it was owing to the concourse of sportsmen brought to Boston by the Kennel Club, or that the opening of the shooting and angling season was fast approaching, all the establishments dealing in sportsmen's goods seemed to be doing a good business. From personal observation we are of the opinion that the most fastidious of purchasers can be fully satisfied with not only the quality of the goods, but the reasonable prices we found in Boston.

PIGEON MATCHES.

SCORES OF MATCHES.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

CANADA—*Strathroy, April* 12.—Bogardus trap, 23 yards rise. First match:

John Paine	1 0 1 0 1 1 1 1 1 1—9
A Johnston	1 0 0 1 1 1 0 1 1 1—7
Major Radcliffe	0 1 1 0 1 1 0 1 1 1—7
Cleverdon	0 1 1 1 0 0 1 1 0 1—6
Jno Saul	0 0 1 1 1 1 0 1 1 1—7

No ties shot off.

Second match:

John Paine	0 1 1 1 1 1 1 1 1 1 0—10
Richard Smith	1 1 1 1 1 1 0 1 1 1 1 0—10
John Saul	1 1 1 0 1 0 1 0 1 1 0 0—7
Wm Saul	1 1 1 0 1 0 1 1 1 0 1 1—9
Cleverdon	0 1 1 0 1 0 1 0 1 1 0 1—7
Johnsion	0 1 0 1 1 1 0 0 1 1 1 1—8

ANGELS.

CANADA—*Paris, Ont.*—Match for the club medal, April 1; 6 birds each, 21 yards rise, 80 yards boundary; weather fine and birds lively:

G C Featherstone	1 1 1 1 1 1—6	W W Hume	1 1 1 1 1 1—6
O Totten	1 1 1 1 1 1—6	H T Westbrook	1 1 1 1 1 1—6
G E Heming	1 1 1 1 1 1—6	W Montgomery	0 1 1 1 1 1—5
Ed Axten	1 1 1 1 1 1—6	— Baxter	1 1 1 1 1 1—6

Tie on six—26 yards.

G C Featherstone	1 1 1—3	W W Hume	1 1 1—3
O Totten	1 1 1—3	H T Westbrook	w
G E Heming	1 1 1—3	— Baxter	w
Ed Axten	1 1 1—3		

Second tie—32 yards.

G C Featherstone	1 0 w	Ed Axten	1 0 w
O Totten	1 1 1—3	W W Hume	1 1 1—3
G E Heming	1 1 1—3		

Third tie—30 yards.

O Totten	1 1—2	G E Heming	1 0—1

O. T.

ONTARIO—*Mineral Springs, Sandwich, April* 10.—Score:

Cook Cousins	1 1 1 1 0 1 1 0 1 1 1 1 0 0 1—11
Jas Scuse	0 1 1 1 1 1 1 1 1 0 1 1 0 1 1—12
Jno Honson	1 0 1 1 1 1 1 0 1 1 1 0 0 1 1—11

James Scuse won.

MONTREAL GUN CLUB.—First quarterly match of the Montreal Gun Club, at five single birds, 21 yards rise, 80 yards boundary:

R Blackwood	1 1 1 0 1—4	W R Hamilton	1 1 1 1 1—5
A Jackson	1 1 1 0 1—4	J W Duncan	0 1 1 1 1—4
J Strachan	1 0 1 0 1—3	A Davidson	0 0 1 1 0—2
H W Jevers	1 1 1 1 1—5	T Hocking	1 0 0 0 1—2

LONG ISLAND GUN CLUB—*Dexter Park, April* 12.—Sweepstakes, 25 yards rise, 80 yards boundary, 1¼ oz. shot, H and T traps, ties decided, miss and go out, and the club rules to govern.

Smith	0 1 1—2	Durfee	1 0 0—1
Broadway	0 1 1—2	Hughes	1 0 0—1
Hance	0 1 1—2		

Tie on two.

Smith	1 1 1 1—4	Hance	1 1 1 0—3
Broadway	1 1 1 1—4		

Smith and Broadway divided the money.

Same Day—Sweepstakes at three birds; conditions as above.

Hance	1 1 1—3	Murphy	1 0 0—1
Hughes	1 1 1—3	Durfee	1 0
Broadway	1 0 1—2	Smith	1 0

Hance and Hughes divided the money.

Same Day—Sweepstakes; conditions like the first.

Durfee	1 1 1—3	Hughes	1 1 1—3
Hance	1 1 1—3	Smith	1 1 1—3
Broadway	1 1 1—3		

Ties on three.

Durfee	1 1—2	Hughes	1 0—1
Hance	1 1—2	Smith	0
Broadway	1 1—2		

Durfee, Hance and Broadway divided the money.

NEWARK GUN CLUB.—At a glass ball match recently, Messrs. Leroy and Duston made the very good score of twenty-four out of twenty-five each. On the shoot off Leroy broke ten straight, and won.

TENNESSEE—*Salem, April* 11.—The following are scores at last shoot of Salem Shooting Club:

First match, eighteen yards rise, at ten balls each.

A Jarratt	3	G Harding	6
A Harding	6	L A Smith	7
Will Ransom	5	J B Kimbro	4
H O Smith	0	I D Miller	7
T O Lillard	4	P N Overall	3
C A Sheafe	4	N C Maney	3
Tom Turner	7	J H Nelson	9

Second match, at five glass balls, thirty-one yards rise.

E R Jones	2	N C Maney	2
J H Nelson	2	Tom Turner	0
T O Lillard	1	H O Smith	0
J B Kimbro	3	A Harding	0
P N Overall	0	Giles Harding	1
C A Sheafe	1	W G Lillard	1
I D Miller	3		

Third match at five glass balls, eighteen yards rise.

A Jarratt	5	W G Lillard	3
I D Miller	3	G S Harding	1
J B Kimbro	3	A Harding	3
C A Sheafe	2	L A Smith	4
P N Overall	1	Jno King	1
J H Nelson	5	H O Smith	4
E R Jones	4	N C Maney	4
T O Lillard	0	Wm Hill	0
Thos Turner	3		

Fourth match—country against town—five glass balls each, eighteen yards rise.

Town side.		Country side.	
J H Nelson	5	L A Smith	0
C A Sheafe	1	H O Smith	4
N C Maney	1	J B Kimbro	2
I D Miller	4	E R Jones	3
M Nelson	1	W G Lillard	3
A Jarratt	2	A Harding	6
Clay Alexander	2	E S Alexander	4
Total	19	Total	21

Fifth match, five balls each, eighteen yards rise.

L S Alexander	4	Jno King	1
A Harding	4	Will Ransom	2
T O Lillard	4	Clay Alexander	3
P N Overall	1	J H Nelson	3
G S Harding	3	H O Smith	1
I D Miller	3	J B Kimbro	4
A Jarratt	5	W S Lillard	3
Thos Turner	3	M Nelson	4

ILLINOIS—*Ashton, March* 30.—To-day, Walter B. Trull, of Turner Junction, who is but fifteen years of age, and who never shot a gun until last October, made the following score at glass balls, 21 yards rise, Bogardus' trap.

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1—73.

E. BATES.

AUDUBON CLUB.—Quarterly shoot at Dexter Park, Chicago, April 12, for the Diamond Badge; 12 birds each, 30 yards rise, five ground traps, 80 yards boundary, gun below the elbow until the bird takes wing. Very fine wild pigeons, furnished by the old veteran, T. Stagg:

Chas Kerns	1 0 1 0 1 0 1 0 0 0 1 1—0
Chas Felton	1 1 1 1 1 1 0 1 0 1 1 1—10
W T Johnson	1 0 0 0 1 1 1 1 0 1 1 1—8
Abner Price	1 1 0 1 0 1 1 1 0 0 1 1—9
Thomas Stagg	1 0 1 1 0 0 1 1 1 1 1 1—9
F C Wilson	1 0 0 1 0 0 0 1 1 1 0 1—6
Chas Morris	0 0 1 1 0 0 1 1 0 0 0 1—5
Greene Smith	0 1 1 1 1 1 1 1 0 1 0 0—8
Alex Cook	0 0 0 1 0 1 1 0 0 0 1 0—4
S R Haven	0 1 1 1 0 1 1 1 1 1 0 0—8
S H Turrill	0 1 1 1 1 1 1 1 1 1 0 1—10
F J Abbey	0 1 0 1 1 1 1 0 0 1 1 1—8
W W Foss	1 1 1 1 1 1 1 1 1 1 1 1—12
Dr N Rowe	1 0 0 0 1 0 1 0 0 1 0 0—4
G McConnell	0 1 0 0 0 0 1 0 1 1 1 1—6

Shoot for prizes, ten birds, 25 yards rise, class shooting, 80 yards boundary. Turrill and Hawthorne divided first; Willard and Foss, second, and W. T. Johnson winning third.

W T Johnson	1 1 1 1 1 1 0 1 0 1—8
Chas Kerns	1 1 1 1 1 0 1 1 1 0—8
Greene Smith	0 0 0 0 0 0 1 0 0 1—2
Alex Cook	1 0 1 1 0 1 0 1 1 0—7
W Hawthorne	1 1 1 1 1 1 1 1 1 1—10
S H Turrill	1 1 1 1 1 1 1 1 1 1—10
Abner Price	1 1 1 0 0 1 1 0 1 1—7
F J Abbey	1 0 0 1 1 1 1 1 1 1—8
C Mears	1 1 1 1 1 0 0 1 0 1—7
C Willard	1 1 1 1 1 1 1 1 0 1—9
G Mosher	0 0 1 1 0 1 1 1 1 1—7
Thomas Stagg	1 1 0 0 1 0 1 1 1 0—6
W W Foss	1 1 1 1 1 1 0 1 1 1—9
C Morris	0 0 1 1 1 1 1 0 0 0—5

G. B.

FLORIDA—*Fonda, April* 8.—Eight single birds, 21 yards rise, 80 yards boundary, American rules:

Thomas	1 0 1 * 1 1 0 0—4	Norton	1 0 0 1 * 0 1 *—4
Wilbur	1 0 * 1 1 1 1 *—5	Palmetier	1 1 0 0 0 1 1 1—5
Hughes	1 1 * * 1 0 1 0—4	Brown	1 1 1 1 1 1 1 0—7

First to Brown. As the birds were all used, no ties were shot off.

ABE DACOTAH.

DR. CARVER AT SALT LAKE CITY.—Dr. Carver at Salt Lake City, April 5, among other feats, succeeded in shooting at a ball, missing it, reloading and shooting again, breaking the same ball before it fell.

New Publications.

THE PRACTICAL KENNEL GUIDE, With Plain Introductions How to Rear and Breed Dogs for Pleasure, Show and Profit, by Gordon Stables, M. D., C. M., R. N. Cassel, Petter & Galpin, London, Paris and New York.

No one in this country can have read the *Live Stock Journal and Fancier's Gazette* without having become interested in the capital articles due to Gordon Stables. There are all kinds of styles adopted by those who write on dogs. Heaven save us from the perusal of those ponderous, massive and pretentious articles, in which a dog is treated in the same literary style as if he were a planet. Gordon Stables laughs at such heavy concerns. What he teaches you about a dog, and what to do with him, is given in a light, easy, conversational manner. There is a pleasant style about Dr. Gordon Stables' book, which we wish could find more imitators. The volume under review is not the least wanting in thoroughness, as may be seen by its nineteen chapters and the index. The idea of the book is, that it shall not only inculcate a love for the dog, but that by its perusal, a gentleman can become a fancier, can learn how to select and breed dogs, and having good dogs, how he can best show them. A chapter, the fifth, on the points of dogs, might be read with advantage by many of our judges. The chapter on the supposed origin of the different breeds, with a description of the bones of the skeleton, is likely to set at rest many a mooted point. As in all matters with which the world is familiar, a number of cant words (shall we offend the dog, and call it slang terms?) have entered the canine glossary. How many people are there who know what the haw of a St. Bernard is? or the stop of a bulldog, or the sting of a pointer? We are coining for ourselves a set of words, and we suppose what a "Yaller dog" is is well known all over the United States as a term of reproach of the *sangue azul* of a dog. Dr. Stables gives quite thoroughly the reasons for dividing points into two catalogues, and the "wherefore" of it he describes fully. We often have discussions in our own journal as to colors of dogs, and the author gives authority to the well-known statement of certain shades of coats following peculiar breeds. As to the taste in colors, that, of course, is another thing, and the old saying, "*De gustibus*," etc., recurs to Dr. Stables. The author, who certainly has had the fullest experience in buying dogs, devotes particular attention to this subject, and has a capital chapter on this topic, called, "Hints About Purchasing Dogs." Of course, never buy "a pig in a poke." Yet how many people do just this kind of thing, and get a mongrel for the price of a prize dog, good, as the author states, "for the market value of the hide, *minus* the value of the rope you buy to hang him." "Beware of sharpers" is the conclusion of this chapter. Dr. Stables explodes the idea which one often sees in advertisements, which runs somewhat as follows: "The champion dog So-and-So, will serve a limited number of bitches." It is the *limited* at which we take exception. There may be some conscientious owners of stud dogs both at home and abroad, who will refuse a man's fifty dollars or ten guineas for the use of their dog, but such singularly prudent people are very rare. Says Dr. Stables: "I candidly confess I never sent a bitch away from my kennel unserved, and never sent back a check either, except twice. In one case the bitch was diseased; in the other, she had by accident already formed an attachment to a dog of meaner breed." Dr. Stables can give no end of useful information as to the preparation of a dog for the show-bench, and how to make his toilette. You may use, if you wish to, olive oil, or, if you desire to put on an extra touch, you can rub into the coat the yolk of eggs—in fact, shampoo your doggy. Do we know anything of "faking" in this country? Of course we don't. The free and enlightened citizen of the United States is above any of these tricks. Still, we happen to be aware, just as they are in England, that pipe-claying a rusty dog will make him look white; and for putting a beauty spot on a dog, why, Batchelor hair-dye can be as cleverly managed here in New York as in London. The book concludes with a description of a breeder's and exhibitor's non-sporting kennel, which abounds with sound sense and practical details. To conclude, we must express ourselves as most pleased with the character and method employed in the writing of the "Practical Kennel Guide," and we unhesitatingly recommend Dr. Gordon Stables' work to the attention of our readers.

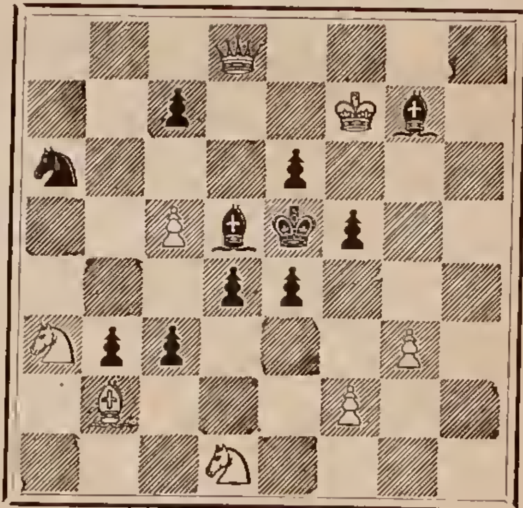
BOOKS RECEIVED.—"Voyage of a Paper Canoe: A Geographical Journey of Two Thousand Five Hundred Miles from Quebec to the Gulf of Mexico, During the Years 1874-'5," by Nathaniel H. Bishop. Boston, Lee & Shepard; New York, Chas. T. Dillingham: 1878.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 14.

Tourney set, No. 10. Motto: Auf. Weidersehn.



White to play and give mate in two moves.

SOLUTIONS TO PROBLEMS—NO. 11.

1—R-Q4 ch	1—Any
2—Mates accordingly	

Game No. 47.—PETROFF DEFENCE.

The first four moves are the same as in the preceding game:

White.	Black.	White.	Black.
5—P-Q4 (a)	5—P-Q4 (b)	11—P tks Kt	11—P-Q B4
6—B-Q3	6—B-Q3 (c)	12—P-Q B4	12—B tks Kt
7—Castles	7—Castles	13—Q tks B	13—P tks P
8—P-Q B4	8—B-K3	14—Q tks Kt P	14—Kt-Q2
9—P tks P	9—B tks P	15—Q-K4	15—Kt-K B3
10—Kt-Q B3	10—Kt tks Kt		Even game.

NOTES.

(*a*) If 5—Kt-Q B3, Jaenisch equalizes the game as follows: 5—Kt tks Kt; 6—Q P tks Kt, 6—B-K2; 7—B-Q B4, 7—Castles; 8—Castles, 8—B-K Kt5.

(*b*) Jaenisch considers the following continuations inferior, viz.: 5—B-K Kt5, or 5—B-K2

(*c*) The protection of the P at K4 is difficult after P-Q B4 is played. If 6—B-Q3 is played, then 6—B-K2, but Jaenisch (*Schach Zeitung*, 1871) considers 6—Kt-Q B3 better.

Game No. 48.—PETROFF DEFENCE

The first eight moves are the same as in the preceding game:

White.	Black.	White.	Black.
9—Q-Q Kt3	9—P tks B P	14—Q tks Q	14—P tks Q
10—B tks P (a)	10—B tks B	15—B-K3	15—Q Kt-Q2
11—Q tks B	11—P-Q B3	16—K R-Q	16—K R-Q
12—Kt-Q B3	12—Kt-K B3 (b)	17—Kt-Q B4	17—B-Q Kt5
13—Q-Q Kt3	13—Q-Q Kt3 (c)		Even game.

NOTES.

(*a*) If 9—Q tks Kt P, 9—B-Q4; 10—Q tks B?, and then 10—B tks P ch, and wins. If on the 9th move K Kt-K5 was played, the game is equalized by, 9—Kt-Q2; 10—B-K B4, 10—Kt-K B3.

(*b*) Black should not capture the Kt.

(*c*) Or, 13—Q-Q B2; 14—B-K Kt5, 14—Q Kt-Q2; 15—R-Q B, 15—Q-Q Kt3, and the game is even.

CHESS IN ENGLAND.

Game No. 49—VIENNA GAMBIT DECLINED.

One of seventeen simultaneous games played some time ago by Mr. Steinitz in the City of London Chess Club

White. Herr Steinitz.	Black. Mr. Mocatta.	White. Herr Steinitz.	Black. Mr. Mocatta.
1—P-K4	1—P-K4	16—B tks Kt	16—P tks B (e)
2—Kt-Q B3	2—B-B4	17—Kt-K Kt3	17—P-Q B4
3—P-K B4	3—P-Q3 (b)	18—Kt-R5	18—R-K3
4—Kt-K B3	4—Kt-Q B3 (c)	19—Kt P tks P	19—P tks P
5—B-Q Kt5	5—B-K Kt5	20—Castles	20—Q-Q2 (f)
6—P-Q3	6—Kt-K B3	21—P-Q5	21—R-Q3
7—P-K R3	7—B tks K Kt	22—Q-K Kt3 ch	22—K-B sq
8—Q tks B	8—P tks P	23—Q-K Kt7 ch	23—K-K2
9—B tks P	9—Castles	24—P-K5 (g)	24—R tks P
10—B tks Kt	10—P tks B	25—Q tks P ch(h)	25—K-K sq
11—Kt-K2	11—R-Q Kt sq (d)	26—Q-R8 ch	26—K-K2
12—P-Q4	12—B-Q Kt5 ch	27—R tks P ch	27—K tks R
13—P-Q B3	13—B-Q R4	28—Q-K Kt7	28—K-K sq
14—P-Q Kt4	14—B-Q Kt3	29—Kt-B6 ch	29—Resigns
15—B-K Kt5	15—R-K sq		

NOTES BY A. BURN.

(*a*) The Vienna Gambit is one of Herr Steinitz' favorite openings, and he has discovered numerous ingenious ways of carrying on the attack notably the remarkable variation called the "Steinitz Gambit."

(*b*) Black judiciously declines the gambit.

(*c*) K-K B3 is better. The move in the text allows the first player to pin the Kt with advantage.

(*d*) This move savors too much of lost time. R-K sq looks preferable.

(*e*) Black has a very bad game, perhaps an irretrievable one; still, it would have been better to have taken with the Q.

(*f*) Surely P tks P would have been better.

(*g*) The finishing stroke.

(*h*) The concluding moves are played in Herr Steinitz' most finished style.

National Pastimes.

SCOTTISH-AMERICAN CLUB.—The opening games of this club, last Saturday, resulted in the following scores:

One-mile Walk, open to all who have not performed in a public race, 14 entries—First heat—W. T. West, Col. City N. Y., 8m. 16⅛s.; second heat, J. B. Hanna, S. A. A. C., 8m. 36s.; third heat, J. H. Crol, S. A. A. C., 8m. 48s.; final heat, West, 8m. 30s. Hanna second.

Two hundred and Twenty Yards Run, 5 competitors—M. E. Moore, 27s.

Three-miles Walk, 3 entries—Chas. Conner, 24m. 25s.

One-half-mile Run, 3 entries—H. H. Moritz, 2m. 35s. A tug-of-war closed the games.

AMERICAN RACKETS.—The match games at the Racket Club Court, Sixth avenue, this city, began last Monday with games between Messrs. Adams and Allen. First game, Allen, 15, Adams, 8; second game, Allen, 15, Adams, 2; third game, Allen, 15, Adams, 8. A racket game at McQuade's Court, this city, last Saturday, resulted in a score of 21, 15 and 13 for W. Maloy, to 19, 21 and 21 for John Sherman.

LIGHTNING SPEED.—The Western Union Telegraph Company boys had a display of pluck and muscle at the West Side Driving Park, Jersey City, last Saturday. The winners in the various contests were: The one-mile walk, twelve entries, J. M. Foster, 1m. 40s. start; time of the mile, 9m. 12s. John Donohue, in the standing broad jump, 8ft. 1in. Standing hop, step and jump, Donohue, 25ft. 1in. D. B. Mitchell captured the 100 yards run in 11s. Donohue in the running hop, step and jump, 33ft. 10½in.

ANOTHER LONG WALK.—Sir John Astley's latest proposition is a twelve days' walking tournament, starting Monday morning, resting over Sunday, and finishing on the succeeding Saturday night. First prize, $1,000. Weston, O'Leary and Gale are expected to compete.

—The Y. M. C. A. Rowing Club, of Boston, give an athletic tournament at the Tabernacle, that city, April 24. There will be the usual athletic contests, with the exhibitions of feats on the gymnastic apparatus.

FIFTY MILES.—George Law, an ex-member of the Scottish-American A.C., made his debut in the character of a professional at the N. Y. A. C. grounds last Saturday. His work was 50 miles in 9h. 45m. 22s.

—In a one-mile running contest, four entries, at the N. Y. A. C. grounds, Saturday, for silver medals to first and second, the winners were T. H. Noonan, A. A. C., 5m. 29¾s., and W. S. Denmark, A. A. C.

—In a race between W. S. Harding, of this city, and Christopher Rice, of Rutland, Vt., at Rutland last week, the former won on a score of 50 miles in 8h. 55m. 18s.

—Chas. A. Harreman, of Haverhill, Mass., attempts, at Boston to-day, to beat O'Leary's best 100-miles time—18h. 53m. 40s.

HOW TO SWIM A HORSE.—These directions are imported; they came from the *Pastoral* (Australia) *Times*, and may be regarded with especial attention as coming from afar:

"It is astonishing how foolhardy most men are in venturing into deep water on horseback. Many a man has been years in the colony without having had occasion to attempt swimming a horse; but hearing it spoken of as a trifling matter, he fancies it comes as naturally for a horse to swim with a man on his back as to walk or gallop. On the contrary, not above two or three horses in a hundred can carry a man safely over a river or stream of any width, and very few men have the nerve, coolness, and presence of mind to leave a horse alone and let him swim. A horse with a man's weight on his back naturally sinks very deep in water, and many horses, before they attempt swimming, keep feeling for bottom with their hind legs. Unless a man is accustomed to swimming a horse, he gets nervous, begins pulling at the reins, and then it is all up with him. The horse gets frightened, struggles, rolls over on his side, or comes right over backwards, and probably gives his rider a kick that puts an end to all his chances of getting ashore. In my opinion no man should go into deep water of any width who cannot swim, and a swimmer should take off his clothes, put them in front of his saddle, unbuckle his reins, and then he is ready for any emergency. The neglect of this later precaution generally drowns the horse, as his foot gets caught in the bridle. I have, however, seen many a man who could not swim get safely across a river by driving his horse and catching hold of his tail."

—The gozlin is the old goose's young child. They are yeller all over, and az soft az a ball of worsted. Their foot iz wove hole, and they kan swim az easy az a drop of kastor-oil on the water. They are born annually about the 15th of May, and never waz known to die natrally. The goslin waddles when he walks and paddles when he swims, but he never dives, like a duck, out of sight in the water, but only changes ends.—*Josh Billings.*

THAT'S THE KIND OF A COYOTE HE IS.—The Virginia, Nev., sportsmen have invented a new and improved system of fox-hunting. The improvement on the old style is in the can't-catch-'em, self-returning, automatic self-boxing, warranted-not-to-wear-out coyote, which takes the place of the ordinary unsophisticated fox. The *Enterprise*, of that town, says:

"Last Sunday a number of our sportsmen took a coyote out into the Twenty-one-mile Desert, visible to the eastward from this city, for the purpose of having a chase—they having a pack of foxhounds with them. When let out of his box the coyote was allowed to get a start of about three miles before the hounds were turned loose. Hounds and hunters on horseback then started after the animal, which gave them quite a long chase. Finally, the coyote became tired of being hunted, and started back toward his box, which had been left standing on the desert, near the wagon in which it was brought. Hounds and men went after his wolfship pell-mell, but he gained the shelter of his box. He was allowed a rest, and was started off again. He made even a better run than before, but, finding himself hard pressed, again made for his box, which he finally reached, but not before he had fought several good fights with the dogs. As it was thought the coyote had done enough work for one day, he was allowed to remain in his box and was brought back to town. That coyote now considers that he knows all about the business, and in time will probably come to enjoy it."

WHAT HAPPENED.

A very respectable Kangaroo
Died week before last in Timbuctoo;
A remarkable accident happened to him:
He was hung head down from a banyan-limb.
The Royal Lion made proclamation
For a day of fasting and lamentation,
Which led to a curious demonstration:
The elephant acted as if he were drunk—
He stood on his head, he trod on his trunk;
An over sensitive she Gorilla
Declared that the shock would surely kill her;
A frisky, gay and frolicsome Ape
Tied up his tail with a yard of crape;
The Donkey wiped his tears with his ears,
The Crocodile shed a bucket of tears;
The Rhinoceros gored a young Giraffe
Who had the very bad taste to laugh;
The Hippopotamus puffed and blew,
To show his respect for the Kangaroo;
And a sad but indignant Chimpanzee
Gnawed all the bark from the banyan-tree.
—*Howel Foster, St. Nicholas for March.*

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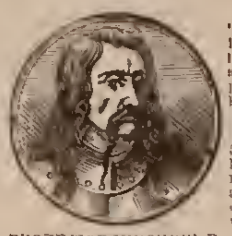

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In the spring traps now used to throw glass balls for practice shooting, sportsmen have a mechanical contrivance which should entirely do away with the "chances" which arise in trap-pigeon shooting, as the glass ball goes invariably in the direction desired by the trap pulled, or in which the trap is set. To bird shooting from a trap—which many dislike on account of the well known objections to it—there is a large element of chance, as one man may have good, slow quartering birds, while his opponent may get strong "in-coming" or "tail-birds," making the match uneven, simply because the one has much easier shots than the other, and is liable to miss or have his birds drop outside the boundaries. In order to derive the greatest possible benefit from trap shooting, and at the same time test the marksmanship of any number who may be engaged, it is necessary: **First**, that not only should the trap throw balls in different directions, but that each person shooting should have in sixty ten shots the same angles at which the others shoot, so that no one may be favored by chance or by the trapper; **Second**, that a record be kept of each person's hits and misses and the angles on which they occur, so that one may practice intelligently, knowing on what angles he needs more proficiency. It is believed that the plan adopted for recording, which has been copyrighted, together with all arrangements, whether of letters, or figures, character or plate for recording shooting by angles will be found all that is desired.

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1877.

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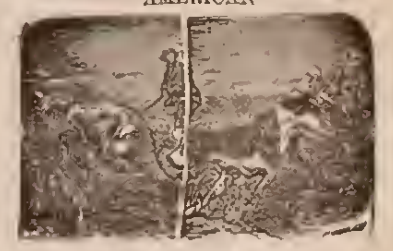

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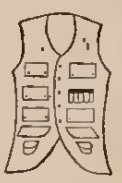

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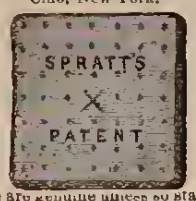

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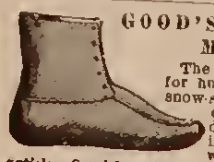

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The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 17 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AEBY, President.

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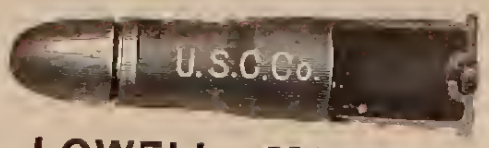

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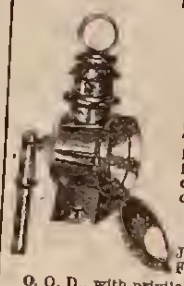

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To Trout Fishermen.

Your money's worth in FISHING TACKLE, and possibly a BEAUTIFUL SPLIT BAMBOO ROD.

Before purchasing tackle elsewhere don't fail to send to

H. L. LEONARD,
19 Beaver St., (up stairs) N. Y. City,

For his lists of TROUT FISHING OUTFIT offered for

FIVE DOLLARS, ($5), Retail Price from $8 to $10
TEN DOLLARS, ($10), " " " $18 to $20

To clubs who may desire to purchase either of the lists offered, or any amount equal to either of them, I will donate, as follows, an extra package for every 10 lists sold:

$17 Trout Fly Rod for every 40 of the $5 Lists sold.
$17 " " " " 20 " $10 "
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The best assortment ever offered for the money. Every article guaranteed. Sent by mail to any address on receipt of money, or expressed C. O. D.

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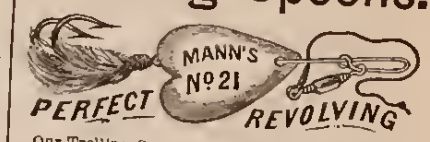
Trolling Spoons.



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FOREST AND STREAM & ROD AND GUN.

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, APRIL 25, 1878.

Volume 10.—No. 12. No. 111 Fulton St., N. Y.

MAKE ME A SONG.

Selected.

OUT of the silence make me a song,
Beautiful, sad and soft and low;
Let the loneliest music sound along
And wing each note with a wail of woe,
Dim and drear,
As hope's last tear.
Out of the silence make me a hymn
Whose sounds are shadows soft and dim.

Out of the stillnesses in your heart—
A thousand songs are sleeping there—
Make me but one, thou child of art,
The song of a hope in a last despair
Dark and low,
A chant of woe.
Out of the stillnesses, tone by tone,
Soft as a snowflake, wild as a moan.

Out of the darknesses flash me a song,
Brightly dark and darkly bright;
Let it sweep as a lone star sweeps along
The mystical shadows of the night,
Sing it sweet,
Where nothing is drear, or dark, or dim,
And earth songs melt into heaven's hymn.

FATHER RYAN.

For Forest and Stream and Rod and Gun.

Scenes in the Choctaw Nation.

NUMBER I.

IN one corner of my library, arranged in such a manner as to display its proportions to the best advantage, is an object which has for me a more than common interest, and which I cannot look at without being reminded of an adventure which will live in my recollection as long as memory itself. This object is the skin of what I am proud to believe was one of the largest panthers that ever fell before a hunter's rifle. Measuring along the curve of the back as the animal lay on its side, from the tip of the nose to the extremity of the tail, the tape line showed a distance of exactly seven feet, ten and one-quarter inches. Its sickle-like claws and ugly-looking teeth are something fearful to contemplate. In the centre of the forehead, and almost as exactly between the eyes as though the distance had been stepped out with a pair of dividers, is the orifice made by the passage of the bullet—the tangible evidence of a remarkable shot. This trophy was secured during a journey across the southeast corner of the Indian Territory—that portion of it occupied by the Choctaws—in the spring of the Centennial year.

But though the panther skin always reminds me of the incidents of that journey, such adventitious aid is by no means necessary to enable my memory to recall them. They made at the time too distinct an impression to depend upon souvenirs for recollection. The *mise en scene* was sufficiently novel, and the danger and discomfort sufficiently abundant to give to the various scenes and incidents that romantic coloring which shines the brightest and endures the longest on the frescoed walls of memory. In June, 1876, I found myself in Red River County, Texas, but with a determination not to stay there longer than I could possibly avoid. The speculation which had brought me there had ended, and the events rapidly ripening in the Quaker City were inviting me urgently northward. To go north, however, in the usual manner—by rail—was not what I fancied. I had come south that way, and for all the pleasure of the trip or the knowledge of the country obtained, I might as well have stayed in a St. Louis hotel reading the gaudy circulars of the M., K. and T. R. R. I was the possessor of a pony and of a light muzzle-loading rifle, and these articles suggested the idea of going at least part of the way "overland." I was not pressed for time, and the novelty of such a trip would more than repay me for its discomforts, if any such there proved to be. A young friend, by name Morgan Nichols, agreed to accompany me, and having made all possible inquiries as to the route, and laid in a few pounds of soda crackers to masticate on the road in the event of a scarcity of game, we started one bright sunshiny morning for the great Red River of the South.

The route we had laid out for ourselves, and which we followed with but slight deviations, was across the "Nation" to a place marked on the maps as Ultima Thule, but which every one we met called "McLean's Store," thence northeastward to Ozark, on the Arkansas, thence to Springfield, Mo., and from there to St. Louis. We expected the trip would last nearly a month, and would give us time to take the cars and reach Philadelphia by the "Fourth."

We crossed the Red River at a place called Mound City, a metropolis consisting of one dwelling house, one store house, and one dilapidated cotton gin. The river here was about forty yards wide, with a current of perhaps four miles an hour. I shall never forget the scene it presented. I had crossed the same stream a hundred miles farther west on my southward journey, but there I saw none of those elements of picturesqueness which were here so abundant. The water had cut a channel between steep banks of bright vermilion-colored clay, which stood some fifteen feet above the surface of the stream. From the top of these banks a level sward stretched away for several yards to where a thick and gloomy forest arose on the southern side, consisting chiefly of pines and oaks, while on the northern bank were more prominent the silvery green foliage of the cottonwoods. The trees were surmounted with their brightest toppings of changing green, which threw itself into varying shades as the leaves were stirred by a slight breeze blowing down the river. The morning sun, shining from a cloudless sky, threw into bold relief the open places near the river bank, with the deep and almost gloomy shadow of the forest. The gorgeous colors presented, the crimson hue of the stream, the brighter red of the sharply-cut banks, the brown of the tree trunks, and the gleaming emeralds of their tops were calculated to leave on the mind an impression which other scenes of greater beauty could not produce. There was no particular beauty here, but there was that indefinable *je ne sois quoi* which gives its charm to many a well-remembered spot. It was the mingling of the curious with the picturesque.

After crossing the river, our route for several miles lay through a curious tract of bottom-land, which differed almost totally from all other "bottoms" it had been my fortune to traverse. On the Texas side of the stream the bottom consisted merely of a thick forest of oaks, filled up with scraggly underbrush. On the northern side the bottom partook more of a swampy and tropical character. It could not be called a swamp, for the ground was hard and firm, at least along the narrow trail we were compelled to travel. Neither could it fairly be called a mere forest, though tall trees, literal "giants of the wood," spread their umbrageous foliage over the gloom below. Nor yet could it be likened to a canebrake, though canes grew there in abundance, their tall slender culms growing thickly along the trail, at times almost closing it in. I noticed that our ponies eagerly snapped at the narrow leaves as they brushed through them. The row of cottonwoods which grew along the river bank had grown thinner as we proceeded inward and were soon only to be seen at intervals, but their places were filled with other species. The water oaks were there, with gigantic pines of several feet in diameter; while here and there amid the gloom we could discern the wide spreading branches of the ugly excrescented cypress. Monstrous grape vines, the diameter of a man's body, stretched, anaconda like, from trunk to trunk, while the branches were heavily loaded and festooned with myriads of lianas, among them the perforated rattan. So thickly were the vines interlaced not only among the branches, but from them to the ground, that only at rare intervals could the sunbeams filter through and give a dim glimpse of the graceefully curved festoons. It was to me a very interesting place, reminding me as it did of scenes supposed by myself at least to be found only at a long distance to the southward.

As we rode along we found that in this net work of vegetable forms occasional openings appeared, and one of these was so curious as to excite remark. The trail passed through the extreme edge of it, and gave a good view of its strange features. It was circular in form and about seventy-five yards in diameter. On all sides was a wall of trees, their trunks and branches so closely interwoven with creepers as to resemble a finely woven screen of foliage colored wire. In the centre of the circle a tall tree had once stood, but had long since been broken off below the lowest branch, about forty feet from the ground. Around this trunk the lianas had clung and clustered until they completely covered it, forming a cone about thirty feet in diameter at the base by forty feet in height, and as regular as though formed by the hand of man. On the top of this cone, his body clearly outlined against the sky, a large blue heron was standing, apparently asleep. The beauty of the scene, as well as its strangeness, caused us both to drawn rein and sit for a few moments in silent contemplation. While sitting thus the heron espied us and flapping his wings rose lazily into the air and was soon out of sight.

A ride of a couple of hours brought us out of the bottom and on to higher ground. The cypresses first disappeared, then the pines grew less frequent, the canes ceased, and we found ourselves riding through a forest of noble oaks, in which the narrow trail we had been following in the bottom widened to the dignity of a blazed road. This road we expected would lead to a place called Shawnee Town, where we had been directed to inquire for information about the road from thence to Graham's Ferry, a crossing on Little River, where we would in turn be directed to Ultima Thule.

Along this road we met with our first Indians—Choctaws, I suppose they were—and the impression left on my mind by this glimpse of the noble savage was sadly at variance with the ideas derived from the pages of Cooper and Mayne Reid. There were two of them coming along the road from Shawnee Town. The foremost was a middle-aged man with a very pleasant and benevolent-looking face. His companion was younger, with a more commonplace countenance, and with an expression lurking about the corners of the eyes which filled one with suspicion. Both were dressed in buckskin hunting shirts, leggings and moccasins. The younger was bareheaded, but the elder wore around his forehead a bright colored band, and on his breast was a medal-like piece of shining metal. Neither of them was armed. Coming behind these, but several rods in the rear, were the "better halves"—squaws by name and squaws by nature, as Nichols afterward expressed it. They could not be called prepossessing in appearance, but were decidedly the reverse. Indeed, they were absolutely disgusting. They possessed not one trace of that "wild, untutored beauty" romance writers have been able to find in Indian maidens. It is true they were now on the shady side of middle age and might have been more attractive when young, but it was hard to conceive of beauty ever attaching itself to such libels on female humanity. Short and stout in body, with short, thick necks, square jaws, high cheek bones, monstrous ears, small evil-glittering eyes, low, black, wrinkled foreheads, and coarse, greasy and unkempt hair, they formed pictures that might well disgust any civilized man with the remotest idea of matrimony. They were clad in buckskin moccasins and leggings and cheap cotton gowns, plentifully besprinkled with beads. On the back of one of them, in a sack formed of a folded blanket, was a little papoose, his impish-looking head peeping over his mother's shoulder and tugging away at the pendant *mamma* she had lifted up to within his reach. On the back of the other was an army blanket, tied at the corners and loaded to its utmost capacity with the traps and "penates" of the family, and beneath whose weight the bearer almost bent double. Not a gleam of intelligence, not a glimmer of a smile enlivened their countenances as we lifted our hats in passing. A look of stolid stupidity was the only return for this act of courtesy.

Such is the result of nearly half a century of government protection and civilization of one tribe of wood Indians.

We soon arrived at Shawnee Town. We did not find it to be much of a place. It consisted of one large frame house, with the usual outbuildings, located in one corner of a large fenced field. On the opposite side of this field were several negro huts, to which we were directed to obtain information about the road. In one of these huts we found an old negress, who informed us that it was about forty miles to Graham's Ferry, and gave us directions as to the road. She was not very well posted on directions, and the most we learned from her was that about ten miles on we would come to a hut inhabited by an old Indian woman who would give us directions for the rest of the way.

The forty miles we had to traverse led us through a beautiful oak grove. Our route was marked by blazes on the trees, which were the only signs of a road visible. The trees were just far enough apart to allow an occasional glimmer of sunlight to filter through their branches, while beneath them was spread a green carpet of rich rank grass. There was no undergrowth, save here and there a clump of blackberry bushes covered with their half ripe fruit, and the sprigs that spring up around those spots where a fallen tree has lain for some time and given protection to the sprouting seed. We found but little to interest us, and the ride soon grew monotonous. A green carpeted grove may be—it is—a very pleasant place on a Sunday afternoon, when the goodie-laden picnic tables spread their inviting treasures beneath the shading branches, but to ride forty miles through such a grove, where the loaded tables and the pretty-faced waiters are absent, can hardly fail to grow tiresome.

As we rode along our ears were greeted by a constant rustling of the grass under our horses' feet. It was caused by the lightning-like darting of myriads of little green and striped lizards, as they scampered out of our path. At times a bevy of quail started up and whirred away into the distance, but as our weapons were both rifles, such opportunities were of no avail to us. We saw no trace of larger game, and we began to think that we might have some difficulty in getting our regular meals, for the crackers we had bought at starting had been all consumed, and they are but poor food at best. Occasionally, though not often, the road led us along the edge of park-like glades, where the blackberry bushes grew thickly. On the ground, or several inches above it, appeared the large plum-shaped fruit of the Mandrake plant, its yellowish plumpness appealing strongly to the palate of Nichols, tempting him at intervals to dismount and fill his pockets with the medicinal apples. At one spot we passed for nearly a mile through an opening which had been made in the woods by a hurricane. The stout oaks, varying from one to three feet in diameter, had been snapped off about three feet from the ground, and many of them were torn up by the roots. Fortunately for us no such storm arose during our journey.

Late in the afternoon a thunderstorm came up. A small cloud suddenly obscured the sun, cutting off the struggling beams hitherto filtering through the tree tops. In a few moments the entire heavens were overcast with dark rolling clouds, and a gloom like that of midnight enveloped the woods, until it was with great difficulty we could distinguish the road. Frequently we were forced to stop and examine the trees carefully in search of the "blazes." A long, low peal of thunder shook the forest, and a wind, slow at first, but rapidly increasing in fierceness, swept through the woods, bending the trees like willow wands, and filling the air with a sad, sighing music. A vivid flash of lightning, followed almost instantaneously by a deafening crash, and then the big drops came pouring down, and in less time than it takes to write it both of us were soaked from crown to sole. Flash

followed flash, and peal followed peal in quick succession, the rain coming thicker and thicker, and the murkiness of the atmosphere growing deeper and deeper, until at last we were forced to draw rein from inability to distinguish the road. Our horses, even, were affected by the scene, and kept snorting and prancing in terror. Suddenly a flash of bluish-colored fire was seen to start from the top of a tree not ten yards distant, and run in a spiral course to the ground, where it disappeared in the earth. At the same instant a heavier peal than had yet been heard reverberated through the woods, and a disagreeable smell, resembling burning brimstone, reached our nostrils, as if to render the scene still more hellish. The rain ceased, or only dripped from the soaking leaves above, the sky cleared, and in less than half an hour from the first sign of storm, the sun was shining brightly on a soaked but bejeweled forest, his glinting rays as they played among the leaves lighting the pearly rain drops until the leafy panoply seemed resplendently sprinkled with diamonds.

As soon as the sky cleared we resumed our journey, first stopping to examine the tree which had been so suddenly smitten. It was a tall oak, about sixty feet in height, and from top to bottom, following spirally around the trunk, was a charred brand, some eight inches in width. We saw many trees afterward in that same forest bearing similar death marks.

This storm promised to render our night's camping disagreeable, for it was only a short time to sunset, and we were not sufficiently skilled in woodcraft to evoke a fire out of soaking timber. However, there was no help for it. Less than an hour after the cessation of the storm the approach of night warned us to look out for a camping-place.

There was not much choice as to location, and coming to a spot where there was a slight rise in the ground, we rode off for some way to the side of the road and made a halt.

How well I remember my first camp in the woods! It was years ago and far away from where I now write. It was on the bank of a crystal lake, in that portion of the Adirondack wilderness known as "John Brown's Tract." A dark background of evergreen trees, in the shadow of which was a picturesque bark hut, with a blazing fire in front and couches of hemlock twigs within. A string of trout lying on the sand undergoing the cleaning process, and a noble buck hanging horns downward from a branch near by. I shall never forget that scene however thickly similar scenes may be impressed on my memory. There was little resemblance between our present camp and that long gone first one I could not help recalling. The evergreens, the hut, the fire, the trout, the buck were all absent. The twig couches we could still provide, but instead of hemlock, we were constrained to content ourselves with the scraggly tips of oak underwood, the leaves still soaking with rain. However, we were too tired to be very fastidious, and after arranging our blankets and consuming a pailful of half ripe blackberries we had picked on the route, we were not slow to betake ourselves to rest.

Ah! my reader, did you ever try to sleep under such circumstances? If so, you may remember that no sooner had you assumed a quiescent position than you felt something crawling over your skin. At all events *we* felt it, and found it impossible to sleep until we had divested ourselves of our clothing and picked some scores of ticks from our cuticles. I suppose all who are interested in wild sports are acquainted with the wood-tick. He makes the acquaintance of every one who passes an hour in the woods of the Southwest, and always leaves some souvenir by which he can and will be remembered. I have fought the black flies of the Adirondacks and have feasted the chigas of Texas, but I never met anything so disagreeable, to my notion, as the wood-tick. Their size makes them easily felt as they crawl over the skin, and the wound they leave behind them is often intolerable in its "itchiness."

Having annihilated the last tick we could find, and seen that our rifles were ready for any emergency, we again lay down and were soon in the arms of the drowsy god. "Tired nature's sweet restorer, balmy sleep," needs no better wooer than a long forest ride. Limbs that have for ten hours crossed a saddle, and eyes which have scrutinized the changing scenes of thirty miles of wilderness, soon overcome the most nervous wakefulness. The chirping of the tree toads and the mingling voices of myriads of night-loving insects, the lonely cry of the whippoorwill, the occasional hoot of an owl, and the noise of our ponies cropping grass, could not hinder the eyes from closing and the mind from sinking into forgetfulness. In less than ten minutes we were fast asleep.

GUY RIVERS.

[TO BE CONTINUED.]

Fish Culture.

[FROM OUR REGULAR CORRESPONDENT.]

OUR WASHINGTON LETTER.

AN INTERVIEW WITH PROF. BAIRD—CULTIVATION OF CARP—THE NATIONAL CARP HATCHING ESTABLISHMENT—SOME FACTS ABOUT THEIR HABITS, CULTURE, VALUE, ETC.

WASHINGTON, D. C., April 22, 1878.

PROF. SPENCER F. BAIRD, the U. S. Commissioner of Fish and Fisheries, received your correspondent, in his office at the Smithsonian Institution, with that courtesy and hearty welcome which characterizes his daily intercourse with men in every condition of life. His office on the second floor of the building, just beneath the main tower, is a comfortable room, plainly furnished, but on the walls, tables and shelves are evidences of the valuable work performed by Prof. Baird and his energetic assistants in the propagation of food fishes. Life-size plaster casts of salmon, mackerel, carp, shad, bass, and almost every fish found in our rivers or along our coast, adorn the walls of this and the adjoining rooms. Models and drawings of various improved apparatus, used in the hatching establishments, are scattered about, and a few volumes, composing what may be called a working library, occupy a neat case in one corner of the room. Prof. Baird himself is a pleasant gentlemen, large in frame as well as intellect. He is a man of great personal magnetism, always polite, and gifted with a ready command of language, as well as an agreeable tone of voice. He is about fifty-five years of age, of light complexion, and a close-cut beard, just tinged with gray, covers his face. Inviting your correspondent to a seat assigned to visitors at the end of his table, he kindly inquired after the folks in the home office, and expressed his gratification at the healthy and prosperous condition of FOREST AND STREAM, which he always reads with care. After returning my thanks I spoke of the national carp hatching establishment, now being prepared on the monument grounds just south of the Executive Mansion, in this city, knowing it would be of interest to your many readers in all parts of the country to have a description of that establishment, and the purposes of the government commissioner in regard thereto. I do not think I could do better than to tell the story in the language of Prof. Baird:

"Well," said the Professor, in reply to my question as to what progress was being made with the work, "Congress a short time ago gave us an appropriation, as you will see here" (handing me a copy of the "Deficiency Appropriation Bill," in which I read the following):

"For adapting the ponds in Monument Lot, in the city of Washington, to the culture of carp for distribution throughout the United States (the use of which lot, for the purpose in question, being hereby granted to the U. S. Fish Commission) the work to be done by the engineer in charge of public buildings and grounds, according to the plans of the U. S. Fish Commission, $5,000 to be available immediately."

Continuing his answer, he said: "Of course we took advantage of favorable weather, and have pushed the work forward so that we hope to have the ponds ready for the carp by the first of April, and will begin the distribution of them next fall. Should we be as fortunate as we hope to be, there will be several thousand for distribution at that time.

THE CARP

is particularly adapted to warm and sluggish waters of the United States, and the warmer the water the better the fish thrives. Among the fish living on plants, it is the most desirable on account of its rapid growth and its great value for the table. In northern ponds and streams they hibernate through the winter, and during that time gain nothing in size or weight; but in warmer waters of the South they do not hibernate, and consequently are growing all the time. They thrive, however, in all waters, from deep cool lakes and rapid streams to the merest puddles and ditches. They usually attain a weight of about three or four pounds in as many years, and are said to attain an average weight of from five to ten pounds, and even more, according to the waters inhabited. There is no other species of fish that promises so great a return in limited waters. Being a vegetable feeder it thrives well upon aquatic vegetation alone, and is especially fond of water cresses and similar succulent plants. Its diet is varied, however, and it devours worms and insect larvæ voraciously. Among the qualities which make it desirable to the pisiculturist are the following: It is very easy to produce from them a great many young; the fish is very hardy and has but few wants; and, finally, there is scarcely a fish with whose conditions and mode of living we are so well acquainted, as it has been raised for centuries, and has almost become domesticated. It grows very tame after a time, and may be taught to eat from the hand, to come to the side of the pond the culturist desires, and to follow him along its edge. The carp in the fish kingdom represents the cattle, sheep, deer and harmless herbiverous animals of the animal kingdom, while the black bass, pike and trout represent the lions, tigers, wild cats and voracious carnivorous members of the latter kingdom.

We have now in the ponds of the Maryland Fish Commission, in Druid Hill Park, near Baltimore, three varieties of this fish, all from the Danube and its vicinity. First, there is an improved variety of the ordinary scaled carp (*Cyprinus carpio*), the flesh of which is firm and flaky. The second is known as the mirror carp (*Cyprinus rex-cyprinorum*), almost entirely destitute of scales, having only a lateral line of them down each side of the body. The third is the leather carp (*Cyprinus nudus*) or naked carp, entirely destitute of scales, the skin being as soft as the finest velvet. The two last named are the best varieties, the leather carp especially, which ranks in Germany with the brook trout in this country, and sells for a sum equal to about twenty-four cents of our money per pound. The scaled carp is raised in Mecklenburg, Holstein, Bohemia and Silesia, the mirror carp in South Germany, and the leather carp principally in North Germany. It is believed that the fish was introduced into Europe from temperate Asia, and has spread from the Danube over the whole of Middle and part of Southern Europe. In its domesticated condition the carp has developed very many varieties, some of which are improvements in quality over the original type, while the contrary is true of others.

The following is a recapitulation of the good qualities of the carp: Fecundity and adaptability to the processes of artificial propagation; living largely on a vegetable diet; hardiness in all stages of growth; adaptability to conditions unfavorable to any equally palatable American fish, and to very varied climates; rapid growth; harmlessness in its relations to other fishes; ability to populate waters to their greatest extent; and finally its good table qualities.

A circular of the *Deutsche Fischerei Verein*, issued in 1876, shows that in Northern Silesia, on the estate of Baron von Rothschild, puddles two or three feet deep in the villages are used for raising two year old carp for stocking distant waters. From this resource a single estate realized what would amount to about $55 per American acre of pond surface.

Correspondent—I have noticed, Professor, that some amateur fishculturists seem inclined to disapprove of carp culture, and declare it is not a desirable food fish.

Prof. Baird—Yes, there are some who have probably never seen a genuine carp, who declare it is a fish of no value. As an illustration, I may mention that I recently received what is called a carp, taken in the Hudson River, but it was nothing more than a goldfish escaped from some pond, and reverted to its first condition. Other specimens of what are called carp in various parts of the United States, were only suckers, chubs and the like, of no value whatever. The genuine carp has a little barb or feeler extending from each side of the mouth, while our so-called carp have not, and there is as much difference between the flesh of the two as there is between that of an ordinary sucker and brook trout. Even the English carp is a poor kind of fish, and it is only within the past few years that England has given attention to the propagation of the finer varieties from the Danube, such as we now have in Druid Hill Park. Our first importation of carp proved to be of a poor variety, and they were not propagated at all; but subsequent importations were of the more valuable species, and it is from them we have raised several hundred. You see, if we can put into a muddy pond food fish which will thrive and grow rapidly there is so much clear gain.

Correspondent—How does it rank as a game fish?

Prof. Baird—It affords no sport whatever to the angler that I am aware of, but its flesh is delicious.

THE HATCHING ESTABLISHMENT

in this city is composed of two ponds, each covering an area of about six acres in the monument lot, and within a few hundred yards of the Potomac River. One of the most valuable considerations is the power to regulate perfectly the supply and discharge of the water. The ponds or lakes were constructed out of a portion of the old canal and a neighboring declivity in the monument grounds by Gen. O. E. Babcock, when he held the position of Commissioner of Public Buildings and Grounds under President Grant. The natural formation of the ground rendered their construction so easy and easy and inexpensive that they were made as an ornament to that part of our public grounds under the name of "Babcock Lake." The body of water is divided into two equal parts by Meridian avenue, which extends from the Executive Mansion to the botanical gardens near the capitol, through the President's, Monument, Agricultural, Smithsonian and other public grounds.

A few months since Prof. Rudolph Hessel, an assistant to Prof. Baird, who has had much experience in the cultivation of carp in Germany, noticed that these ponds were admirably adapted to the propagation of the fish, and that they could be converted into a first-class hatching establishment without any great expense. If they had been constructed for the purpose they could not have answered it better, with a little additional labor rendered necessary to grade the bottoms, so that the water can be drawn off from either at will and the fish secured for distribution.

CONSTRUCTION OF THE PONDS.

In an establishment for the breeding and distribution of fish of this character it is, of course, necessary to have it so arranged that any number required for stocking particular waters may be secured and placed in proper tanks for transportation with as little delay as possible, and without the risk of injuring the fish. To accomplish this purpose, the portion of each pond bordering on Meridian avenue, above described, has been excavated to a depth of six feet, and at the lowest part of each a substantial pier of brick and Ohio stone, laid in the best hydraulic cement, has been constructed. From these piers a sewer extends some distance, connecting with one of the large sewers of the city in that locality, through which the ponds can be emptied. Surrounding these piers, and beneath the surface of the water, is a brick wall two feet in height, inclosing a space fifteen by twenty-five feet at the deepest part of the pond, so that when the water is drawn off the fish from all parts of the pond gradually follow it until they collect within the brick inclosure described, and are there dipped out with nets. The outlet from the ponds through the piers is so arranged by a system of sluice-boards placed on top of each other that the flow of the water can be controlled by one person, the waste always being from the surface instead of from the bottom so the fish cannot escape. The ponds will be so graded at the bottom as to remove all depressions from which the water cannot be completely drained, they being very objectionable, since a great number of fish are lost in them, and the removal of predaceous fish is prevented. The ponds have an average depth of 4½ feet, and the water supply for them is through a three-inch main from the Washington Aqueduct. By this they can be filled to the required depth. Besides, several bountiful springs exist near the margin of one of the ponds which constantly keep a supply of fresh water flowing therein.

THE BREEDERS.

In one of the ponds is an island of about half an acre upon which an embankment three feet high has been raised forming the breeding pond, which will be divided into three different sections for the breeders. The young fish will also be kept in three different sections until able to take care of themselves when they will be placed in the larger ponds to await the time of their distribution. The chief difficulty in rearing carp is that a large number of ponds is absolutely necessary in order to meet the expense of culture and make the time and labor bestowed upon it remunerative. In our national establishment we will have no such difficulty, as we have a complete system of ponds arranged for the breeders, young carp and mature fish, all so constructed that they can be easily emptied, and any voracious black bass, pike or other destructive fish removed, the black bass and pike especially being the most dangerous enemies of the young carp.

In the breeding ponds it is not necessary to introduce much fresh water during the spawning season, as the water in them would thus become too cold and retard or even completely frustrate the spawning and hatching process. During the spawning season (from about the middle of May till middle of July) the fish delight in warm brackish waters exposed to the sun. The females while surrounded by the males paste their eggs to water plants, and it is estimated that a medium sized fish will produce from 200,000 to 250,000 eggs annually. The ponds for the breeders can be kept absolutely clear of the predacious fish. Besides the breeders there will be placed therein a few young carp one or two years old for chasing; old carp are said to be too inactive about spawning time, and the more the water is disturbed the better the eggs will be fertilized.

Three-year-old carp which have attained a weight of between three and four pounds are the most desirable for the table.

Prof. Baird now has about 400 superior carp in the ponds of the Maryland Fish Commission in Druid Hill Park near Baltimore, but it is not his intention to bring them all to Washington. More than half of them will be placed in the ponds above described, but the others will be kept in the Druid Hill Park ponds, so that in case of accident by freshet or otherwise he will still have a supply to fall back upon.

SALMON.

Having obtained the interesting views of Prof. Baird in regard to the carp I next referred to the California salmon culture and inquired what progress was being made in that branch of fish propagation.

Prof. Baird.—I have every reason to believe that the California salmon will be the great food fish of the people of a large portion of the world. Besides having planted them successfully in our own waters we have sent them to the Hawaiian Islands, to New Zealand, Australia and other parts of the world where they are now thriving, and we have applications from Chili, Ecuador and other South American countries, and also from many European countries. Of 500,000 eggs sent to New Zealand last year and an equal number sent to Australia 95 per cent. hatched successfully, and the young fish are now thriving in the waters of those islands.

SALMON IN THE POTOMAC.

Prof. Baird then spoke of several instances where the California salmon have been taken in Eastern waters in which they were planted four or five years ago, and in answer to a

question as to when they might be expected to appear in the Potomac said he had every reason to believe that they would soon appear in these waters as well as in other streams with a rush. They were planted here, in the Susquehanna and various other rivers, about the same time in 1873 and '74, and it was then expected they would return to the streams in four or five years, so he would not be at all surprised at their becoming abundant within a short time. R. F. B.

ALBINO FISHES.—One of our leading fish culturists informed us the other day that Albino trout were quite common in his ponds; and we have since discovered by investigation that albinoism is possibly as prevalent among both salt and fresh water fishes as it is among birds and animals—haddock, rock cod, groupers, butterfish (*E. ornatalibi*), eels, gold fish, and other species furnishing the data. Melanism is common among trout, some specimens being of a very dark blue-black.

PENNSYLVANIA.—Salmon trout have been placed in the headwaters of Penn's Creek; 8,000 California salmon in the river at Renovo; 2,000 of the same in Paddy's Run, and 2,000 trout in Youngwoman's Creek, near North Point.

SHAD IN THE ALABAMA.—The fish from the Alabama River, recently sent to Prof. Baird for identification, has been pronounced by him "a fine specimen of the white shad, although not quite so large as it is found in Northern waters, but representing fully the best products of the St. John's River." This settles the shad question, so far as the fish of the Alabama and Coosa rivers are concerned, and the people of Alabama are to be congratulated on this valuable acquisition to their food industries. The Walumpka *Alabamian*, of a late date, says: "It is estimated that not less than 1,000 pounds of white shad have been caught out of the river, at this place, within the last week. Over 175 fine ones were caught on Sunday. Our market is so glutted with these delicious fish that they are selling for only 5 to 7 cents a pound.

—The Manchester, Mich., *Enterprise* says the eel artificial propagation is a success in the waters of that vicinity.

Natural History.

BIRD NOTES FROM LONG ISLAND.—No 2.

BY FRANKLIN BENNER.

[*Concluded.*]

THE great-crested fly catchers have not been very abundant at Astoria for some years. Nests have occasionally been found in the orchards, but this last spring it became quite common, as many as six or seven nests coming to my personal knowledge. Their screams could be heard everywhere through the orchards and around farm-houses. On this day I watched a pair constructing their nest in an old golden-winged woodpecker's hole, in a dead limb of an apple tree, and upon a bluebird's nest, from which the eggs had been taken some weeks earlier. I concealed myself under a hay rick, at a distance of about forty yards, and observed them for over three-quarters of an hour. They had but just commenced, and in a few moments they both appeared, the female bearing a feather in her bill, which she placed in the cavity. In a moment they were off in the direction of a farmyard, and remained away nearly five minutes, returning by the same way in which they left. Their arrival was announced by the male, who, alighting on a neighboring tree, would utter his harsh shriek, while the female placed the feather or tuft of cattle hair which she had brought in the hole. This was repeated continually; they always left and returned in the same direction, the male acting merely as escort, without doing any of the work.

On the 13th I went to the nest again, and, as I approached, the female flew out and perched on a tree close by without uttering a note. I went up to her, but she flew off and did not reappear again, although I waited for some time. The nest, which contained five fresh eggs, is quite an elaborate one, being made up of a curious selection of materials. It is five and a half inches in diameter outside, and about one and a half inches deep; the bottom is partly of grass, which composed the bluebird's structure, woven in with large chicken feathers and bits of cattle hair, both white and red. The chicken feathers also formed the sides and bed for the eggs, together with cattle hair, a couple of tufts of soft white hair, evidently from some rabbit, a piece of muskrat skin, and pieces of the cast-off skin of a snake. Altogether it is one of the most interesting nests of this bird I have ever met with. A few days later I came upon another, which was being constructed likewise upon an old bluebird's nest, in a knot-hole in an apple tree. There was no very extensive attempt at a nest, only a few feathers. In the bluebird's nest, however, were four of its eggs spoiled, and the fly-catcher had deposited three eggs above these. I left them untouched, hoping to get a full set in a day or two, but when I returned I found all had been laid, but two were broken, and the nest was in a state of confusion and the birds gone. Now, the cause of all this mischief could not be imagined until further investigation revealed another hole in a tree, not twenty yards distant, containing three young mottled owls about four or five days old. The parent bird was perched upon a limb overhead, and blinked down at me as I was trespassing upon her home. She no doubt was the cause of the desertion of the eggs of both bluebird and fly-catcher, for she no doubt, on her nocturnal tramp, found the bluebird early in the spring, and on the increase of her family, made another trip to the larder. From this very hole, where the owls were, my friend, Mr. C. S. Allen, took a set of six eggs of the same bird early in May, and this was evidently the second brood. In April, 1872, I took a set of five eggs, and Mr. Allen has had another set since then from this same nest. There are several places where I am sure to find the eggs of this owl every year. It is very common on this part of Long Island. They have been found in both plumages. In 1870 I found a set of eggs with a gray parent, and the parent of the young spoken of above was red. In 1873 I found six young in New Haven, Conn., where both parents were red, and I watched them until they were able to fly, when I captured five of them, which were distributed around, and, as far as I was able to trace them, they retained the gray plumage. Two which I brought home and kept for a couple of months, and then placed in the Museum in Central Park, retained their gray plumage for over a year, when I lost all trace of them. The majority that are found in Astoria are of the red variety.

On this same day (May 30), while passing through a patch of peas a grass finch (*Poocetes gramineus*) started up from her nest, which was placed in one of the rows and sunk so that the top was on a level with the ground and very neatly concealed. It was almost entirely composed of old pea vines, to which were added a few coarse grasses, and it was sparsely lined with horse-hair. It contained four eggs partially incubated.

June 2d was bright and clear with a cool breeze blowing, and a tempting day for woodland investigation. Several of the discoveries of this day have been mentioned above for the sake of continuity, but there were a few things noted of which nothing has been said. On the borders of a salt water inlet, was a piece of marsh grass not more than forty feet square, in which were four nests of the long-billed marsh wren (*Telmatodytes palustris*) in various stages of construction. As there were only one pair of birds to be seen I judge they must all have belonged to them. Some ten days later I examined these nests again but found only one inhabited and containing five chocolate eggs. These birds are common all through the salt meadows and many of their nests can be found, but only one out of every three is occupied.

A colony of red-winged blackbirds had taken up their quarters along this same stream, and their "conk cheree" note was very decided in objecting to any trespass. The nests, of which there were about a dozen, were all placed at least two feet from the ground, and some as high as six feet. The lowest were in wild rose bushes, the others in swamp willows. In a swamp not a mile distant they nest in the grass as is their usual custom. Nearly all the nests contained eggs, the majority of them freshly laid; their size varied very much, some sets being very much smaller than others. While going through a rather solitary piece of woods and looking up I spied a green heron (*Ardea virescens*) looking down from her bundle of sticks and on the alert to depart with a farewell croak. On climbing the tree I found five eggs just on the point of hatching, three of them in fact being already picked. Nearly every piece of woods around contains a nest or two of these herons, and likewise of the night heron, but the latter, which five or six years ago were very abundant, are rapidly leaving, and in a short time there will be none left. The shore in the vicinity of their breeding place is being used for docks and other purposes, and persons are continually digging for clams, etc., so that they are unable to obtain their food without going a long distance in search of it, and this has undoubtedly had as much influence in driving them away as the persecution of so-called sportsmen.

A red-eyed vire (*Vireo olivaceus*) had just laid one egg in a nest found, and a lot of young crows were on the point of leaving their home.

June 4.—Found another nest of the least fly-catcher containing four fresh eggs. These were hatched on the 17th, and in eight days the young were able to leave the nest.

July 4.—A set of young catbirds left their nest, and on the 18th the parents were carrying materials for a new one.

On July 27, the last day to which my notes have been brought, a brood of young robins were taking their first lesson in flying when one more unfortunate than its fellows fell to the pavement and was instantly killed.

For Forest and Stream and Rod and Gun.

HABITS OF THE RUFFED GROUSE.

THERE has been so much written about the ruffed grouse that it may seem to the general reader that nothing more remains to be said, but having seen very few articles upon the subject that gave this best of game birds any credit for its many good qualities without qualifying the statement with some slur or innuendo that, to say the least, "condemns with faint praise," I propose to tell you "what I know about grouse."

I am a plain, unlettered countryman, brought up among the green hills of New England, the home of the noble bird I love so well. My pen is but a poor stub at best. Had I but the inspiration of that glorious sportsman, "Frank Forrester," then might I hope to express some portion of the feelings that stir my soul to its inmost depths, when on some beautiful October morning, with eager dogs and trusty gun, I seek their favorite haunts. I feel that I shall come far short of doing justice to the subject, as the high-flown words and well-rounded periods that read so well are entirely beyond my reach.

There! having fired my shot I feel better, and we will now proceed to business. Let us visit the ruffed grouse in his native "wiles" (I think that is original). In the first place, although I presume that you are aware of the fact, I will state that they are the most wily and cunning bird in the world; full of tricks and dodges to cheat the honest sportsman out of his dinner. But the very fact that they are so crafty only adds to the enjoyment and gives a zest to the pleasure that is not found in the pursuit of any other bird. I could fill columns with the story of my wrongs; of how I have been cheated and fooled by the sly witches when they could not g^ away. Perhaps the relation of a few instances may prove interesting; they certainly were to me, and I do not recall a single one in which admiration for their skill and good judgment did not much more than repay me for my disappointment at their escape. In the fall of '59 I lived in Connecticut and hunted the whole season through. About half a mile from my house, and in a direct line with a famous hunting ground that I was in the habit of visiting quite often, was an alder run that nearly always contained one or two birds. There was a heavy stone wall running the whole length of the piece, near which I had started an old cock grouse several times, and had not succeeded in getting a shot. I had never followed him up, as he invariably crossed a stream at the lower end of the run that I could not get across without going some distance. One evening, on my return from a rather unsuccessful tramp, my dog came to a point near the wall. Thinking how easy I had him this time, I walked in forward of the dog, when, like a young hurricane, this vile bird rose and gave us to understand that he was going, like a rocket, straight for his cover on the other side of the stream, instead of which, after attaining an elevation of about twenty feet, as I was complacently taking in the entire situation and calmly waiting for him to get away the proper distance when I would deliberately cut him down in his pride, he suddenly, and with a twist of his tail that was very aggravating to my feelings, made a swoop downward within a foot or two of the ground, and left me on the other side of the wall. I still comprehended the entire situation, but not with the aforesaid calmness, without which no one can ever hope to successfully cope with an old cock grouse. A few days later, with the remembrance of my defeat still rankling in my bosom, I concocted a plan to get the best of that bird; in fact, the whole of him. I placed my little brother at the head of the run with the old dog, and, giving him my watch, told him to wait just ten minutes, and then start with the dog and beat through the run toward me. I very cautiously went round to the place where he invariably crossed the stream, and was congratulating myself upon my successful strategy, when a whoop from my brother gave me warning of a point. I signalled him on and decided that I would lay out the old cock just on the bank of the stream, about twenty-five yards to my right. A confused flutter in the brush, and a loud "Mark" from the boy, started my pulse a little faster, and when I caught sight of the bird my blood fairly boiled—*he was going the other way.* He started out of a little clump of bushes and flew directly at my brother, within three feet of his head; he made a grab at him and missed. About the same time he missed my watch, and, for aught that I know to the contrary, as I have never seen it since, that bird wears that watch, and shows it to admiring crowds of his friends, and tells them how he got ahead of my time.

This was many years ago, but I still retain a vivid recollection of the scene. I trust that I have grown wiser since, and I think that the birds have too, as they still succeed in getting away with me quite often. Only last fall, while out with a companion for a day's sport, we started one of those crafty birds several times. Each time there was some plausible excuse why we did not bring him to bag. There would be the trunk of a tree in the way, or a rock, and at last we had a dead sure thing on him in a hazel thicket, with both dogs on a staunch point on one side, my companion at the end where he must show himself, myself opposite the dogs, forming a triangle, with the bird in the centre. Of course, with "straight powder" no bird could escape this situation. Any one can see at a glance that his days were numbered. Brother sportsman, sympathize with us in our great bereavement. That bird, in the language of the immortal Webster, "still lives." He burst from the thicket about twenty feet from my companion, and probably did not know that he was there until he reached the top of the brush—like the fellow that was going to jump from the top of a building into a pile of shavings, but when he got half way down some one shouted, "Glass in the shavings," he immediately stopped and went back. Just so this bird went back on us. He pitched suddenly to the ground, and, alighting behind a big rock, ran for his life. We heard him a moment after rise from a safe distance, and caught a glimpse of him as he scaled up the side of the mountain, where we could not follow. My companion expressed himself perfectly satisfied—was glad he escaped—so smart a bird ought to live. I did not argue the point with him, as there was a far-away look in his eye, and an expression about his mouth that made me think that comments from me were uncalled for. A few days later I had occasion to remember with profound satisfaction my "golden silence." We were beating down an alder run that swung round in a half circle from a piece of large timber. I was on the inside, and we had nearly reached the lower end when a wary old bird sprung from below us, and started nearly toward me for the timber. When opposite, and not more than ten feet from me, I turned slightly to get in good position, at the same time saying to my companion, "This makes eight" (we then had seven in the bag). Then this wretched bird, that I thought so simple, quicker than thought turned and made a dive straight at me, and passing within three feet of my head, plunged through the middle of a small pine tree behind me. I was so worked up that I did not even hit the pine tree when I fired, and to this day, although every other incident is strongly impressed upon my mind, I cannot recall the direction in which my gun was pointed at the time of the discharge. But, alas! for the gallant bird; he had played his last trick. My companion stood just in the right place, and there was no sheltering place. The scalp of the gamy bird now adorns the belt of his deadly foe. I felt very grateful to my companion in that he made no invidious remarks upon the occasion.

We have since talked it all over, and I find that in his forbearance he was only reciprocating former action on my part. Thus you see that virtue sometimes has its reward. The above are only a fair sample of many, very many, similar instances that these eyes have beheld. And, reader, although you may be skeptical upon the point, do not deny me the right of my belief, that for sly manœuvres and successful tricks, an old cock grouse will discount Joey Bagstock and the Heathen Chinee. RUFFED GROUSE.

FERRISBURG, Vt., March 24, 1878.

Yesterday a warm south wind was blowing, and I saw a purple finch, and on the lake a vessel making her way northward, and robins and song sparrows were singing merrily. To-day a real winter snow storm with a howling north wind holds possession of our land, and the poor birds are in doleful dumps in the shelter of barns and thickets. What a deal of interesting information you are publishing concerning ruffed grouse. But I think J. P., of St. Paul, is wild, or else the Minnesota partridges have most remarkable habits. I've a mind to start a theory. How would this do? The partridge hammers with his bill on a hollow tree, after the fashion of a woodpecker. I have never seen him do it, but doubtless he might if he chose, quite as easily as to pound a log with his wings—which I never saw him do either, but I have seen him drum on a rock. As to alighting on trees or on the ground when flushed by a man they are as apt to do one as the other here, except toward nightfall and there is much snow on the ground, when they usually "tree," or when flushed by a dog that pursues them barking they almost always take refuge in a tree. I believe. I am much gratified to learn that I am not the only one of those who attempt it who cannot bring down the ruffed grouse in his flight oftener than once in —— times, that is to say, not always every time. To tell the honest truth, the shot I have expended on them would probably many times outweigh all the partridges I ever bagged. But I will keep trying, it amuses me, and it doesn't hurt the birds much.

AWAHSOOSE.

CORNING, N. Y., March 23, 1878.

EDITOR FOREST AND STREAM:

Lest the subject might be forgotten, I will contribute my experience in reference to the female partridge drumming. While in St. Lawrence Co. in 1867 I shot a partridge on a drumming log, which proved on dissection to be a female. As I found none other there, and the drumming being repeated several times before I could get sight of it although I was within three rods, I concluded that she must have done

the drumming. As some unhealthful or unnatural excitement will cause the hen to crow, and I have seen one hen trying to render male services to another hen, I see no reason why like influences might not cause a female partridge to drum.

Speaking of Albino deer, it might not be out of place to state that a white deer was killed in the Adirondack region near Cranbury Lake by a young man named Marsh, who was hunting in company with Jas. McKee, Jr., of Edwards, N. Y., in the fall of '75. Mr. McKee requested me to confer with some taxidermist about preserving it, but what disposition was made of it I have not been informed. D. C. M.

LINNEAN SOCIETY.—At the meeting of the Linnean Society, April 20, a dozen members were present. Mr. George N. Lawrence was elected Honorary Member. Papers were read by Mr. John Lawrence on the Pilgrim Islands in the St. Lawrence, and the birds found breeding there. The secretary read a review of Robert Ridgway's "Ornithology of the Fortieth Parallel." Also the following communication from H. A. Purdie, of Boston, relative to a previous paper:

"I read with much interest the Society's discussion on the nests of *empidonax traillii* and *acadicus*. May I ask (referring to the eggs of '*traillii*' found at Great Manan by Mr. Pearsal) what 'nearly white' means? Does this mean that the eggs were not spotted at all, or that the usual *creamy* tint was wanting, though the surface was normally spotted with reddish? As but one species of this genus (*E. forsillus*) is now recognized as extending from the Atlantic to the Pacific coasts, it is interesting to know if both in Grand Manan and Dakota it sometimes produces unspotted *white* eggs. The nests at least have much varied, *pusillus* building in the West an *aestiva*-like structure, *traillii*, in the East, a loose, bulky, *cyanospiza*-like home. But, if I am not very much mistaken, the bird building in hollow trees in California is *E. difficilis*, now considered a good species. At any rate, *difficilis* does so breed, and if *pusillus* also, it will be a very interesting fact. Recently taken and thoroughly identified nests and eggs of *E. flaviventris* are a great desiderata at the present moment. The Smithsonian Institution has three sets labeled *E. flaviventris*, one with nest-eggs *spotted*, collected by Mr. Boardman at Calais, Me., or its vicinity; the other sets from Halifax, N. S., or Grand Menan, with eggs *unspotted*. But Messrs. Ridgway and Henshaw have lately written me that these two sets strongly resemble eggs of *E. minimus!*

THE SPARROW VANQUISHED AT LAST.—We all know that the sparrow is a regular prize-fighter, who can whip anything feathered of his weight and inches. His prowess is not only historical, but self-vaunted; for does not the pugnacious fellow admit his own murderous deeds in the nursery rhyme, where it reads:

"Who killed Cock Robin?
'I,' said the sparrow."

But the battle is not always to the strong. The tide of victory sometimes sets the other way, as in the instance which our Salem correspondent relates below. The gentleman in genteel dress of blue and buff, it seems, proved too much for the "rough" in rusty brown. Occasionally the bully is mistaken in his man. We quote:

"MR. EDITOR: Last Wednesday morning a pair of blue birds were about my bird house. Soon appeared a troop of sparrows and a row occurred, in which a single sparrow and a blue bird had it out, and I am happy to say the blue bird won, and the sparrows, all of them, soon cleared out. That they are pugnacious, this fact proves; that they are more so than some natives, particularly the swallow (*T. bicolor*) I do not mean to imply; but, in our section of the country, I think they might be dispensed with. Should think the starlings described in last issue by R. O'C., of Dublin, were much better birds to import, if necessary to do so at all, which I question.

Yours, R. L. NEWCOMB."

BOOMING OF THE BITTERN—*Editor Forest and Stream.*—In one of Thoreau's essays it is stated that the booming of the bittern, with which most residents in the country are familiar, is produced by the bird by first sucking up a quantity of water and then holding its head up and ejecting it in successive spurts, uttering at the same time its peculiar cry, like the driving of a stake. Can any of your correspondents confirm or disprove this statement? I never but once saw the bird in the act of booming, and then at too great a distance to see the spouting of water from its bill, if there was any; but I plainly saw a violent jerking of the head and neck at every cry.

Chicago, April 2, 1878. H. W. T. E.

[This is a very old notion, and one which has been confirmed by no recent observations. A similar belief was that the bill of the bird was put inside of a reed to increase the sound. Mr. Endicott, in his admirable article on this species, says: "The truth is, of course, that the bird uses no means to produce its bellow but its own organs of voice."—ED.]

SPRING ARRIVALS—*Fort Hamilton, L. I., April* 6.—The following species are reported: Feb. 26, bluebirds. I believe these have been here the whole winter. They were heard in January in Montclair, N. J. March 2, red-winged blackbirds; March 4, cow buntings; March 7, crow blackbirds (*Quiscalus versicolor*); March 7, pewees; April 1, fish-hawks; April 5, barn swallow. In your last issue I see an account of a cardinal grosbeak seen in Central Park. Two years ago my friend, H. A. Wheeler, obtained one on Staten Island in January. He supposed it to have been an escaped bird. Your correspondent also speaks of song sparrows as early visitors. There is not a day of the year but they can be obtained here. D. L. B.

THE EUROPEAN STARLING—*Editor Forest and Stream*—Seeing in your valuable journal the opinion expressed that the European starling is a singer, and that being not in accordance with my limited observations of these birds when in Europe, I addressed the inquiry to the well known ornithologist, Howard Saunders, Esq., on this point, and here you have his answer: "Starling singing! No; no real song, but he *sometimes* whistles half a bar, and then breaks down, and is a good imitator of a whistle or squeal. I heard one on my house at Reigate continually repeating the squeal of *Milvulus ictinius* (kite) long after my tame bird had gone to the Zoo (Zoological Gardens, London)." T. M. B.

Boston, Mass.

EARLY BIRDS.—A Painsville, O., correspondent writes: 'April 7, while two of our citizens were taking a stroll, their setter came to a point on a brooding woodcock. One week later the young were found to be hatched and gone. Was not this early for woodcock? ANO."

ARRIVALS IN CONN.—*Milford, April* 12.—Our black martins have again established themselves in their old quarters. Last year it was the 21st of April, being earlier this year than before in five years. QUILL DRIVER.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

HARDY AZALEAS.

THE cultivation of this beautiful tribe of plants is not so general in this country as it should be. We have several fine species inhabiting our woods known as "honey-suckles," and producing that curious growth on their leaves caused by the puncture of an insect known as "May-apple;" and it is probably on account of their being natives that we so lightly esteem them, as well as so many other gems of our native flora, although abroad it is considered as furnishing more floricultural treasures than any other country. Experience has taught us that formerly it was almost useless to cultivate native plants, shrubs and trees for sale, as, when offered, a contemptuous shrug of the shoulders, and the expression, "Why, they grow in the woods!" was all sufficiently condemnatory, and the Ailanthus was taken in preference to the Tulip tree, and a Hydranzea in preference to an Azalea or Kalmia; and yet if, the Azalea was one of the Chinese varieties it would sell readily and be universally admired.

It is a pleasure to observe that a change has come over the public in this respect, and we have no doubt that the beautiful groups that adorn our principal parks and country seats have a great deal to do with the estimation in which they are now held. Our principal nurserymen grow them in large quantities, and some, like the Messrs. R. B. Parsons & Co., and S. B. Parsons & Sons, of Flushing, make specialties of Rhododendrons, Azaleas, Kalmias, and other similar plants. Our native varieties are all well worthy of cultivation, and though it is somewhat difficult to transplant large plants with success, young plants about six inches high, if taken up carefully and planted in nursery rows in the garden for a few years, will make good plants ready for transplanting into the shrubbery, or planting in groups as individual taste or necessity may dictate. It is better, however, to obtain them from the nurseries, where they are raised from seed, and, being often transplanted, are furnished with a good stock of roots. The earliest to bloom of our native species is A. nudeflora. This is very common; grows from four to six feet high, flowers in May and June before the leaves are produced, and from growing in moist, swampy places, is generally called "Swamp Honeysuckle."

A. viscosa is also a lover of swampy ground, and grows from four to ten feet high, bearing in June and July large clusters of fragrant white, rose-colored or striped flowers.

A. arborescens is a native of the mountains of Pennsylvania and the Blue Ridge in Virginia. It grows from five to fifteen feet high, the flowers, which appear in June, are large, fragrant and rose-colored like A. viscosa, make their appearance after the leaves are developed.

A. calendulacea grows on the mountains of Pennsylvania and the Carolinas, and ranges from three to ten feet in height. It bears in May a large profusion of large, showy flowers, of various shades of yellow, orange and flame-color, and is one of the most showy of the genus.

As these varieties are all liable to sport in color, even in their native state, advantage was early taken of this tendency by European nurserymen to produce an immense number of varieties by cross fertilization, crossing each species with the other, and again crossing these hybrids with each other, using in the process another species, A. pontica, a native of Turkey, to aid in the operation. The Belgian nurserymen have been especially successful in this, so much so that the hybrid varieties they have given to the world are universally known as Ghent azaleas. The hybrids produced are very beautiful, comprising all shades and combinations of color in white, yellow, orange, copper, flame-color, rose, crimson, brick-red and purple, many of them being beautifully striped as well. All who visited the display made by the Messrs. Parsons at the May exhibition of the N. Y. Horticultural Society, at Gilmore's Garden, last season, cannot but remember the fine specimen plants, as well as the gorgeous colors of the beautiful groups of these plants, there exhibited. Many of the finer sorts are grafted on strong growing stocks, and are perpetuated by name.

There are also some other species of Azaleas which, though generally cultivated in the Greenhouse, prove to be tolerably hardy, especially in dry, well drained soils. A. amœna is a very neat growing sort, with bright, rosy crimson flowers and small, bright, evergreen leaves. A. indica alba is also quite hardy in some localities. There are some very large specimens of it to be found in Greenwood, and no plant can be more chaste and effective for cemetery purposes. A. phœnicea and other species and varieties from Japan may prove hardy also; if so they will be valuable additions to our list of ornamental shrubs.

PALMS AS HOUSE PLANTS.—*Land and Water* has this to say of house plants:

The India-rubber plant, *Ficus elasticus*, is a splendid room plant. Its large, thick, leathery leaves, hold and handsome in appearance, are uninjured by dryness or dust, or change of temperature; it lives contentedly, drinking in water through its roots largely and revelling in occasional sponging of its leaves. It is a rapid-growing plant when it has room for its roots, and even when it has become pot-bound, it will maintain its leaves green and healthy for a long time if kept well supplied with water. But there is always danger of overdoing in watering, and many a plant is lost through this cause. An India-rubber plant should be kept near the window in the light; there it can grow tall, making a leafy ornament, and an inside edging of green to the window-frame. Then there are the greenhouse palms, such as *Chamærops exulta*, *C. fortunei*, *C. humilis*, which do not require fire-heat during the winter (none of the palms will stand freezing.—Ed. P. E.), and can therefore be placed in entrance-halls, corridors, etc. "Palms," remarks Mr. B. S. Williams, in his most useful book on "Stove and Greenhouse Plants," "are among the easiest plants to cultivate with which we are acquainted, their chief requirements being good drainage and an abundant supply of water to both roots and foliage. In the latter case, however, be sure it is clean. Perhaps the greatest error it is possible to fall into in growing palms is to keep them dry at any period of the year." In their native habitats they are found on banks of rivers, almost or quite in the water; others, if at a distance from springs, are yet only found in humid places. Those who grow palms in rooms should keep them standing in pans of water, and be careful to sponge the foliage frequently. As for *Distia lurida*, and its handsomely variegated variety, *Variegata*, they are capital room-plants. The bold leaves stand well for a long time in a dry atmosphere, requiring to be kept cleansed from time to time. Like the palm, it is a water-loving plant, and should not be allowed to suffer for the want of it.

LOUISIANA FOR EMIGRANTS.—*Abbeville, April* 19—*Mr. Editor:* I perceive from your columns, as well as those of other papers, that many people are looking for new homes and desirable localities. Believing that south-western Louisiana, and especially the Parish of Vermilion, offers as many inducements as any country in the world, I present a few of the many advantages it offers for the consideration of those who wish to remove: The soil is very productive and land cheap; the population sparse; the climate delightful throughout the year. Lying along the shore of the Gulf of Mexico, and fanned by its cooling breezes, the summer heats are never oppressive. Snow and ice are seldom or never seen. The health of this region is excellent. Yellow fever has never (but once) visited this portion of the State. The land is mostly rich prairie, of a black, loamy character, producing corn, cotton, rice, sugar-cane, Irish potatoes, sweet potatoes, oranges, plums, figs, bananas, peaches, etc., in abundance. It is a very fine stock country also, the grass lasting nearly the whole year. Vermilion River, running through the parish (county), is navigable for steamboats and schooners throughout the entire year. Good, rich unimproved prairie land can be bought near navigation for from $1.50 per acre to $5. Game of certain kinds is very abundant. The game resources of this region are better known in London than in New York, and it is visited every winter by English sportsmen. One hundred snipe per day is not a big bag to make for a good shot. One man, a "Britisher," was reported to have bagged 1,900 snipe in one day on the marshes of the adjoining parish of St. Mary. Geese, ducks, brant, curlew, etc., by the millions all winter. Woodcock, plover, sandpipers, partridges, snipe and prairie chickens abound; bear and deer few. Further information given on application to W. W. EDWARDS.

A TENNESSEE POULTRY FARM—*Nashville, April* 11.—A farm near this city is to be devoted entirely to fowls. The spot selected seems an excellent one for the purpose, the ground is undulating, dry, sandy, and rocky, well wooded, and a never failing stream running through it, on the banks of which is enough arable land to grow what grain will be necessary to feed them. There are at present on the place 2,800 hens, which number is to be increased to 5,000 when the improvements are finished. At present this large number are running together, but it is the intention of the owner to subdivide the farm into walks or runs large enough to contain each from two to three hundred hens. J. D. H.

—A grand Stock, Agricultural and Mechanical Fair will be held at Nashville next October. The Stock Breeders Association of Tennessee and the owners of the Fair Grounds having agreed upon terms, the buildings are to be repaired and the grounds put in fine order.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 14, 15, 16 and 17. Dr. W. Seward Webb, Secretary.

BALTIMORE KENNEL CLUB.

ANNUAL EXHIBITION OF THE BENCH SHOW OF DOGS.

BALTIMORE, April 23, 1878.

Under the best of auspices, with a most pleasant day and fully on time, by nine o'clock this morning the Baltimore Bench show was duly opened. The building in which the show is held was ample as to room, the Masonic Temple having, if anything, more superficial area than the main room used in Boston. Two stories were used, the large auditorium being devoted to sporting dogs, and a room below to the non-sporting dogs. Mr. Charles Lincoln, the able superintendent,

has by this time so fully mastered all the intricate machinery of a dog show, that in arrangement of kennels, in feeding and watering, in attendance, all the minutiæ are admirably cared for. At an early hour the building was well filled, and a good number of people were at the show during the whole of the day. In judging the dogs a raised platform was used, which answered fully all purposes, and when the critical examination of the dogs took place it was carried on with commendable celerity. The officers of the club, J. Addison Smith, Esq., the President, L. R. Cassard, Esq., the Secretary, with the Executive Committee, Messrs. T. A. Symington, A Jenkins, Jr., M. D. Groverman, R. Stuart Latrobe, and H. S. Zell, were all in attendance, and the representative of the FOREST AND STREAM AND ROD AND GUN had to thank them for facilities given him in collecting information.

Now, a dog show may or may not present special features. Recalling the exhibition given by the Massachusetts Kennel Club, we took occasion to remark that it was the class of native New England setters which was to us the most brilliant part of the show. These dogs were not only excellent, but were in large quantity. We are only too glad to notice that in the Baltimore kennel this most excellent feature is again presented. In the Baltimore show were exhibited no end of likely dogs, and already the care and good judgment taken by the members of the Maryland Kennel Club is asserting itself. In importing our native stock other people may not think as we do, but we must confess to be tired somewhat of seeing those revolving stars which corruscate incessantly at Bench shows, and which are always crowned. Of course it may be said quite justly, "Since those dogs which won the prizes are the best, how is it to be helped?" To this we must reply that we want, if not fresher element in the animals, at least more judges or a diversity of them. Bench shows have followed one another in such rapid succession, at only a few weeks intervals, that prize dogs are quite monotonous creatures. When a dog has won in St. Louis or Boston, why, it had become pretty certain that he would win in Baltimore, or if transported during the next month to San Francisco, that he would win there. We again must declare that we have no fault to find with Mr. Davidson, believing that his ability in regard to judging dogs is only equalled by his sense of right. But how can it be expected that the gentleman can go back on himself?

Now, if any one supposes that the position of a judge at a bench show is an easy one he is very much mistaken. The precipitancy of the thing, the rapidity with which dogs have to be handled and passed on prevent us apparently in our judging of dogs, from having more than one judge, still we think that we will never, in the United States, do entirely away with grumbling, until we have more than one judge to declare as to the merits of the sporting class of dogs. If for non-sporting dogs there are two judges, why not have two for sporting dogs? The judging began on the day of the opening at about 3 o'clock, Mr. Davidson working with the sporting dogs and Dr. Twaddell the fox terriers, hounds and all non-sporting dogs, assisted by John H. Duval, Esq., for the Chesapeake Bay dogs.

In the champion class there was some half-dozen entries, and the winner was Mr. P. H. Bryson's Gladstone, who has been distinguished straight through from her puppy days. A very fine white, black and tan ticked dog, Royal Duke, owned by G. B. Clason, of Milwaukee, was a V. H. C., while Warwick and Crack were both highly commended. In the bitches there were some ten good ones. Floss (No. 13), owned by J. H. Whitman, of Chicago, won the blue, while Petrel, the mother of Gladstone, had a V. H. C., and Magnet, the last year's winner in Baltimore, received a similar recognition. Belle, a promising blue Belton, and Brenda were H. C'd. Now we defy any one to say that they ever saw a better lot of red setters than those exposed in class 2. Mr. G. W. Ggilvie's Ben, a son of Elcho's, took the blue, Berkley, of the St. Louis Kennel Club, by the same sire as Ben, with Race, another 2-year-old from Elcho, were both V. H. Cs. In this class there was a coal-black dog which wasn't red, Irish he might have been, but red he wasn't. In the champion Irish bitches (class 2), they were all good. The St. Louis Kennel Club won the blue with Duck (No. 26). Firefly, belonging to Mr. Gause, of Wilmington, Del., coming in with a V. H. C. We should not forget Nora, owner Mr. R. Neville, of Fauquier Co., Va., who had also a V. H. C., and, we think, ran Duck very close. In the champion Gordons there were two entries, both good. The winner was Rupert, belonging to the Goldsmith Kennel Club, of Toledo, Mr. A. A. Mellier's King getting a V. H. C. In the bitches all good, the Goldsmith Kennel won again with Fan. In fact the whole lot of these Gordon bitches were good ones, and they all had V. H. C's. Sensation was winner in the champion setter class, Mr. Edmund Ggill's Flake getting a V. H. C. Everybody knows Sensation, a really superb dog, but Flake has also claims to attention, as a close built, muscular, well put together dog, with no end of fine points about him. In bitches, if Mr. Ggill was Very Highly Commended with Flake's position among the champion dogs, his fine Rose had a walk over in the bitches. Whether opposed to a single bitch or a whole line of them Rose is very hard to beat.

In the imported English setter dogs, Mr. Clason's Royal Duke was first, Mr. Gause's Warwick had the red ribbon and Crack had an H. C. In the bitches, Petrel—spoken of before, such a good little one—deserved the blue, as did Gift the second prize. There were three V. H. C.'s given, one to Mr. Von Culin's Gllie (No. 47), one to Pickles, owned by Messrs. Whitman and Waller, of Chicago, and one to Brenda, owned by Capt. Foster. As the evening was approaching and light insufficient, the English setter dog puppies were the last judged Pelham, owned by Capt. J. W. Foster, of Leesburg, Va., being first, and Mr. Allie Hardy's Dandy (No. 50) being second.

In Chesapeake Bay Dogs there were a great number of good ones, there being some twenty odd. The winner of the dogs was Tim Crisp; of the bitches, Juno.

We give the winners in the various classes of non-sporting dogs as far as were carried out on Tuesday.

Class 13—Chesapeake Bay Dogs—1st, Rob, Tip Crisp, Brooklyn, Md.; 2d, Rollo, W. F. Levering, Baltimore; V. H. C., Buck, G. N. Fagelo, Baltimore; H. C. Gull, G. Brown, Brooklandville, Md.; C. Jack, C. Brown. Bitches—Juno, N. E. Johnson; 2d, Fan, W. N. McCay, Baltimore Co., Md.; H. C., Pirate Bess, W. S. Isaacs, Baltimore. Puppies—1st, Keener, Dr. J. Wilkine, Baltimore; V. H. C., Sinbad, S. J. Martenet, Jr., Balto; Crook, C. Brown.

Class 25—St. Bernards—1st, Don, J. P. Haines, N. Y.; 2d, Rover, E. Bowen, Balto; V. H. C., Bob, J. C. Steintreuner, Balto.

Class 26—Newfoundlands—1st, Hayes, H. W. Livingston, N. Y.; 2d, Leon, C. T. Crane, Balto.

Class 29—Dalmatians—1st, Spot, J. Peebair; 2d, Ring, same owner; C., Spot, W. J. Montague, Balto.

Class 33.—Black and Tan Terriers—1st, Flora, F. G. Linck, Balto.

Class 34—Skye Terriers—1st, Tom, R. McLellan, N. Y.; 2d, Donald, W. Sanderson, Phila.

Class 35—Yorkshire Terriers—1st, Bright, W. A. Haines; 2d Beauty, same owner.

Class 37—Scotch Terriers—1st, Rob Roy, J. P. Elliott, Balto.; 2d, Dick, J. H. Cottmann, Balto.

Class 38—Toy Terriers—1st, W. A. Haines; 2d, Beauty, same owner; H. C., Flora, J. F. Beard, Balto.

Class 40—Italian Greyhounds—1st, J. Lowry, Balto.

SPECIAL PRIZES.

Classes 68, 69, 70—Best Chesapeake Bay Dog—Rob, Tip Crisp. Bitch—Dido, G. A. Jessup, Langford, Md. Puppy under 12 mos.—Sinbad, S. J. Martenet.

Class 73—Best Scotch Terrier—Elliott's Rob Roy.

Class 74—Best Skye Terrier—McLellan's Tom.

Class 75—Best Black and Tan Terrier—Linck's Flora.

Classes 79, 80—Best Chesapeake Bay Dog and Bitch—Tip Crisp's Flora.

Class 87—Same (short haired)—Tip Crisp's Rob.

The leading gunsmiths in Baltimore had very handsome displays of their very excellent work at the bench show. We can only mention at present, for want of space, the admirable guns exhibited by Messrs. Clark & Snyder. The Parker guns were also on exhibition. A stand was filled with the Remington rifles, and Mr. McCoombs, the well-known gunmaker, had also a fine collection of arms. We trust in a subsequent article to give this exhibit a more extended mention.

ENTRIES AT THE BALTIMORE BENCH SHOW.

DIVISION FIRST—SPORTING DOGS—CHAMPION CLASSES.

English setters, 17; Irish setters, 10; Gordon setters, 6; Pointers, 6.

OPEN CLASSES.

English setters, imported or their progeny, 12; English setters, native, 84; Irish setters, imported or their progeny, 16; Irish setters, native, 22; Gordon setters, 27; Pointers, large, 11; Pointers, small, 15; Pointer puppies, 13; Chesapeake Bay dogs, 18; Irish water spaniels, 2; Retrieving spaniels, other than Irish, 4; Clumber spaniels, 1; Cocker spaniels, 7; Foxhounds, 15; Beagles, 14; Dachshunds, 6; Greyhounds, 5; Fox terriers, 7.

DIVISION SECOND—NON-SPORTING DOGS.

St. Bernards, 4; Newfoundlands, 7; Shepherd or Collie dogs, rough, 10; Shepherd or Collie dogs, smooth, 2; Dalmatians, 4; Bull dog, 2; Black and tan terriers, under 11 pounds, 1; Skye terriers, 6; Yorkshire terriers, 2; Scotch terriers, 2; Toy terriers, 3; Pugs, 3; Italian greyhounds, 2; Miscellaneous, 1; Native setters, any strain, 15; Imported setter dog, any strain, 3; Imported setter bitches, any strain, 7; Pointer dogs, 4; Pointer bitches, 2; English setters, braces, 3; Irish setters, braces, 4; Gordon setters, braces, 1; Pointers, braces, 3; Native setters, braces, 2; Imported English setter stud dog with two of his get, 3; Native, do., 3; Irish setter stud dog with two of his get, 2; Gordon, do., 2; Pointer stud dog with two of his get, 1; Native English brood bitch, with two of progeny, 2; Imported do., 2; Irish setter do., imported or native, 2; Gordon setter do., 3; Native English setters, under 12 mos., 5; Imported do., 1; Gordon do., imported or native, 6; Irish setter do., 2; Pointer do., 3; Fox hounds, not less than two couples, 4; Double fox hounds, 12; Best couple beagles, 3; Chesapeake Bay dog, 2; Chesapeake Bay bitch, 1; Chesapeake Bay puppies, under 12 mos., 2.

Class 71, 2; class 72, 5; class 73, 2; class 74, 4; class 75, 2; class 76, 1; class 77, 6; class 78, 3; class 79, 3; class 80, 5; class 81, 8; class 82, 5; class 83, 4; class 84, 6; class 85, 7; class 86, 3; class 87, 4; class 88, 1; class 89, 1; class 90, 0.

BOSTON DOG SHOW RIBBON.—The second prize in Class 17 at the Boston Dog Show was awarded to No. 445, Jack, late Toby, belonging to Captain McMurdo, of Westfield, N. B.

THE WESTMINSTER BENCH SHOW CLASSIFICATION.

EDITOR FOREST AND STREAM:

It has been stated, in private and in print, that the Westminster Kennel Club care very little for an attendance of sporting dogs at their coming show, but are catering especially to the owners of the non-sporting dogs; and are directing their efforts to produce a grand show of pet animals—a show to delight the ladies of Gotham, and to line the pockets of the club with shekels, inasmuch as the population of the city will attend the show conducted upon such a basis, and the attendance is what the Club seek, rather than that a show should be given having as its ultimate object, the improvement of the sporting dogs of the country.

If this be so it is good to know it, and the sportsmen of America had better leave their stock in their kennels than take them to a show conducted under such auspices and for such purposes.

Sportsmen and sporting journals condemned the speculative shows held in Boston, Hartford and Baltimore last year by irresponsible parties, who cared nothing for the dogs and everything for the dollars; and how much quicker ought condemnation come from sportsmen when a recognized kennel club holds a show for just such an object.

The classification of the setters at the coming show gives color to the facts above stated, when we find the imported and native classes thrown together for judgment, and an Englishman imported to judge them. We put no imputations on Mr. Lort, but accord him the name and reputation of a gentleman; but he comes here a lover and breeder of the "field trial" and other strains of English dogs, and cannot escape a prejudice in favor of the so-called "blue-blooded" dogs.

Among many of our own sportsmen no native dog stands an equal chance with the blue-blood or his progeny, unless the native shows the conformations and physical types and the color of the present fashionable imported strains. What sort of probability of gaining a prize does a native black, or black and white, dog stand if he happens to have a long, handsome ear, or has a short body, however well he may be ribbed or chested; although his loins may be as strong as a horse, if his legs are a little long and send him like an antelope, and he can stay to his work all the season, and show staying qualities that would kill the blue-blood with his long body and short legs? None at all; because the blue-bloods are to-day—by their admirers—assumed to be the types to breed to, and it is not entirely true. Some of our "off-colors" natives cannot be surpassed, physically, by the inbred imported animal, and to make the new arrivals from across the water the standard to breed up to, is wrong. Give us what is good in them, and reject the rest, and recognize in full the excellent qualities of the home-bred animal.

Therefore, when the New York club throws time unjustly together the imported and native setters, and continues the one-man power in judgment, the judge bringing to us his old-world predilections in favor of the dog bred upon English soil, the only remedy remains of keeping our dogs at home. VALE.

[We by no means agree with our correspondent as to the idea he entertains that the coming New York Bench Show caters especially to the owners of non-sporting dogs. A large metropolis like New York has all varieties of animals, sporting and non-sporting, and every kind of dogs ought to have a chance to win prizes. We must beg to differ again with "Vale." We are more than ever in favor of doing away with classes of imported dogs. It is fully time that our native breeds should be put collar to collar with imported dogs. If the advantages of breeding from the best English animals or direct issue from them, have not already declared themselves, they never will. Of one-man power in judging we are inclined to be on "Vale's" side, but without casting the least imputation on Mr. William Lort, to whose thorough knowledge of dogs is added the utmost fairness and impartiality.—ED.]

SPECIAL PRIZE LIST—NEW YORK BENCH SHOW.—No dog or dogs, their get or progeny, can be entered for any of the following prizes unless they have already been entered in the champion or regular classes, and an additional fee of two dollars will be charged for all such entries. In judging stud dogs and breed bitches, the judges will be instructed to consider the sires or dams as well as the get or progeny.

Class A—Best pointer dog, any weight, a Parker gun, won by Sensation at the Boston Bench Show, 1878. Value, $300.

Class B—Best brace of pointers, over 50 lbs., without regard to sex, and owned by one person. $50.

Class C.—Best brace of pointers, under 50 lbs., without regard to sex, and owned by one person. $50.

Class D—Best pointer dog, any weight, to be shown with two, and only two, of his get. $50.

Class E—Best pointer bitch of any weight, to be shown with two, and only two, of her progeny. $50.

Class F—Best pointer puppy, under 12 months old, dog or bitch, a combined gun case and sportsman's traveling trunk, manufactured and presented by Messrs. Thomson & Son. Value, $40.

Class G—Best setter dog of any strain bred in the United States from native parents. $50.

Class H—Best setter bitch of any strain bred in the United States from native parents, a handsome single driving harness, presented by N. J Demarest & Co., Newark, N. J. Value, $75.

Class I—Best English setter bred in the United States, a solid silver cup, manufactured by Messrs. Tiffany & Co., and presented by F. O. De Luze and Spratt's Patent Biscuit Co. Value $100.

Class J—Best English setter dog, to be shown with two, and only two, of his get. $50.

Class K—Best English setter bitch, to be shown with two, and only two, of her progeny. $50.

Class L—Best red or red and white setter dog, to be shown with two, and only two, of his get, a handsome double-barrel breech-loading shot-gun, presented by W. W. Greener, Esq. Value, $200.

Class M—Best red or red and white setter bitch, to be shown with two, and only two, of her progeny. $50.

Class N—Best black and tan setter dog, to be shown with two, and only two, of his get, a handsome double-barrel shot-gun, manufactured and presented by Parker Bros., of Meriden, Conn. Value, $300.

(White markings allowed on dogs competing in this and following classes.)

Class G—Best black and tan setter bitch, to be shown with two, and only two, of her progeny. $50.

Class P—Best display of foxhounds, consisting of not less than three couples, a handsome silver cup, manufactured and presented by Messrs. Tiffany & Co. Value, $100.

Class Q—Best mastiff, dog, bitch, or puppy, a silver collar, chain and muzzle, manufactured and presented by Messrs. W. T. and J. Meracrean. Value, $50.

Class R—Best St. Bernard, smooth coated or rough coated, dog, bitch, or puppy, a silver cup, manufactured by Messrs. Tiffany & Co., or cash, $50.

Class S—Best Cocker Spaniel, dog, bitch, or puppy, a silver cup, manufactured by Tiffany & Co., or cash, $50.

Class T—Best fox terrier, dog, bitch, or puppy, a silver cup, manufactured by Messrs. Tiffany & Co., or cash, $50.

Class U—Best bull terrier, dog, bitch, or puppy, a silver cup, manufactured by Messrs. Tiffany & Co., or cash, $50.

Class V—Best Yorkshire blue and tan terrier, dog, bitch, or puppy, a solid silver cup, manufactured by Messrs. Tiffany & Co., or cash, $50.

Class W—Best pug, dog, bitch, or puppy, a solid silver flacon, presented by G. DeForest Grant, Esq., and manufactured by Messrs. Tiffany & Co. Value, $75.

The following railroads and steamboat lines have already agreed to carry dogs free to and from the show, when accompanied by owners: New Jersey Midland, Erie, New Jersey Southern, Central of New Jersey, Pennsylvania R. R., Delaware, Lackawanna and Western, Lehigh Valley, Boston and Albany, N. Y. Central, New York and New England, Fall River and Stonington lines. All the express companies have agreed to bring and return dogs for one rate for the round journey. G. W. R. and Grand Trunk railroads of Canada, will bring dogs free and issue round trip tickets at one and one-third fares. C.

MINNESOTA KENNEL CLUB.—This club, recently organized, has for officers: President, B. Beaupre, St. Paul; Vice-Presidents: Gen. H. H. Sibley, St. Paul; C. J. Butler, Stillwater; E. T. Archibald, Dundas; Wm. Mullikin, St. Cloud; D. C. Estes, Lake City; A. C. Rand, Minneapolis; Col. Henry Poehler, Henderson; George Warner, Mankato; Ben Randall, St. Peter; J. C. Meloy, Hastings; H. E. Brown, Faribault; Joe Prendergast, Le Sueur, John Hutten, Windom, Thos. P Cantwell, Brainard. Secretary and Treasurer, W. S. Timberlake. Executive Committee: C. B. Dilley, Lake City; E. F Warner, Wm. A. Hamilton, S. Lee Davis, C. McIntyre, C Gotzian, Chas. Zimmerman, H. Shipman, C. S. Uline, C. Seabury, R. Warner, St. Paul; Mr. Lyons, Faribault.

It is proposed to have a bench show at St. Pauls in September next on the occasion of the State fair. We have no doubt of the success of the Minnesota Club. The material already exists in abundance in the State. We have long ago made up our mind that it is in the West that the coming dog of America will be raised.

New York Bench Show.—The entries for the coming show in this city are fast coming in, and there is every reason to believe that the exhibition of dogs will exceed in interest the initial show of the Westminster Kennel Club. Premium lists and entry blanks may be obtained of Chas. Lincoln, Sup't, 33 Murray street.

A Correction.—In our notice of the Muirkirk Kennel, of Prince George's, Maryland, the printers turned Captain Nicholson's Nig into Meg. N-i-g is the way the dog spells his name.

MR. BERGH ON HYDROPHOBIA.

Hardly crediting that Mr. Bergh was no believer in hydrophobia, we addressed a letter on this subject to the President of the Society for the Prevention of Cruelty to Animals, and we have been favored with a reply. It seems that Mr. Bergh is quite skeptical in regard to hydrophobia. We may remark that there are still some very intelligent people who do not believe in Jenner nor inoculation from small pox. Of course, we cannot agree with Mr. Bergh or his authority, Professor Maschka. The diagnosis of hydrophobia, as most lucidly explained by Sir Thomas Watson, differs from tetanus. We do not think "that the mind is master of the situation." How can Mr. Bergh explain the case of one death from hydrophobia in New York, the patient being a child between two and three years? (Forest and Stream, Vol. IX. p. 437.):

Editor Forest and Stream:

In response to your polite inquiry "whether it is true that I am a disbeliever in hydrophobia as a specific disease," my answer is that I am so, and for the following, among other reasons. Professor Maschka, who is at the head of the University of Prague, and is an acknowledged authority all over Europe, declares that all the symptoms ascribed to hydrophobia are to be met with in various other diseases, and that many persons suffering from apparent hydrophobia have never been bitten by any animal at all! He therefore concludes that it is not a specific disease, but only one occuring under certain conditions incident to various diseases. Buckmuller and Lorinser shared his opinion that it is a nervous disease, resembling tetanus; that it may follow an injury as well as occur without any previous injury or bite. Stadthagan treated twelve persons who had been bitten by dogs supposed to be mad. Of this number only one showed signs of sickness, and recovered. Cramer relates that, in the year 1852, in Hamburg, 100 persons were bitten by so called rabid dogs, and that only one died of symptoms of hydrophobia. Lorisner, of Vienna, successfully proves that no specific disease is produced in man from the bite of a mad dog. Even inoculation has failed to establish the contagion theory. Hartwig cites 137 dogs bitten by rabid dogs, and of all these, only six died with symptoms of hydrophobia, while the rest remained perfectly well. According to Buckmuller, after extensive experiments in inoculation, entirely different symptoms, such as nervous fevers, catarrhal fevers, inflammation of the lungs, etc., ensued, and inoculation with the blood of dogs supposed to be rabid showed no ill effect whatever! On the other hand, however, cases of assumed hydrophobia have occurred, produced by wounds of the most trivial nature, such as a scratch with an iron nail, hardly drawing blood. Maschka relates a case of a man who died of a slight scratch upon his nose from the paw of a dog. Yet this case, after a carefully conducted *post mortem* examination, gave no other indications than such as tetanus reveals.

The sum of all this is that the mind is master of the situation, and if the theory recently advanced by a surgeon of this city—viz., "morbid impulse"—be correct, then it follows that the mind is parent, not only of all moral disorders, but physical as well. If the fellow who knocks you down and takes away your watch acts only in obedience to a "morbid impulse" for the acquisition of timepieces, is not the same organ capable of generating hydrophobia or cholera as well?

Respectfully, Henry Bergh, Pres't.

MANGE.

From a most thorough paper in the *Veterinary Journal*, due to Dr. J. A. Nunn, we make the following condensed abstract: Mange is divided into three kinds—Scabies or Scurvy Mange, Follicular Mange and Red Mange. Red Mange.—The first symptoms are itchiness and uneasiness, followed by the formation of minute pimples resembling fleabites. The first two stages are not often seen in practice. The second stage is likely to be mistaken for the *Eczema rubrum*, which is a non-parasitic disease. Red points are found under abdomen, inside of thighs, and when skin is thinly coated. Uneasiness shown in feeding or drinking, from itching, is nearly always diagnostic. There is a rapid loss of hair, chiefly on back, ears and neck. The pimples burst, either by the dogs breaking them or naturally. The exudation of these pimples drying forms crusts that attain a certain thickness. Bran-like scales or scurf accumulate on the upper eyelids. In old cases hair is matted in tangles. Red points spread rapidly, the parasites being conveyed by the claws. All these symptoms are only helps in the diagnosis, for it is only the microscope which absolutely determines the disease. The *acari* or parasite, are not easy to find, whereas, in man, with itch, or scabies, the human *acari* are found, in dogs it is more difficult. Treatment—Wash the dog with soft soap and warm water and scrub with a soft brush. Break down accumulation of scales with the thumb nail; wash so as to soften skin so as to allow better action of medicament to be employed. Character of dog must be taken into consideration when ointments, salves or preparations are used. With long-haired dogs shaving may be necessary, if not by a razor, with shears. Most common dressing is sulphur and lard, which is sufficient, provided the whole of the affected parts are dressed so that none of the *acari* escape. Slight quantities of caustic potash or soda (we should prefer the latter—Ed.) would be useful in breaking down the scales. Sulphur ointment has the decided advantage of being harmless in case the dog licks it, which invariably happens. A dip made of glycerine and carbolic acid might be found useful, but it should be remembered that with some animals other than sheep it has a fatal effect. The objection to creosote, with decoctions of tobacco, —the latter often used for sheep—is that they both discolor the hair, and have a disagreeable odor. Professor Oamgee gives the following formula: creosote, 1½ parts; spirits of wine, 15 parts; water, 11 to 14 parts. Apply twice or thrice, with intervals of a day or two. In using tobacco *care must be taken*. The decoction of tobacco is made by pouring 25 to 30 parts of hot water over one of leaf. Immerse a dog in this from five to ten minutes, *not more*, and apply warm. A stronger decoction, say one part from 5 to 10, will poison an ox. [We have seen a large dog killed from ignorance in using a decoction of tobacco for mange, though properly managed as to quantity of tobacco used and time of both—we have seen excellent cures.—Ed.] This preparation is to be recommended on account of its cheapness. Stavesacre seed (*Delphinium staphisagria*) digested in olive oil—1 of seeds, 8 of oil—at a temperature of 100 deg. Fareuheit, is good to apply on pet house dogs, as it has no smell and does not color the hair. Of the preparations of mercury, blue mercurial ointment and the green iodide are commonly used. Both should be used cautiously, as by being absorbed salivation may take place. They are best employed when small spots are affected. [We have seen a dog paralyzed in all his limbs from an ignorant use of blue ointment.—Ed.] As constant irritation reduces the dog, certain tonics are necessary. Arsenical liquor in five drop doses three times a day have good effect, also sulphate of quinine in 3 to 5 grain doses. Laxatives may be necessary, such as a dose of castor oil. Exercise should not be forgotten. A bed of pine sawdust has been recommended, but this may have the effect of causing the dust to stick to the sores on the dog and to cake. Pine shavings are just as good. No matter what may be the material used in bedding, it should be changed twice a week and the old bedding burned. All kennels that diseased dogs are housed in should be washed with lime containing carbolic acid, in the proportion of a pint of common brown acid to a bucketful of whitewash. For at least a month after a dog has had mange in a certain kennel, this kennel should be free of occupants.

(*To be continued.*)

ROCKET.

A valuable cocker spaniel, owned by C. E. Scott, editor of the Rod and Gun column of the Bucks Co. *Gazette*, Pa., was run over and killed last week by the cars at Bristol, Pa.

It was only a dog, they said, not worth making a fuss about. Aye, it *was* only a dog, but a dog possessed of a higher order of intelligence than some men whom I have met. It was the work of a moment, when my old sporting friend rang the bell and sent word to me that my dog had been cut in two by the cars, to leap from the bed and hurriedly dress and run to the depot. There upon the bank, a cruel cut through bone and muscle evincing the nature of his death, was Rocket. Truer blood never coursed through veins than could be traced in him back through long pedigree. What though it was all native. The little tuft of white on the back of his head, the long silky feather from legs and stern had marked in like manner his ancestors for over thirty years to my own knowledge. Rocket was a cocker-spaniel, bred by William Rhile and brought to me two years ago by Ben Mortonby from the Neck, that part of Philadelphia where the true cocker is known, kept and loved. Careful training and faithful nursing through the diseases incident to puppyhood, had brought him to such condition that he was looked upon as the boss railbird and woodcock dog of the section. Nor was this his only qualification. Better watchdog never lived. Often too has he been deputized as watcher over the baby as she sat tied into her low chair. Never tiring, the spaniel would fetch back and place in her hand the playthings which she delighted to throw to the farther part of the room, and afterward pick up and carry each one out to the basket in the dining room where they were kept. When she slept he sat by the cradle, and at the slightest stir would raise his paw and gently rock it. Did the women folks like him? Well, if you had heard the difference of tone when Snipe, the big orange and white setter, came lumbering in from that which was used when Rocket lightly stepped in the door, you would have placed the odds on the spaniel. He was the only one of his kind that I ever knew to stand rail birds. Not that he stood them as a setter stands, but when he scented them in the tussocks there was always a backward look for the gun and a patient waiting for the master before the plunge was made. How he got out that night, or why he attempted to cross the track in the face of the swift rolling wheels of the express, is a mystery. It may have been that life was to him, as to many, full of toil and trouble, from which he sought release, or it might have been that a tramp had enticed him away and his hurried flight homeward was intercepted by the train. Suffice it that the children mourned him and his master was compelled to content himself with useless regrets.

To-night, as I look down from my desk at the rug where he was wont to curl himself as I sat writing through the long evenings, I miss him. Kickers and cuffers of dogs may sneer, but the man who cannot love a gentle spaniel, brimful of affection for its master, has no heart in him. Sigma.

Bristol, Pa.

HOUNDS POISONED.

April 18, 1878.

Editor Forest and Stream:

Some fiend has again commenced his work of destruction of my pack of hounds by a poison which soon carries off its victims. Driver, by Watchman, out of Mischief, full sister of the peerless Vanity, as my estimable friend Pious Jeemes called her, is the first sacrifice. Last year, in the midst of the hunting season, some of my choice hounds met the same fate. Four of them, with Watchman at the head, were first-class red fox dogs. Driver was a special favorite. His color was a beautiful blue speckle, his hair short and as smooth as that of a pointer. His form was compact and strongly knit together; but what was best of all was his action and style, well supported by unflagging energy. He was a perfect representative of the Byron stock. The loss of Driver has sickened me, and in my present mood would sell out to a purchaser worthy to follow such a pack as its master. I consequently invite an immediate correspondence on the subject from the owners or proprietors of kennels. There is no guarding against this description of warfare on hounds. They will prowl at night, and in the day if kenneled at night. To kennel them from season to season, night and day, would impair their vigor and health. Apart from this, the inconvenience and trouble are too great for general practice. It is a very easy matter in this section to destroy whole packs by a judicious distribution of some deadly poison. If hounds be kenneled at night, they will then prowl in the day. The poison could then be administered to selected victims, and the vindictive could then at his pleasure pain you where it was most painful.

T. G. T. of Gaston.

P. S.—I take this occasion to state to the Hon. Jno. E. Kenns, of the H. of R., from West Virginia, to whom I had promised a pair of pupples by Driver out of Bell, that I cannot comply to the full extent of that promise. But that driver was put up with Aggy, a splendid young Byron slut, not well tested in the chase yet, and he shall have a pair from her.

T. G. T.

Fox Strategy.—Back here in the country, about all the winter sport we have is fox hunting with gun and hounds. I want to tell you about an old fox that bothered me a good deal last fall. I used to start her in about the same place every time, and no matter how good the following, the dogs would lose her. I knew that they did not run her in, as I could tell by their feet that they had not been digging. She used to take a straight line and lead the dogs right out of my hearing, and that would be the last I knew of them. I found at last it was no use, so when they started her I would start for home. I made up my mind to know about it when snow came, but it was a long time before I could start her on a snow. Finally one fine morning the dogs raised her. There had been a fall of about two inches of moist snow in the night, and I knew Madam Reynard would have to work to get away. She soon led the dogs out of hearing, but I took the track, bound to know where she went to if it took a week. Well, I followed on about three miles till I came to the brook. Here, somewhere, must be where she slips them think I. But no; she kept on down the brook, which is about twenty to thirty feet wide, for half a mile or more, past several bridges. She had taken every wall that the wind had blown the snow from on her way, and had got some ways ahead of the dogs. But walling it didn't amount to much, only she gained a little on the dogs, and gave her more time for her finishing stroke. For the last half mile she had kept within a foot or two of the bank of the brook, with long jumps, till she came to a long still stretch of water about three feet deep. Here she came down to a trot or walk and turned off from the brook again toward a long wall upon the side hill, which the wind had blown the snow from, and here the dogs were at work, first one way and then another. I took the wall and followed it a quarter of a mile or so, finding a track once in a while where a little snow hung on the wall, till I came to where there was a long stretch that was not blown off and no tracks over it. Then I went the other way, but I could not find where she had left. Finally I had to give it up and started for home. Following along back on the track, something made me get down on my knees and examine the track. Then I began to see how it was—she had gone up and down that wall for a blind. Finally she came back, and taking her old track to the wall, and stepping in it every time till she came to the brook. Just here a small maple not more than three inches through had blown partly across the stream—she had jumped into the top of this and crossed on the body of it. She must have had this in view all the time, as she had turned toward it when she went along first, and had not made a long leap between it and the wall, for she knew that she could not strike into a jumping track as nicely as she could into a fine trotting track. I called up the dogs, went back to the bridge down the other side, and in five minutes had her up again, but she had probably wet herself some in crossing, and in a few minutes ran into a large burrow. I was bound to have her, so I went to a farm house and borrowed a steel trap and thought I had her sure, but she beat me then, for there was an outlet that I did not find, and she got away as she deserved to. I have not started her since, and she has deserted the burrow.

Ashburnham.

Turkoman Greyhounds.—The Jardin d'Acclimatation has lately been enriched (we learn from *La Nature*) with three Turkoman greyhounds of great beauty, the first specimens imported into Europe. The animals are known in the country under the name of Tazi, and are employed in catching hares, like the Sloughi in Algeria and the greyhounds in Persia. They are of noble aspect, and have great strength of muscle; their head is remarkably long and delicate in form. The hair on the body is short, but the ears (which are very large) are covered with long, silken hair. Their legs are also covered with well developed hair, and the contrast of this with the upper smooth part of the body is surprising at first sight, the dogs appearing as if they had large waving pantaloons, or reminding one of some kinds of fowl. One of the three dogs was obtained from the Kirghises of Emba, the two others at Samarkand (and by M. de Ujfalvy). We believe that it is among this breed that, as mentioned by Hamilton Smith, the *stop* greyhound is found so trained, that when a whole pack of them is in pursuit of a doubling hare, a stick thrown before it instantly produces a general halt, and one only is then signalled out to pursue the game.

What a Bear Dog Is.—A Montreal correspondent, who ought to know, thus defines the characteristics of a bear dog, as recognized in his section:

"It is no easy matter to furnish particulars of dogs suitable to assist in the capture of the brown bear. Such dogs, so far as I know, are of a nondescript class, laying no claim to blue blood. They should possess courage, but tempered by a considerable amount of discretion, and a becoming degree of respect for their own personal safety. This toning down, however, should not be done at the expense of vivacity. A too tenacious dog would be apt to end his career in the embrace of his bearship. A sustained and sprightly skirmishing attack in the rear generally ends in Master Bruin forming the natural conclusion that he can rid himself of all this annoyance by climbing a tree. When aloft he calmly surveys his tormentors until the rifle arrives to complete the work the dogs commenced. An approved cross is that between a foxhound and Scotch terrier, recrossed by a collie. I am sorry I cannot at present put your friend in Maine in the way of procuring such a dog. Conservator.

Montreal, April 8, 1878.

Quitch Grass.—A gentleman farmer's opinion on quitch grass is given boldly below:

Corning, April 19, 1878.

Editor Forest and Stream:

I regret to say that I have half an acre stocked with a most luxuriant crop of quitch grass. I vainly tried to eradicate it for several years, removing loads of roots each year, but it only seemed to improve the crop. Should any of your patrons desire a stock, and can't get seed, by mailing, say 25 cents for packing, in addition to postage on the amount they

require, to Jas. McKee, Jr., Edwards street, Land Co., N. Y. they will receive by return mail some nice fresh roots. Should a car-load be desired, I think it could be furnished on short notice, and on very reasonable terms. I think, however, parties would display wisdom by hunting up some other remedy for their dogs before stocking their land with this grass.

Very respectfully, D. C. McKee.

Rupture in Puppies.—Mr. M. P. McKoon, of Franklin, Del. Co., N. Y., the well known breeder of cocker spaniels, writes us as follows:

"I saw in the last issue of your paper inquiries as to what to do for ruptured puppies. Physic the pup and then feed on light liquid food for four or five weeks. After physicking shave the hair about the rupture and apply a sticking plaster, and in eight cases in ten the pup will get well and sound."

Ned.—Ned, the property of W. H. Pierce, of Peekskill, has claims for beauty and size. Ned is out of pure Gildersleeve Flora, by One-eyed Sancho, and is two years old. His dimensions are as follows: Height at shoulder, 28in.; from tip of nose to root of tail, 46¾in.; around chest, 33in.; length of head, 11½in.; ears from tip to tip, 19in. In ordinary condition he weighs 79lbs.; carries a very high head and is pure white with orange and white ears and three small orange spots on body; has black eyes and nose, and is beautifully feathered; hair straight and wavy. Ned has never been exhibited in public, but is called by everyone who has seen him a remarkably fine animal.

Visits—*Brooklyn, March* 13, 1878.—Fisher & Bickerton' ced Irish setter bitch, Belle Mead, has visited Dr. Wm. Jarvi rhampion Echo.

Pocohontas—Rob Roy.—Mr. H. H. Winslow's (Kokomos, Ind.) Pocohontas, by Rock out of Dora, visited by Mr. Burges' Champion Rob Roy, on the 12th inst.

—Chas. E. Cunningham, of Boston, claims the name of Marius for his lemon and white English setter dog pup, by Gen. Ely's Speed out of Mr. Hardy's Daisy.

Sea and River Fishing.

FISH IN SEASON IN APRIL.

Speckled Trout—*Salmo fontinalis.* Land-locked Salmon—*Salmo gloveri.* White Perch.—

FLIES FOR APRIL.

Black Gnat, or Midge.—No. 13.—Body and feet black, wings subhyaline.

Dark Claret Gnat.—No. 13.—Body dark claret, feet black, wings subhyaline.

Bright Claret Gnat.—No. 13.—Body bright claret, mixed with red fox face, feet ginger, wings of one sex hyaline, the other ochreous.

Gray Gnat.—No. 13.—Body dark fox, mixed with dark claret, feet gray, wings hyaline.

Dark Fox.—Nos. 10 or 11.—Body and feet dark fox, mixed with lemon colored mohair, wings subhyaline, tail three fibres of dark gray hackle.

Poor Man's Fly.—Nos. 9 and 10.—Body and feet, hare's ear and yellow mixed, wings slightly mottled gray, tail the mottle of the wood duck.

Olive Gnat.—No. 13.—Body dark olive, mixed with bright claret, feet ginger, wings hyaline.

Red Fox.—Nos. 10 and 11.—Body fox cub face, mixed with yellow, feet red (chicken red), wings pale gray or subhyaline, tail mottled feather wood duck.

Bright Fox.—Nos. 10 and 11.—Body and feet brightest part of the fox, mixed with yellow, wings brightest hyaline, tail pale yellow.

Black Hackled Fly.—Nos. 9 and 8.—Body orange, ribbed with gold tinsel, hackle black wings, tail of the American partridge.

GENERAL FLIES.

Iris.—No. 8.—A hackle fly, ribbed with silver tinsel, body hackle, wings and tail scarlet.

Peacock Palmer.—No. 8.—Body peacock herls, hackle black and red mixed.

Gray Palmer.—No. 8.—Body peacock herl, dark gray hackle.

Professor.—Nos. 8 and 9.—Body bright yellow, feet golden brown, wings wood duck and mallard, dyed yellow, mixed, tail scarlet ibis.

Queen of the Water.—Nos. 8 and 9.—A hackled fly; body orange ribbed with gold tinsel, hackle chicken red, wings bright mottle of the mallard.

Grizzly King.—Nos. 8 and 9.—A hackly fly; body green, hackle dark gray, tail scarlet ibis, wings mottled feather of the pin-tail.

Fish in Market—Retail Prices.—The new arrivals at Fulton Market this week have been sea bass, bluefish, weakfish and kingfish. Mackerel are very large and abundant. Shad not plentiful, those from the Connecticut River being very scarce and the prices high. The most remarkable specimen we have seen for a long time was an odd looking creature, brought in by the mackerel fishermen, who explained that it had been caught in their nets. It turned out to be a fine specimen of the tree-climbing iguana, which had been procured from a South American ship. The reptile, when we examined him, had that woe-begone, down-in-the-mouth look of the hungry tramp, far from home and in a strange land. We may in future look for weekly quotations of fresh iguana, just in from South America. Our quotations are as follows:

Striped bass, 20 cents; large do., 15; smelts, 10; blue fish, 18; frozen salmon, 25; green do., 75; mackerel, large, 15; do. small, 10; Southern shad, 30; native, 40; Connecticut River, 60; weakfish, 15; white perch, 15; Spanish mackerel, 35; green turtle, 12; halibut, 12½; haddock, 0; codfish, heads off, 0; do., heads on, 5; black-fish, large, 15; small do, 10; porgies, 15; sea bass, 20; eels, large, dressed, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 20; turbot, 20; scallops, $1.50 per gallon; soft clams, per 100, 30; do., large, 60; whitefish, 15; pickerel, 15; salmon trout, 18; Long Island brook trout, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.75.

Movements of the Fishing Fleet.—Receipts of halibut quite liberal; 13 Bank arrivals with 585,000 lbs. Georges fleet bring in light fares; arrivals for the week being 18, and receipts 100,000 lbs. Mackerel have put in an appearance much earlier than usual, and the catch indicates a good supply.—*Cape Ann Advertiser, April* 19.

Connecticut—The trouting season in Connecticut opened brilliantly on the 15th, and the anglers were out bright and early on the streams that brighten the iron-rusted mountains about old Salisbury. The Lakevilleans were out in full force, and there were more big fishers on More Brook than big trout to comfort them, though it is said that Dan Ashman caught 150, some weighing a half pound, and we can guess what sort of fingerlings the other sum were. Arthur W. Benson, the veteran angler from Brooklyn, was also about. Our resident artist, Sherman Pease, caught forty-two nice ones, in the upper part of More Brook, that filled his 9lbs. creel, and he didn't fish but half a day at that. He reports that the brook is alive with young trout (last fall's spawning), and that the fishing was not so good for many years as now. The 10,000 land-locked salmon placed in the Twin Lakes, or streams that enter them, are as lively as griggs, and take the feed we throw to them daily like veterans, as they are bound to be.

Druid O'Salisbury.

Rhode Island—*Newport, April* 20.—Scup are now taken in the bay. Coot.

A String of Trout.—If we cannot go ourselves and cast our lines in the rippling waters and catch our trout, at least our friends do not forget us. We have then to thank Mr. W. Holberton, of No. 117 Fulton st., for a dozen very handsome trout caught by him on Saturday last in Long Island waters.

Adirondacks. Trout fishing is now good at the Edily, Number Four, and in Crooked Lake.

Greenwood Lake Association.—The Greenwood Lake Association, having purchased the property of the Greenwood Lake Sportsman's Club, now possess one of the most beautiful and accessible sites for a club house in the vicinity of New York City. It proposes to erect a substantial building on the shore of the Lake for the accommodation of its members. The house is to be 40x22ft., with a kitchen and servants' quarters in the rear, and connected with the main building by a covered passage way. The club has a membership of about twenty-five, the trustees being C. Olcott, A. L. Roe and N. C. Cooke, to whom parties desiring memberships are respectfully referred.

Camping Out on Barnegat.—Mr. G. V. Kinsey, of the Ashland House, Barnegat, N. J., has made arrangements to provide visitors this coming fishing season with tents for camping out. When the Barnegat waters abound with bluefish Mr. Kinsey's tents will be well patronized. The fun will begin some time in June.

Ashley House, Barnegat Inlet, April 23.—First blackfish of the season caught to-day. C. Parker took fifteen in one slack water. B.

Pennsylvania—*Bradford, April* 20.—Trout are very plenty here, catches of from 100 to 300 are made every day; the fish run small, few over 1 pound. Tuna.

Angling About Philadelphia.—The Philadelphia *Sunday Post* has opened a "Rod, Reel and Basket" column, which is filled with fresh, newsy and original piscatorial news. From it we learn that large chub are biting freely at Spread Eagle Station on the Bound Brook Railroad; Camden anglers catch catfish, eels and perch at Knickerbocker wharf, foot of Market street; Vine street wharf, for large catfish; Federal street wharf, in the railroad depot, catfish, eels and perch. Newton Creek, on the Haddonfield pike, is a favorite place for catching sunfish, perch and roach, the usual bait being the red worm. Fly fishermen, go to the Riffles at and below the Darby Creek dam—rockfish, perch, sunfish and chub. The fishing at Young Womanstown, mouth of Young Woman's Creek, and up the stream, is within convenient distance for the Philadelphians, and has been often extolled by us.

White Perch Taking the Fly.—Just now, and during the greater part of next month, the white perch (*Morone americana*) will be on their spawning beds. Along the shoals of the Delaware River, and especially in the Potomac among the rocks, which extend from Ead's Mills to Little Falls, a mile or more, are famous spawning beds, and there the finest kind of fly fishing is enjoyed in the spring. The white perch also takes the fly in early fall, although it is strictly a ground feeder and a bottom fish. It is a marine species, feeding on minnow, crab and peeler crayfish. The veteran John Krider, of Philadelphia, says:

"In reference to the white perch taking the fly: At Betterton the fishing there is in deep water, from twenty-five to thirty feet deep, and they will not rise to the fly; but along shoals of the Delaware River and sluice gates, my friends have often taken them with the fly in the months of August and September. We have been making a white fly, imitating a grub; also a red fly, which has proved very successful. The fly has also been used for chub or fall fish."

Mr. Petrie, a well-known angler in Washington, D. C., says:

"I have caught thousands of them here at the Long Bridge with a fly in imitation of a "miller." I make or dress them myself with a common white hen's feather, with a little white or yellow worsted for a body. About dusk and after dark is the best time. You must draw the fly slowly along the edge of the water where the fish are supposed to be. It will not do to make the fly dance on the top as for trout fishing, but just sink about an inch below the water and keep moving. I fish with three flies, but seldom get more than two fish. Hook very small, with plenty of feathers on wing."

Susquehanna Salmon.—In your reply to E. T. P., Washington, D. C., asking about species of salmon in Susquehanna at Harrisburg, you say they are the *black bass.* This is incorrect. They are the pike-perch or wall-eyed pike. Please made correction next week. A. F. Clapp,

Sptg. Ed. Sunbury *Gazette.*

We did not need to be informed by the editor of the Sunbury *Gazette* that the so-called Susquehanna salmon are the pike-perch or wall-eyed pike, though our types did say they were the black bass. Our misprint was due to pure carelessness on the part of the writer, and he deserves a reprimand. We thank our brother editor for calling our attention to it, and we hope E. T. P., of Washington, whose address is mislaid, will note the correction. For full description of the pike-perch and its local synonyms see "Halleck's Sportsman's Gazetteer," pages 272 and 319-23.—Ed.]

Tennessee—*Columbia, April* 20.—The past week has been a lively one for anglers and fish. Eight parties have gone from here to the many trout streams, and met with success. One party went to Swan Creek, and fished for a German silver reel. The following score shows who won: Ed. Hill, 40; C. L. Gordon, 23; A. M. Hughes, Jr., 9; G. P. Webster 39; Mr. Wheat, 20; H. P. Webster, 3. The largest weighed 3½lbs. A party at Lick Creek caught 60; another, at Tennessee River caught about 200, the largest, a catfish, 16lbs., several trout, 6½lbs. Mr. Horsley, editor *Herald and Mail,* was one of this party. He is a true disciple of old Izaak. A party from Mt. Pleasant, after three days' fishing on Big Bigbee, returned with 60 trout, largest, 4½lbs. A garfish, weighing 16lbs. and measuring 4ft. 4in. in length, and a catfish, weighing 40lbs., were taken from a trot-line in the river here last week. A friend and myself, in two days' fishing on Buffalo Creek, returned with 75 trout and pike. Val.

Louisiana—*Lake Charles, April* 16.—Piscatorial sports are splendid; plenty trout and other fish caught in our lake. W. M.

Michigan—*Detroit, April* 20.—Perch fishing never better than now. Jno. Loy caught a string that weighed 39½ pounds in about four hours this morning, some of them would weigh 1½ pound each. In the morning when I come up-town I meet boys and men with poles of every imaginable shape on their way down to the copper docks. Druid.

Ohio—*Painesville, April* 16.—Some bass being caught in Grand River. There would be excellent fishing were it not for unlawful pounds and nets at the mouth. Ano.

Kilby's Catalogue.—We would recommend our friends in the Provinces to send to Mr. R. H. Kilby, of Montreal, for his catalogues. These pamphlets are gotten up in excellent style (there are three of them), and they run through the whole series of sportsmen's goods. Nothing is wanting. If Canadian fishermen cannot find at Kilby's what they want they must be indeed hard to please. All cricketing implements are included in the catalogues.

One Lucky Plucky Man.—Mr. Chas. F. Orvis, of Manchester, Vt., says: "I never was so busy before. Have more than I can do. My San Francisco trade is far beyond my expectations. I am about enlarging my works so as to be able to fill orders more promptly. I think the Forest and Stream has done much to contribute to my prosperity, for which I am very thankful."

Wind-fish.—Several correspondents in this State have kindly replied to our inquiries for information as to what is locally known in this State as the "wind-fish," or "win-fish." It is also called a chub, but is in reality one of the *Salmonides* known as *Argyrosomus artedi* (Gill), and nearly allied to the Coregoni. It is known popularly as the lake herring. Mr. C. Van Brunt, of Poughkeepsie, says:

"The win-fish (not wind-fish) is found in the streams emptying into the Hudson, more especially Wallkill, Fishkill Creek, Wappingers, and although possessing all the characteristics of the ordinary chub of the North, they are slimmer, whiter scaled, more vigorous, frequent swift waters, and afford better sport, and are better eating than the chub proper. They rarely reach one pound in weight, although occasionally they are caught over this weight in a large stream like the Wallkill. They average a few ounces. Catching this fish with a grasshopper for bait in the Fishkill Creek was the delight of my boyish days."

Mr. J. W. Griggs, of Paterson, N. J., says the fish is known as the whitefish in the northern part of that State. He does not know why it should be called "wind-fish." Never heard it so called until last summer, when he was at Ramapo River, Rockland County, N. Y., at which time he took them weighing two pounds; has heard of weighing as high as three pounds. [An extraordinary fish.—Ed.] He says:

"They rise well to a fly on a dark day, and fight very pluckily. The best fly in summer is a white moth, or any white fly. The best bait for them is called "dough bait," being white cotton kneaded into wheat dough. It is very tough, and very taking. These fish are sometimes taken in lakes. I caught one in Lorrillard's Lake, in Orange County, last August, weighing one and a half pounds. I was fishing for black bass, and was baiting with black crickets. They bite well, also, on white grubs."

Here, also, is a very interesting letter from G. S. Van Sicklen, editor of *Fysshe and Fyshing:*

New York, March 30, 1878.

Wind-fish appears to be a local name in Orange County, N.Y. I never heard it used elsewhere, but the fish is the chub. I caught a great many ten or fifteen years ago in the headwaters of N. G. Willis' "Moodna" Creek, in Cornwall, when throwing a fly for trout, and it is the same old chub that grows "as big as a lamb" (as Thad. Norris, of genial memory, said), upon the Beaverkill. In the east branch of the Delaware they call it "bass." I have caught them on various hackles, and on the coachman and Montreal fly. Probably on others grasshopper is the killing bait for them. On more than one occasion the gentlemen boarders at John Orr's, at Mountainville, have kindly aided me in catching grasshoppers for the next day's fishing. The sight of half a dozen of us hopping around in the meadow in front of the house used to cause great amusement.

The right time to catch grasshoppers is before the dew is off in the morning, when you will find the nimble insect, numb and stiff, and easily taken. Another good way is to coax a lady, with ample crinoline and white skirt, to walk over fresh cut stubble, or a new mown field, while you revolve around her and pick off the hoppers, which seem to be attracted by the whiteness. Hoppers, you know, always go for the light, and the best way to keep them, after you have caught them, is in a dredging box. Cut a square hole in the rim of the cover, and another in the top of the cup part, turn the cover till the two holes

coincide; keep your left thum over that opening (unless you are left-handed); as fast as you catch hoppers poke them in. When you have enough, turn the cover half an inch, and you have them safe. The perforated cover gives them air. Hang the box by its handle on your creel strap, or button it on the front of your fishing shirt. When you want a bait turp the cover again till the two holes coincide, and one of the hoppers will crawl out slowly towards the light. Seize him; turn the cover again and keep the rest alive. But a fly fisherman does not often need grasshoppers.

Those wind-fish or chub afford good sport in August, when it is too late for trout. They are more active and shy in "Moodna" than in the Delaware. I don't know why. As the hazy atmosphere of the gloaming (like a mist) enlarges to our eyes the size of objects at a distance, so the old fisherman, in the twilight of his years, looks back a long way and recalls fish of enormous size which he once caught; so I will not call upon John Orr to bear witness to the size of wind-fish I have brought to the scales at his mill to have weighed. I will tell, though, of one large basketful, seventy odd, all of good size, which I carefully cleaned on the bank of the stream and packed in mint, which happened to be handy; and how my pride at the platters full at next morning's breakfast was sorely humbled at the unexpected bitter flavor of the otherwise delicate fish. When you seek to propitiate the cook by cleaning your fish while you rest in the shade by the stream and smoke, before starting for the road to go home, do not pack them in mint.

There used to be trout in the Moodna, but when the "Newburg Short Cut" was built the navvies spent their Sundays in turning the stream and its tributaries, and the trout are gone. The average catch now is one fingerling per annum, and the few owners of the land along the stream are so blind to their own interest and pleasure that they will not unite and restock and preserve the stream. Some day they will wake up. But all this while the trout might be growing. Tell "Sportsman," of Newburg, to use a Montreal fly. G. W. V. S.

Very opportunely also, by a coincidence, comes a letter from Mr. Rowland E. Robinson, of Ferrisburgh, Vermont, making an inquiry as to the identity of a fish which we have ascertained to be the same already referred to—the *Argyrosomus artedi* of Gill. It is accompanied by an exquisite drawing, with proper specifications, etc. He writes:

FERRISBURGH, March 19, 1878.

MR. EDITOR—From what I can learn of the fishermen, they first became known about five years ago, and then, and for two or three years after, were only caught on the west side of the lake. During the past winter they have been taken on the east side, but I cannot hear of a single instance of their being caught at any other time but in winter, in any manner. So far as I can learn, they are always taken through the ice with a small hook and a very short line, say two or three feet, in sight of the angler, and biting very gingerly. The ordinary bait is a morsel of fat salt pork. The color is dark bluish on the back, becoming silvery on the sides, brightly so on the belly, with iridescent reflections on the gill covers. The scales are very easily detached. I should say that the average length was from nine to thirteen inches; the weight from ¼ of a pound to 1¼—but this is from memory and guesswork. The ova in the specimen I examined Feb. 25 were very small, and I should think not likely to mature earlier than May. Are they a migratory fish? If so, how is it the spawn is so backward at the only time they are seen here? If not, why are they never caught at all in summer, when the lake swarms with anglers and every cove and beach is swept by seines? He is known here as "blinefish," "salmon herring," and I know not what other titles.

Prof. Gill's letter, under cover of your envelope, was duly received. Since getting it, Mr. Hall, of Vergennes, has shown me Prof. Baird's reply to his inquiry. A specimen of the fish was sent to Prof. B. He says: "It is a species of whitefish, and Mr. Milner determines it to be the *Argyrosomus clupeiformis*, a species analagous to the so-called herring of the Great Lakes." Prof. Gill names it *A. artedi*.

AWAHOOSE.

By a fortuitous chain of circumstances, we have in the foregoing letters much valuable information, which enables the scientist to determine very nearly the habits and habitat of the fish in our Northeastern inland waters. The *A. artedi* spawn in November. They take the fly and grub freely in summer, and may be caught through the ice in winter with bait, and being a fine fish for the table, it seems that they may fill a conspicuous place among the catalogue of game fish.

PRACTICAL LESSONS ON BASS FISHING—No 2.

CHICAGO, March 18, 1878.

EDITOR FOREST AND STREAM:

I left my imaginary bass-fisher fairly launched upon the lake, but before proceeding further with him I wish to go back for a few general observations.

In the first place, don't get up in the middle of the night with the insane idea that you must be on the water at early dawn. If you do so you will lose your sleep for nothing. A bass is a very sensible fish, and prefers a late breakfast. His breakfast hour is from 8 to 11, and he rarely bites before then.

Second observation: Consult the weather; select a cloudy day if possible, but not a rainy one. However, a sunny day, with sufficient wind to make a good ripple on the water, is just as good. If the wind is high, or if there is no wind and the water is glassy, pack away your tackle and stay at home and play with the babies.

Third observation: Upon starting from home be very modest in your promises and also in your expectations. Tell your wife that it is a very bad day for fishing, that the wind is not in the right quarter. If it is cloudy tell her that bass seldom bite unless the sun shines, and *vice versa;* that if the weather changes you may get a few, but don't much expect to; that you only go for a day's rest, or to try a new rod, line or hook; or that you have got to go near the lake on business, and shall make a few casts. Your imagination will supply plenty of reasons for disarming the expectations which your previous fish stories may have excited in her mind. The beauty of this course is inestimable. If you don't bring home any fish you are all right, as she had no expectation that you would. If you or your boatmen happen to capture a good string, then you are so much ahead, and your wife will think you are a deuce of a fellow to get so many in such bad weather, and you can quietly put on a few airs. By the way, it is always safest to select a boatman who has no speaking acquaintance with your wife or friend. It sometimes saves the necessity of answering awkward questions. One more short observation. Never be guilty of taking your gun along with the idea that you can fish and shoot ducks at the same time. There won't a duck come within a mile of you, and your gun will only be an encumbrance.

And now, finally, I have to make a personal observation: I have got myself into a scrape. I have been foolish enough to read my other letter to my wife in one of my confidential moods, thinking to impose upon her an increase of respect for my attainments as a fisherman, but I missed the mark this time; when in furnishing my hero (you) an outfit, I reached the "flask of whisky," there was an explosion. It was abominable that I had put that in. If a man couldn't go fishing without drinking whisky he had better stay at home and dig potatoes, and be of some use in the world. In vain I told her that the whisky was for the boatman, and showed her that I had said so in my letter. Oh! yes; she knew all about that. The boatman! humph! much of it the "boatman" would get if you were along. Didn't you tell me that one great beauty of the boatman you had last summer was that he didn't drink? I suppose that was because you wanted it all yourself. "Now, my dear," I venture to interpose, "don't get personal; you know I never take anything along but bottled beer, and that I only take that because the water is warm and not fit to drink, and fishing on a hot day is rather warm work." "Ah, indeed! That explains why you take so much ice and so many lemons. I suppose you make lemonade out of the beer, don't you?" "Oh no; can't you understand? The ice is to keep the beer cool, and the lemons are for the boatman. He sucks them to prevent sunstroke when the hot sun is pouring down upon his head in the middle of the day." "Ah, the poor fellow! I thought you always went ashore during the heat of the day and lay round in the shade until it was over." "Well, my dear, so we do, but—I think, upon the whole, we had better drop the discussion, as I see that you don't exactly understand the circumstances of the case, as you are not a fisherman, and it would take me too long to fully enlighten you." "I don't care," said she, "I think it is too bad any way that you said anything about whisky. What a lesson to teach the boys who will read it!" I hastened to assure her that no boys ever read the FOREST AND STREAM; that they are not allowed to, as it has been found that, whenever one of them gets hold of a copy, he is sure to run away from school and go fishing or gunning the first opportunity. I affirmed, without the solemnity of an oath, that the paper was only read by great, big-bearded men, who would not be induced to drink any whisky, if they did not want it, by anything I might say, and I utterly disclaimed—and I now disclaim—any intention to champion the flask. You see I came triumphantly off, but still I confess that I am a little troubled about those "boys," and I must noise my preparation and eliminate the whisky. But how shall I get along with that boatman? I had started him off beautifully with a taste for that same flask, and it is a pity to spoil the picture. But it must be done. I have pondered long and carefully over the matter, and the best way I can see out of the difficulty is this: Don't take any whisky, but after you are clear away from home and on the lake, immediately after you have taken in your first fish, remark to the boatman, "Now we *will* have a drink." Feel in all your pockets; look into your lunch-basket, into your minnow bucket, under the boat thwarts, and everywhere. Express a good deal of consternation, and declare that you must have forgotten your flask—that you had it all ready and must have left it on the table in your hurry. Confound your luck a few times; declare that such a thing never happened to you before, and never shall again. Tell him you didn't care much for it yourself, but you meant to have some for him, and he may consent to be mollified. This course has its disadvantages, as it requires you to hunt up a new boatman every time you go out, and it won't take you long to exhaust the supply of new ones. However, something must be sacrificed to principle. "There, my dear, are you satisfied? I have done the fair thing by you, but you shan't read any more of my letters."

Now, I expect, Mr. Fisherman, that you begin to be impatient, and to fear that you are never to get fishing. Well, I have given you your first lesson, and one that it is necessary to learn thoroughly if you ever expect to be anything but a tyro—to wit, *patience.* "*La patience est amere, mais son fruits sant deux,*" and I have half a mind to make you wait another week before going fishing at all. But I won't try you further now, and will get at once down to business. Rig your tackle before getting into the boat. If you have no friend with you, place yourself in the bow, in order that you may cast ahead. If your friend is along, place him there. For this there are two excellent reasons—first, you display your generosity; and second, if he catches the most fish, of course it is understood that he ought to, as he has the best place while if you take it and fail to have the best luck, you no, only lay yourself open to the charge of selfishness, but the inference follows that your friend is the best fisherman, and altogether you will feel uncomfortable, and even become liable to express a doubt that his biggest fish weighs the conventional five pounds.

Now we are off. Don't wait to reach the best hole in the lake, but commence at once and be obtaining experience. Place your minnow upon the hook by running it upwards through both jaws. In this way he will live and swim a good while. Don't hook him in the back or belly. Reel in your line until the hook is about 18 inches from the tip of the rod. Take the rod in your right hand just behind the reel with your thumb resting lightly upon the spool to hold it. Extend the rod well back so as to give a good swing. Bring the rod to the front with an increasing velocity, and just before it comes to the direction in which you wish to cast, release your thumb from the reel and "let her spin." Hold the rod steady in that direction and let the line run until your bait strikes the water, then stop the reel quickly to prevent over running. The cast must not be made with a jerk, not too rapidly, but steadily and with just sufficient velocity to run off the line. At first it will trouble you to do this much more than you probably think. Your bait will go anywhere and everywhere except where you want it to go. Sometimes after a tremendously careful effort you will find it sticking to the blade of an oar, or the side of the boat, or it will be dangling from your companion's rod or line with which it has in some unaccountable way got mixed, or your minnow will go spinning off beautifully by itself, leaving the hook behind and leaving behind also a mad fisherman, or the devil himself will get into the reel and it will suddenly stop without apparent rhyme or reason, or it will overrun and gather back and tangle up your line in a way that will test your ability as a linguist. Continue to smile outwardly and lay the difficulty to the newness of the line, which "has not got the kinks out of it." Don't try at first to "land" your bait in any particular place. Try for general results and be happy to get it anywhere at a respectable distance from the boat. After you have attained facility in placing it seventy-five feet away, then you may venture to tell your boatman to row so that you may drop your bait "just by that lily pad over there," but don't try that the first day, nor the second. Cast with the wind: after a few seasons' practice you may cast successfully against it. Of course famous trout fishermen of whom we read are able to laugh at the wind and hurl their flies into the teeth of a gale, but don't you try it. Well, I suppose that by this time you have pounded a half dozen minnows to death and worked yourself into a fever heat, and your mind into a fearful state of exasperation, and I am going to give you a taste of something better. The boatman has got you to where there is a bar—(that word extracts a groan from me for the barred "Wicker." "Boys" won't know what that means, confound 'em, as I had intended to use it in lightening some of your woes and soothing your melancholy; and now I shan't dare to make you lose your biggest fish as I had fully determined to do, for nothing passes over that bar but water)—a place where the boatman says you are "bound to strike something," and you do. There is a tug at your line. You cry out, "I've got a bite!" The boatman says "Let him have it a minute." You wait quivering as long as you can, and then you give a yank which tries the timber of your tip (I don't mean that you ought to, but you will). The fish makes a rush to one side. Your friend shouts, "Look out for him!" the boatman, "Hold him tight." You fumble around with your right hand until you get hold of the reel handle, when you reel in as though you were racing for a wager, and the fish comes right along. You think it the easiest thing in the world; he don't make much fuss until he nears the boat, when he flurries about a little. You announce however that he pulls like thunder, and must be a big one. The boatman says something which you don't understand about a "cussed snake," gets up with the landing net, tells you to "bring him up," leans over the side and takes in a two-pound pickerel. Bah! so much fuss for nothing. I need consolation myself now. Excuse me this time, my friend, and I vow that I will never voluntarily catch another pickerel even on paper. (I am going to ask the editor some time to give me space to express my love for pickerel, and if I get it I'll search the pages of the classics for language of invective, and if I fail to do the subject justice I'll throw away my pencil forever.) Kill him so that he may never bite anything again, and then throw him as far away as possible. If you are weak-headed enough to carry him home tell your wife that he is a fine specimen of muskalonge, and preserve your self-respect if you can.

I am frightened at the length of this letter, and though I know just where there lies one of the "genuine" waiting for us, we never can catch him in this letter, as it will be a matter of some time with us, and I am going to ask Mr. Editor for just one more chance. If he don't give it to me no one will ever know whether you caught that bass or not, and it will become one of the mysteries of the world. G. C.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

J. M. H., Newark, and G. H., New York.—Blanks for entries sent you.

H. J., West Quincy, Mass.—Reliable maker, and you ought to have a good, safe gun.

W. R. N., Cleveland, O.—There is no law against trap shooting in New York State.

L. M., Concord, N. H.—For a full description of the Allegash River region, Maine, see F. and S. Sept. 23, 1875.

B. P., Pleasantville, Pa.—Inform me what length is considered best for shot-gun barrels, 12 gauge, for general use? Ans. 30 inch.

P. D. M., Nashville, Tenn.—Distemper often destroys the sense of smell in the dog to a great extent. That is possibly the trouble with your pup.

J. (?), Red Oak, Iowa.—Is there any difference in the recoil of a choke and cylinder bored gun? If so, is it noticeable? Ans. Not any appreciable difference.

O. T., Paris.—The address of G. E. Lewis, the gun and rifle maker, is 32 and 33 Lower Loveday st., Birmingham. Mr. G. E. Heming, of Paris, is his agent.

A. F., Homer, N. Y.—My puppy has an open navel, otherwise is healthy. What shall I do? Is he worth raising? Ans. Yes, worth raising. Apply a pad to the part at once.

J. A. P. Peoria, Ill.—Where can I obtain Cones' Manual of Ornithology, and price of same? Ans. Price $2.50. Address Dr. Elliott Cones, U. S. Geographical Survey, Washington, D. C.

AMATEUR, Hebron, Wis.—I send a description of a species of duck, etc. Ans. Description scarcely sufficient to be of much use, but it is probable that your bird was a Ruddy duck (*Erismatura rubida*).

G. D. R., Richmond.—In the experiments with the auxiliary barrel what was the penetration? Ans. As far as could be judged, very great, cutting through the wood placed at back of target to support it.

J. H. B., Philadelphia.—The riflemen at the Longmeadow Range Springfield, Mass., shoot directly at the target. To a person looking from a passing railroad train it would seem that they shoot at an angle.

QUILLDRIVER, Milford.—As between the —— and —— rifles and the old style with hammers which would you advise one to obtain? Ans. Respectfully decline answering, can only say that have just seen splendid work with the first.

H., Willow Brook.—My puppy has a lump about the size of a hickory nut at his navel and feels very soft and seems full of water, or blood. Ans. Probably the lump is a *hernia.* If so, an operation will be necessary to effect a perfect cure.

R. T. G.—The address that R. T. G., of Philadelphia, asks for in the March 28 No. of F. and S. that owns the place called the Crystal Spring Fish Farm in the Ramapo Valley, N. J., is at present 319 Battery st., San Francisco, Cal. Address B. B. Porter.

R. L. N.—I fail to find advice relative to wild rice in your columns. I should like very much to obtain some. Please advise in Correspondent's column. Ans. See last issue of FOREST AND STREAM, April 18th page 197. Cannot procure wild rice until next fall.

W. W., Washington, D. C.—Where are such springs as are used on the glass ball traps manufactured? Or where can I get one, and the probable cost? Ans. Any car or carriage spring maker in Baltimore. Price ought to be about $1.50. The trap makers sell for $2.

R. F., Philadelphia.—In one of my hunting excursions in Luzerne County I saw a hunter with two black woodcock. Are they a rare bird as I never saw any before? Ans. Very rare, we think, for we never heard of one before. Black woodpeckers are in some sections called woodcock.

J. B. M., Philadelphia.—My Newfoundland dog, not quite a year old, won't eat anything but meat. How can I break him of this habit, and what is the best food for him? Ans. Offer him other food twice a day regularly for five minutes at a time, and then remove. He will soon come to terms.

PORKOPOLITAN.—What the "skeleton butt-plate" is I well know, but what "skeleton stock" means, as applied to a $300 shot-gun, I am not sure about. Ans. We are in the dark ourselves—that is, as far as a skeleton stock to a shot-gun. On a rifle pistol it is common. Never heard of it on a shot-gun.

C. W. P., Yonkers, N. Y.—Please let me know what dog is the best adapted for following horse trails in a warm climate and where the streams are from ten to twenty miles apart? Ans. The pointer will follow longest without water. You should always carry water in a five gallon keg. Have we got your meaning?

VOYAGEUR, Goshen.—1. Am going to Europe with an English gun. Will I have to pay duty on the same in France, Germany, etc. 2. Would I be charged duty on my return to the U. S.? 1. If the gun is for your own use no. 2. On your making an affidavit that you had taken the gun from the U. S. to Europe and returned with it, no duty.

F. R. G. Brooklyn.—1. Is there any such firm as —— —— who make B. L. guns, and if such what is their reputation? 2. During August is their any shooting about East Lynne, Conn.? Ans. 1. A name put on 2d and 3d quality of work. Anybody can use it. 2. You will find better fishing there in season than shooting; the latter is poor.

YATES DRAGOONS, Syracuse, N. Y.—About two months since you published a problem as follows: To change 64 square feet to 65 square feet Will you please republish, or give answer through "Answers to Correspondents?" Ans. You know not what you ask. One man has already become insane on that subject. Money could not tempt us to republish it. See the solution in our issue of March 7.

J. S. T., Oriskany.—1. How can I keep gray grubs? 2. Is the hellgramite found in the Mohawk River? 3. How to make wire cartridges for a muzzle-loading shot-gun? Ans. 1. In rotten wood, wet sawdust, mock, or moss. 2. Not certain about this. 3. Wire cartridges are woven wire cases in which shot are mixed with bone-dust. The object is to make the shot hail or keep close together.

A. JACKS, Augusta, Maine.—We made no error. A third-class target, according to rules of N. R. A. has a bull's eye eight inches in diameter, up to 300 yards, this eight inch bull's eye answers for all distances. Now, a reduced bull's eye for gallery or short range practice is so diminished as to equalize the distance once desires to shoot. There are no N. R. A. rules governing gallery practice for reduction of bull's eyes.

W. D. H., New Bedford.—1. Please give me your opinion of a gun marked ——, London. 2. What would be the most effective charge of powder for it to shoot nine buckshot weighing seven to the ounce? 3. Also how can I color linen or cotton lines of a permanent color? Ans. 1. Excellent. 2. Experiment and you will ascertain. 3. Decoction of black walnut, or butternut shucks, hemlock, or oak bark.

F. F. M.—Are there any trout in the Bronx River, Westchester Co., or any other fish worth the trouble to catch? Ans. Don't think there are any trout in the Bronx River now. Riparian owners have repeatedly introduced them into that stream and its little tributaries, but the encouragement to hope for reproduction is very small indeed. Mr. James Meyer put several hundred in at Pelhamville last summer, but his friends fished them all out.

A. H. S., Catainssa.—Give as near as possible the price of a —— double-barrelled breech-loading shot-gun (Sheffield, England), laminated steel barrels, 32in. 12 bore, side lever action, double action steel rebounding locks, finished in good style? Ans. We do not know the name of such a maker nor do any of our leading New York gunsmiths. The first part of the name with the conclusion *ward* is a well known gun builder. Are you sure you are right?

H. V. S., St. Martins.—Please tell me if the single barrel, breech-loading shot-gun manufactured by —— is a reliable gun, and all that it is represented to be? 2. Does the auxiliary rifle barrel advertised in your paper extract the empty shells, and can it be used in a single as well as a double barrelled gun? Ans. 1. Quite a reliable gun. 2. It does not extract the shell. The auxiliary barrel would work perfectly well in any single barrel breech-loader.

J. S., Tuna Creek.—1. Can I get a Ballard rifle, No. 38, extra long, 10 or 12 shot? 2. If not, can I get any rifle shooting No. 38 except single shot, and where? 3. Where can I get the game laws of N. Y. State and Pa.? Ans. 1. A Ballard is a single shot. Don't you mean a Winchester? 2. In Winchester rifles nothing is made less than .44. 3. Send to the Secretaries of State of N. Y. and Pa., or to your State association for the protection of fish and game.

ALL RAIL TO SAN ANTONIO.—In answer to correspondents who have already made inquiries we will say that there is now a railroad direct from Galveston to San Antonio connecting with the Iron Mountain and Texas Central. Secondly, we are informed by Mr. H. L. Bingham, of San Antonio (to whom interrogatories may be addressed), that Mexican sheep of the best grade can be bought from $1 to $1.75 per head; ponies, $10 to $25, and all equipments as cheap as in any section of the country.

SUBSCRIBER, Montpelier.—To clean brass shells, run with mixture of two parts sulphuric acid, two parts water and one part pulverized bichromate potash, and then wash in hot water. Or one ounce cyanuret potassium, one pint soft water; dissolve; put into a preserve jar with a glass cover, mark it poison, set it by the fire and soak the shells in it for twenty or thirty minutes. Then fish them out with a stick, douse them into cold water and dry by the fire. You can keep the mixture for farther use.

J. W. M., Winterset.—1. What preparation can I use on my tent to preserve and prevent from leaking? 2. Who deals in chilled shot in Chicago, and, if nobody, who is my nearest dealer? 3. Would you recommend it for shooting prairie chickens, quail and snipe? Ans. 1. Take a pound of sugar of lead and half a pound of powdered alum, and dissolve in a bucketful of rain water; pour the fluid into another vessel when all the ingredients are dissolved, and soak tent. 2. J. W. Miller, Chicago. 3. Yes.

W. D. R., Lennoxville, P. Q.—1. How would you advise me to begin the study of Natural Philosophy? 2. How and when should a black and tan Gordon setter bitch be spayed? 3. Can chicken lice live on a black Newfoundland pup? If so, can the pup live? Ans. 1. Be more specific; what branch of Natural Philosophy do you wish to pursue? 2. Between the ages of six weeks and three months; for *modus operandi* see "Sportsman's Gazetteer." 3. The lice will not live on a black dog, nor on a white one, nor indeed on a dog of any color.

H. G. B., Exeter, New Hampshire.—1. Can you direct me to a store in Philadelphia or Boston where I can get a small ax to be worn on the belt, such as were used in the war and were called "camp axes?" 2. What would be a fair price for a Sharps' carbine made in 1848, and would it be suitable for deer hunting? 3. What is the price of Fred Englehard's "American Rowing Almanac" and where can I get it? Ans. 1. Reed & Son, Boston; John Krider, Philadelphia. 2. Ten dollars. 3. Peck & Snider, 82 Nassau St., N. Y. Price 75 cents.

J. V. M., Phila.—1. I have a gun marked ——. Is the maker considered a good one? Weight 9 pounds 10 gauge. 2. What is the proper load for such a gun? I use 4 drs. powder and 1¼ oz. shot Ans. 1. We know of a firm W. & Son who are good makers, but not the single name. 2. You load rightly. You might diminish by ¼ of a drachm your powder. Try it.

M. L. K., Kittanning, Pa.—1. Could a muzzle-loading gun be made modified choke? 2. If so how should it be done, by gradual taper from breech to muzzle, or by sudden closing? 3. How far should the sudden closing be from the muzzle? 4. Would 12 gauge at muzzle, 11 gauge at breech be modified choke? 5. What should it cost? Ans. 1. Yes. 2. Could not answer, as all makers vary as to choking. 3. Varies from 1 to 3 inches. 4. Yes. 5. Cost $10. Mr. Squires, of No. 1 Cortlandt st., will do it and guarantee pattern.

G. L. T., Montrose, Pa.—For a set of drawings to build a Newport cat boat from write to Desmond, 37 Peck Slip, N. Y., who will furnish a set at about $10, or see issue of F. and S. for Feb. 7, where the lines of such a boat are given. Unless you have a skillful boat builder in your neighborhood who understands a ship's draft or plans, these drawings, or any others, may be Greek to him. In that case you had better have a boat built and sent to you, or have a good second-hand one shipped. There are plenty of such boats in the market here. For descriptions of a great variety of boats see "Hallock's Sportsman's Gazetteer."

C. P. S., Richmond.—What position do you consider the best for off hand shooting? Should the arm rest on the body? Ans. This depends very much on the build of the rifleman. Of the three positions one is the actual or theoretical, with the right arm at an angle from the body; the second is the left fore arm at rest on the body, and the third the German, or hip or rest position. It is claimed that at Creedmoor the best shooting at 200 and 300 was made with the first position. It never can be decided, we are afraid, as some of the best riflemen use all the positions. Sanford won last year 200 yards with the off hand. This year Joy won with the body rest.

A. O., Shanoks, O.—1. In what localities in West Virginia are deer, bear and mountain trout abundant? 2. Are there any boots for general hunting purposes, better for wear, to keep dry feet, etc., than the alligator boots advertised in your columns? Ans. 1. Go to Berkeley Springs, Morgan Co., via Baltimore and O. R. R. to Sir John's Run, thence afoot. November is the best month. 2. The Esquimaux seal skin boots are better, but hard to get. Might get a pair in Gaspe, or Quebec, Canada. The Canadian shoepack we think equally good, and the porpoise skin boots of G. McDonald, 64 Haymarket, London, are no doubt better.

W. H. C., Kingston, Canada.—1. What is the calibre of rifles used in gallery shooting, and their weight? 2. How are they sighted? 3. What is the charge and description of powder? 4. Is all shooting done at a 100 feet with targets reduced in proportion to range required? 5. Names of makers by whom these rifles are manufactured? 6. Their cost? 7. Do N. R. A. rules govern competition? Ans. 1. 22 calibre. 2. Globe and peep sights. 3. Hazard's powder, metallic cartridge, with short .22 cartridge, 28 of lead and 3 grains powder. 4. Yes, with reduced targets. 5. Ballard, Remington; principally the Ballard rifle. 6. Thirty-five to fifty dollars. 7. Yes.

MAJOR.—1. What is the "twist" of the riding in the express rifle? 2. What is the best compound for cleaning brass shells and manner of using same? Ans. 1. There are half a dozen firms who make the so-called "express rifle." All differ in the riding. From 1¼ to 1¾ turn in 30in. 2. Vinegar, or a weak solution of oxalic acid will brighten the shells. Ronald's metal shell cleaner will do the business thoroughly. Also rub with a mixture of two parts sulphuric acid, two parts water and one part pulverized bi-chromate potash, and then wash in hot water. Also dissolve an ounce of potassium cyanuret in one pint soft water, soak the shells half an hour and then souse in warm water two or three times a day before a fire.

PILGRIM.—All speckled trout which can get access to salt water will go to it. The water and the food which it contains adds greatly to their condition and flavor. We have specimens in jars of *Salmo fontinalis* which were taken in different places along the coast, from Maine to New York, in some cases in seines a mile from shore. One of these was taken off Waquoit, Cape Cod. All our Long Island trout ponds have dams and outlets to salt water. The fish bred in the ponds go over the apron of the dam, and in the spring it is as common to catch them in the salt meadows below the dams as in the ponds themselves. It is yet a disputed question among ichthyologists whether the sea trout and speckled trout are identical. The question has been before them for years.

G. W. D., Chicago.—1. Had my gun moderately choked, but find that it leads in shooting. Now, do you think I can prevent this by having it full choked, for it scatters too much yet. 2. Will chilled shot lead a gun as readily as the soft? 3. A party advertises to rebore gun so as to make them shoot close and hard without choking (a process of his own). Would you advise that method in lieu of the former (choking)? 4. He alleges that choke bores do not shoot buckshot well. What do you think of this? Ans. 1. All choked guns lead more or less, and if full choked it might not lead any more than with moderate choke. 2. No. 3. Could not advise. Possibly they choke under another name. 4. Right as to buckshot, we think. BB's will answer for buckshot—if you use buckshot—chamber in muzzle when the gun is choked.

E. G. K., Williamsport, Pa.—1. I wish to procure one of the auxiliary rifle barrels for my 8¼ pound 10 gauge shot-gun, to be used principally for deer hunting. Would the 38 cal. extra long shell give a flatter trajectory than the 44 cal (model 1873) Winchester shell? 2. Would the auxiliary barrel stand an extra long 44 cal. shell? 3. Is the barrel not too short to burn all the powder of either extra long shell mentioned? 4. What cal. and kind of shell would you prefer for the kind of gun and purpose indicated? Ans. 1. Do not think it would. 2. Yes. 3. Might not burn all the powder, still from experiments witnessed, the fouling in all cases was very slight. 4. 44 cal. As to shell there would be really no preference. For convenience in the woods the everlasting shell, say a half dozen of them, would answer all ordinary purposes.

C. R. R., Boston.—For information of the climate, soil, products, sporting privileges, business advantages, statistics and information in general of Colorado, California, Tennessee, Maryland, Florida, Texas, New Mexico, Minnesota and Nevada, consult Appleton's "Encyclopædia," Lippincott's "Gazetter," Reports of the Government Bureau of Agriculture. Write the Commissioners of Immigration of these States and Territories; send for pamphlets and prospectuses to J. D. Brown, Gen. Pass. Agt., M. K. and T. R. R., St Louis, Mo.; L. Buroham, Land Com. U. P. R. R., Omaha, Neb., and to the agents of the railroads passing through the other States. For Texas particularly buy Taylor's "Coming Empire," for sale at this office, price $1.50.

ROD AND REEL, Wallingford, Vt.—In your last issue I notice an article on the Bay Chaleur. Can you give me any information respecting manner of getting there and cost of transportation? Can good guides and boats be procured? If so, at what price? And lastly, can one totally unacquainted in that section gain the privilege of fishing in the waters mentioned? Ans. There is a direct and most expeditious route to Bay Chaleur and its adjacent waters via the Intercolonial Railroad from Quebec and St. John, or from Bangor connecting with E. and A. R. R. at McAdam Junction. You can get all the guides you want at Dalhousie, Campbellton or the Indian mission opposite, and trout fishing is free in all the rivers. For fullest particulars buy Hallock's "Fishing Tourist," price $2, for sale at this office. A handsome book for the parlor table as well as the camp.

L. N. St. O., Glens Falls, N. Y.—I spend the summer yachting in Baie des Chaleurs and around the Nova Scotia and New Brunswick coasts. I have occasion to shoot many sea birds. I can mount them when fresh, but when the skin is dry I cannot stuff them, being unable to soften the skins. Could you give me some way of preserving the skins fresh, or softening them when hard so as to be able to give them a natural shape? Ans. Take the dry skin, and having removed most of the dry stuffing replace it by moistened cotton. Then bury the skin in damp sawdust and let it remain for one, two or three days according to the size of the bird. Care must be taken not to leave it long enough to rot the skin. On taking it from the sawdust and removing the wet cotton a little manipulation will render it soft enough to work easily. A few experiments will teach you how to manage it.

F. M. W., Ithaca, N. Y.—We have within the last few years placed many thousand trout and black bass in the south end of Cayuga Lake, but there seems to be an insufficient amount of food for them, as the water is very deep. Do you think it would be a good plan to put some of the fry of the whitefish, *Coregonus albus*, or the *C. clupeiformis* in the lake as food for the fish? Ans. Do the latter take fly, or bait? And do you think the Mackinaw trout, *Salmo amethystus*, would thrive in Cayuga? Cayuga Lake seems to be the home of almost every variety of bird and fish. Ans. We know of no better lake than Cayuga Lake for the experiments you propose to make. The whitefish, Mackinaw trout and herring would thrive there, no doubt, and the fry and spawn would serve as food for predacious fish like the bass. Both the whitefish and herring will take a fly at certain times.

C. G. H., Oakland, Cal.—1. Which do you think the best, the —— sporting or the —— sporting, cal. 38? 2. Is the 38 cal., long, good for 200 yards? 3. What size do you think the best for general use? 4. Do you know of any New York firm from whom I could obtain a Winchester repeating rifle, cal. 38, long? What would it cost to have one made to order? 5. Is there any book from which I could learn tanning and taxidermy? What would the instruments needed cost? Ans. 1. Respectfully decline answering. 2. Most too light a bullet for long distances, with great accuracy. 3. 30 cal. with 50 grs. powder of the arms you mention. 4. No. The Winchester only make 44 and 45. 5. See Brown's Taxidermist's Manual, published by Orange Judd, and Haney's publication; also Hallock's "Gazetteer." Something like $5 to $10. Write to Frass, Fulton St., New York, for tools.

P. S. S. F.—1. I have a setter bitch puppy whose navel has not receded yet, or, in other words, there is a lump, soft to the touch, right there where the mark of the navel ought to be, about the size of a walnut; she is 10 months old. What shall I do for it? 2. Till what age do dogs grow in height and length? 3. What constitutes a Bismark setter? Ans. 1. Make a pad of buckskin, stuff it with hair, and use it as a compress by binding it on her. Remove from time to time, and keep the dog clean, and look out for chafing. 2. Ordinary dogs, two to three years; some breeds, of the larger kind, even longer. 3. A particularly very fine breed, which is from Philadelphia. Generally white, with silky coat, fine feather and of great speed, courage, instinct and docility. The breed is not only handsome, but as good as they look For further particulars see back numbers of F. AND S.

W., Attica, N. Y.—1. In this country we have a variety of shooting—grouse, snipe and woodcock; woods filled with brush, lowlands swampy. For general shooting in western New York would you prefer a setter, or pointer? Why? 2. Why did T. C. D., of Philadelphia, amputate the tail of his setter? 4. During the warm weather the perch in Silver Lake, this county, are said to be wormy, or filled with grubs. Are they worms, or grubs? Why is it? Why confined to warm weather? Why confined to perch? 4. Is it best to protect game by State legislature, or by local county laws? Ans. 1. On the whole a setter is preferable. 2. Probably the tail was considered to be too long. 3. We discussed this last week. 4 Local legislation presupposes a local interest in game protection and so may effect better enforcement of the law than is secured by general enactment. If the people are interested either form will accomplish the end.

JACK, Wellsville, N. Y.—A fine shepherd dog six years old about three weeks ago had distemper. Did not swell much about the head and neck, no gathering and breaking, about blind for one week. Lies around very dumpish; did not eat much. Gave him a dose of sweet milk, lard, gunpowder and sulphur ten days ago. The past ten days he has had a good appetite and has flushed up considerable, but does not get any strength. Starts off as usual, goes staggering along and falls down. Hind legs and back appear the weakest; more ambition apparently than strength. Will lie in the sun a while, then gets to panting and goes into the shade a while; then back into the sun. He is fed on table scrapings. Eyes rather dull, with some yellowish gathering at corners; tongue and lips about natural condition in health, hair duller colored than usual, no material change in body further than thinness, breathing natural when not in sun, then faster than natural; bowels and secretions nearly as usual. Appetite good now, runs loose night and day, nose dry and parched, runs slightly. Ans. Give him two grs. quinine three times a day for a week and keep him in the fresh air. Will probably recover.

J. H., Mount Royal, Florida.—Your proposed change of a 20ft. cat to a schooner will increase the amount of gear to be handled, will require more care and expense per year; otherwise there is no reason why the change should not be made. Without knowing the "hang" or centre of lateral resistance of your boat we can only approximate to the correct position of spars. Find this centre of your boat and centreboard, and set that of the subjoined rig about 3 inches forward of it. If impracticable with dimensions given alter to suit. Bowsprit, 8ft. 6in. outboard 8in. thick at stem. Foremast, 5ft. from stem, mainmast, 6ft. 6in. abaft foremast. Foremast, about 16ft. 9in. from deck to upper cap. Mainmast, 17ft. 3in., jib, 12ft. on foot; 17ft. on stay; 11ft. 6in. leech; foresail, 12ft. hoist, 6ft. head, 6ft. foot, 14ft. 6in. leech. Mainsail, 12ft. 6in. hoist, 7ft. head, 17ft. 6in. leech and 14ft. on boom. Topmasts, 7 to 8 ft. long. Masts, 4in. diam. at partners. For stepping mainmast have a stout thwart across cockpit and bolt or spike heavy shoe on keelson for keel step. Use ¾in. manilla for rigging and 8oz duck for sails, double bight luffer, run ½in. hemp rope round foot, luff and head, none on leech required. See our back files for instructions, especially in vol. 9.

C. D. F., Boston.—1. What would be considered a good pattern for a 12 gauge breech-loading gun, cylindrical, with metallic shell, under the following conditions: Powder (best) 3½ drs., shot 1¼ oz., 344 pellets to the oz.; two wads between powder and shot, target, 36 inch circle; distance 40 yards? 2. Under same conditions, the same questions for 10 gauge gun. 3. Under same conditions, the same questions for the 12 and 10 gauge guns, both being bored either by "choke," or "drawboring" (both barrels alike) for "close shooting guns." 4. Under same conditions, the same question for same gun, left barrels being supposed to be bored for very close shooting; the right barrels for medium close. 5. Ought the use of paper shells to cause any appreciable variation in above results, and what, if any? Ans. 1. 190 to 200. 2. 210 to 220. 3. 260 to 280. 4. 225 to 235. 5. Rather better results with metallic shells. Experiments show about from 5 to 10 per cent.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, APRIL 25, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, April 26.—Baltimore Kennel Club. Trotting at Toronto. Base ball: Utica vs. Stars, at Utica; Rochester vs. New Bedford, at New Bedford; Springfield vs. New Bedford, at Springfield; Athletic vs. Keystone, at Philadelphia.

Saturday, April 27.—Boston Bicycling Club run to Quincy. Creedmoor. Seventh Regt. R. C. match. Trotting at Toronto. Base Ball: Yale vs. New Bedford, at New Bedford; Springfield vs. Rochester, at Springfield, New Bedford vs. Worcester, at Worcester.

Monday, April 29.—Base Ball: Springfield vs. Amherst, at Amherst; Star vs. Auburn, at Auburn.

Tuesday, April 30.—Base Ball: Star vs. Auburn, at Syracuse.

STILL BLOOMING.—It seems that in Boston that guileless, bland and simple child of nature, Comanchee George, still flourisheth. Sweetly murmuring "Coccatel, Cocattel," the pigeon-toed hero of many an Indian fight, dispenseth today his okra seeds for the real original Tollula, with which the Atzec maiden, when she hid the pod of the blooming flower in her dusky bosom, was fragrant, perceptibly so, for seven geographical miles. Shall we deny it? Gught we to go back on George? No, never! Touched by his beautiful fervor, smelling ourselves (in poetic fancy) a lattice decked with glorious crimson flowers, the air dyed by a thousand sweets, dreaming of bees dead drunk with the delicious odor, we did invest. May the money we paid George do him good, for the ideal Cocattel to us was worth more than the dollars we disbursed for okra seed. A correspondent in Boston, without our admiration for Comanchee George's powers of Coccatellian inspiration, is down on the putative perfume-purveyor; but then there are some people of decidedly practical and prosaic proclivities. And okra doesn't make such bad soup either!

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

AUTOGRAPH LETTERS BY FRANK FORRESTER.—The following autograph letters, written by the genial and lamented Herbert, have been sent to us by Capt. R. E. Ducaigne, of Cincinnati, O., who obtained them from Mr. Heath, a Cincinnati bookseller, whose opportunities for collecting appear to have been excellent. We are under many obligations for a gift of an original. The punctuation of the original, addressed to the Editor of the *Boston Notion*, has been adhered to:

MY DEAR SIR: AUGUST, * * * 1840.

I am compelled vastly against my will to take a liberty with you. In travelling I never carry with me more ready money than is actually necessary and having done so now & taken orders on Bangor I was so clever aboard the boat as to lose a twenty dollar bill—

I am a little afraid of being short before I reach my destination & in this emergency have taken the liberty of drawing on you for ten dollars at sight—for which I will account to you either pecuniarily or literarily as you please—I doubt not you will pardon the liberty—Pray let me hear from you addressed to me Post office Bangor.

I am Dear Sir ever yrs HENRY WM. HERBERT.

DEAR SIR: NEW YORK, April 4th, 1871

Though long delayed, I write at length to redeem my promise by sending you a little piece of poetry for the *Notion*.—How the sentiments may agree with yours I hardly know—but I suppose poetry is privileged. —The only request I have to make, is that if published—it may be without any comment! If not that you will return me the MS at your earliest convenience!

I have transcribed it carefully, and do not imagine that there will be any difficulty about the printers decyphering it—May I however beg you to be very careful about the correcting of the punctuation, as the whole point of the lines depends on their running and reading fluently.

I remain faithfully yours, HENRY WM. HERBERT,

Geo. Roberts, Esq. Boston. 65 Murray st..

THE AMERICAN TEAM.—We have before this expressed our opinion most decidedly in regard to the ill-timed action of the late American team in appointing themselves their own successors. Never, do we believe, has there been a measure proposed of a more questionable character, nor likely to bring with it more disastrous effects. It smacks of self-arrogance, a good deal of conceit, with any amount of insubordination. We are quite positive that this unwise method of self-election is but a half-hearted measure, and that the wiser-thinking part of the late American team, and certainly the better riflemen, have not given their consent to this most absurd and willful action. We trust that we may before long give notice of abdication of the *vested rights* of the late American team, or, as "Nick" expresses it, "that they will step down and out." We have a very pertinent article on this subject from "Nick," which we greatly regret being obliged to defer until next week.

A SHOT THAT ECHOED ROUND THE WORLD.—Five years ago to-day, the 25th of April, the first shot was fired by a rifleman over the Creedmoor range. Col. G. W. Wingate was the shooter, and Genl. Woodward acted as marker. The echo of that shot has not yet died out, nor is there any prospect of its so doing. In the semi-decade, from 1873 to 1878, the sport of rifle shooting has taken a firm hold on the American people; it has become a national pastime, and is rapidly working its way into a national duty. The single range of Creedmoor has hundreds of exemplars over the country. American rifles are acknowledged to be the best in the world, while the pages of the FOREST AND STREAM bear the brilliant record of victories won by American riflemen at home and abroad.

HONORS EASY.—The Zettler Rifle Club, of this city, has graciously conferred the honor of membership in that crack corps upon T. C. Banks, Esq., the indefatigable business manager of the FOREST AND STREAM AND ROD AND GUN consolidated journal. By the same token the Louisville Gun Club, of Louisville, Kentucky, has extended its hand of fellowship to editor Chas. Hallock, Esq., of the same journal. Thus are the unambitious made men of mark among worthy marksmen. Our acknowledgments of the honors are sincere and appreciative. May the records of these two clubs continue always to stand among the highest.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.

New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sago, Buffalo.

Connecticut State Sportsmen's Association, Hartford, May 15.

Iowa State Sportsmen's Association, Des Moines, May 28.

Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.

National Sportsmen's Association, Wilkesbarre, Pa., June 11

Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.

The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowanco.

Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.

Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

KENNEBEC ASSOCIATION FOR THE PROTECTION OF FISH AND GAME.—Dr. G. W. Martin, of Augusta, Maine, recently delivered an able address at the formation of this association, in which attention was called to the grand field of work afforded by the lake system of Maine. The total number of the lakes and more important ponds is not less than 1,568; or, including the rivers and streams, an area of 3,200 square miles—nearly half the area of the State. About 15,800 square miles is still covered with the primeval forest. To preserve the fish and game of these great fields of sport is the work proposed by the Kennebec Association and others of similar character in the State. There is ample opportunity for much intelligent and well repaid labor here, and from the favorable inauguration of the new association we are led to await most beneficial results.

NEW YORK GAME CLUBS.—The Albany *Express* has this to say of the energetic Game Clubs of Central New York:

"There seems to be a very general determination this year among sportsmen's clubs, game constables, magistrates, and, in fact, all who realize the necessity of preserving game and fish, to enforce the laws. Good examples are set at Clay, Tully, Canastota, Oneida, Cazenovia, Cayuga, Sodus, Cortland, Skaneateles, Otiseo and more places in Central New York, where arrests have been made and penalties enforced. Officers who are derelict, are in some instances complained of and fined $25 for their inactivity. The indications are that more will be done this season in enforcing the laws than has been done altogether heretofore."

ONONDAGA COUNTY FISHING CLUB.—This club, which was organized in October last, has increased in membership until it now numbers over seventy, including some of the best lawyers and business men of the county. Last week the club instituted legal proceedings against seventeen illegal fishermen. Efficient service may be expected from the Syracuse gentlemen who are now in earnest in their resolution to break up the poaching.

—Game Constable Geo. M. Schwartz is making things lively for the poachers of Irondequoit Bay, N. Y.

—Ithaca has a new game protective club, called the Forest City Sportsman's Club.

WEST JERSEY GAME SOCIETY.—At the semi-annual meeting of the West Jersey Game Protective Society, held at Camden, April 17, the committee on purchasing game and fish reported that, since the first of January last, they have put into the woods, in various sections of West and South Jersey, 280 live quails and 16 guinea fowls, and have distributed in the streams and lakes 6,700 California salmon. During the past two years (not including the number above mentioned) the society have distributed this species of fish as follows: Great Egg Harbor River, 19,500; Mullica River, 19,000; Maurice River, 18,500; Tuckahoe River, 6,000; Cohansey River, 9,500; Alloway's Creek, 8,000; Mantua Creek, 6,500; Timber Creek, 3,500; Oldman's Creek, 3,500; Salem creek, 3,000; Dennis Creek, 2,500; Raccoon Creek, 1,000; Woodbury Creek, 500. The society, during the past four months, have paid a bounty of twenty-five cents each on 500 hawks killed, and also on 75 foxes; for policing and other expenses, $589.55. Thirteen persons have been arrested, found guilty and punished for violating the game laws.

PROTECTION DEMANDED FOR SHAD.—It seems quite positive, notwithstanding all the services of the Fish Commissioners, that as long as indiscriminate shad fishing takes place night and day, and all the time, shad must diminish in both these rivers. How can shad reproduce their kind if they are prevented by nets from coming up the river at all? There must be a time, say one day in the week, allowed to shad, when every net should be taken out of the river.

—The pigeon slaughter about Petoskey, Mich., has been engaged in, it is estimated, by not less than 1,500 persons, including white, black and red men. Representatives of the Saginaw and the Bay City Sportsmen's Clubs went to the scene of the unlawful netting, and by the summary arrest and conviction of some of the offenders have suppressed the illegal netting.

—Rushville, Ind., is organizing a Game Protective Club.

The Rifle.

WALNUT HILL RANGE.—*Boston, April* 17.—The "Shot-Gun Match," at 800, 900 and 1,000 yards, fifteen rounds at each distance, winners to be determined by the averages of the best three consecutive scores. The following very tall shooting was made:

W Gerrish.

800	5	5	4	4	4	5	5	5	4	5	5	5	5	5	5—71
900	5	5	5	5	5	4	5	3	5	5	5	5	5	5	4—71
1,000	5	5	5	5	5	5	5	4	5	5	4	5	5	5	5—73—215

W H Jackson.

800	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5—74
900	4	5	5	5	4	5	5	5	5	5	5	5	5	4	5—72
1,000	4	5	5	4	5	4	4	4	5	5	3	5	4	5	5—67—213

A H Hebbard.

800	5	5	5	5	3	5	5	5	3	3	5	5	5	5	3—67
900	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5—72
1,000	5	3	4	4	5	3	5	4	5	5	5	4	5	5	5—67—206

H Tyler.

800	4	5	5	4	5	5	5	5	5	5	5	4	3	5	5—70
900	4	5	5	5	5	5	5	4	3	5	5	5	5	5	5—71
1,000	3	4	4	4	5	4	5	4	5	4	4	5	4	5	4—65—206

A Hebbard.

800	5	5	4	3	4	4	5	3	3	5	5	5	5	5	5—66
900	3	4	3	5	4	5	5	5	4	4	3	4	5	4	4—62
1,000	5	4	4	0	5	5	3	5	4	4	5	4	5	3	5—61—189

J F Brown.

800	0	3	3	3	5	5	4	4	5	4	3	5	4	5	5—58
900	0	3	4	4	5	3	3	3	5	5	5	4	4	4	4—56
1,000	3	5	5	5	5	3	5	5	3	4	3	5	5	5	3—64—178

J E Shepard.

800	5	4	5	5	4	5	5	5	5	5	5	5	5	5	5—73
900	3	5	3	2	5	5	3	3	4	5	3	5	3	4	2—55—128

Mr. Shepard withdrew at the 1,000 yards range. We may remark that 215 and 213, out of a possible 225, is very tall shooting. Mr. Jackson's 74 at 800 is superb.

WALNUT HILL.—The first match last Saturday was the amateur series, open only to members of the Massachusetts Rifle Association; ten rounds at 200 yards;

H Mortimer	5	5	5	4	4	4	3	4	4	5—43
J Wemyss, Jr	5	3	4	5	5	4	5	3	4	4—43
W E Guerrier	4	4	5	4	4	4	4	2	5	5—41
W Poland	3	4	4	4	5	4	4	4	5	4—41
E B Souther	3	3	5	4	4	4	4	4	4	5—40
H B Sargent, Jr.	4	4	4	4	5	3	4	4	4	4—40
J N Frye	4	5	3	4	4	4	4	3	4	4—39
J B Parker	5	3	3	4	5	5	3	4	4	3—38
H Severance	5	4	3	3	2	4	3	4	4	2—34
F Wildo	4	4	4	2	3	2	4	4	3	2—32

"No Cleaning Match," 200 and 300 yards, resulted as follows:

	200 yds.	300 yds.
J Wemyss, Jr	3 4 5 4 4 4 4—28	4 4 5 4 4 2 4—27—55
H Tyler	3 5 4 4 5 4 4—29	3 4 4 3 4 3 4—25—54
Wm Poland	4 5 4 4 5 4 5—31	4 3 3 2 4 3 2—22—53
E B Souther	3 4 4 4 4 5 4—28	3 5 4 3 4 3 0—22—50

H Mortimer	4 3 4 3 4 4 4—26	3 3 3 3 4 0 4—20—46
J N Frye	3 4 2 4 4 3 4—23	4 3 4 4 2 0 4—21—44
J B Parker	3 4 3 3 3 3 4—23	3 0 0 4 4 4 4—19—42

An improvised match, at 200 and 300 yards, resulted in this score:

J E Phipps	4 4 5 4 3—20	5 4 4 4 4—21—41
C C Wemyss	4 3 5 3 5—20	4 4 4 4 4—20—40
A J Wemyss	3 4 4 3 4—18	4 3 4 4 4—19—37
A T Hunnewell	0 4 3 0 3—10	3 3 4 3 3—16—26
H E Betten	2 0 2 4 3—11	4 3 3 3 2—15—26

CONNECTICUT—*New Haven, April* 22, 1878.—A private match between J. J. Sweeney and P. G. Sanford, best two in three matches; Winchester repeating rifles:

First match.

J J Sweeney.....4 4 4 4 4 4—28 P G Sanford.....5 5 4 4 4 5 5—32

Second match.

J J Sweeney.....4 5 4 4 4 5—30 P G Sanford.....4 4 4 3 4 4 4—27

Third match.

J J Sweeney.....4 4 4 4 4 4 4—28 P G Sanford.....4 4 3 4 3 4 4—26

Total for Sweeney.....86 Total for Sanford.....85

X.

CREEDMOOR.—On Saturday the two regular matches, one at at long and one at short range, were shot. The long-range was for the fourth Remington competition; prize, $300 in gold. Mr. Allen made 180 out of a possible 200. At the first contest, which took place some twelve months ago, the same gentleman made 158. Conditions, 20 shots each at 900 and 1,000 yards:

	900 yards.	1,000 yards.	Total.
Isaac L Allen	89	91	180
John P Walters	90	89	179
L L Hepburn	90	85	175
B G Doughty	90	84	174
C E Blydenburgh	88	85	173
L Weber	87	86	173
R Rathbone	90	82	172
Homer Fisher	86	85	171
Gen F F Millen	80	77	157
N D Ward	74	70	144

At three o'clock the third competition for the "Skirmisher's Badge" took place. Second-class targets were used, known as the 500-yard targets. Distance covered, from 200 to 500 yards; five shots advancing and five retreating. Mr. James Ross, the winner, had on a prior occasion made 37 out of a possible 50. Following was the scores:

	Advance.	Retreat.	Total.
James Ross	15	19	34
A B Van Hensen	14	20	34
F C McLewee	14	16	30
C H Eagle	12	14	26
J E McNicol	15	9	24
J L Bontillier	8	14	22
J H Teackle	12	9	21
J W Gardner	2	17	19
Thomas Lloyd	3	10	13
W H Heisser	4	7	11

The Seventh Regiment Rifle Club shot for various prizes. For first stage of trophy, Capt. J. L. Price made 31 out of a possible 35. For the Andrew's Diamond Badge, Mr. O. H. Eagle made 80 out of a possible 100.

CREEDMOOR, April 17.—The "Dirty Match," so called because no cleaning can be done, came off. Distance, 200 yards; 15 shots. The following were the best scores; prize, a Ballard rifle; possible 75:

J F Rathyen	66	C H Johr	57
C G Zeitler	61	A J Howlitt	57
Frank Hyde	61	D Banks	57
T Rogers	61	Thomas Lloyd	56
P McMorrow	63	W Robertson	56
J R Grohman	63	C H Eagle	56
F H Holton	63	G H Creed	56
A H Wickham	63	J L Paulding	56
G L Morse	62	E H Sanford	55
N D Ward	62	D E Vannett	54
J T B Collins	61	J L Case	54
I L Allen	61	C E Blydenburgh	54
A McInness	60	Dr H S Dudley	54
W R Livermore	60	J Olri	52
J E Irwin	60	E W Price	52
N O'Donnell	60	J H Teackle	50
H Fisher	60	J W Mangam	49
H W Gourlay	59	B Squier	49
J S Conlin	59	W Haddenhorst	47
Charles Helzman	59	W H Keen	43
J L Price	59	J W Todd	45
E Squier	59	E A Goater	44
D F Davids	58	J R Washington	44
F L Sheldon	58	James Ross	39
L H Greve	58	Capt C E Truslow	37

On the same day, competition for the "Appleton Prize," the winner to have a copy of the "American Encyclopædia." Conditions, 200 and 300 yards; seven shots at each distance; possible 70:

Dr H S Dudley	60	Homer Fisher	53
D Banks	59	C H Johr	52
F H Holton	58	J L Price	52
Theodore Rogers	58	J L Paulding	51
E E Lewis	58	A McInness	51
I L Allen	58	W R Livermore	51
C E Blydenburgh	58	R H Keene	50
E H Sanford	58	J E Irwin	49
E Squier	57	J W Mangam	49
C H Eagle	57	J S Conlin	49
J W Todd	57	N O'Donnell	48
W Robertson	56	A J Howlitt	48
F L Sheldon	56	D E Vannett	47
E A Perry	55	Thomas Lloyd	47
C G Zeitler	55	B Squier	44
C Helzman	54	C W Minor	44
J S Case	54	J R Grohman	44
G H Creed	54	J H Teackle	42
G L Morse	54	C M Merchant	42
P McMorrow	54	N D Ward	41
E W Price	54	H W Clements	44
J T B Collins	54	S J Gorman	40
D F Davids	54	James Ross	39
J F Rathyen	54	E A Goater	37

TELEGRAPHIC MATCH.—A match will be shot between the G. H. Thomas Post, G. A. R., of Chicago, and the New York Rifle Club. The date of the match is not yet fixed.

ZETTLER RIFLE CLUB held their weekly shooting at 207 Bowery; Creedmoor target reduced to gallery distance; ten shots per man; possible score, 50:

D Miller	50	J Du'lt	45
P Fenning	50	J Levy	45
Theo Kilgrath	49	H Oehl	44
M L Riggs	47	B Zeitler	43
M B Engel	47	M Dorrler	42
C Judson	47	J Colhane	42
F Farbarus	46	N D Ward	41
C G Zeitler	46	W Moore	41
E L Beatese	45	C Wallace	40

First competition of the above club for a gold medal, at Guttenburgh, Steinbruner's range, 200 yards off-hand; ring targets, ten shots per man; possible 250:

W Klein	216	F Farbarus	184
P Fenning	201	R Zimmerman	178
N D Ward	199	J Duff	174
M L Riggs	194	D Miller	170
M Dorrler	192	G Schurman	168
H Oehl	185	L Beatese	160

SEPPENFELDT RIFLE CLUB.—175-foot range, 18-inch target, 2½-inch bull's-eye; Creedmoor rules; possible 50:

W Seppenfeldt	49	Sam Dwyer	45
A H Anderson	48	N W Buch	46
Th Regan	47	C Roesch	41
Dn Sullivan	47	G Recker	43
Alo Keller	46	E T Munder	42
Er Holtzmann	45	M Morrissey	42
Isaac Garrison	45	W Leary	40
Ed Story, Jr	45	Ch Laing	41

CH. SHACKELL, Sec.

CARLISLE (PA.) RIFLE ASSOCIATION, *April* 19, 1878.—The following scores were made at 800 yards. The Carlisle Rifle Association is very young yet, this being only the fourth time they have been on their range:

Geo D Keller	5 5 2 3 4—19	Wm R Miller	2 3 3 4 5—17
John L Coover	4 3 2 0 0— 9	A D Boas	0 0 2 2 5— 9
Jos Shrom	2 5 3 2 5—17		

SOUTH CAROLINA—*Charleston*—Our riflemen have pulled off the cover, rubbed off the old oil and polished up their shooting-irons, and are again in the field after some months of quiet. The Sumpters led off with a company match on last Saturday, at their new range on the parade ground, 200 yards, off-hand, open sight, any army rifle, five shots. First prize, Company Gold Medal, won by First Lieutenant Bruns; score, 19. Second prize, Sharps Rifle, won by Captain Miller; score, 19. The average shooting was very good, considering the small amount of practicing.

Friday, 19—Carolina Battalion, Company Match, at their range, parade ground—200 yards, off-hand, open sight, six pound pull, three rounds of five shots each.—Company Gold Medal, won by P. H. Lynch, 1st round, 20; 2d, 21; 3d, 20. W. J. McCormack, second, 18, 18, 17. The average scores of the balance of the club were not as good as usual for the Carolinas, and they will have to use a little more discipline with the younger members of their team if they hope to keep their place in the first ranks of our crack shots. The Carolinas have made arrangements to have a fine sooting stand built on their range, and as a proof of their well known gallantry and of their high esteem for the fair sex, they will have a fine ball for dancing and the accommodation of their lady friends, attached to their stand. They hope to have everything completed by the 15th of next month, and will give a grand reception and shooting match at the opening of their hall.

YENOTS.

FROOMOOR.—Contest for silver prize presented by Crescent City Rifle Club; 200 yards, off-hand, military rifle:

D Rosenberg	4 4 4 5 5—22	King, B	3 3 4 4 4—18
J K Renaud	3 4 5 4 5—22	Gilfen	3 4 3 3 5—18
Thos McQuilby	4 5 4 5 4—22	Coleman	4 5 3 3 3—18
Heslit	4 4 4 4 4—20	Pardo	4 2 3 4 4—17
Brown	4 4 4 4 4—20	Stevens	3 3 4 5 4—17
Babbitt	4 3 4 4 5—20	Dupre, Hy	4 4 3 2 4—11
Collins	4 3 3 5 4—19	Perilloux	4 3 2 4 4—17
Watkins	4 3 4 4 4—19	Daner	4 3 3 3 3—16

The Continentals, Washington Artillery, Louisiana Field Artillery and Crescent Battalion made excellent scores at 500 yards.

TEN SHOTS AT SIXTY YARDS COVERED BY A QUARTER OF A DOLLAR.—A correspondent sends us the photograph of a target made by Mr. John F. Beaver, of Dayton, Ohio, with a Sharps rifle, .45-cal., at 60 yards. The ten shots cover a space of ⅞ in., a fraction less than an inch, and every shot would have struck a silver quarter.

CALIFORNIA RIFLE ASSOCIATION.—We give herewith the scores of the spring meeting at San Bueno, April 11. The first event was the regimental team match:

First Regiment.

Lieut A Robertson	4 4 4 4 4 4 4 4 5 5—42
Capt H J Burns	4 4 4 4 4 5 4 3 5 5—42
W F Leeman	5 4 4 4 4 4 3 4 5 4—41
J Biggy	3 4 4 4 4 5 5 4 4 4—41
O M Shaff	5 5 4 4 4 4 4 4 3 4—41
J E Klein	4 3 4 5 4 4 4 4 4 4—40
M A McKildony	4 4 5 5 4 3 3 4 4 4—40
C Milligan	5 4 4 4 4 4 3 4 4 3—39
Charles P Le Breton	5 3 4 3 3 4 4 4 4 4—38
Corporal Duncan	4 3 3 4 4 4 4 4 5 3—38—402

Second Regiment.

E H Ladd	5 5 4 4 4 4 4 4 4 4—42
John P Warren	3 3 5 4 4 5 4 4 5 4—41
Harry Hook	4 4 5 4 5 4 4 3 4 3—40
F Hageman	4 5 5 3 5 3 4 4 3 4—40
Captain W H Brockhoff	4 4 4 4 4 4 4 4 4 3—39
George H Wood	4 5 3 4 4 4 4 4 4 3—39
Edwin K Luke	4 5 4 4 4 4 4 4 3 3—39
Charles Goetgen	4 4 4 4 3 4 3 4 4 4—38
D W Swain	4 5 2 4 4 5 4 4 4 2—38
Thomas Macanley	3 4 3 3 4 4 4 3 4 3—36—392

Third Regiment.

Lieut J W Maher	5 5 4 3 5 5 4 3 5 4—43
Capt J H McMenomy	3 4 3 4 4 4 4 5 4 5—40
A G Fitzpatrick	5 4 4 4 3 4 4 3 4 4—39
J Masterson	4 5 2 4 4 4 4 3 4 4—38
P Killilea	4 4 3 4 4 4 4 4 3 4—38
Thomas Tunstend	3 4 5 3 3 4 5 3 4 4—38
T H J Grilla	4 4 3 4 5 3 4 4 3 3—37
John Stack	5 3 3 4 3 3 4 4 3 4—36
P O'Rourke	3 4 3 4 4 3 4 4 3 3—36
Capt D J Sullivan	4 4 3 4 2 0 5 4 3 4—33—377

Cavalry Battalion.

Capt H W Gray	5 4 4 4 3 4 4 4 3 4—38
P W Greany	4 2 4 3 3 4 3 3 2 4—37
Lieut M Cook	3 4 4 3 4 3 4 3 4 4—36
Lieut P F McGrath	4 4 4 3 3 4 3 3 5 3—36
Frank Buxton	4 3 3 4 4 3 3 4 3 3—34
P Rotherman	4 3 3 4 4 4 3 4 2 3—34
Charles Sallx	4 3 2 3 4 3 3 3 5 3—32
Capt M Greany	4 2 4 3 4 4 3 3 2 4—29
F Edwards	4 4 4 0 5 2 4 0 2 3—28
Capt C O Keene	0 0 0 0 3 3 4 3 3 3—19—323

Match for silver medal of the C. R. A., shot by best marksman in each team:

Lieut J W Maher	4 4 5 5 4—22	Joshua Robertson	4 4 4 5 4—21
E H Ladd	4 4 5 5 4—22	Capt Gray	3 4 3 3 4—17

Lieuts. Maher and Ladd shot off with the following result:

Lieut J W Maher	3 5 4 5 4—21	E H Ladd	4 4 4 4 4—20

The Kellogg Challenge Cup Match.

	300 yds.	600 yds.
J Robertson	3 4 4 4 5—20	4 3 3 4 3—17
J W Maher	3 4 4 4 4—19	3 3 3 5 5—19
H J Burns	4 4 4 3 4—19	
J P Warren	3 4 3 4 3—17	4 4 2 5 3—18
C P Le Breton	4 3 4 3 3—17	
W Shaughnessy	4 4 3 3 3—17	4 3 4 4 5—20
W F Leman	3 4 4 3 3—16	5 3 4 3 5—20
W C Urbau	3 3 4 4 3—16	
M Donn	3 2 3 3 4—15	
J Klein	3 4 3 3 2—15	4 3 2 4 3—16
F Kuhnle	0 3 4 4 4—16	5 5 4 4 3—18

Pacific Life Challenge Cup contest; 200 yards:

Gen John McComb	5 4 4 5 5—23	E K Lake	4 4 4 4 5—21
W M Farrow, of N Y	5 4 5 4 5—23	P Hageman	4 5 4 4 4—21
F Kuhnle, Petaluma	5 5 4 5 4—23	J S Campbell	4 5 4 4 4—21
H C Smith	4 4 5 4 5—22	E H Ladd	5 3 4 4 5—21
Major D W Laird	4 4 5 4 5—22	Capt H J Burns	4 4 4 4 4—20
J E Klein	4 5 4 4 5—23	Wm Shew	4 4 4 4 4—20
Sergt C P Le Breton	5 2 5 4 5—22		

The Ladies' Match resulted in the highest scores for:

J E Klein	4 4 5 5 5—23	F Kuhnle, Petaluma	5 4 4 5 5—23
W M Farrow, of N Y	4 5 4 5 5—23		

A CLEAN SCORE.—In a match between the Oakland and San Francisco Clubs, at Oakland, Cal., April 10, the following scores, out of a possible 50, were made:

Farrow	3 5 4 4 5 5 5 5 5 5—46
Col Kellogg	3 3 5 4 5 3 4 5 5 5—42
Graves	4 5 4 4 4 4 4 4 3 4—40
Hanson	4 5 5 4 3 4 3 4 3 5—40
Hinn	4 2 4 4 5 3 4 4 4 4—38

Mr. Farrow, of New York, then made this score with a Ballard rifle: 5 5 5 5 5 5 5 5 5 5—50.

SACRAMENTO PISTOL TEAM.—Weekly match, April 10. Range, 60 feet; circular target, 10½ inches in diameter, with rings counting from 1 to 11, and bull's eye, one inch in diameter, counting 12. Out of a possible 120, the following scores were made:

Byers	10	10	10	11	10	10	10	9	9	9—98
Ballard	10	10	10	11	9	7	11	10	6	8—92
Gerber, H	7	8	10	11	12	6	8	8	9	12—92
Grimes	9	9	8	8	6	12	12	10	9	8—91
Farren	12	10	10	10	7	12	10	10	9	8—98
Kane	11	11	9	7	4	11	10	10	9	9—91
Loftus	11	11	10	9	8	12	11	10	10	9—101

MONTANA—*Helena, April* 6.—Match for valuable prize; strong wind and rainy; 200 yards, off-hand. Score:

G Stuart	4 4 5 5 5—23	E Ingersoll	4 3 3 5 4—19
D W Curliss	4 4 4 5 5—22	Capt Page	2 3 4 3 5—17
H Hewins	4 4 5 4 5—22	Dr Jones	3 4 3 3 3—16
H Handley	4 4 4 4 5—21	D Flowerre	4 3 0 3 3—13
O Allen	5 4 4 3 4—20		

MOUNTAINEER.

Programme of the Spring Meeting of the National Rifle Association of America.

CREEDMOOR, L. I., MAY 23, 24 AND 25, 1878.

FIRST DAY—THURSDAY, MAY 23, 1878.

"Leech Cup" Match, 10 o'clock A. M.—Open to all native-born citizens of the United States, and all resident members of the Amateur Rifle Club, regardless of nationality. Distances, 800, 900 and 1,000 yards. Position, any, without artificial rest. Rounds, fifteen at each distance, without sighting shots. Weapon, any rifle within the rules. Entrance fee, $1 for members of the A. R. C., and $2 for all others. Prize—The Leech Cup, to be held by the winner during the year, and championship gold badge, value $50.

Frazier Gold Prize Match, on new range, at 1 o'clock P. M.—Prize, $250 gold, presented by Mr. J. W. Frazier. Open to teams of two men from each company of the National Guard, S. N. Y., to be in uniform and to use the Remington rifle, State model. Companies to be allowed to send more than one team, and teams to be allowed four entries each. Entrance fee, $1 for each man. Distance, 200 yards; position, standing. Prizes—$250 in gold, divided into four prizes of $100, $75, $50 and $25. The team making the highest score will take the first prize, and those next in order of merit the others.

"Soldiers' Match," on new range, 1 o'clock P. M.—Prize, a bronze trophy, presented by Col. Robert Olyphant; value, —. Open to teams of eight (privates or corporals) from each company, troop or battery in the National Guard, each organization having the right to send as many teams as it sees fit. Distance, 200 yards; position, standing. Weapon, Remington rifle or carbine, State model. Third class target. Competitors to be in uniform, jacket, cap, waist-belt and cartridge box. The match to consist of two stages. First, firing by file; five rounds per man; time not to exceed two minutes from the command, "Commence firing." Second, firing by volleys; five volleys for each team.

"Skirmishers' Badge" Match will be called at 4 P. M. Open to all members of the N. R. A. and members of the National Guard of any State in uniform. Weapon, the military rifle issued to the Regular Army or Navy, or to the National Guard of any State, by the authorities thereof. Distances, from 200 to 500 yards, as hereinafter prescribed. Second-class targets. Entrance fee, fifty cents. The highest score to take the badge, the next to take 15 per cent. of the entrance money, and the third 10 per cent., the remainder being retained by the Association to cover the expenses of the match. The badge to become the property of the person winning it three times (not necessarily consecutive).

SECOND DAY—FRIDAY, MAY 24, 1878.—SHORT-RANGE MATCHES.

Commencing at 2 o'clock a. m., on New Range.

1. Subscription. Open to members N. R. A. only. Distance, 300 yards; position, standing; weapon, any rifle.

2. Stated Prizes. Open to all comers. Distance, 300 yards; position, standing; weapon, any rifle. No duplicate entries allowed.

3. "The National Guardsman" Match. First Stage. Open to members of the National Guard. Distance, 300 yards; position, standing; weapon, the authorized military rifle in use by the organization of which the competitor is a member. Prize, a Remington long range rifle, value $125. To be won three times, not necessarily consecutively, before becoming the personal property of winner.

4. Subscription. Open to all comers. Distance, 300 yards; position, standing; weapon, Remington military rifle, N. Y. State model.

5. Subscription. Open to marksmen N. G. S. N. Y. Distance, 300 yards; position, standing; weapon, Remington military rifle, N. Y. State model. Competitors in this match must wear their "Marksman's Badge."

6. Subscription. Open to all comers. Distance, 300 yards; position, standing; weapon, any military rifle, *including* SPECIALS.

7. Subscription. Open to all comers. Distance, 300 yards; position, kneeling; weapon, any carbine.

8. Team Subscription. Open to any team of four men representing any rifle club in the United States, or any four members of the N. R. A. Number of teams from any club or association unlimited. Distance, 300 yards; position, standing; weapon, any rifle.

9. Team Subscription. Open to teams composed of any four members of the National Guard, S. N. Y. Distance, 300 yards; position, standing; weapon, Remington military rifle, N. Y. State model.

LONG RANGE MATCHES.

10. "Sharps' Military Team." Commencing at 9 o'clock A. M. First stage. Open to teams of four men from any military organization (company, battalion or regiment.)

Distance, first stage, 800 yards; second stage, 900 yards; third stage, 1,000 yards; position, any under the rules; weapon, any military rifle (not special military). Teams may use the rifle their organization is armed with, or any other; but all the members of each team must be armed alike. Entrance fee, $2 per man. PRIZES—To the team making the highest aggregate score, a Sharp's military rifle, model 1878, to each member. Presented by Sharp's Rifle Company. *One-half* the entrance money to be divided as follows: One-sixth to the team making highest score at 800 yards; two-sixths to the team making highest score at 900 yards; three-sixths to the team making highest score at 1,000 yards.

11. Subscription. Open to members N. R. A. Distance, 800 yards; position, any; weapon, any rifle.

12. Stated Prizes. Open to all comers. Distance, 800 yards; position, any; weapon, any rifle. No duplicate entries allowed.

13. Team Subscription. Open to teams of four men, as in match No. 8. Distance, 800 yards; position, any; weapon, any rifle.

14. Team Subscription. Open to teams of four men—all comers. Distance, 800 yards; position, any; weapon, any rifle.

15. Subscription. Open to members N. G. S. N. Y. Distance, 800 yards; position, any; weapon, Remington military rifle, N. Y. State model.

10. "Sharps' Military Team." Commencing at 1 o'clock P. M. Second stage. Open to teams of four men. Distance, 900 yards. Conditions, etc., as in match No. 10.

17. Subscription. Open to members N. R. A. Distance, 900 yards; position, any; weapon, any rifle.

18. Stated Prizes. Open to all comers. Distance, 900 yards; position, any; weapon, any rifle. No duplicate entries allowed.

19. Team Subscription. Open to teams of any four men—all comers. Distance, 900 yards; position, any; weapon, any rifle.

20. "Sharps' Military Team." Commencing at 3 o'clock P. M. Final stage. Open to teams of four men. Distance, 1,000 yards. Conditions, etc., as in match No. 10.

21. Subscription. Open to members N. R. A. Distance, 1,000 yards; position, any; weapon, any rifle.

22. Stated Prizes. Open to all comers. Distance, 1,000 yards; position, any; weapon, any rifle. No duplicate entries allowed.

23. Team Subscription. Open to any teams of four men—all comers. Distance, 1,000 yards; position, any; weapon, any rifle.

THIRD DAY—SATURDAY, MAY 25, 1878.—SHORT-RANGE MATCHES.

24. Directors' Match. Commencing at 9 o'clock A. M. Open only to Directors and Honorary Directors of the N. R. A. Distance, 200 yards; rounds, five; position, standing; weapon, any rifle. No duplicate entries allowed.

25. Stated Prizes. Open to all comers. Distance, 200 yards; position, standing; weapon, any rifle. No duplicate entries allowed.

26. Military Team Match. Open to teams of five from any company, troop or battery of the National Guard of New York or other States, or of the regular army, navy or marine corps, to be composed of company officers, non-commissioned officers or privates, certified to have been members of the company they represent, on March 1, 1876. Distance, 200 yards; position, standing. Teams to use the rifle their company is armed with. This match to be fired in thirty minutes. PRIZE—An embroidered flag, value $100. To be won three times before becoming the property of the organization.

27. Team Subscription. Open to any team of four men representing any rifle club in the United States, or any four members of the N. R. A. Number of teams from any club or association unlimited. Distance, 200 yards; position, standing; weapon, any rifle.

28. Carbine Team Match. Open to teams of four from any troop or battery, N. G. S. N. Y. Distance, 200 yards; position, standing; weapon, Remington carbine, N. Y. State model.

29. Subscription. Open to members N. R. A. Distance, 200 yards; position, standing; weapon, any rifle.

30. Subscription. Open to members N. R. A. Distance, 200 yards; position, standing; weapon, any military rifle.

31. Subscription. Open to members N. R. A. Distance, 200 yards; position, standing; weapon, Remington military rifle, N. Y. State model.

32. Subscription. Open to all comers. Distance, 200 yards; position, standing; weapon, any military rifle.

33. Subscription. Open to members N. G. S. N. Y. Distance, 200 yards; position, standing; weapon, Remington military rifle, N. Y. State model.

34. Subscription. Open to marksmen, N. G. S. N. Y. Distance, 200 yards; position, standing; weapon, Remington military rifle, N. Y. State model. Competitors in this match must wear their "Marksman's Badge."

35. Subscription. Open to members of the National Guard of any State, or of the regular army, navy or marine corps of the United States. Distance, 200 yards; position, standing; weapon, the authorized military arm issued at public expense to the organization of which competitor is a member.

36. Subscription. Open to members N. G. S. N. Y. Distance, 200 yards; position, standing; weapon, Remington carbine, N. Y. State model.

37. Subscription. Open to all comers. Distance, 200 yards; position, standing; weapon, *any carbine.*

MID-RANGE MATCHES.

38. Subscription. Commencing at 9 o'clock A. M. Open to all comers. Distance, 600 yards; position, any, with head to target; weapon, any military rifle.

39. "The National Guardsman" Match. Second stage. Open to members of the National Guard. Distance, 600 yards; position, any, with head to target; weapon, the authorized rifle in use by the organization of which the competitor is a member. Prize and conditions as in match No. 3.

40. Stated Prizes. Open to all comers. Distance, 600 yards; position, *any;* weapon, any rifle. No duplicate entries allowed.

41. Team Subscription. Open to any team of four men, representing any rifle club in the United States, or any four members of the N. R. A. Number of teams from any club or association unlimited. Distance, 600 yards; position, *any;* weapon, any rifle.

42. Team Subscription. Open to teams of four from any military organization in the United States, including the regular army, navy and marine corps. Distance, 600 yards; position, any, with head to target; weapon, the authorized arm issued at public expense to the organization which the team represents.

43. Subscription. Open to members N. R. A. Distance, 600 yards; position, *any;* weapon, any rifle.

44. Subscription. Commencing at 2 o'clock P. M. Open to all comers. Distance, 500 yards; position, any, with head to target; weapon, Remington military rifle, N. Y. State model.

45. Subscription. Open to members N. G. S. N. Y. Distance, 500 yards; position, any, with head to target; weapon, Remington military rifle, N. Y. State model.

46. Subscription. Open to members N. R. A. Distance, 500 yards; position, any, with head to target; weapon, Remington military rifle, N. Y. State model.

47. Subscription. Open to all comers. Distance, 500 yards; position, any, with head to target; weapon, any military rifle.

48. Subscription. Open to members of the National Guard of any State, or of the regular army, navy or marine corps of the United States. Distance, 500 yards; position, any, with head to target; weapon, the authorized arm issued at public expense to the organization of which competitor is a member.

49. Team Subscription. Open to teams of four from any military organization in the United States, including the Regular Army, Navy, and Marine Corps. Distance, 500 yards. Position, any, with head to target. Weapon, the authorized military arm issued at public expense to the organization which the team represents.

50. Stated Prizes. Open to all comers. Distance, 500 yards. Position, any. Weapon, any rifle. (No duplicate entries allowed.)

Prize List.—Fifty per cent. of the entrance money in each Subscription Match will be divided among the competitors therein, as shall be announced in a subsequent programme.

The stated prizes in Matches Nos. 2, 18, 22, 25, 40 and 50 will be announced in a supplemental programme.

Game Bag and Gun.

GAME IN SEASON IN APRIL.

Wild ducks, geese, brant, etc.

PATENTS ISSUED IN WEEK ENDING MARCH 5, 1878.—Fire arms, nipple guard, N. Freiz, 200,999; Cartridge, G. W. Evans, 200,995; Cartridge box, J. W. Frazier (r), 8,112; Cartridge loading device, E. Schenck, 200,846.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Brant geese, 1.50; mallard ducks, 75; black ducks, 75; widgeon ducks, 50; broad bill ducks, 50; teal ducks, 50; wild geese, per piece, $1; Wilson snipe, per doz., $1.50; plover, $1.50; hay birds, large, $2.50; small, 75; wild pigeons, flights, $1; do stall fed, $2; Philadelphia squabs, $3.00; wild do, $1.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25 cents; do., fowls, 18; do., turkeys, 18; do. ducks, 18; State and Western chickens, 16; do., turkeys, 16; do., fowls, 12; do., ducks, 15; capons, 40; slips, 30; spring chickens, 35.

SNIPE SHOOTING.—The opening snipe shooting has not borne its usual fruits. Scarcity of birds and small bags has been the wide-spread complaint. The fact is, the present has been one of the most remarkable springs ever known. Ethereal mildness burst forth simultaneously all over the country at a very early date. Latitude and longitude lost their climatic peculiarities, and the genial breath of gentle spring breathed over all their length and breadth alike. On the third day of March the buds were swelling and the swamp maples putting forth their leaves from Canada to the far Northwest. Vegetation seemed as far advanced in Minnesota as in the latitude of New Jersey. No snow on the ground and no frost within it. The weather was so warm, in fact, that sportsmen threw off their shooting-jackets while they tramped, and the market of Chicago was well supplied with birds—the snipe—which usually come much later after a long period of blustering, chilly weather. We quite agree with a Kentucky friend when he says:

"Heretofore the snipe made regular advances forth with the season, and giving out as the weather grows warmer. This year they kept on, a few stopping here and there, and scattering themselves over a wide territory, at the same time spreading themselves instead of, as heretofore, confining themselves to a narrow belt. While the aggregate may have been as large as heretofore, the number was so scattered that large bags were impossible."

RHODE ISLAND—*Newport, April* 20.—Our snipe shooting has thinned out too soon; our sportsmen complain of long tramps and few wild birds. Coot shooting from the boat house, Situate and Sconnet Points, is just now in order, and the birds are flying finely for sport. It is one continual long bang from early morn to night. Mr. R. Baker, of B., made a very fine bag of coots and one wild goose in two days' shooting from the boat house point. COOT.

MURRAY HILL GUN CLUB.—A number of gentlemen met at the residence of Nicholas Engle, 12 West Twenty-seventh street, April 15, and organized the Murray Hill Gun Club. The officers are as follows: Dr. J. H. Meyer, Pres.; Fred Tracy, Vice-Pres.; Geo. Crowley, Sec. and Treas. Gentlemen wishing to become members should address the secretary, 12 West Twenty-seventh street.

LONG ISLAND—*Good Ground, April* 16.—The rest of the Jersey City Heights Gun Club returned to-day, taking with them twenty-six geese and some ducks. The inlet continues good, with excellent prospects of good fishing as well as sniping during the summer.

PRIZE FOR THE NEW YORK STATE ASSOCIATION.—The Messrs. Tatham have had made for the New York State Association a most elegant keg mounted on a truck, the keg to be filled with some 500 pounds of their numbers 6, 7, 8, 9 and 10 of improved chilled shot. In addition to this they also present 500 pounds more. The keg has painted on it "Harder, Heavier and more Uniform and of Brighter and Clearer Finish than any other Shot." Here is a chance for the winner of some of the matches having his shot free for quite a number of years to come.

JERSEY CITY HEIGHTS GUN CLUB.—On Thursday, May 2, the Jersey City Heights Gun Club will have a grand glass ball tournament, when the following programme will be carried out: There will be sweepstakes, open to all amateurs, for prizes of $100, $50 and $25 at single and double balls. Take the ferry foot of Deshrosses or Courtlandt streets, and go to Marion. Committee of Arrangements, Messrs. Thompson, Toffey and Eaton.

PENNSYLVANIA—*Erie, April* 19.—Snipe shooting very poor on account of the dry weather. Mr. O. M. Tibbals made the best bag of the season so far. Any amount of pigeon shooting a short distance from here on Philadelphia & E. R. R.—two of our crack shots bagged about one hundred dozen in the last ten days, all on the wing. SNIPE.

Bradford, April 20.—The gentlemen of the Tarport Oil Exchange have organized a sporting club, the "Tunungawaut Club." Many fine shots among them. TUNA.

Conneautville, April 16.—Snipe-shooting good about here.

TENNESSEE—*Huntingdon, April* 19.—The quail season has closed here, leaving a larger number of quail to be carried over than usual. The prospect for an extensive raise the coming season is good. Snipe shooting has been very poor. This being the season for turkey gobbling our sportsmen have been quite busy in the early morn for a week or two. They repair before day to the forest where turkeys are most likely to roost, and if they halt within a half mile of a sturdy old gobbler they are certain to hear from him as gray morn dawns in the east. Up to this writing about a half-dozen turkeys have been brought in varying in weight from 18 to 22½ pounds. Our fishermen are angling in Beaver Creek, but so far with rather indifferent success. FORESTER.

Columbia, April 20.—Mr. H. F. Watkins, living near Summerstown, Lawrence Co., about 20 miles from here, shot and killed a wild turkey weighing 29 pounds. A gentleman living near him killed one weighing 17 pounds. I am informed that "the woods are full of them." VAL.

LOUISIANA—*Lake Charles, April* 16.—Plovers (pepper bots) are very plentiful here now. A friend of mine, M. J. R., and I, yesterday, in three and a half hours killed fifty-one plover. Jacksnipe are making their appearance, but not plentiful yet. Marsh hens are also coming in. Many different snipe and water-fowls make their appearance here usually in the months of May and June. Partridges, ruffed grouse, etc., are nesting and protected by the game law. W. M.

TATHAM GUN CLUB.—The Tatham Gun Club was organized April 1, at Waco, Texas, and named in honor of the Messrs. Tatham of this city. The officers are: C. O. McColloch, Pres.; D. R. Ginley, Vice-Pres.; H. M. Thompson, Sec. and Treas. A shooting tournament will be held May 9 and 10, for the champion badge presented by the May Festival Association. A large number of clubs are expected to participate.

OHIO—*Painesville, April* 16.—A good many quail have survived in this vicinity, and their cheerful notes are heard on every hand. Snipe still scarce. ANO.

Bellefontaine, April 15.—Logan County includes within its limits almost a score of lakes. The country is not of low elevation. It is a part of the dividing ridge that separates the waters that flow to the Ohio from those that flow to Lake Erie. Indian Lake, the largest in the county, is now included in the Lewistown reservoir, which covers about thirteen thousand acres, and is famous for fishing and duck hunting. Silver Lake is a nice body of water, with gravelly bed, on the line of the Cleveland and Indianapolis Railroad, and is a resort for picnics and excursion parties. Rushcreek, the next lake of importance, is surrounded by an extensive swamp, which is now being ditched. Remains of various kinds of animals are being daily dug up by the workmen. Deer and elk horns are found in a good state of preservation. A set of horns have been discovered, measuring between six and seven feet from skull to tip, with numerous antlers, supposed to be remains of the moose. They were too badly decayed to be preserved. Logs are dug up with the marks of the beavers' teeth visible where they gnawed them from the tree. What a grand menagerie the animals whose remains lie deposited in this bog would make. This was the pioneer sportsman's favorite for hunting and fishing; but as the game gives way to the huntsmen, so they are giving way to the landlords, who forbid trespassing by gunners or anglers, and ere long the dismal Rushcreek Swamp by human ingenuity will be converted into fields of thrifty grain. ONOR.

MINNESOTA—*Sleepy Eye, Brown Co., April* 12.—The prospect for chickens was never better, the country is full of them, and their booming in the morning makes a continuous sound like the humming of bees. Geese, brant, ducks and sand hill cranes are here in plenty, covering the grain fields and filling the sloughs. When the new lines are opened up from here this will be a prairie sportsman's paradise. VERD MONT.

IOWA—*Winterset, April* 15.—Snipe are coming in quite plentifully. Our game law, as per action of the late Legislature, allows to shoot chickens only from Sept. 15 to Dec. 1. Good for the chickens, but bad for the sportsmen. J. W. M.

CAPTAIN BOGARDUS AT HOME.—The captain, from his home at Elkhart, Ind., writes us that, with Eugene, he is polishing off snipe and golden plover at the rate of thirty to fifty a day. This is to keep their hands in. On the 29th of April Captain Bogardus will shoot at the theatre, and then goes on to Pittsburg to break glass balls there. The captain will be in New York during the dog show.

CANADA.—Our correspondent, Mr. J. U. Gregory, writes us from Quebec, under date of the 11th inst.:

"The first woodcock of the season was flushed on the morning of the 9th inst. by the veteran sportsman Pierre Portugais, who for thirty-eight years past claims to be the first to do so every spring. The first black duck of the season were killed at Sorel, two-thirds way between here and Montreal, on the 3d inst. by Pierre Poliquero, the man who canoed His Excellency, the late Governor of the Province of Quebec, on both occasions, when my guest last fall, duck shooting at Sorel, four black ducks and one golden-eye were sent to me and were in

fine condition. I understand Poliquero bagged twenty ducks on that day. No snipe have made their appearance here yet, nor will they do so until frost is entirely out of the ground.

PIGEON MATCHES.

Scores of Matches.—To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday.

Connecticut—*Stamford, April* 21.—Glass ball match:

T R Hoyt..........0 0 1 1 0 0 0 1 1 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1 0—16
L L Staples........1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0—21

A.

Greenpoint Shooting Club.—The regular monthly shoot at Monteverdes & Eagleston's New Shooting Park, Columbusville, L. I., Wednesday, 17th inst., for gold badge; seven contestants at seven birds each; birds furnished were extraordinary good flyers, which accounts for the following score:

Geo Bullwinkle...1 1 1 0 0 1 0—4 F Sautler..........0 1 0 0 0 0 1—2
H Parmenter......1 0 0 1 1 1 0—4 C Kelbe...........1 0 0 0 0 0 1—2
W Krumbeck......0 1 0 0 1 1 0—3 J Reineke.........0 0 0 1 0 0 0—1
C Passe............1 0 0 1 0 0 0—2

Ties on four—five birds each.

Geo Bullwinkle........1 1 1 1 0—4 H Permenter..........1 1 0 0 1—3

Second match; glass balls; ten each:

Bullwinkle..........9 Sautler..........7
Parmenter..........8 Kelbe..........4
Krumbeck..........8 Reineker..........4
Passe..........5

Good shooting was afterward done by members and friends at pigeons and glass balls. H. P.

Seneca Gun Club.—*Seneca Falls, N. Y., April* 19.—Match for gold badge held by Mr. Geo. Nearpass:

Wm Parrish..........1 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1—16
M TenEyck..........1 1 1 1 0 1 1 1 1 0 1 1 0 1 0 0 1 0 1 1—14
H Silsby..........1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—19
H Twist..........1 0 1 1 1 0 1 1 1 1 0 1 0 1 1 1 1 1 1 1—16
Geo Nearpass..........1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1—18
G C Marsh..........1 1 1 1 1 1 1 0 1 0 w
P W Graf..........1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 0 1 1 0—16
H Kipp..........1 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 0 1 1—16
J H Way..........0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—17
H P Sinclair..........1 0 1 0 1 1 1 1 1 1 1 1 0 1 0 1 0 0 1 1—14
L Van Buskirk..........0 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1—17
M Hoag..........1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 0—17
N Weatherly..........0 1 1 0 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1—16
F S Nearpass..........1 1 0 0 0 1 0 0 0 1 0 • 0 1 0 1 0 1 0 0— 7
E C Rosencrans..........0 1 1 1 1 1 1 1 1 1 0 1 0 0 1 1 w
R Ridley..........1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—19
J B Westbrook..........1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 0 1 0—16
A W Baker..........1 1 0 1 1 1 0 0 1 1 w
James Niver..........0 0 1 0 1 0 1 0 1 1 1 1 0 1 1 1 0 1 0 1—12
E Burton..........1 0 1 1 1 1 1 1 0 1 1 1 1 0 0 0 1 1 0 0—13

Ties on nineteen.

H Silsby..........1 1 1 1 1—5 R Ridley..........1 1 1 1 0—4

Newark Gun Club.—Weekly shoot, April 20; glass balls:

Kay..........20 yds..........14 Decker..........12 yds..........17
Leroy..........20 ....17 Dustan..........12 19
Miller..........10 ....11 Brentnal..........12 22
Coster..........16 19

Badge has to be won three times. The winner handicaps four yards each time.

A brush for the balls at 18 yards; 5 balls:

Kay..........4 Hubbard..........3
Leroy..........5

M. R.

Pennsylvania—*Carlisle, April* 18.—Bogardus trap and screen; 18 yards:

H Noble..........1 1 1 1 1 1 1 1 0 1 1 1—11
R Shearer..........1 1 1 0 1 1 1 1 1 1 1 1—11
J C Rupp..........1 1 0 1 1 1 1 1 1 0 1 1—10
A D Boas..........1 1 1 1 1 1 0 1 1 0 1 0— 9

Ties on eleven.

H Noble..........1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—14
R Shearer..........1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1—13

A. D. B.

Amateur Cope Club.—Best scores of match at Westchester, Pa., April 12; Purdy trap, 18 yards rise:

Josiah Cope..........1 1 1 1 1 1 1 1 1 0 1 1 1 0 0 1 0 1 1 0 1 1 1 1 1—20
H Ingram..........1 0 0 0 0 0 1 0 1 1 1 1 1 0 1 1 0 0 1 0 1 1 1 1 1—16
T S Cope..........0 1 0 0 1 1 0 0 0 1 0 1 1 0 0 1 1 0 1 1 1 1 1 1 1—15
Allen Cope..........1 1 0 1 1 1 1 1 0 0 1 1 1 0 1 1 1 1 0 1 1 0 1 1 1—19
R French..........0 0 0 1 0 1 0 1 1 0 1 0 0 1 0 1 1 1 1 1 1 1 0 1 1—16
F Hoops..........0 0 0 1 0 0 0 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1—16
J G Cope..........1 1 0 0 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 0 1 0 1 1—19

Ties.

A Cope..........8 T S Cope..........7
J G Cope..........7 R French..........6
C Ingram..........7

Northwestern Shooting Club.—Regular competition for championship badge, Erie, Pa., April 15; day windy:

S S Burton..........1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 0 1—17
W W Derby..........0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1—16
G W Hayward..........1 0 1 0 1 1 1 1 1 1 0 1 1 1 0 1 0 1 1 1—16
T W Jarecki..........1 0 1 1 0 1 1 1 1 1 0 1 0 1 0 1 1 1 1 1—16
H Van Velsor..........1 1 0 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 0—15
W Tracy..........1 1 1 1 1 1 1 1 0 0 1 1 0 1 0 0 1 1 0 0—13
Jake Graham..........1 1 1 1 1 1 1 1 0 0 1 1 0 1 0 0 1 0 1 0—13
T Lynch..........0 1 0 1 1 1 1 0 1 0 0 1 0 1 1 0 1 1 1 0—12
P Diefenbach..........0 0 1 0 1 0 1 0 1 1 0 1 1 1 0 1 0 1 1 1—12
John Graham..........0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 0 1 0 1 1— 8
S Thompson..........1 0 1 1 1 0 0 0 1 1 0 0 0 0 0 0 0 0 1 0— 7
Capt Koehler..........0 0 0 0 0 w

Several sweepstake matches were shot. Messrs. Derby and Jarecki carried off the bulk of the prizes.

Washington, D. C., *April* 13.—The following glass ball matches were shot here to-day; Bogardus rules:

Henderson.0 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1—25
E L Mills...0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 —19
Peck.......1 0 1 0 0 1 0 1 1 1 1 1 1 1 1 0 1 1 1 0 0 1 1 1 0 —17
McLeod....0 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 0 1 1 0 1—23

Match between Mr. Derrick and Mr. Mills, 25 yards rise:

Derrick..........0 1 1 1 1 0 0 1 0 1— 6
Mills..........1 0 1 1 1 1 1 1 0 1—10

E L Mills—11 01 01 01 10 11 11 11 11 10 11 11 11 11 10 11 11 10 01 10 10 10 10 11 10 00 11 11 11 11 11 11 10—50.

The second ball was thrown by hand with all the force possible, and not one of these was shot at inside of fifty yards. Mr. Mills is the agent here for Messrs. Nichols & Lefever, of Syracuse, and shot one of their 12-gauge, full-choke guns, with a charge of four drachms Hazard's FG sea-shooting powder, and $1\frac{1}{8}$ ozs. No. 0 Tatham chilled shot. The chilled shot do not mash when striking the ball, and their superiority over soft shot for this kind of shooting was never more clearly demonstrated.

Bowling Green Champions.—A match for the championship of Warren County, Kentucky, was shot April 18; 18 yards rise; Bogardus rules; score:

Bowling Green Gun Club.

E F W Chelf..........0 1 1 0 0 1 1 0 0 1 1 1 1 0 1 1 1 1 0 1 1 0 1 1 1—17
W W Cooke..........1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0—21
Birt Bray..........1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 0 1 0 1 1 1 0 1 1 1—20
Pleas Patter..........1 1 0 0 0 0 0 1 6 1 1 0 0 1 1 1 1 0 0 0 1 0 0 1 1—12
Dick Brashear..........1 0 1 1 0 0 1 1 1 0 0 1 1 1 1 1 1 0 1 1 0 1 1 1 1—18
J C Bean..........1 0 1 0 1 0 1 0 1 0 0 0 0 1 0 1 1 1 1 1 1 1 1 1 0—16
Geo Hunt..........1 0 0 1 1 1 1 1 1 1 0 1 1 1 0 1 1 0 1 1 1 1 0 0 0 1—17
Dack Ragland..........1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 0 0—20
C Lucas..........1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 1 1 1 0 0 0 0— 9
Tom Kinniard..........1 1 0 0 1 1 1 0 1 1 0 0 0 0 0 1 0 1 0 1 1 0 1 0 0—12

Total.......... 162

Bowling Green Rod and Gun Club.

G W Cooke..........1 1 1 0 1 1 1 0 0 1 1 0 0 1 1 1 1 1 0 1 1 1 1 1 1—19
Ben Cullin..........1 1 1 1 0 0 1 0 1 0 0 0 0 1 0 1 1 0 0 1 1 0 1 1 1—14
W H Philips..........0 1 1 1 1 1 1 1 0 0 1 0 1 1 1 0 1 1 1 1 0 1 1 1 1—19
H K Thomas..........0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1—21
J O Burge..........0 0 0 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 0 0—17
T P Smith..........1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1—21
Bill Baker..........0 0 1 1 1 1 0 1 0 1 0 1 1 1 0 0 1 1 0 1 1 1 1 1 0—16
Arch Baker..........1 1 0 1 0 0 1 1 1 1 1 1 0 0 0 0 1 1 0 1 1 0 1 1 1—16
H L Underwood..........0 1 1 0 0 1 1 1 1 0 1 0 1 1 1 1 1 0 0 1 1 0 1 1 0—16
Watt Baker..........1 0 0 0 0 0 0 1 1 1 1 1 0 0 0 1 0 0 1 1 0 0 0 1 0—11

Total.......... 170

Ohio—*Cincinnati, April* 13.—Pigeon match for a handsome Fox gun; rise, 21 yards:

McGraw..........1 1 1 1 0 1 1 1 0 w
Overman..........1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Caldwell..........1 0 1 1 1 1 1 1 1 1 1 w
Sedam..........1 0 1 1 1 1 1 0 w
Perry..........1 0 1 1 1 1 1 1 0 w
Leathers..........0 1 1 0 w
Davis..........1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Thornton..........1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—14
Fleischman..........1 0 1 1 1 1 1 1 1 1 1 1 1 w
Gaff..........0 0 w
Dragoo..........1 1 1 1 1 1 0 1 1 1 w
Morin..........1 1 1 0 1 1 1 1 1 1 1 w
Alexander..........1 1 1 0 1 1 1 1 1 1 1 w
McLaughlin..........1 1 1 0 1 1 1 1 1 1 1 w

Putnam won the tie with four straight at twenty-six yards. The winner shot a "darned old muzzle-loader," killing every bird shot at, and now the boys are peddling out their stock of breech-loaders at reduced rates. Will report another shoot in a week or two. Secretary.

Ohio.—Belle Centre Ball Breakers shot a match April 10 for the badge and championship of the club; 18 yds; C. B. Anderson's trap:

C B Anderson..........1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1—15
F M Lansdown..........1 1 0 0 0 0 0 0 1 1 0 0 0 1 1 1— 7
J D Campbell..........1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 1—13

J. D. C.

Pacific Gun Club.—Regular contest for medal; Hamtramck Park, Detroit, Mich., April 18:

J Minahan......1 1 0 1 1 0 0 0—4 D H Thayer.....1 0 0 0 0 1 0 1—3
Wm H Gillman. 1 1 0 1 1 1 1 1—7 Chas Brown.....1 1 1 0 1 1 0 1—6
J K P Norvell...1 1 1 1 0 0 1 1—6 T Bermingham..0 1 0 0 1 1 1 0—4
N H Williams....0 1 1 0 0 1 0 1—4 John Stenton...1 1 1 1 1 1 1 1—8
Jno Demass.....0 0 0 0 0 0 0 0—0 W H Sullivan....0 0 1 0 0 0 0 0—1

Total..........21 Total..........22

Dr. Carver at Denver.—A match at Denver between Carver, to shoot with a rifle at balls, 10 yards, and Mr. Gove, to shoot with shot-gun at balls, 18 yards, resulted as follows:

Carver—1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—97.

Gove—1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1—47.

San Francisco Rival Shots.—The following match was shot April 7:

CALIFORNIA CLUB.

	Single.	Double.
C Robinson	1 1 1 1 1 1 1 1 1 1 1 1—12	11 10 11—5—17
J Kerrigan	1 0 1 1 1 1 1 1 1 1 1 1—11	00 11 00—2—13
G W Downey	1 1 1 1 1 1 1 1 1 1 1 1—12	11 11 11—6—18
H Mock	1 1 1 1 1 1 1 1 1 0 1 1—11	10 11 11—5—10
W Spencer	1 1 1 0 1 1 1 1 1 1 1 1—11	11 11 11—6—17
T Morrill	1 1 1 1 1 1 0 1 0 1 1 1—10	11 11 10—5—15
J Gregory	1 1 0 1 1 1 1 1 1 1 1 1—11	01 11 11—5—16
J Stack	1 0 0 1 1 1 1 0 1 1 1 1— 9	11 01 11—5—14
J Murray	1 1 1 1 1 1 1 1 0 1 1 1—11	11 10 00—3—14
Total		140

GUN CLUB.

	Single.	Double.
J Kennedy	1 1 1 0 1 1 1 1 1 1 1 1—11	11 11 00—4—15
M Wilson	1 1 1 0 1 1 1 0 0 1 1 0— 9	11 10 00—3—12
G Tuttle	1 1 1 1 1 1 1 1 1 1 1 1—12	01 01 11—4—16
T Butler	1 1 0 1 1 1 1 1 0 0 1 1— 9	00 10 11—3—12
H Havens	1 1 1 1 1 0 1 1 1 1 1 0—10	01 11 00—3—13
C Havens	1 1 0 1 1 0 1 0 0 1 1 0— 7	11 11 01—5—12
A Havens	1 0 1 0 1 1 1 1 0 0 1 1— 8	00 11 00—2—10
M Fuller	1 1 0 0 1 0 1 1 0 0 1 1— 7	11 11 01—5—12
W G Budd	1 1 0 1 1 0 1 0 1 1 1 0— 8	01 00 00—1— 9
Total		111

Robinson, Kerrigan, Downey and Mock used Claborough muzzle-loader; Spencer, Merrill, Gregory and Stack used Claborough breech-loaders; Murray, a Daly; Kennedy, a Gates; Wilson, Tuttle and H. Havens the Greener; Butler, the Scott; C. and A. Havens, the Tippen & Lawdens; Fuller, the Manton; Budd, the Grey & Moncreaf.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
April 26	7	15	5	33	2	59
April 27	8	09	4	51	3	48
April 28	8	57	5	23	4	33
April 29	9	39	6	08	5	17
April 30	10	19	6	44	5	57
May 1	10	57	7	20	6	33
May 2	11	35	7	55	7	12

STEAM YACHTING.

The well known firm of Baird, Huston & Co. have a surprising amount of work in hand at their works in Philadelphia, more particularly when the general stagnation of trade for the past few years is taken into consideration. In fact this firm is probably the busiest shipbuilding concern in the United States with the exception perhaps of the mammoth establishment of John Roach & Son, at Chester. Moreover the numerous orders the concern is now executing for foreign countries is a most encouraging sign to all who wish to see American industry take that lead in the world's manufactures which is justly due this nation's boundless resources and the restless inventive faculties of her people. Messrs. Baird, Huston & Co. have now as a member of their firm the designer of the famous flyers *Continental*, *Firefly* and *Minneola* and others, and the same gentleman is at present occupied to his utmost in answering the demands made upon the establishment for the supply of steam-yachts and other vessels for the foreign market. We doubt whether other parties in this country have as yet made such a specialty of high speed steam launches and torpedo boats of steel and iron as the able naval architect Mr. Samuel Holmes, who is in charge of the ship-building department at the Kensington works. It is a satisfaction to know of a firm posted in such matters of modern naval science as Froude's steam line theory, as well as in the practical points of the use of steel instead of iron for construction purposes where maximum strength with minimum displacement is required, and the rapid extension of the reputation of the firm in question as scientific designers is evidently appreciated by the public if we may judge from the increasing prosperity of this establishment. They have only recently delivered to the U. S. Government a twin screw steamer for the Light House. Board of 153½ft. length, 25ft. beam and 10½ft. hold. On the stocks and in hand, in various stages of forwardness, are the following steamers: One 00ft. long, 18½ft. beam, 10ft. hold, with surface condensing engines 24x30, for Cuban parties; one iron steamer for Brazil; one iron sidewheel tug for Bolivia; an iron screw tug and an iron steam-yacht for the same destination, and a fine steam-yacht, 40x8x4 for the West Indies, besides a large amount of home work. The demand for very fast steam yachts with speeds from 16 to 21 knots is rapidly on the increase and one can see no reason why in this country an engineering establishment with all the facilities required will not in time make for itself a reputation of world wide fame such as is the proud distinction of the Thorneycrofts and Yarrows of the old country at the present day. There has been so far comparatively little encouragement given to builders of steel vessels, and this is in America all the more remarkable since we have taken quite extensively to the construction of boilors in whole or in part of steel, it being nowadays rather the exception to find crown sheets or fire boxes of iron as of yore in any first-class work. Likewise in England steel has been kept back in an unaccountable way so far as its application to large ships is concerned. True, this may be traced with more or less show of reason to the inability of our English cousins to turn out steel in large quantities of the reliability required for ship building operations, though they have of course long ago been making the very finest brands for consumption in tools and for boiler use, as well as for plating small yachts and torpedo boats. Since Lloyds have lent a favorable ear to the steel mill owners and have established regulations of late permitting the use of steel under advantageous and equitable rules in ship building, giving this material due credit for its superior strength and durability when properly manufactured, we look for a brisk impetus to steel construction both at home and abroad. The bad odor attaching to steel so long as Lloyds refused to recognize it or to grant its just claims as a building material of wonderful strength and pliability has now been removed, and it remains with the ship builder and mill owner to show, by close examination and numerous tests by the former, and intelligent, scientific, responsible treatment by the latter, that the newly begotten confidence in steel for shipbuilding has not been misplaced. We are led to these remarks in consequence of the wonderful tenacity to which we in America have clung to wood as the material for fast steam yachts. While Thorneycroft was sending his wonderful boats through the water over the measured mile at a rate of twenty, twenty-one and twenty-two miles and over, and his engines *sustaining* these speeds for hours, we have been floundering about with clumsy wooden craft, their models seldom equal to those of Great Britain, and debarred from speed through great displacement and too much beam. Fortunately, the errors our steam yacht builders have fallen into, probably through adhering too closely to the sailing model, are gradually being dissipated, and the true science of naval architecture is slowly but surely displacing vague individual notions and long ridden hobbies. Until designers and modelers will take the trouble to look up Froude's stream line experiments and consent to follow the inevitable facts brought to light through his efforts, they will be sailing in a fog without chart or compass, and are sure to bring up standing on the rocks whenever they attempt to pass beyond the set limit of fifteen or sixteen miles per hour. There are two things absolutely indispensable to the lines of a really high speed launch or yacht, and they cannot be circumvented. First, you must have fine lines—very fine lines—both forward and aft; that is, the average angle of entrance and exit must be small. This involves the first necessity, which is small beam in proportion to length. Second, the amount of surface immersed must be reduced to a minimum—in other words, the displacement and girth be as limited as possible. To this end all weights must be restricted to the lowest admissible figure, and consequently the use of a material which causes a saving in weight over wood to the amount of forty per cent. and over iron to something like ten or fifteen per cent., cannot be overlooked much longer by that conservative element in nautical society, which reasons that wood is the best, because a kind Providence allows wood to grow, and therefore intended it for ships.

YACHTING ITEMS.

San Francisco Yacht Club.—Mr. Daniel Cook, owner of the *Tidal Wave*, has been elected a member of this club, together with several other gentlemen of the Pacific slope. The club is financially prosperous, the treasurer, Mr. Underhill, showing a balance of $1,100 to its credit. A location for the new club-house has been chosen at Old Saucelito and a committee directed to erect a suitable structure at once. Contributing members are to be admitted to the club list hereafter. At the meeting, April 4, it was decided to have an opening cruise April 27, the fleet to make for Vallejo; low water at 2:39 p. m., and no moon, as we are informed. Just why it should be necessary to let the public know the absence of the moon does not appear. Surely it could not be that the blue ribbon element of the club has the possibility of dire disaster in view should the moon rise over the fore yard, and in selecting the particular date has made a *ruse* to do away with frequent observations of Dame Luna's altitude? Not if we know the gentlemen from the Pacific, where blue ribbon has not yet dared interfere with the strict nautical etiquette of

the quarter-deck or the mariner's only companion and trust during his lonely vigil. But then perhaps there are to be fair ones accompanying the gallant tars to Vallejo, and they require protection, more so of a dark and stormy night. There is the overcoat to be shared, and there is the protecting arm of the sailor to ward off the spray from dainty figures, and there are other matters. On the whole, it is best the moon should be a little late in showing up that night.

HAVERHILL YACHT CLUB.—This club elected the following gentlemen to act as officers for the ensuing year: Commodore, E. F. Brown; Vice-Com., A. L. Reed; Fleet Capt., J. W. Dow; Sec., J. E. Collins; Treas., W. M. Dresser; Meas., Harvey Doane. Regatta Com.: L. H. Spaulding, J. E. Heath, Chas. Stacy. The pleasant spring weather has enlivened the boat owners, and preparations for the summer's sport are well under way. The first launch this season was Vice-Commodore Reed's dainty *Linnie May*, quickly followed by the sloops *Myrtle*, *Foster*, *Lizzie Warner*, *Captain Titcomb* and *Novice*, owned by J. E. Heath. The *Waverley*, also launched, has been sold out of the club, much to the regret of the members, she being fast and of pretty appearance. For new yachts, Harvey Doane has nearly completed a steamer for Barnard Martin, 24ft. in length, and has on the stocks a keel-sloop for W. M. Dresser, about 25ft. over all. Messrs. Tuxbury and Heath are having built a C. B. sloop, 27ft. in length, handsome model and fast lines. Much is expected of her. Secretary Collins has ready to launch a 20ft. sloop, which some think will make up those in her class the coming season. She is deep-bodied, quite flat sided, with bilge low down, and wide V stern set low down on dead wood. There are three 18ft. cat-rigged boats to come out this spring, which are all the new craft known to be building. Owing to the spring freshets, which are liable to continue late into the spring, no fixtures have been made yet for regattas or excursions. WEATHER HELM.

April 15.

[From our correspondents letter it will be seen that times on the Merrimack River will be quite lively ere long.]

SLOOP YACHT MAGGIE B.—This sloop sailed for Florida, April 14, in charge of her owner, Captain Tumbridge. The *Maggie* was formerly the property of Tom Thumb, and her present owner is to sell her to Florida parties, upon his arrival, for a pilot boat. At last accounts she had reached the Delaware Breakwater windbound. She is 44ft. on load line, and 16ft. beam, well built and will make a handy pilot cutter for smooth waters, though her spars will require reduction for regular work. Her owner is navigating the boat himself, and holds a master's certificate in the merchant service. The *Maggie* experienced a heavy southeast gale and put into Hampton Roads under four reefs.

—In his new yacht, just launched, Mr. Pearce, of the Atlantic Yacht Club, has a handsome and able-looking affair under his feet. Her model, by Gorman, the builder, bears resemblance to the *Wave*, his last turnout. Length over all, 46ft.; beam, 15ft. 3in.; hold, 5ft. 2½in.; length on load line, 41ft. 5in.; mast, 53ft.; boom, 43 ft.; gaff, 22ft.; bowsprit outboard, 28ft., and topmast, 21ft. The frame is of oak and hackmattack, yellow pine planking, galvanized iron fastening. Centre-board, 13ft. long; main saloon, 9ft.; two staterooms, W. C., pantry, and forecastle. Her dead rise is moderate, floor timbers straight, rather quick turn at the bilge, and plumb sides from the water up. Forward the hollow is slight, and kept mostly below water; aft the rim is very clear. The boat looks like a fast one.

YACHTING DRIFT.

Mr. W. J. Powell has presented to the committee in charge, as a special prize for the catamaran making best time at the New York Bay Regatta, a handsome silk pennant.....Sloop *Glance*, C. H. Read, Esq., is being overhauled at Far Rockaway.....Sloop *North Star*, formerly of New Bedford, and the handiwork, we believe, of the blind Herreshoff, has been sold to Mr. Chas. A. Stevenson.....Mr. Frank S. Towle has received his sloop *Thorne*. She is 22ft. keel, 9ft. beam, and 2ft. 3in. hold.....Farrell has in hand a racing sloop 24ft. 10in. long, foot of 86th street, E. R..... Captain Hinsdale has finished for Mr. T. H. Hinton, for use on Onondaga Lake, a steam launch 27ft. long, 5ft. 10in. beam, 2ft. 10in. deep, engine 3¼x4½, direct acting, inverted, high-pressure; screw 24in. diameter. Same builder is engaged on another for Mr. W. J. Sanderson, length 30ft. 6in.; beam, 6ft. 6in.; depth, 3ft.; engine, 5 H. P., condensing; cylinder, 4½x5; boiler, 4ft. long, 27in. shell, with 94½in. tubes of brass. Hinsdale has also laid the keel for a steam yacht for Dr. F. Platte, 38ft. long, 6ft. beam, 3ft. hold; double engine, cylinders, 3¼x4in. each; propeller, 30in. diam.....*Spitfire*, on the same lake, is having a new set of engines put in by W. J. Sanderson, of Syracuse.....Jerolamon has launched the steam-launch *C. D. P. Gibson*, belonging to the Jersey City Yacht Club..... Sloop *Sadie* will be overhauled at Port Jefferson.

THE OAR AND PADDLE.

METROPOLITAN ASSOCIATION.—At the last meeting of the Metropolitan Association of Amateur Oarsmen, there were delegates present from the Argonauta, Atalanta, Carman Rowing Association, Columbia College Boat Club, Dauntless, Knickerbocker, Athletic, Nautilus, Neptune, Vesper and Viking, of Elizabeth, N. J. The meeting was an adjourned one from March last. It had been called for the purpose of adopting certain amendments to the constitution, and to arrange a programme of races for the next Fourth of July regatta. The following contests were fixed upon: Single sculls senior and single sculls junior; pair-oared and four-oared shells; six-oared gigs, with coxswain; eight-oared barges, with coxswain. The Regatta Committee consists of the officers of the association and the following gentlemen: A. R. Warner, of the Argonautas; L. C. Bruce, of the Knickerbockers; T. J. Goodwin, of the Columbia College Club; A. L. Soulard, of the Carman's; Gen. M. T. McMahon, W. B. Curtis, J. E. Eustice, of the Atalantas; J. P. Earle, Nereids; Mr. Van Buskirk, Mystic Boat Club; Mr. Phillips, Triton Boat Club, Newark; A. T. Shand, Neptunes, Staten Island. The Committee on Qualifications consists of General A. Shaler, Judge H. A. Gildersleeve, Commodore Dickerson, and Messrs. D. M. Judd and E. A. Buck. In view of the aspersions cast by foreigners upon the status of American amateurs, we call their attention to this very able committee, and should our English cousins choose to take the trouble to investigate the status of the gentlemen composing this committee, they will not find it a very difficult task to trace their standing in New York society, and will probably become convinced that amateurship in America is not lax, and a good deal more than a fast and loose convenience as it is in England.

UPPER HUDSON REGATTA.—This association has decided upon June 12 and 13 for its regatta. The Laureates have withdrawn from the concern. Hereafter the finish of the course will be opposite the boat-house of the Cohoes Club. Entries close June 5, and must be addressed to the Secretary, R. R. Richards, Troy, N. Y. There will be on the first day races for fours, trial heats; second, pair-oars; third, trial heats, junior single sculls; fourth, senior singles. Second day—First, trial heats for fours; second, trial heat for junior singles; third, double sculls; fourth, final heat, junior singles; fifth, six-oared gigs.

WATKINS REGATTA.—The silly rumor that the great meeting on Seneca Lake had been abandoned has been officially denied. The races will take place as originally announced in the circulars and in FOREST AND STREAM.

SOUTH CAROLINA REGATTA.—A special meeting of the Regatta Association of South Carolina was held at Charleston, Thursday, 18th, Mr. I. P. Lesesne in the chair. The following committees were appointed: Finance—Geo. D. Bryan, A. T. Smythe, I. L. Walker, R. D. Mure, J. B. Bissell and A. Vanderhorst. On Entertainment—C. R. Holmes, Chairman; F. W. Dawson, Sam Wragg and J. Aneram Simons. On Prizes—F. W. Dawson, chairman; A. Vanderhorst and A. T. Smyth. On Rowing—A. B. Murray, chairman; E. H. Sparkman and H. B. Bull. On Sailing—Chas. H. Glidden, A. L. Tobias and N. B. Murray. Mr. J. Aneram Simons was elected secretary. The annual regatta will take place on Thursday and Friday, May 30 and 31. On Thursday, 30th, there will be four races, the first for four-oared shells; the second, gig race; third, whitehall; fourth, boys' race. On Friday, 31—In the morning the race for the English Challenge Cup will come off. In this race only Charleston clubs will be allowed to enter. On the same day there will be a race for first and second class yachts. It is generally regretted that the Regatta Association did not make up their programme before, as there is but a short time for the crews to train between now and the 30th, and we fear that our friends from Savannah and New Orleans, whom we expected to be with us this regatta, may not be willing to come over on such short notice. If they do come, however, they will receive a hearty welcome from the whole community in general and from their old friends, the Palmettos and Carolinas, especially. The Palmettos have the following small fleet ready for action: One four-oared shell, 41ft. 6in.; one single scull shell; four gigs; one Whitehall, 21ft. One or two of the racing crews of the Palmettos have been out several times lately, are pulling well together and making good time. A splendid "First Crew" has been made up and will go to work on or about 1st of May. If they pull up to their former records, the Palmettos will hang up the champion flag for 1878 alongside of the champion flags of '73, '76 and '77, which they hold now. They also hold the Georgia Champion Flags for '73, '74 and '75, and several very handsome pieces of plate, won in various races in South Carolina, Georgia and Louisiana. The Carolinas have the following crafts on hand this season: Two four-oared shells, one cedar and one paper; two gigs and one Whitehall. We regret to hear that the Carolinas have not made up any crew, but we trust that the recent action of the Regatta Association will infuse new life into this crack club, and that by the 30th of May they will have one or two crews at least who will represent the Carolinas as well as they were represented in '74, '75, '76 and '77, and we are certain that they will not submit to having the "English Challenge Cup" wrested from them without one stroke for its defence. It is said that the Electric Boat Club intends to put one or two very strong crews afloat this season. The Electrics are keeping very quiet, but will certainly be heard from on the 30th and 31st. YENOTS.

RUSHTON'S ROB ROY CANOES.—Mr. J. H. Rushton, of Canton, New York, writes us April 20:

"I am now building to order, for gentlemen in Louisville, Ky., two Rob Roys of the following dimensions: Length, 14ft., width inside, 26in.; depth between floor and deck, 13in.; deck rise or curvature, 4in. This gives plenty of room for sleeping; depth of keel below siding, 1½in.; water tight bulk heads about 3ft. from ends; planking, white cedar, ⅛in. thick; deck timbers, sawed cedars; keel and stems, oak; ribs, elm, 1½ inches apart, with three broad (1½ inches) ones at centre and each end of cockpit, which will be 3ft. 6in.x17in., combing bent, making round corners ⅜in. thick, about 1½in above deck. The deck will be 3-16th cedar, covered over with strong drilling, laid in paint and finished as coach tops and carriage work. You cannot tell it from wood when finished, and it will always be tight; mast socket as usual. I can get up such a canoe, and a real fine one, for $75 for the boat alone, *i. e.*, without mast, sail and fixtures. On "rigs" I am not very well posted, and would rather sell "boat alone." The boat, of which Mr. Wm. Lyman, has a "cut" in his advertisement in your columns is one of three I built for him the past winter. J. H. R.

IS THE UPPER KENNEBEC NAVIGABLE?—Two or three weeks ago a correspondent asked us if the Kennebec was navigable from Augusta to Moosehead Lake with a portable boat? We answered, "Yes." Now there is a gentleman at Augusta, Maine, who probably knows more about the river than we do, who says it is not so navigable. He says:

"It has so much quick water as to make it necessary to 'carry' a quarter of the way. There are many rapids, and in one place it runs so wild that no boat could stem it for five or six miles, and the banks are a perfect wilderness, and there is no 'carry,' trail or tote road. Please explain how you usually 'navigate' under such circumstances? The river is descended during high water in the spring by the river drivers in batteaux, but I should pity the poor fellow who undertook to go up, no matter how 'portable' his boat was. He had better put it on wheels and go up by horse power."

REMARKS—We print the above because we do not wish to disappoint any of our correspondents, or get them into trouble; still, we have always found any river navigable where logs can be driven down. We have poled up many quick headwaters where we had to work a part of our passage by lifting the canoe over shoals and carrying around falls, dams, rapids, jams, etc., and we are ready to do it again. We have been familiar with the waters of Maine and Canada for twenty years; four of them during a permanent residence. We have traversed many thousand miles in a canoe in all parts of America, and are willing to undertake to navigate the Kennebec from its outlet to its mouth in a portable boat of the proper weight, length and draft, and at a proper stage of water. The only absolutely impracticable river is one which runs through a canyon with perpendicular walls, and a current too swift to stem with paddles, and too deep for setting-poles. Cross-logs and fallen trees are not taken into account by canoemen.—ED.]

CANOEING.—In our last issue we gave a list of the officers of the N. Y. Canoe Club. As the large number of canoes building of wood, and paper as well, attest the growing interest taken in this, perhaps one of the cheapest and healthiest of sports, an account of the cruises undertaken last year by the boats of the leading club will be instructive and interesting. We doubt whether in England, in spite of the vast constituency the sport there possesses, any club can show such a brilliant record of enterprise and adventure as the N. Y. C. C. scores upon the pages of its history from 1873 to 1877. Among the many trips inland and at sea we select the following: Canoe *Alice*, John Habberton, length, 15ft., *Herald* model; cruised in 1877, in company with *Bess*, *Violetta* and *Ethel*, from Rouse's Point, N. Y., to Sorel, P. Q. Canoe *Bess*, *Herald* model, length, 17ft., C. L. Norton; cruised, in 1875, from New York to Greenport, L. I., via South Bay, with *Violetta* as far as Southampton, and *Walrus* as far as Peconic Bay; in 1877, from Rouse's Point, N. Y., to Sorel, P. Q., with *Alice*, *Violetta* and *Ethel*. Canoe *Chip*, *Nautilus* model, length, 14ft., J. E. Roosevelt; cruised with *Gretchen*, in 1873, from Staten Island to Rockaway and Rockville Centre, keeping even with New York steamboat for over three miles. This would give to the canoes something like a speed of twelve miles. *Chip* also sailed in 1874 from Rockaway via. Cedar Island to Sayville, L. I. Canoe *Ethel*, Nautilus model, length 14ft., T. H. Upton, cruised in 1876 from Newport, Vt., to Sherbrooke, P. Q., via. Lake Memphremagog and the Magog Rapids, and from Wells River, Vt., to Pompanoosac, Vt., with *Violetta* and *Walrus*. These cruises were made under her first owner, Mr. C. L. Norton. From 1877 Mr. Upton took command and cruised as before mentioned in company with *Alice*, *Bess* and *Violetta*. Canoe *Floy*, under Mr. W. L. Alden's colors in 1872, made the trip with *Walrus* from Rouse's Point, N. Y., to Quebec, P. Q. In 1873 with *Walrus* from Staten Island to Rockaway; in 1874 with same companion from Southampton, L. I., to Easthampton, L. I., and return. In 1875 again with her faithful mates *Walrus* and *Bess* from Flushing, L. I., to Southampton, L. I. In 1876 with *Walrus* and *Midge* from Newport, Vt., via Lake Memphremagog and the Magog Rapids to Sherbrooke, P. Q., and from Wells River, Vt., down the Connecticut to Pompanoosac, Vt. In 1877, with *Alice*, *Bess* and *Ethel* from Rouse's Point, N. Y., to Sorel, P. Q.;—a fine showing for the *Floy* and that veteran hero of the paddle, W. L. Alden, Esq. This gentleman has transferred his recent property to Mr. T. H. Upton, of N. Y., and has had a new traveler built by Everson, of Williamsburgh, L. I. She is named the *Shadow*, *Shadow* model, length 14ft. Concerning this new type we hope to give our readers further particulars. Canoe *Hattie*, Nautilus model, length 13ft., J. M. Barnes, went in 1876, in company with *Kleine Fritz*, from Hornellsville, N. Y., via Canisteo, Chemung, Delaware and Schuylkill Rivers to Philadelphia. In 1877, from Green Camp, Ohio, via the Scioto River, to Ripley, Ohio. In 1877, same company, from Covington, Va., via James River, to Thornhill's Falls. Canoe *Lotos*, Nautilus model, length 15ft. 10in., G. L. Morse, cruised in 1872 with *Violetta* from Rouse's Point, N. Y., to Quebec, P. Q. In 1873, with *Violetta*, from Staten Island to Rockaway. In 1874, with *Violetta*, from Northampton, L. I., to Easthampton, L. I., and return. In 1875, with *Violetta* and *Bess*, from Flushing to Northampton, L. I., and with *Bess* from the latter port to Sag Harbor. In 1876, with *Violetta* and *Midge*, from Newport, Vt., to Sherbrooke, P. Q., and from Wells River via the Connecticut to Pompanoosuc, Vt. Canoe *Rosalie*, Nautilus model, length 15ft., E. B. Bronson, Secretary N. Y. C. C., cruised in 1876 from Harlem to New Baltimore, N. Y., with *Titania* and *Puck*. In 1877, with *Titania*, from Harlem via. Hudson River, Lake Champlain, Sorel River and St. Lawrence River to Gananoque, P. Q., an extended and most interesting sail. Canoe *Titania*, also of the Nautilus variety, length 14ft. 6in., F. Sherman Smith, cruised in 1873 from Harlem to New Baltimore with *Rosalie* and *Puck* for company. In 1877, from New Baltimore to Harlem, distance 139 miles, time 39h. 50m. Again in 1877 from Harlem to Gannanogua, Ont., via. Hudson, Lake Champlain, St. Johns and St. Lawrence Rivers and among the Thousand Islands. The club flag is well known on New York waters, and if the zeal of the organization bears fruit in proportion to the efforts of its members, it will be known ere long on all the rivers and in all the harbors of the land. The flag is a pointed burgee, red ground and white horizontal stripe in centre.

ROWING RIPPLES.

The Columbia College Boat Club will have a benefit amateur magical entertainment at the Union League Theatre, May 8, to aid in raising funds for their European trip.....Gookin Bros., Faulkner and Reagan are the prospective professional "four" of the Hub this year.....Biglin and Frank Bellan will sit in a pair and paddle round Harlem.....Mr. M. F. Davis, of Portland, is taking some of the avoirdupois off of Plaisted, preparatory to his race with Hanlon, the lad of Toronto..... Shawmut and City Point amateurs will send sixes to Silver Lake, Boston. Kelly, the old champion of England, considers Trickett a match for any one, and is willing to lay pounds to shillings on him against Courtney. Kelly does not think much of American professionals. How about the cleaning out the Ward Brothers gave to the British professionals at Saratoga Lake? Has friend Kelly forgotten that so soon? .....Reagan, Boston's north-end pet, and Frenchy Johnson seem likely to get foul of each other. Reagan's friends want $100 down, and a thousand more to see the thing through. It is worth that much, Frenchy. Just think of the champion of New England! How nice that sounds. Pony up, Frenchy. .....The Columbia crew will leave for England May 22. Fearon has made them a boat.....Harvard boat-house contains twenty-five single sculls, eight doubles, two pairs, seventeen sixes, four eights, one barge, two Rob Roy's, three wherries and one Whitehall.....Potomac Club, of Washington, have ordered from Waters, of Troy, a new paper four ....Analostans are at work.....Silver Lake professional regatta takes place Decoration Day.....Messrs. Sage, Eldridge, Ridabock, Edson and Goodwin, the Columbia four to go to England, are in training.....Mutuals, of Albany, will row a paper boat, 40ft.x20in., at Watkin's.....Nothing new from Henley yet.....Thames Rowing Association having voted not to buy the boat-house of Columbia Boat Club, Brooklyn, will build one from plans and specifications furnished by Noank parties, New London, Conn.....Captain Bancroft, Messrs. Weld and President Danforth, of Harvard Boat Club, have engaged accommodations for crew of a Mr. Lamb, on Groton side of river, near Naval Station.

National Pastimes.

CRICKET.—The cricket season was opened April 17, at Prospect Park, Brooklyn, with appended score, by members of the Manhattan Cricket Club:

DOO SIDE.		LOVE'S SIDE.	
Hooper, b Jackson	0	Makin, cl, Dellar, b Greig	4
Greig, b Jackson	6	Ames, b Greig	0
Giles, b Lane	18	Jackson, c H Tucker b Greig	7
Hanstarg, b Lane	2	C Scott, run out	0
McMurray, b Jackson	0	Lane, b Greig	0
H Tucker, ct Ames, b Jackson	2	Cluman, c Dowdy, b b Hooper	2
T Tucker, ct Ames, b, Jackson	4	Jepson, b Greig	0
Dellar, not out	9	McKenzie, ct and b Hooper	0
Jones, b Makin	0	Chippendale, not out	1
Harrison, ct and b Jackson	7	Dowdy, b Hooper	2
		Chadwick, st Dellar, b Greig	8
Byes, 3; wides, 2	5	Leg bye, 1; wides, 5	6
Total	53	Total	30

Hooper's side	0	21	25	26	28	33	36	46	—46
Love's side	1	10	10	12	15	17	18	21	—30

Umpires—Messrs. Neeves and Chadwick.

The club will, during the season, have several matches with Paterson and Philadelphia clubs, and go to Philadelphia in July. The officers of the club for 1878 are: President, James Neeves; Vice-President, Dr Drayton; Secretary, L Love; Treasurer, S G Hosford; Managing Committee, Messrs R Hooper, B Jenkins and D L Evans. Among the players are Messrs Hosford, McDongall, Greig, Hooper, Love, Jenkins and Makin.

—The St George's have a new ground in the rear of the Knickerbocker base ball field, where they will have opportunity for daily practice. The officers are: President, Mr J T Soutter; Vice-President, George T Green; Secretary, M H Talbot; Treasurer, Berkeley Mostyn; Committee, Messrs E H Moeran, R I Crop, C Evans, A Marsh and D B Gilbert. Among the prominent players are Messrs Soutter, Moeran, Jones, Marsh, Giles, Mostyn, Talbot, Wetham and Harcombe.

—The energetic Staten Island Club players have made many improvements on their grounds, which, with the new club-house, mark a great improvement in the history of game in Richmond County. Several other games—lawn tennis, archery, quoits, etc.—are indulged in by both gentlemen and ladies, the latter having organized the Ladies' Club for Out-door Sports. The officers of the cricket club are: President, William Krebs; Vice-President, W H Clark; Secretary, W H Davidge; Treasurer, W M Betts; Directors, R B Whittemore, W M Donald, George S Schofield, Jr, M G Houghton and P F Kobbe. Among the principal players are Messrs J R Moore, Davidge, Donald, Davis, Duer, Eyre, Houghton, Roberts and Jarvis.

MERION CRICKET CLUB.—This club, of Philadelphia, now in its thirteenth year, opened the present season at the club grounds at Ardmore, last Saturday, with a game between the first eleven and twenty-two. The club has a list of one hundred and twenty-six members, and twenty-one junior members. The officers are: Pres., Jas. Rawle; Vice-Pres., J. R. Williams; Sec., Ed. S. Sayres, Jr., 217 South Third street, Phila.; Treas., W. M. Montgomery.

THE CHAMPIONSHIP WALK.—The conditions of the walking match at the Rink, this city, May 10 and 11, have been changed by the rescinding of the stipulation that 110 miles must be covered in order to win the medal. It will be given to the athlete walking the greatest number of miles in twenty-four hours. A special track is to be laid down for the amateurs. The division of the professional prizes will be as follows: The winner will take the belt and $200, the second man $100, and the third $50; $25 will be given to the man who beats the American record at 50 miles, and $25 to the pedestrian who beats the American record at 100 miles. All communications must be addressed to Edward Plummer, 9 Murray street.

WHEELING A BARROW.—R. L. Potter started out from Albany, April 10, to wheel a barrow from that city to San Francisco. This feat, if performed within 250 days, is to be rewarded with a purse of $1,000. The wheeler must make his 16 miles each day, Sundays excepted. This is another item for our proposed department of Irrational Pastimes.

NEW YORK ATHLETIC CLUB.—The programme for the spring meeting of the club, May 30, includes the following games: 100, 220 and 440 yards, half-mile and one-mile run, three-mile walk, 120 yard hurdle race, shot putting, hammer throwing, pole leaping, running high and running broad jumps, tug of war, open to teams of five men from any athletic club or organization, with the following handicaps: 125 yards run, 250 yards run, 600 yards run, fifth of a mile hurdle race (2½ feet hurdles) and one-mile walk. Entries close May 20.

BOSTON BICYCLE CLUB.—The club assembled on Boylston street, at 3 P M, Saturday, with eleven bicycles in line, Captain Frank Weston in command. A run was made to Newton via Beacon street and return. Time, bout eight miles per hour.

INTER-COLLEGIATE ATHLETICS.—At the convention held in this city April 20, delegates were present from Columbia College, Lehigh University, New York College, Princeton, Rutgers and Union Colleges, and the University of Pennsylvania. H G Maynard, of Princeton College, was elected president for the ensuing year; W J McNulty, of Union College, Vice-President; E S McIlvane, of the University of Pennsylvania, Secretary; William Waller, of Columbia College, Treasurer; J W Pryor, of Columbia, H F J Porter of Lehigh University, and H Marquand compose the Executive Committee for the ensuing year. The spring contests will be held on the 18th of May, on the track of the New York Athletic Club at Mott Haven, with the following list of events: For undergraduates—One-mile walk, two-mile walk, 100 yards dash, quarter-mile run, half-mile run, 220 yard dash, one-mile run, hurdle race, running high jump, running broad jump, pole vaulting, putting shot, throwing hammer, standing high jump. For graduates—a 100 yard dash and one-mile walk.

PEDESTRIANISM AT BOSTON.—The walking matches held under the auspices of the North End Athletic Club, closed last Saturday evening. James Hughes walked six miles in 55m 44s. A three-mile walk was made by Hallett in 25m 17s; Merrill, 27m 38½s; and Higgins, 28m 50s. Mile run: J Kelly, 5m 52s; Leighton, 5m 55s; Frisbee, 5m 59s; and Farren, 6m 35s. Mile run for professionals: Lawrence Agnew, 5m 51s.

—The pedestrian Fisher, of Louisville, Ky., made fifty miles in 9h 13m.

C. O. D.-FISH—That spells codfish, but they were catfish, and according to the veracious account of the *New Orleans Times* there were 1,523, the modest catch of one and one-half hours' angling, by four anglers, near that city. The result of this performance, we are told, was "an unprecedented depression in the fish market, the price of selected 'cat' with mashed bones, being quoted at half a cent a pound, with little inquiry and few speculators at that figures. Many of our citizens have been the recipients of strings of this delicious fish, sent by express, marked 'speckled trout, C. O. D.,' and generally sent back with regret, on account of not understanding the initials. Altogether the trip was not a success; to quote the emphatic language of Colonel Jack Sellers, they didn't leave enough catfish around Lookout Station to start another generation."

—Teacher with Reading Class: Boy (reading)—"And as she sailed down the river—" Teacher—"Why are ships called she?" Boy (precociously alive to the responsibilities of his sex)—"Because they need men to manage them."

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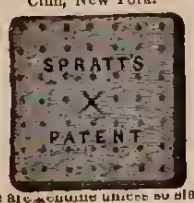

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SCHUETZENFEST

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Monday, June 24, 1878,

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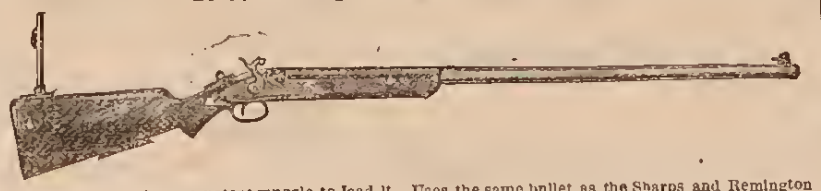

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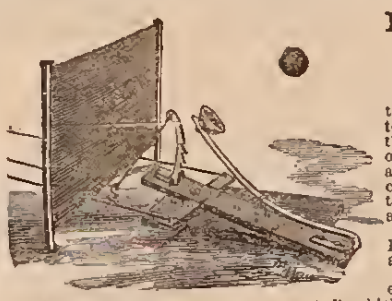

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MAY 2, 1878.

Volume 10.—No. 13. No. 111 Fulton St., N. Y.

Scenes in the Choctaw Nation.

No. 2.

I WAS the first to awake, and I did so with the unpleasant sensations of one who has slept only long enough to be tantalized by it. I had indeed hardly slept at all, but had only been passing through a series of disagreeable dreams. The lack of food the previous day, the long ride, and the stings of the ticks had worked me into an incipient fever, and after sleeping perhaps an hour, I had begun to dream. In these dreams peals of thunder and vivid flashes of lightning kept company with myriads of gigantic ticks which attacked me with a relentless fury, as if to avenge the death of those Nichols and myself had annihilated before retiring. One monster, I remember, nearly as large as a sea turtle, seemed foremost in blood-thirstiness, and was just preparing to plunge his prohocis into my heart, when I made a desperate struggle to escape from his clutches, and in doing so shook myself awake.

When I first opened my eyes I thought that surely I was still either asleep or dreaming. It was about midnight, and as dark as midnights proverbially are. The starlit sky, under which we had gone to sleep, had been again overclouded. Not a star was to be seen, and indeed, the sky itself was not visible, though I had noticed before lying down that directly over our heads was an opening in the tree tops. The clouds, however, that darkened the sky did not seem to portend a storm. There was no thunder nor lightning, and the air had not that peculiar "feel" always discernible before the approach of rain. The wind had died away, and not a flutter was heard among the branches. The stillness was almost appalling. The deep breathing of Nichols, still asleep, was the only sound that reached my ears. The tree toads and the *cicada* were silent; the whip-poor-will no longer uttered his ghostly cries; the ponies, tired out by their long walk, had ceased cropping the grass, and were apparently asleep. It was one of those moments, mysterious in cause and mystifying in their influence, which frequently occur in forest wilderness when everything seems hushed in awe and nature appears to hold her breath as if in expectation of some dread catastrophe.

As I lay there gazing up and out into the darkness a strange feeling of dread crept over me, causing me almost to tremble. I confess this now without blushing, though I know it is like confessing to a boyish weakness. I do not think I am a coward. On one occasion at least I have faced what I believed to be certain death, and I met his gaze without a tremor, and more than once have I run risks which others have pronounced reckless. Nor was it fear which, on this occasion, caused me to hold my breath as I lay there trembling. I knew there might be dangers in that forest—dangers from wild beasts or wilder men. I had heard many stories before leaving Texas of the Choctaws murdering white travelers through that territory. But had I known that in the woods around a host of painted devils were lurking in ambush I do not think it would have caused the cold chills to crawl up my back as they did. It was a feeling rather of dread than of fear. The intense darkness, the grave-like stillness, working on my half fevered system, had to a degree unstrung my nerves and made me an easy prey to incubus. Such was my nervousness (I smile now to recall it) that I put out my hand and rested it upon Nichols to assure myself that I was not alone. Somewhat quieted by this I resumed my recumbent position and tried to forget my surroundings in sleep.

But it was of no avail. The sense of danger oppressing me would not down at the bidding of Morpheus. Close my eyes never so tightly the deep gloom would still be apparent, and the breathless silence would still seem to haunt my ears.

Hark! What sound was that? Surely I heard something besides the lungs of my *companero*. It was in the direction of the horses. They had apparently awoke from their slumbers and were moving about as if to place themselves in easier positions. This was my first thought on hearing the noises. The rustling of the grass in the direction where the horses should stand seemed to admit of no other interpretation. I could not see them, nor could I had they been standing within ten feet of me owing to the intensity of the gloom around us. But I knew the direction from our bed in which they had been tied, as well as the distance, and felt certain that the noises were caused by them. It did not add to my nervousness, but rather tended to soothe it, by breaking the silence which had grown so oppressive.

Suddenly, however, the character of the rustling noises seemed to change. The horses appeared to be stepping about quickly, going, so far as I could judge, quite to the end of their tethers, and then stamping around in a semi-circle at the ends of the ropes. Soon they began to stamp harder and to prance around more energetically as though frightened at something and trying to get out of its reach. This was followed by a half angry, half-frightened snort, as if the object feared had approached nearer, or its presence had grown more unendurable. I was convinced that we had neighbors for which it would be prudent to prepare. I reached out my hand and took up my rifle, at the same time giving Nichols a shake that aroused him from his slumbers.

"What's the matter?" he growled, rubbing his eyes as though bewildered by the darkness. "Jupiter! ain't it dark!"

"Sh——! Do you hear those sounds?"

"What sounds?"

"Out where the horses are."

"I don't hear anything except the horses stamping around.'

"Nor do I, but did you ever hear horses stamp in that way when there was nothing around? There! did you hear that?"

A frightened rush was heard at this instant, followed by the angry snort above mentioned.

"I tell you, Morg., there's something dangerous out there, and we'd better get ready for it."

"But what can there be?"

"Well, there might be a bear, or a panther, or a Choc'aw, or the devil, but whatever it is it is dangerous or our ponies would not act so."

"Good Heavens!" said Nichols. "There it is! Don't you see it?—right over where the horses are—up from the ground—two balls of fire!"

I looked in the direction indicated, and there, sure enough, beheld the objects which had evidently frightened the ponies. Gleaming out of the intense darkness were two large round orbs of fire. They were up some ways from the ground, and appeared to be about three inches apart. They were not motionless, but seemed to sway from side to side, and at times to move on their axes. Once they disappeared for a moment, but soon re-shone with all their baleful brilliancy. They were apparently full and round, though they at times assumed oval and oblique shapes.

Both Nichols and myself knew very well what the phenomena were. We knew that the fiery globes were not balls of fire, but the dilated eyeballs of some night-prowling animal. What animal we were not sufficiently skilled in woodcraft to determine. It might be a bear, or a panther, or a murderous Choctaw, or something different from all three. We knew that bears and panthers were both abundant in those woods, or at least we had been told so, and both are tree climbers. An old hunter could have told us which we were now gazing at, at a glance, but we were not old hunters.

I will not say we—myself at least—were not frightened. I was, but not to such an extent as to lose control of my senses. I retained sufficient coolness to realize that, unless interrupted by some move on our part, our nocturnal visitor was likely to make away with one or both of our horses, and this was a contingency to which I could not consent. I determined to take the initiative. Telling Nichols to get his rifle ready to support me in case I missed the mark, I quickly adjusted a fresh cap, and, lying over on my back, I rested the barrel across my knees, and as well as I could in the dark, took aim at the two glaring eye-balls. Then, waiting a moment to be sure my nerves were steady, I pulled the trigger. As the sharp crack rang out upon the air, the hosts of chirruping insects seemed to awake and filled the woods with their cries. At the same moment, so simultaneously, I thought surely I had missed my aim, the two eye-balls leaped upward and outward, and the next instant we heard a dull thud, as of some heavy body falling upon the ground. At the same time the two ponies, with frightened snorts, sprang away to the opposite side from where the eyes had been, and were heard to bring up with a jerk as they came to the end of their tethers. There they stood stamping nervously, long after other sounds had again subsided into silence.

For some time we lay with bated breath, listening for some sign which should show the effects of the shot, but we did not hear a sound, save the dull thud spoken of. I had been so occupied with my rifle that I had not followed the after-movements of the object aimed at, but Nichols declared that by the flash he had seen the monster in the act of springing, and that the spring and the shot both came together. He could not tell what the animal was, but it was at least twenty feet long! I tried to induce him to go out and see what had become of the game, but he persistently declined, and as I felt about as he did on the subject, we concluded to wait till morning before stirring from our couch.

By the first flush of morning light we were on our feet, and having reloaded my rifle, we walked out to the scene of the night's adventure. As we approached the spot where the ponies were tethered we could see that the grass had been trampled down considerably, but it was still too high to discover whether or no there was any trace of our nocturnal visitor. It was not until we were almost up to it that we beheld it. We had reached a spot directly under the limbs of a rather low-growing oak, one of which limbs was about fifteen feet from the ground. There, just out from under this limb, his lifeless body damp with dew, lay the monster panther, whose skin I have said now adorns my library. The carcass was doubled up in a heap, as though life had departed before the body struck the ground. It was evidently an old male, which had escaped being hunted to any great extent, and under conditions favorable to development, had grown to an abnormal size. My bullet had entered the skull directly between the eyes, and had caused instant death. I was myself surprised at the precision of the shot, for I am not exceptionally skilled in marksmanship, and had the wealth of the Indies been offered me to repeat the shot, I could not have accomplished it. It was simply a lucky accident, such as often occurs to those who use fire-arms to any great extent. I remember once cutting off a woodpecker's head, at a distance of thirty feet, with a small pocket revolver, and yet an hour later, with the same pistol, I fired more than twenty shots at a target a foot in diameter, and failed to even scratch it! It was not skill but accident that controlled these cases.

While Nichols was picking up our traps, I proceeded to skin the panther, for I was determined not to lose such a trophy. I had nothing but a dull jack-knife, and the skin was terribly tough, and it took me nearly four hours to accomplish the task. I left the claws and skull in the hide, intending some day to have it stuffed. After scraping off all the flesh I could remove, I rubbed the inside of the skin with toilet soap—the only chemical I had about me—in hopes it would help preserve the skin until I could get some arsenic. Then I rolled up the trophy, and having eaten a few berries Nichols had picked, we were ready for another day's journey. But before starting there was an important question to be settled, and that was which way we should go. The sun was high in the heavens, and we could easily tell the points of the compass. But where was the road we had traveled the day before? We had left the road and ridden a quarter of a mile or so to one side, in order that our ponies might not attract the attention of some wandering semi-savage, but the events of the night had made us quite forget which side of the road we had turned to. I was certain we had turned to the right, while Nichols was equally certain we had turned to the left, and as both of us could not be right, and as we both had fair memory under ordinary circumstances, we could not agree as to which was the proper direction to take. At last, however, I gave in to my more enthusiastic companion, and we turned our horses' heads to the southward.

Sure enough, he was in the right, or seemed to be. After riding about a quarter of a mile we came to a road leading in a direction east by north. I say a road, but it was only by courtesy it could claim that title. It was merely a dim vista through the woods, with here and there a tree trunk on either side, showing the well-known "blaze." There was not a track on the ground to show that the road had ever been traveled. Along this road we started, and rode on for several hours without halting. The scenery was the same as on the previous day—the same green carpet of grass, the same seemingly endless grove of oaks. It looked like a likely place for game, but we did not wish to lose any time to hunt it, and though we were getting rather hungry, we thought we could stand it till we reached some place where we could buy provisions, or until some game should show itself along the road. This last was what we expected. We had been assured before leaving Red River that we would have no difficulty whatever in finding an abundance of game without leaving the trail.

After traveling for several hours the disagreeable thought intruded itself that the road we were on was not the right one. We had been told that it was only forty miles from Shawnee Town to Graham's Ferry, and if this was the case we should have reached the latter place by this time. Besides, the road, after the first few miles, did not run in the right direction. It tended too much to the South, as though running to some point on Red River. However, there was no help for it now, and, whether right or wrong, the cheapest plan was to go on. About three o'clock we halted for a short time to rest our horses, and while I watched them, Nichols strolled out into the woods to see if he could scare up any game. I heard the report of his gun after a while, and he soon returned with a raccoon, the only living thing he had seen, and even this he had secured at too great a cost, for, on discharging his rifle, the nipple had broke off close to the breech, and as we had no way of extracting the remaining piece, the weapon was for the time practically useless.

After resting awhile we resumed our journey, taking the coon with us, intending to make a supper off of it should nothing better show itself. At intervals the road was crossed by foot-paths or trails running in various directions. These trails form a perfect network all over this part of the nation. They cross and recross each other at all angles and in all places. Probably the destination of each one is known to their copper skinned trampers, but to the tyro in woodcraft they present an inextricable labyrinth. Here and there are passed rude log huts, which seem to be temporarily deserted by their tenants. Only one out of some dozen we passed was inhabited. In front of this was grouped a party of Choctaws consisting of a "buck," a squaw, and several papooses of different ages. These last, as soon as we appeared, made themselves scarce in all directions. We addressed ourselves to the "buck," and asked him if we were on the right road to Graham's Ferry. To our vexation, however, he did not understand English, and all our inquiries only elicited a series of unintelligible grunts. This, as we were afterwards informed, is always their custom, unless the stranger opens the conversation by offering some present, as tobacco, or a "drop o' the craythur." *Then* they can understand English, at least sufficiently to carry on such a conversation as the circumstances would naturally suggest. As we were not posted in these little tricks of Indian diplomacy, we were forced to continue our route unenlightened as to its correctness. Late in the afternoon we arrived at what seemed to be a river "bottom," through or into which our road ran. It was a dismal place in the full sense of the word. The grass ceased, and we found ourselves riding over a tract of hard packed mud, the surface of which was a thick slime. The oaks gave place to gigantic pines, which towered upward and interlocked their dense needle-covered tops scores of yards above our heads, completely shutting out the sunlight. There was no underbrush, that we could see, and the vines and creepers, so prominent in the ride from Mound City to Shawnee Town, were here wholly absent.

It was about five o'clock when we reached this place, and the slanting sunbeams, playing over the lofty tree tops, told that the sun was rapidly approaching the horizon. But very little of his light had reached us in the oaken woods, and when we entered the bottom it ceased altogether. It would have been wiser, perhaps, to have hesitated before entering such a place at such an hour, and to have waited till morning before attempting such a passage, and Nichols urged me to this course. But I was not to be convinced that the tract was of any considerable width, and as we had now both agreed that Nichols had been in the wrong about the proper direction in the morning, he reluctantly assented to the venture, and together we entered the gloom.

It was not long before I realized our mistake. The sun set, and to replace his light, nor moon nor star shed their rays down through the needles of the overshadowing pines. A veil of thin, hazy clouds draped the heavens, completely shutting off all light. Before we had ridden a quarter of a mile, we were not only not able to distinguish the "blazes" on the trees, but were straining our eyes to keep from running our horses' heads against the trees themselves. The darkness was so intense that Nichols swore he could feel it give way as he urged his pony through it. At the same time a dampness, as of a thick fog, became palpable to the senses, and besides dampening our clothes, chilled our bodies to the bone. At last, as by a common impulse, we drew rein to consult as to what was to be done.

We did not stop long. We felt it would be a mere waste of time. There was but one course open to us now, and that was to go on. We could not go back. We would have been as likely to lose the way as by going forward. Neither could we camp where we were. Whether cowards or not, we would not have dared to go to sleep in such a place. The very air seemed redolent with death. It was a spot where malaria might exult to dwell, and to have slept all night on that slimy soil, inhaling the noxious vapors which seemed to permeate the atmosphere, would have been certain to implant in our systems some dreadful miasmatic disease. We deemed it compulsory, almost, to go on. We did not try to distinguish the road any longer, for all such effort was evidently vain. By conversing we contrived to keep together, save when obliged to swerve to one side by an intervening tree. We could not see the trunks, but trusted solely to the instincts of our animals. We could not even see each other, and were only conscious of each other's presence by our conversation and the occasional rubbing of our ponies' sides.

Deeply disagreeable as this place was—and it promised to be even more so—it was possible, as we learned before escaping from it, for something still more disagreeable to occur. We came to a place where there was water. It was a muddy bayou, perhaps, or it might have been some running stream emptying into the Red. We could not see it to judge of its character. We only knew of its existence by its effects. My first intimation of it was feeling my horse's shoulders suddenly sink, and the next instant find him swimming under me. So sudden was the plunge that, not dreaming of such a contingency, I was quite startled, and in the surprise my rifle slipped out of my hands and fell with a plunge into the water, taking along with it the raccoon, which, for convenience sake, I had carried tied to the muzzle of the piece. I could not stop and look for it, for the horse was swimming vigorously ahead, and, great as the loss was, I was compelled to submit to it. The pony soon reached the land, having swum, perhaps, a dozen lengths, and I halted and shouted to Nichols, whom I had not heard for several minutes past. He had been carried away by the water to some distance, and his answering shout seemed to come from some gloomy depths; but by shouting to each other he was enabled to find his way up to me, and we again rode on, this time not quite so briskly as before.

How long we rode in this darkness we could not tell, when we finally emerged from it. We felt instinctively that we had lost the road, but when or where we could not tell. The width of the bottom we could not guess at, for we did not know but we had ridden in a circle. We only knew it seemed to us that we had ridden many hours and passed over many miles of territory. The darkness ever lengthens the hours, haunted by thoughts of dread and crowded with nightmares of reality, and whether we passed a longer or shorter time in the bottom, it seemed to us an age. At last, however, we emerged from it. We got at last out from among the pines, off of the slimy soil, and to a place where, through an opening in the trees, we could discern the murky sky. The first sign we received of our exit was the brushing of grass against the horses' feet and the occasional rubbing of underbrush against our legs. We could also tell by the firmer tread of the animals that we were off the slimy mud, and we no longer felt the disagreeable dampness which had exuded therefrom.

Rolling some old letters into a taper, I halted for a moment and ignited the roll, which made a brilliant, though ephemeral, light. By this blaze we saw that we were in one of those small glades or savannahs, which are so abundant in these woods. Around us we could see the oak trees, and at our feet the rich rank grass. In the centre of the glade, just as the light was flickering out, we noticed a small bush growing, and the next moment we were in total darkness again.

As we could gain nothing by going further that night, we determined to stop here until morning, which we thought could not be far distant. We picketed our horses to the little bush, and having arranged our traps as well as possible under the circumstances, without thinking of supper or even of our prayers, we soon forgot our trouble in sleep.

GUY RIVERS.

Fish Culture.

[FROM OUR REGULAR CORRESPONDENT.]

Abstract of the Twelfth Annual Report of the Commissioners on Inland Fisheries, Massachusetts, for the Year Ending Jan. 1, 1878.

MASSACHUSETTS was a pioneer in the work of fish-culture, and the efforts of their able commissioners have been well directed and rewarded with very encouraging results. The work of the past year has been directed to the introduction of a variety of food fishes. A number of streams have been reopened and stocked with alewives.

As a result of the suicidal conduct of the fishermen on the Merrimac, the supply of shad has been even smaller than was anticipated. The Commissioners complain of the short-sighted action of the shad netters in destroying the source of their own revenue; and we presume that this stupidity of otherwise sensible people—which, we need not state, is not confined to Massachusetts fishermen—is one of those paradoxes which will probably puzzle us as long as there are fishes and fishermen. There is reason to hope, however, that the disastrous result of the past injudicious greed may, for a time at least, teach the wisdom of less greedy conduct. We regret to learn of the still unsettled difficulty between the States of Massachusetts and Connecticut. An appeal from the Commissioners of the former State to those of the latter, to so regulate the shad fisheries of the Connecticut that Massachusetts might derive some deserved revenue from that industry, has proved ineffectual to remedy the above.

Two hundred thousand California salmon spawn received in 1876, 180,000 were hatched and delivered, 10,000 going to Saugus River, 30,000 to North River, 50,000 to Lancaster, and the rest to the head waters of the Merrimac. There is, however, a mystery about the young of these fish which has yet to be solved. Notwithstanding the hundreds of thousands that have been put into New England waters, no one has yet been able to say with certainty that he has seen a single smolt. Either they cannot endure the winter in our rivers (which is not probable), or the smolts so closely resemble the young of *Salmo salar* that they cannot be distinguished, or, what is most likely, their habits lead them into deeper and warmer water, and they drift earlier to the sea.

The distribution of the 150,000 young land-locked salmon was to the following ponds:

Wakefield, 4,000; Waltham, 1,200; Lunenburg, 4,000; Lincoln, 4,000; Middleborough, 20,000; Newton, 3,000; South Weymouth, 4,000; Winchendon, 4,000; Greenwood, 4,000; East Bridgewater, 4,000; Ashburnham, 5,000; Boxford, 3,000; Middleton 2,500; Wellfleet, 5,000; Georgetown, 4,000; Wilbraham, 5,000; Sandwich, 4,000; Framingham, 5,000; Natick, 4,000; Pittsfield, 5,000; Nantucket, 2,500; Berlin, 3,000; Braintree, 3,000; Lancaster, 15,000; Duxbury, 6,000; Halifax Pond, Plymouth, 10,000; Shawshire River, 8,000; Huntington, 3,000; Medford and Winchester, 2,000; Essex, 4,000.

Recent experiments with the *Salmo salar*, and observations on the Merrimac, appear to indicate that none of the young salmon go to sea before they are two years old, and that during that time they are to be found at all seasons in the headwaters of the streams in which they are deposited. Another important fact has been ascertained, which may save expense in stocking rivers. Many of the fry deposited about two miles above Livermore Falls went twenty or thirty miles up the river, ascending the mountain streams, and pushing into all the tributaries, their instincts leading them into waters too rapid and cool to sustain perch and pickerel, and where their only enemies are brook trout and the piratical poachers calling themselves anglers.

The return of mature salmon to the waters of the Merrimac this year commences a new era in the history of fish culture in this country. It is, therefore, with feelings of the greatest pleasure that the commissioners present the report of Thomas S. Holmes, of what he found passing over the Lawrence fishway during the past season, which report records the passage of salmon in June and July.

In addition to the above record there was a fall run of salmon, which commenced Oct. 11 and ended Oct. 30. These fish, so far as seen in the way, were from six to ten pounds in weight. Much larger ones may have passed over, as Mr. R. R. Holmes saw one three feet long, near the hatching-house at Plymouth, the first of November.

The success of salmon culture is therefore assured, and there is no reason, except our own want of management, our own neglect of that with which Nature has so bountifully provided us, why our rivers should not be as productive as those of Europe. Under proper culture, with wise regulations, strictly enforced, it is not easy to over-estimate the advantage that may accrue to the State by successfully carrying out what has already been demonstrated.

To this end we have united with the commissioners of New Hampshire in establishing, at Livermore Falls, a hatching house and ponds, supplied with both spring and river water. These are situated within a stone's throw of the river, where, by means of weirs, the spawning salmon can be turned into them. It is reasonable to think that the establishment may do as well as the celebrated one at Bucksport, conducted so skillfully by Mr. Atkins. The cost of these works will be small, probably not exceeding $4,000. In 1871 the price of salmon spawn in Canada, the only place it could be obtained, was $40 per 1,000 in gold. The salmon works at Penobscot, Me., afterward reduced the price one-half; and subsequently the Bucksport establishment, started by the commissioners of Maine, Connecticut and Massachusetts, afterward assisted by the U. S. Commissioner, was able to furnish spawn at about $3 per 1,000.

FISH CULTURE IN WEST VIRGINIA.

RONCEVERTE, Greenbrier Co., W. Va., April 23, 1878.

EDITOR FOREST AND STREAM:

Dear Sir—You will no doubt be interested in hearing something about what West Virginia (following the good example set by so many of the other States within the last few years) has been doing in the matter of fish culture. As the population of the State consists principally of small farmers or cattle men, scattered about over a territory in many places wild and rough, and taken altogether is not much more than half that of the city of Philadelphia, the State cannot afford to spend very large sums on public improvements.

However, an appropriation of $20,000 was judiciously expended at the Centennial and a creditable display made of coal, timber and other resources of the State. Last year a fish commission was appointed and an appropriation of $3,000 made to begin operations with.

The commissioners are John W. Harris, Esq., of Louisburg, Greenbrier Co., Pres. of the Board, and Messrs. Henry B. Miller, of Wheeling, and C. S. White, of Romney. The commission could not get to work until quite late for operations last year, but a hatchery was established at Romney, and from eggs bought in Pennsylvania about 175,000 brook and salmon trout were hatched and distributed to various streams throughout the State. More of these would have been placed in the streams by the commission, but about the time the fry were ready to distribute the hatchery was robbed and quite a number of fish taken off, presumably by persons who did not want them sent away from their part of the country. There were placed in the Ohio River 12,000 California salmon. There were also placed in the Greenbrier River at Ronceverte 5,000 of the same fish. These fish, unless they will in time become land-locked, would hardly benefit the Greenbrier, I think. The journey is a long one from the sea to the mouth of the Ohio, let alone the ascent of the latter to the Kanawha, that to the New River, and that again to the Greenbrier. New River would be a fine stream for such fish along the lower 30 miles of its course, as it runs through a canyon and is very rough and affords a fine mixture of falls and pools. Of the shad put in the Greenbrier some five or six years ago nothing has ever been seen since that I can discover. Shad have, however, appeared in the Kanawha, several well authenticated instances having occurred when they were captured. The shad is so timid a fish and not very hardy that I would doubt its making the long journey here from salt water if there were no obstacles, but I have no idea that shad could get over the falls of the Kanawha or Richmond's Falls on New River. These are actual falls, not rapids. The rapids themselves would likely deter shad from getting up New River. The Greenbrier River is singularly destitute of fish affording any pleasure in the catching. Catfish, caught by the natives on lay-out lines, or, as they call them, "trot lines," and a few "horny head" chub being about all the fish in the stream except at the extreme head waters in the upper end of Pocahontas Co., where there are some trout. There are no good trout streams flowing into the Greenbrier. The stream would be a pleasant one to fish and quite easy of access as the C. & O. R. R. follows it for 40 miles of its lower course, and the valley is well settled up stream for 70 or more miles, and nearly to its head. Last autumn 500 black bass from three to five inches long were put in the Greenbrier at the Kanawha Pike bridge, five miles above Ronceverte, and 300 in New River near Richmond's Falls. This spring there have been put in the Greenbrier at Ronceverte 7,000 land-locked salmon and 150 black bass: the salmon some time before the bass. The latter were all fine, full grown fish—spawners. If the bass take as well to the Greenbrier as they did to Jackson River and the James, where there is now fine fishing to be obtained by leaving the C. & O. R. R. at Clifton Forge, there will be a fine stream for the angler in a few more seasons. The commissioners expect to get another appropriation at the next session of the Legislature, and it is to be hoped that they will be enabled to go on with the work now begun. Truly yours, C. C.

SALMO SALAR IN THE MISSISSIPPI.

JACKSONPORT, ARK., April 15, 1878.

EDITOR FOREST AND STREAM:

Concerning the salmon reported a week or two ago in your paper as having been taken in the Mississippi at Memphis, I regret to say that in all human probability his front name is Jack; in other words, he was a jack salmon, Ohio River salmon, glass-eyed pike, American pike perch (*Lucio perca*). Mottling, resembling that of the rattlesnake, is not at all unusual in full-grown specimens of this fish, as taken in the waters of this vicinity. If southern correspondents would remember that the true salmon has all soft-rayed fins excepting the second dorsal, which is adipose, and that no fish with spine-rayed back fin is of that genus, a great deal of confusion and inaccuracy would be spared us.

While on this subject I would like to say, by way of suggestion merely, that the difficulties in the solution of the problem of stocking Mississippi waters with the California salmon (*Salmo quinnat*) would probably be materially lessened if fish could be placed in the White River of Arkansas, somewhere above the mouth of Black. My reason for this faith is that pure cold mountain water, flowing with a rapid current over rock and gravel bottom, can be reached from the sea on this river by a route several hundred miles shorter than any other. A glance at any good map will conclusively show this. My opinion is founded on the best observations I have been able to make. Difficult as I recognize this problem to be, I can but believe that should specimens of the fish ever reach the mouth of the White River on their upward journey, all inseparable obstacles might be considered as surmounted. The character of the water, except at the very highest stage, would be well suited to the continuance of the journey; much better than any part of the Arkansas, Missouri or Mississippi, and equally as favorable as the Ohio, and much nearer the Gulf.

The upper waters of the river can be reached by way of Springfield, Mo. If success be possible, I can conceive of no achievement more important. YELL.

STRIPED BASS (*Roccus Lineatus*) IN FRESH WATER.—*Boston, April* 24.—Genio C. Scott says in his book that striped bass can be acclimated in fresh water:

"For a few weeks in the estuaries of the southern coast of Cape Cod, school bass (*i. e.*, from two to five pounds) can be taken, at certain periods of the tide, as fast almost as the line can be rebaited and got into the water; and within two or three miles of these places are large fresh water ponds or lakes so full of feed that the numerous black bass that are there can with difficulty be persuaded to bite. It would be the easiest thing in the world to put in several hundred striped bass in a season, and if they would thrive and multiply, a very gamey and bold-biting fish could be added to our waters. DOCTOR.

[Some steps have been taken to propagate striped bass in Coney Island Creek, near this city, though no really practical measures have yet been adopted. We wish our Boston friends would undertake the work. A variety of striped bass (*Roccus chrysops*) is found abundantly in the tributaries of the Mississippi River, and notably in Murdoch Lake, near St. Louis. The bass ought to thrive in fresh water.—ED.]

FISH MORTALITY.—There is a reported mortality among the black bass in Hohomock pond, Pembroke, Mass. Similar troubles in New Jersey waters were reported in Townsend stream last year, but two months later in the season. The Hohomock pond water is pure and clear, and no adequate reason can be assigned for the mortality. We suggested last June that there might be some fatality among the larvæ and crustacea upon which the fish feed, or to poisonous gases percolating through the earth from beneath. Fish Warden Pierson, of Morris county, N. J., ascribed it to the peculiarly warm spring. Who can explain it?

SHAD IN TENNESSEE.—George F. Ackers, State Fish Commissioner, writes to the Nashville *Banner* that Bob Edmonds, a fisherman, caught five genuine shad in a net below the city last week. James O. Davis, an old Virginian, partly raised on shad, examined them closely, and decided that they were the genuine salt water shad. If this can be confirmed by another catch and exhibited for inspection, it will establish the fact of the wisdom of the United States Fish Commissioner's action, in planting nearly 200,000 young shad in the Cumberland several years ago.

Natural History.

NOTES ON SEVERAL RARE BIRDS TAKEN ON LONG ISLAND, N. Y.

BY N. T. LAWRENCE.

[Read Before the Linnean Society of New York, March 23, 1878.]

THE following species were observed and taken during a period of time extending over six years. Most of the species noted are of rare or unusual occurrence, and two of them *Colluria ludovicianus* and *Tringa bairdii* I am quite certain have not been previously recorded from Long Island.

I am indebted to Mr. Robert Lawrence, of Flushing, L. I., for the notes from that locality and Moriches.

Minus polyglottus, Mocking bird.—Two specimens taken at Rockaway; the first, a young male taken in September, 1871, which, from its nestling plumage, had probably been bred in the vicinity. The second, a fine adult male, was taken Nov. 7, 1877, in an open field a short distance from the salt meadow.

Collurio ludovicianus, Loggerhead Shrike.—One specimen (female) taken at Rockaway, Sept. 19, 1875, on a piece of upland of about nine acres in extent, containing a scattered growth of low cedars, and surrounded by salt meadows. Another was observed in September, 1876, but I did not secure it.

Plectrophanes lapponicus, Lapland Long-spur.—One male shot at Rockaway in December, 1871, in company with the shore larks (*Eremophila alpestris*). A second specimen was procured in Fulton Market, March 13, 1875, which probably came from Long Island.

Passerculus princeps, Ipswich Sparrow.—Five specimens taken at Rockaway, among a low range of sand hills that skirt the main shore of bay. The first in Dec., 1870; second and third, Nov. and Dec., 1872; fourth, Nov., 1874, and fifth, Jan., 1878 (See "Nut. Ornith. Bull.," April, 1878).

Contopus borealis, Olive-sided Flycatcher.—Mr. Robert Lawrence had the pleasure of taking a full plumaged male, May 24, 1872, shot on a spruce a short distance from his residence at Flushing.

Centurus carolinensis, Red-bellied Woodpecker.—A fine adult specimen was taken by Mr. Robert Lawrence in a piece of wood near Flushing in October, 1870. I have an adult male procured in Fulton Market, Nov. 2, 1872, which probably came from Long Island.

Aegialitis wilsonius, Wilson's Plover.—An adult male taken at Rockaway, July 1, 1872. From its slightly worn plumage and excited actions at time of capture I surmise may have been breeding in the vicinity, but could find no trace of nest.

Steganopus wilsonii, Wilson's Phalarope.—On the 3d of Oct. 1872, at Rockaway, I met with a pair of these birds, in company with two big yellow legs, *Totanus melanoleucus*, and succeeded in taking one, which proved to be a young male; another was observed in October, 1874, but did not secure it. On one occasion, while blue-fishing off Fire Island, in the month of August, we came across a party of five Phalaropes swimming in the ocean, which, from their size, I presume were the Wilson's.

Lobipes hyperboreus, Northern Phalarope.—At Rockaway, on the 24th of August, 1874, I killed a young male and immature female out of a passing flock of least sandpipers (*Tringa minutilla*.) Another was captured in August, 1875.

Macrorhamphus scolopaceus, Greater Long-beak.—On the 27th September, 1873, at Rockaway, I took a young female. When shot it was in the company of *Totanus flavipes*. A second was taken September 25, 1874; another observed in September, 1875, but I did not secure it.

Micropalama himantopus, Stilt Sandpiper.—In all the authorities I have looked up in reference to this bird, I find it stated "as rare or uncommon on the Atlantic coast," which is very surprising to me, for on the south side of Long Island, where it is locally known as the "bastard yellow-leg," it is certainly common. I have quite often, while bay snipe shooting, had parties of from three to five, and very frequently a single bird or a pair came into my decoys. Of four specimens in my collection at present, two are in adult breeding plumage, taken in July; the balance in fall plumage, taken in Sept.

Tringa bairdii, Baird's Sandpiper—Four specimens taken at Rockaway. The first two in September, 1872, shot on a small piece of meadow, out of a flock of *Tringa minutilla*. The third was taken August 26, 1873, while snipe shooting on a low strip of sand that separates the ocean and bay. My attention was first called to it by hearing a peculiar long-drawn whistle, and soon after I perceived a small snipe flying very high. The next moment it darted down and settled among my decoys, where I secured it. The fourth was taken in the same locality as the first two, September 20, 1874. Three of the above specimens were males.

Tringa maritima, Purple Sandpiper.—One specimen taken at Rockaway, Nov. 1871, along the main shore of the Bay. It is rather strange that this bird should be so rare on Long Island, for Mr. C. Hart Merriam informs us that it winters and is quite abundant on Falkner's Island, in Long Island Sound.

Tryngites rufescens, Buff-breasted Sandpiper.—Although this bird is more uncommon than rare, still I have only noted four specimens taken at Rockaway, as follows: One, Aug. 25, 1873, adult female; another, Aug. 1874; the other two, Sept. 13, 1875.

Ardetta exilis, Least Bittern.—Mr. Robert Lawrence informs me he has a fine specimen, taken on Flushing Meadows.

Sterna fosteri, Forster's Tern.—Two specimens taken at Rockaway. One shot along the surf Oct. 1, 1872, the others on the meadows Sept. 3, 1873. Both young birds.

Mareca penelope, European Widgeon.—An immature male procured in Fulton Market, Jan. 6, 1873, shot at Southampton, L. I. (See *Nut. Ornith. Bull.*, April, 1878.)

Somateria mollissima, Eider Duck.—Two specimens in immature plumage were taken on Long Island Sound near Flushing in the winter of 1877.

Stercorarius pomatorhinus, Pomarine Jager.—One specimen shot by a friend Sept. 19, 1872, at Rockaway, and kindly presented to me. It is rather strange that in the fall of 1872, the Jagers were very numerous at Rockaway, making their appearance in the last of August and remaining until the middle of October, and never before that year or since have I seen a single specimen.

Stercorarius parasiticus, Parasitic Jager.—The specimen here noted I found at Rockaway washed up by the sea in the fore part of June, 1873. The bird was very much decomposed, but sufficiently preserved to identify the species.

Rynchops nigra, Black Skimmer.—A pair of fine adult specimens were shot by a gunner at Rockaway, July 26, 1876, and presented to me. These with two others observed flying over the Bay Sept. 3, 1876, and one young bird procured in Fulton Market, are the only specimens that have been noted in a number of years, and yet Mr. Geo. N. Lawrence informs me that twenty-five years ago the Skimmers were very numerous on the south side of Long Island, and particularly in the neighborhood of Rockaway.

Colymbus septentrionalis, Red-throated Diver.—Two specimens noted, one taken by myself at Rockaway, Sept. 19, 1872, the other by Mr. Robert Lawrence in Flushing Bay, Oct. 11, 1877. Both of the above are adult birds. In this plumage it is rare, although the young are frequently shot in this vicinity.

Utamania torda, Razor-billed Auk.—Mr. Robert Lawrence informs me that he has in his collection a fine female, taken by a gunner at Centre Moriches, March 5, 1878, while decoying ducks. The man had fallen asleep in his blind, and on awakening found the Auk sunning itself within a few feet. It was very gentle, and was secured while swimming slowly away.

Mergulus alle, Little Auk.—On the 10th of Jan., 1878, at Centre Moriches, a specimen was found half a mile back from the Bay in a piece of woods; it was still alive but unable to fly. The bird had probably been driven ashore by the storm of a few days before, as they have been quite numerous on the coast this winter.

NOTE.—We have the pleasure this week of presenting to our readers an extremely valuable paper on some of the rare birds of Long Island. The notes are communicated in a paper read before the Linnean Society of New York, by Mr. N. T. Lawrence, and are especially important in that they record the capture of two species never before taken on Long Island, we believe. Ornithologists and collectors will read this communication with great interest.

THE GRAY PARTRIDGE (Perdix Cinerea)

Mr. John Swainson, of St. Paul, Minnesota, has called our attention to a game bird found in Sweden—the gray partridge (*perdix cinerea*)—which, he believes, if introduced here, more especially in the North, would be admirably adapted to our climate. Mr. Swainson has some objections in regard to the European quail. In England, where they were introduced some eighty years ago, they are not held in public favor on account of their propensity to run and skulk in the grass as soon as the dogs are on their track. With the gray partridge, our correspondent states, no such trouble would be found. As we have some friends in Sweden, we have written to them on the subject of this particular bird, which is found in winter in Northern Europe, and in due time we will be glad to give sportsmen full information as to the cost of birds and charges of importation. Mr. Swainson has written to us the following letter:

ST. PAUL, March 13, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I have followed with great interest the initiatory steps taken by Judge Everts and Mr. Hapgood to introduce into this country the European quail. Certainly these gentlemen deserve not only the thanks of the whole sportsman's fraternity, but every assistance and co-operation to promote their very praiseworthy enterprise. I am glad to notice in your paper that several other sportsmen have taken measures for the importation, on a still larger scale, of this interesting game bird; and I have reason to hope that another season will see at least 1,000 of these lively little fellows planted in the Upper Mississippi valley, from which, in their yearly migrations, I think they will not much diverge, having a large water-course as a guide and a continent to their right and left before they are able to try the experiment of crossing an ocean, while the Gulf States offer them for winter quarters a climate as semi-tropical, or nearly so, as that of Northern Africa, their most southern winter home on the other side of the Atlantic.

While this is certainly a move in the right direction, there is another game bird of Europe, to which I wish to call attention, and the introduction of which into this country would, I feel confident, not only succeed, but give us one of the finest game birds in the world, in several respects far superior to the quail. The gray partridge of Europe (*perdix cinerea*) resembles in habits and habitat very much our beloved "Bob White," while it differs from it in size, which is fully twice that of its American cousin, and, in plumage, a fine bluish gray mottled with brown. In habits it is stationary, even more so than our quail, being always found within a small circumference from the place of its birth. This may, to some, seem an objection to its introduction in the utmost northern part of this country, where one might suppose it could not exist on account of the severity of the winters, but it is a hardy bird, and in Northern Europe it is found in abundance as far north as lat. 60. In Sweden, for instance, it abounds near Stockholm, Upsala, and the shores of Lake Malaren, where the climate is certainly fully as severe as in Vermont or New Hampshire. But a condition for the existence of this bird is cultivation. Where there are no farms you will never find any partridges. It is, *par preference*, the bird of the stubble-field, the potato and turnip-patch. In cold and stormy weather it will take shelter under hedges and in nearest brushland, and after a snow-storm you are pretty sure to find them on the sheltered side of the grainstack or under the barn or stable, where, if hospitably treated, they are very apt to remain all winter in a semi-domesticated condition, and will amply compensate such kind treatment by raising their broods in nearest grain-field, and there, in proper season, the farmer or his friends will find from each pair of the previous winter a bevy of from 16 to 24 birds, affording a most exquisite sport and a delicious dish for the table. They lie well for the dog, and are in this respect far preferable to the European quail, which is a great runner, and often gives both sportsman and dog a good deal of trouble. But the partridges rise with great noise, and, once started, are very quick on the wing; so, my young and somewhat excitable sportsman friend, let me tell you there is such a thing as now and then missing a bird, and if ever you get a side-shot at a European partridge, aim fully as much ahead as on a ruffed grouse.

The writer wishes to fix the attention of our enterprising sportsmen to this bird, and feels no hesitation in predicting that if once introduced into this country and properly protected, it would multiply all over the continent and give us a game bird, the superior to which is not found either here or in any other country. J. S.

BIRDS TOWERING.

EDITOR FOREST AND STREAM:

The very interesting and instructive notes I have seen in the FOREST AND STREAM, relative to towering birds, move me to narrate an experience of my own touching the subject referred to:

In January, 1861, I was hunting in one of the river parishes in Northeast Louisiana. We had had excellent success, and killed quite a number of deer and the largest panther I ever saw or ever wish to see. It was about three o'clock in the afternoon when I came to the cornfield of Dr. Adam Bowie. There were, perhaps, a thousand acres planted in the great American cereal, and the stalks were immense, nearly fourteen feet high, having grown with the luxuriance characteristic of the plant on the lowlands of the Mississippi. My dogs flushed an immense flock of of wild turkeys out of the corn. They flew away heavily into the forest and alighted in an immense oak tree about 150 yards from where I was sitting on a log by the plantation fence.

I was carrying an excellent rifle, made by Frank Wesson, of Worcester, Mass. Of course it was a muzzle-loader (at that time we had no other) with a thirty-inch barrel of steel, carried a half-ounce round bullet, and weighed about 10½ pounds. I have owned a great many excellent rifles in my time, but have never had one which possessed such extraordinary accuracy, combined with long-range qualities. With it I shot a swan on Swan Lake, Ark., nearly a quarter of a mile away.

But to return to my story. The turkeys were very large. There was one in particular, an old gobbler, as I could see by his beard, which was sitting on the extreme end of a dead limb in the top of a tree. I took a rather coarse sight at him and fired. The whip-like crack of the rifle made the echoes ring again, and the startled birds flew in every direction. The turkey I had shot at acted most singularly. He stretched himself up to his full height, which was almost five feet, and then started to fly toward the cornfield instead of away from it. About fifty yards from the tree he commenced to tower, and in a circle he ascended nearly a quarter of a mile high, I should think, when suddenly he began to turn over and over in the air, and fall. With precisely the same movement as is made by a wild duck with both wings broken, he fell, about seventy-five yards from where I stood watching him, perfectly dead. The bullet had gone directly through the body just below the wing points, and an inch from the heart.

This was much the largest wild turkey I ever saw. He weighed, when dressed and ready for the spit, 27¾ pounds, and the fat was an inch thick on his back. I have frequently seen wild turkeys tower, but never witnessed such a remarkable case as the one I have described above. W. H. R.

Washington, April 6, 1878.

BLUE BIRD VS. SPARROW.—Our correspondent, Mr. E. B. Gleason, writing from Elmira, is an admirer of the sparrow, and gives us an interesting account of a battle between blue-birds and the foreigners, in which the latter were worsted and driven from their home. Mr. Gleason says:

"A lady friend, who is quite an observer of birds, tells the following incident in regard to the birds in question, which so corroborates my views that I send it to you. She built a little sparrow house in her yard near the window, and in a day or two it was taken possession of by a pair of sparrows, who began at once to build their nest. When two or three days had elapsed, during which time they had carried in a great deal of building material, as is their habit, along come a pair of blue birds (*S. sialis*) and take it into their heads to possess the house and nest of the sparrows, which they do, after a hard fight. The meek little sparrow is like some quiet people—when he is mad he is awful mad. The fight lasted some time, but at last the bluebirds came off best, and now occupy the house; but the sparrows still come around ten or a dozen times a day, when a little skirmish ensues, in which they are worsted. So much for the sparrows driving other birds away."

A good many friends of the sparrow seem to be speaking up just now. Here is a newspaper clipping which says that a flock of bluejays attacked and defeated eighty English sparrows that were turned loose in a park at Dubuque.

BREEDING OF FOXES IN CAPTIVITY.—*Terryville, Conn., April 18.—Editor Forest and Stream:* Mr. C. T. Granniss, of this place, has succeeded in raising a litter of young foxes, a feat which the traditional oldest inhabitant says he never "hear'n tell on afore." The old foxes were captured about a year ago in the town of Warren and are kept confined in a large cage, which gives them more liberty than when chained, as is usually the case. The young ones, four in number, are about two weeks old, and are doing nicely. Is this a common occurrence, or is said ancient inhabitant correct in regard to the rarity of foxes breeding in confinement? W. B.

[We think that O. H. is quite in the right, and that the breeding of foxes in captivity is very unusual. Wolves, however, are known to breed occasionally in zoological gardens. —ED.]

THE LINNEAN SOCIETY.—This society has now adjourned to June 1st, when the last meeting will be held before the members separate for the summer to reassemble in September or October. We shall look forward with interest to the reports next fall of the summer's work.

JORDAN'S MANUAL OF THE VERTEBRATES.—We are glad to be able to announce that Prof. Jordan's Manual of Vertebrates has had a most successful sale, and that a new edition is promised shortly. This new edition is to be much enlarged and will contain over 400 pages. An important addition to the work

is a full bibliography. That portion of the work devoted to the fishes has been entirely rewritten and will be especially full. A synopsis of the North American *Salmonidæ* has been inserted. Another new feature of the work will be a full series of definitions of specific, as well as generic names. We shall look forward to receiving this work with great interest.

CRIMES OF THE CROW.

POTTSVILLE, Pa., April 15, 1878.

EDITOR FOREST AND STREAM:

In a recent talk with a suburban farmer on the habits of the crow, the following is the opinion delivered by him, which may be of interest to the readers of the FOREST AND STREAM at this season of the year:

Q—Is not the crow a friend of the farmer?

A—Think I am reasonably well acquainted with the habits of the crow, and I haven't the first word to say in his favor, and candidly express my opinion that he is a nuisance to the farmer.

Q—Why do you denounce him?

A—Because he will destroy the various products of the farm. He will carry off all the eggs of poultry that he can find, also the eggs and young of the insectivorous birds. If he does not, why do birds fight or chase him away when they are rearing their young, and at no other time? That is sufficient proof that he is an enemy to them.

Q—Does he not destroy the grub-worm and other insects that injure the crops?

A—He does no such thing. I admit that he will eat grubs (as they are called) in the spring of the year, because he is *compelled* by hunger, owing to the scarcity of food. He will not destroy the cut-worms that eat the corn off about the time it is coming through the ground, because he can find other food that he prefers, such as eggs and young birds. I have seen him time after time light down behind the mowing machine on which I was sitting and pick up a young bird and carry it off to feed his young, and return in a few minutes in search for more. Nearly my whole life has been devoted to farming, and I have the first time yet to find the crow taking the worms out of the hills of corn. But I have seen him taking the corn out, perhaps intending, when he starts, to get a worm, but whether he does or not, he always makes it a rule to get the corn.

Q—Is the crow-blackbird (as it is commonly called) of similar nature?

A—He should have the same reputation as the crow, for he is a destroyer of the smaller birds, going to their nests and taking out the eggs or young, whichever it happens to be, and eating them. They have become so numerous that it is almost impossible to get any of the early cherries, because, from the first time the cherry begins to turn red on one side, they begin to eat them, biting the red side only. They also destroy a great amount of corn in the fall before it is cut up into shocks. It is not what they eat, but they pick the husk loose from the end of the ear, so that the ear takes water during a storm, and the consequence is, when you go to husking, you find that the ears which have been picked by these birds are black at the end, and the ear is generally mouldy all the way down. DEM PEDRO.

SALMO FONTINALIS IN TEXAS.

HOUSTON, April 22, 1878.

EDITOR FOREST AND STREAM:

Some time since you wrote me, asking if *salmo fontinalis* was found in Texas. I replied that I had never seen it, but had little doubt of its existence in the Pan Handle region of Texas. Since I wrote you I have been perigrinating considerably, and am still doing so. At Palestine I met with Dr. H. I. Hunter, a scholarly and accomplished gentleman, who was a Confederate surgeon during the war, and for some time established at Fort Davis. He told me that he found a fish that he took to be *Salmo fontinalis* quite numerous in the Limpia, and in the streams north of that they were abundant. He had never seen this fish before, but entertained no doubt at all that it was the true speckled trout. The Limpia flows through a region about 5,000 feet above the sea, whose mercury rarely rises above seventy-five, and the creek itself is as clear as sunlight. I have no doubt the officers at Fort Davis would give you information of this fish. A buffalo hunter, just from the Pan Handle, told me that he could catch the speckled trout by the wagon load in all the streams of that region—the head waters of the Canadian and Red Rivers. "The only difference," said he, "between this trout and the trout in the North is that the spots on this one are bigger and bluer." Maj. D. W. Hinkle, who was with Emory's Boundary Commission, and whose acquaintance I formed here, says the buffalo hunter is about right. He has been all over the Pan Handle. I am convinced that you are right in your Gazetteer. N. A. T.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING APRIL 20.—One yellow-faced amazon, *Chrysotis xanthops*, presented by Mrs. Richard P. Dana, N. Y. City; one horned owl, *Bubo virginianus*, presented by Mr. William A. Day, N. Y. City; two wild geese, *Bernicla canadensis*, presented by Mr. John Sutherland, N. Y. City; one giraffe, *Camelopardalis giraffa*; two angora goats, *Capra hircus*.

W. A. CONKLIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING APRIL 24.—One gray fox, *Vulpes virginianus*, presented; three alligators, *A. mississippiensis*, presented; two horned toads, *P. cornuta*, presented; one catbird, *Mimus carolinensis*, presented; one robin, *Turdus migratorius*, presented; one opossum, *D. virginianus*, presented; one kingfisher, *Ceryle alcyon*, presented; one pied-billed grebe, *Podilymbus podiceps*, purchased. ARTHUR E. BROWN, Gen'l Sup't.

—Anglers will notice that Moosehead Lake is now available for trouting.—[*Adv.*

—Why increase your sporting expenses by using paper shells when the objections to the use of metal shells is entirely removed by the use of Ronan's Metal Shell Cleaner?—[*See adv.*

McBRIDE FLIES.

Every fly that was left for sale with W. Holberton, of the Sportsmen's Emporium, I removed from his store. He has no McBride flies as his advertises. *None are sold to the trade.* S. J. McBRIDE.

189 Broadway, N. Y. City.

THE BOSTON BOATS.—The Fall River Line of Boston steamers have issued a very pretty little vignette, on which is an excellent likeness in colors of one of their world-renowned palatial steamers, and announcing the reappearance of the Bristol and Providence upon the route for the summer season. The rates of fare will remain at the extremely low figures of the past, $3 either way and $5 for an excursion trip, music by Hall's famous band thrown in.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

SYNOPSIS OF A LECTURE ON PRUNING AND TRAINING FRUIT TREES.

GIVEN BY MR. A. BOILEAU AT THE MARCH MEETING OF THE NEW YORK HORTICULTURAL SOCIETY.

WE believe the following will be instructive and useful to those interested in the cultivation of fruit trees, as Mr. Boileau says the art of training them is but little known in this country, and certainly one would have to go far to find such trees as he has in his city garden, and we doubt much if there is another garden in the States where there is so much taste displayed in the training of the different forms of apple and pear trees, showing fully the advantage of such treatment for ornament, as well as for the abundant production of choice fruits, because trees treated as he manages them cannot fail to produce liberally every season. For the formation of the pyramidal pear tree, he said every year the leader must never be pruned longer nor shorter than from fourteen to fifteen inches, with care that it should be so pruned that the cut of this year should leave the eye opposed to that of the previous season; for instance, if last year it was pruned with the eye facing the south, it should be left facing the north this year. This is to keep the stem straight, and each year never to have more nor less than five branches on the leader of the tree. If more grow they should be cut off, and if there are less an incision should be made above the eyes that are wished to be developed. This operation will stop the flow of the sap at that point and cause the eyes to start and grow vigorously, care being taken to have the five new branches interposed between the five branches of of the previous year. This is done so as to give space between the branches, to allow the air to circulate freely into the interior of the tree. This is very easy to understand, as any one can see on the few specimens he has on his place. You can see where the leader was pruned every year, one year on one side, the following on the other, and so on to the top of the stem, which is about ten feet high, with about eight series of branches, five in each, and all interposed between each other. The effect is beautiful and ought to be seen by every one who has a few fruit trees on his place, so that he might acquire the knowledge to treat them for the advantages of ornament and choice production as above. These stem branches (if we may so call them) he terms "frame branches," and they are trained obliquely from the stem of the tree so that they should not be so near each other. The branches growing on these are named laterals, and on the good treatment of these depends the success of the crop of fruit. To cause the formation of fruit buds they should receive the following treatment: In June, when the young laterals are about seven or eight inches long, they should all be pinched back to the fifth or sixth leaf from their base, and at the end of August or beginning of September again pinched about an inch above the first, the result of this second stopping being that at that season of the year when the flow of the sap has nearly stopped, the dormant eyes between the first and second pinching do not receive sap enough to develop themselves into branches, but swell and form spurs, which are the formation of fruit buds; and further, the sap that would flow into the useless branches should they not be removed goes into the fruit, causing them to grow much larger, at the same time allowing the air to circulate more freely through the tree, and the sun to shine on the fruit, giving them more flavor and color; whereas if there was no pinching done in summer, the fruit would be less in number, smaller; and, being constantly shaded, would have no color and but little flavor, and at pruning time much redundant wood would have to be cut away, and in consequence there would be very few fruit buds on the laterals. For the formation of espaliers, he said that when the tree has been planted one year and has well-established roots, as with the pyramidal or any other form, the young tree can be pruned back with certain success of fine and vigorous development. It ought to be cut about eight or ten inches from the ground, on the one eye which faces you, and which will of course form the leader; and just below select two eyes opposed to each other, one on the right and the other on the left; these two branches are to form the base, and should be trained obliquely so as to allow them to grow vigorously, and in July, when the leader is strong enough, cut it back always on the eye facing you, at about one foot from its base, care being taken to select two eyes for the formation of the second series of branches that should correspond with the two of the base. For instance, if, on the first year of pruning, the branch you obtained on the right side of the tree is above that on the left side, it must always follow in the same manner afterward to establish regularity, and when the trees are vigorous two series of branches can be had every season, one at pruning time and one in summer, as can be seen on the specimen trees in his place.

Mr. Boileau has promised us to say something further as to his methods of training the more fancy forms, such as his fountain vase and crinoline shapes, and also about grape vines, which he recommends not to be pruned long, as most people do, and also never to be trained vertically, but to prune the young shoots when about thirty inches long, and train them horizontally so that all the eyes on the young shoots may be developed. The cultivation of the grape vine is so interesting to most people that he has promised us a special article on his method of pruning and training it.

We have much pleasure in stating further that Mr. Boileau has also distinguished himself in the decoration of halls and churches, in grouping plants with trees, etc., as he did last year at Neilson Hall on the occasion of the Martha Washington reception, where the different nations were represented with plants of their respective climates; and only those who have seen his grouping at Trinity Church on festival occasions can judge of his taste in this particular. The planting of Trinity, St. Paul's and other church yards on Broadway is also under his supervision, and for the good and advancement of the beautiful in nature, as well as in art, we trust he will keep it up to the high standard he has already obtained.

BUFFALO CROSS BREEDS.—*Houston, Texas, April 22.*—Maj. D. W. Hinkle, of the Emory Boundary Commission, has told me that a wealthy stock-raiser in Coleman County, Texas, named Merchant, has a number of calves, the product of buffalo bulls and the domestic cow. He had seen them and pronounced them very poor stock. He says both the buffalo and the cow are debased in their offspring, and that an uglier animal can hardly be found—long, lank, lean, hairy and stupid. He does not believe that our beef stock can be improved by mixing with the buffalo. He also believes that these crosses may prove mules; that is, impotent to propagate their species. But this is conjecture. The hybrids he saw were not quite a year old. In my little book, "Two Thousand Miles on Horseback in Texas," I stated that I had never seen a cross between the buffalo and domestic cow. In this I was mistaken, but had forgotten the fact. In the county of San Saba, in 1858, I saw a cross of this kind that was between two and three years old. It was indeed an ugly beast; long, lean, lank and slouchy; the ugliest of the cow kind I ever saw; but it certainly was a great improvement in bone and frame, and if it would take on fat I cannot see why it would not be an improvement in beef. I consider the question still an open one, with the chances decidedly against the improvement of our cattle by putting a dash of buffalo in the blood. Would our white race be improved by a mixture with the big, wild Comanches? Greatly improbable. N. A. T.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, as of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 14, 15, 16 and 17. Dr. W. Seward Webb, Secretary.

BALTIMORE KENNEL CLUB.

THE BENCH SHOW.

BALTIMORE, April 25, 1878.

With a very full attendance both on Tuesday and Wednesday, to-day Masonic Temple has been fairly crowded, and many Baltimore ladies were present. Baltimore journals pay but a very limited attention to field sports, and though within a few miles of the city many a fox hunt has its meet, such matters are hardly noted. Baltimore ladies have inherited from their mothers and grandmothers a love for fox hunting, and many of them are cool and daring fox hunters, and when the brush is in view are regardless of their necks. All these fair women have their pets among the kennels, and when at the last Bench Show all their favorite fox-hounds unfortunately were not the recipients of prizes, their ire was immense. No man ever could reason with a woman as to her dog, and the expression, "Love me love my dog" (providing Darwin will allow that there was a cur in Paradise), must have originated with Eve.

It was with the native English setter-dogs that we must confess we had the greatest interest. Taken all together they were a fairly good lot, but they did not compare as a whole with the same class exhibited in Boston. The discrimination exercised by Mr. Davidson was excellent, and in some twenty-eight dogs, Dr. E. R. Baer's Don, a fine orange and white, was clearly the winner. Mr. E. P. Welsh's St. Cloud, of the Rob Roy and Sherwood's Nellie stock, ran Don very closely. Among the best dogs were Jeff, belonging to the Chicago Kennel Club, and Mr. Hiner's Zac with Spot, owned by Mr. T. Denmead. Dick and Chance were also worthy of particular mention, all these dogs coming in for a V. H. C. Of the setter bitches, Mr. Frank W. Thomas' Fanny won the blue, being a very perfect and thoroughbred creature. Mr. B. E. McClenahan's Fleet, an orange and white, was a close second. In the puppy class, there were numerous likely animals. Brutus, owned by Mr. J. O. Higgins, was first. In the bitches, Aribel, bred by Mr. T. C. Higgins, of Delaware City, was a perfect beauty. In class 7, imported Irish setter dogs, Mr. Ogilvie's Ben had it by long odds, and Mr. Brown's Grinsa was second. In the Irish setter bitches, though Mr. C. Z. Miley's Floss was a pretty one, Mr. Gause's Fire Fly, which was a V. H. C. in the champion class, was the winner. In native Irish setters the whole collection was fairly good, Mr. Ogilvie's Ben, the winner of the champion class, taking it easily. In bitches, Mr. Weighell's Breeze, an H. C. before, took the blue. In Gordon setter dogs, Mr. R. N. Elder's Rapp was first, and Mr. Millier's King was second. In this class, to show how good these were, in 12 dogs entered, three of them not competing as belonging to the Baltimore Kennel Club, 8 dogs had merit awarded to them. In the bitches, Mr. Weighell's Belle was first, and Queen, of the Goldsmith Kennel Club, second. Among the very choice dogs we may cite Mr. Tilley's fine Whip, which bitch also had an honorable mention in class 3. Almost without an exception the entire classes of Gordon setter puppies were good. In class 10, pointer dogs, Mr. J. N. B. Latrobe, Jr.'s, Bounce was a wonderfully well made dog, and took the blue. Mr. S. C. Magraw's Major Elliott was a fine second. The V. H. C's were well merited, among them was Mr. J. K. Bramble's fine pointer, the No. 210. Mr. Bramble, of East Newmarket, Dorchester County, Maryland, is a thorough, practical sportsman, and his dogs and method of training them are well known to us. In pointer bitches, Mr. Orgill's Romp, a one-year-old lemon and white, was winner. In class 11 (pointers under 55 lbs.), Mr. A. P. Bauer's Captain took the blue, and Mr. J. Lynch's Rapp, with the Sensation blood in him shining all over, was the winner of the red. In bitches, Mr. Orgill's stock carried off first and second with Ruby and Belle. In pointer-dog puppies, Mr. A. V. Canfield's Tuck was a fine winner. Tuck getting also the special in class 64. In Chesapeake Bay dogs, a great deal of interest is placed. If it is not in Baltimore that these truly American dogs are to be discovered, it is a question where they are to be found. We find that in Baltimore a great diversity of opinion still exists. The question of what is the true

Chesapeake Bay dog does not seem to be decided. Now let us give the appearance of Tip Crisp, the No. 250, the winner of the Blue. Tip Crisp is a large, heavy dog of a sedge color, with dark reflections on his coat, with a slight waviness of hair about his neck, and would weigh some 80 pounds. He has a big head, very wide across the eyes, with short ears close to his head. Eyes small and showing the haw. Very heavy shoulders, muscular straight legs, with no web in the feet. Now amateurs of the Chesapeake Bay bitches, though declaring Tip Crisp to be good, directed our attention particularly to Fan, the No. 252 among the bitches, as having the best type. The hair, they say, regardless of the division into the two classes of long and short haired, or big and small dogs, should not be more than an inch long, with fur beneath it. This shows the true otter strain. The weight, they also affirm, should be nearer to sixty than to seventy pounds; and they argue that for activity in the water and for scrambling over thin ice a heavy dog cannot do the work. There were numerous varieties of the Chesapeake Bay dog, some 15 native animals, and the types differed very widely. We are not afraid to say that, ignorant of the performances of these dogs, we are very much at sea on this subject still, and crave for further information. Tip Crisp being first, Mr. W. T. Levering's Rollo was second among the dogs, with Mr. Johnson's Juno and Mr. W. N. McCay's Fan as second. These dogs are sweet tempered, or should be, and as we are often asked to advise our friends as to their purchase, not only for ducking, but for the protection of houses, we would invite a full discussion of their merits.

In fox hounds the couples collections were simply superb. Dr. Twaddell, who, with patient care and study, makes no snap decisions, had to ponder a long time over a choice. Among so many good ones, large and small, of various makes and colors, it was no easy task. The difficulty in couples was to find two well assorted animals. In most cases, though both dogs were good, one would be much the better of the two. Mr. Owen Norris's Mayo and Gazelle, of Easton, Md., were made first, and a most righteous decision was it, with Mr. G. W. Landenberger's Chimer and Cyclone second. Mr. Landenberger, from his kennel at Fort Washington, Pa., had quite a number of likely foxhounds. Mr. Weighell's Buck and Mate showed elegant points, as did Mr. Scharff's Logan and Hunter. Almost all of these dogs were hard working animals, and many of them had been hunted within a short time. In beagles Mr. Galup's Spot was a neat dog, and almost as fine as Mr. S. H. Martenets, Jr.'s, Gess, the latter taking the first prize. In dachshunds Cora was a very perfect example of this race of dogs. In non-sporting dogs, with the exception of Mr. Haines' St. Bernard Doo, who took the first prize, and the collies, the collection was not good. In the smooth collies a great many first-class animals were exhibited. Mr. T. W. Lawson's Tom O'Shanter, imported, was a beauty, and was worthy of being called the first, as was Mr. Vaughn's Clyde of being a second. In the smooth collies Mr. Cox's Nettle was surprisingly good, as was Mr. Morris' Floric. In Skye terriers Robert McLellan's Tom, a good blue, low—but a few inches from the ground—with a fine head and good coat was a winner. Our list of prices will give the winners in the special list. The final excitement of this bench show of course concentrated in the Tiffany cup, to be given to the best pointer or setter in the show. The following were the entries:

R. W. Price, Kate, pointer, No. 223; J. H. B. Latrobe, Jr., Bounce, pointer, No. 208; R. N. Elder, Fly, Gordon, No. 187; J. S. Lemon, Crack, English setter, No. 2; G. B. Clasen, Royal Duke, English setter, No. 6; Geo. W. Ogilvie, Ben, Irish setter, No. 20; H. W. Gause, Fire Fly, Irish setter, No. 24; Meredith Jenkins, Flirt and Flora, Irish setters, No. 81; R. E. McLanahan, Snipe, Irish setter, No. 32; J. Lynch, Rapp, pointer No. 213: J. C. Higgin, Petrel, pointer; E. Orgill, Romp, pointer.

Long did Mr. Davidson ponder over this most difficult task. At last Mr. Higgin's Petrel won it, and deserved it. This fine bitch has not only intrinsic merits of her own, but it should be remembered that her progeny has done much to improve her race of setters.

SUPPLEMENTARY LIST OF AWARDS.

Class 14—Irish Water Spaniels.—1st. King of the River J. H. Whitman, Chicago; 2d. Liffey, same owner.

Class 15—Retrieving Spaniels.—1st. Bab, J. H. Whitman; 2d. Mallard, T. M. Aldrich, Providence, R. I.

Class 16—Cumber Spaniels.—1st. Trimbush, J. Thorn, Jr., New York.

Class 17—Cooker Spaniels.—1st. Deck, J. H. Whitman, and Fanchon II., E. W. Davis, Providence, R. I.; 2d. Queen, L. Willey, Baltimore; H c., King, same owner; C., Dot, W. H. Whitbridge, Baltimore.

Class 18—Fox Hounds.—Mayo and Gazelle, Owen Morrie, Easton, Md.; 2d. Rattler and Hunter, G. W. Landenberger, Fort Washington Kennel, Pa.; V h c, Logan and Hunter, G. Scharff, Magnolia, Md.; Vixen and Fury, G. W. Landenberger; Buck and Mate, L Weighell, Rochester, N. Y.; H c, Flora and Rally, A. F. Faucett, Baltimore, Md.; Music and Zelmer, Nimrod Gasnell, Baltimore.

Class 20—Beagles.—1st. Fan, S. J. Martonet, Baltimore; 2d. Spot, E. B. Gallup, Perrymanville, Md.; V h c, Gess, S. J. Martenot; Queen, J. B. Prentiss, Wilmington, Del.; Ranter, W. L. Bradbury, Orange C. H., Va.; H c, Diana, P. Dorsey, New Market, Md.; Lucy, J. P. Prentiss, Wilmington; Rose, J. H. Price, Langford, Md.

Class 21—Dachshunds.—1st. Cora, T. B. Allen, New York; 2d. Duke, same owner; V h c, Flirt, H. Cassard, Baltimore; Brisk, same owner; Waldman, G. W. Landenberger.

Class 22—Greyhounds.—1st. E. Y. Hinckle, Brooklyn, Md.; 2d. Charlie, H. W. Livingston, New York; H c, Venus, H. Sanders, Baltimore.

Class 23—Fox Terriers—1st. Tricksey, Chas. Walton, New York; 2d. Young Mettle, same owner; V h c, Jack and Fannie, F. Gebhard, New York; Snipe, O. N. Appold, Baltimore; H c, Gaylass, J. S. Brancher, Baltimore.

Class 39—Pugs.—1st. Rex, Miss Bessie Webb, New York; 2d. Prince, Miss Mamie F. Smith, Elkridge Landing, Md.; C, Rocket, G. B. Jooson, Baltimore.

SPECIAL PRIZES.

Class 42—Native Setter.—Jack, Chicago Kennel Club.

Class 43—Imported Setter Dog.—Oladson, H. P. Bryson. Bitch—Loo II., St. Louis Kennel Club.

Class 44—Pointer Dog.—Sensation, Westminster Kennel Club. Bitch—Pallas, same owner.

Class 45—Brace English Setters.—Royal Duke and Gift, G. B. Clason, Milwaukee, Wis.

Class 46—Brace Irish Setters.—Race and Ben, Chicago Kennel Club.

Class 47—Brace Gordon Setters.—Rupert and Mate, Goldsmith Kennel Club, Toledo, O.

Class 48—Brace Pointers. Flake and Rose, E. Orgill, Memphis, Tenn.

Class 49—Brace Native Setters.—Jack and Race, Chicago Kennel Club; V h c, J. B. Seth, Easton, Md.

Class 51—Native Setter Stud Dog, with two of get.—Tell, H. Otten, Baltimore, Md.

Class 52—Irish Setter Stud Dog, with two of get.—York, C. Z. Miley, Lancaster, Pa.

Class 53—Gordon Setter Stud Dog, with two of get, Rake, G. H. Appold, Baltimore.

Class 54—Pointer Stud Dog, with two of get.—Flake, E. Orgill.

Class 55—Native English Setter Brood Bitch, with two of progeny.—Nell, H. Clayton, Ulrich, Baltimore.

Class 56—Imported English Setter Brood Bitch, with two of progeny.—Petrel, J. C. Higgins, Delaware City, Md.

Class 57—Irish Setter Brood Bitch, with two of her progeny.—Fannie Fern, Chicago Kennel Club.

Class 58—Gordon Setter Brood Bitch, with two of progeny.—Fly, R. M. Elder, Baltimore Md.

Class 60—Native English Setter Puppy.—Anibel, J. C. Higgins.

Class 62—Gordon Setter Puppy.—Rap, R. N. Elder.

Class 63—Irish Setter Puppy.—Rough and Ready, C. S. Keller, Washington, D. C.

Class 64—Pointer Puppy.—Tuck, A. V. Caufield, Baltimore.

Class 65—Collection of Fox Hounds.—Rattler, Hunter, Chimer, Cyclone, Vixen and Fury, G. W. Landenberger.

Class 66—Couple Fox Hounds.—1st. Rattler and Hunter, G. W. Landenberger; 2d. High and Low, J. C. Bently, Sandy Spring, Md.; 3d. Moody and Sankey, T. H. McGaw, Baltimore.

Class 67—Couple Beagles.—Gess and Fan, S. J. Martenot.

Class 76—Pug.—Prince, Miss M. F. Smith, Elkridge Landing, Md.

Class 77—Shepherd or Collie, and Class 78, Best Rough do.—Tam O'Shanter, T. W. Lawson, Boston.

Class 88—Pair Shepherd or Collie Puppies.—Shep and Belle, J. W. Downey, New Market, Md.

Class 89—Kennel of Gordon Setters.—Goldsmith Kennel Club, Toledo, O.

Class 90—Setter or Pointer that has never won prize.—Petrel, C. Higgins.

WESTMINSTER KENNEL BENCH SHOW.—Entries for the show are coming in with wonderful rapidity, and there is no doubt but that the best collection of dogs ever seen in America will be shown in New York. Mr. August Belmont and Mr. M. Morris have made entries, as has Mr. Orgill. The fine Gordons owned by Dr. Spier and Mr. Munn will be on exhibition. Those superb Laveracks owned by Mr. Charles H. Raymond are entered. The finest collies, native and imported, will be on the show bench. As soon as the 940 entries are made the lists will be closed. Instead of using paper tags, which were troublesome and apt to be detached, metal tags will be used. Boston, Baltimore and the West will send their choicest animals, and everything looks as if the arduous labors of the Kennel Club would be fully rewarded by a large attendance. Mr. Lort, the judge of sporting dogs, sailed on Tuesday last from Liverpool.

DOG TRANSPORTATION FROM BOSTON AND THE EAST.—During the period of the Westminster Bench Show, to be held in this city, the New York and Boston Railroad will carry dogs free to and from the show, when accompanied by their owners. These roads will endeavor to pay particular attention to the comfort of the dogs passing over their roads.

BEAR DOGS.

THE CHASE AND THE SCRIMMAGE.

NASHVILLE, April 18, 1878.

EDITOR FOREST AND STREAM:

Bear and panther are still very plentiful, but at the time of which I write, some thirty years ago, they were so numerous as to render stock raising almost impossible on the sparsely settled plantation in the counties of Issaquena and Washington, in the State of Mississippi.

Some of the larger planters paid great attention to the breeding and selecting of the dogs which they used in this most exciting sport. The best breed of bear dogs was the product of a cross between the common hound and the Scotch or bull terrier. This combination gave the necessary courage and preserved the tongue. But as this particular breed was scarce, and almost all kinds of dogs delighted in the chase for bear or panther, and large numbers often being necessary to bring the game to bay and secure it, the packs in every instance were motley groups to look at.

Well do I remember my father's hunter, Lige; a short, stout built, copper-colored negro, with long shaggy hair and beard (inclined to gray) that nearly concealed his face; and his keen black eye as he mounted his gray hunting horse, Bullet, his long cane knife sheathed in his belt, his winding horn slung over his shoulder, and his well-tested Westley Richards laid across his saddle, which, as well for himself, was the receptacle for such articles as rope, strings, a hatchet and canteen, deemed by him as essential to a bear-hunter's outfit. Sounding the last few short staccato notes on his horn to call the dogs together for the start. Oh! what a pack!—hounds, half-breeds, curs and nondescripts, to the number of forty or more. To see such a motley crowd one could scarcely realize, when hearing them in full cry, that such exquisite melody could come from such an unsightly source. But such was the case, for although I have followed some of the finest packs of hounds in England and in France, I never experienced such sensations of thrilling excitement as at the sounds echoed and re-echoed through that vast virgin and semi-tropical forest from Lige's bear dogs when in full chase on a "hot trail."

It was a common occurrence to strike a fresh trail in a field near the houses, as the bear and panther would come to the open to commit their depredations. It was impossible to follow close after the dogs, on account of the natural obstacles, sloughs, undergrowth and dense canebrakes, with which the forest abounded, and which were the favorite resorts of the game when pursued, and in which they were invariably brought to bay. Bears are almost as cunning as foxes; they delude the dogs in every possible way by doubling, running through water, etc. An old bear, if not too fat, was difficult to capture unless the pack of dogs was a good one; not only would he run a long while, but would fight the dogs off. But at last, when too hotly pursued, and seeing the dogs were too much for them, they would take to tree, choosing generally the largest gum they could find, in the high densely foliaged branches of which they no doubt hoped to be secure. This point of the case is always recognized by the huntsmen from the peculiar barking, yelping and snarling of the dogs.

Now began the hardest and most exciting part of the chase, as the tree chosen by brain or the panther as a refuge was sure to be in the midst of a densely-matted canebrake. In order to get at it trails had to be cut through the cane, and as custom gave the right of shot to the first who reached the place, every one was naturally anxious to be first, and a lively race followed. The only exception made to the above rule was one with regard to the huntsman, Old Lige; by his superior knowledge of the woods, and by his excessive energy was almost always first, therefore he was never expected to shoot unless the dogs were in jeopardy, or the beast about to get away. In shooting at the bear or panther, aim was taken when possible at or near the region of the heart, or through the abdomen, they being considered the most vital parts. Even when shot through the heart they were often not killed outright, although the charge used by the hunters at that time was an ounce ball and three buckshot from a 10-bore shot-gun. As soon as the animal would fall to the ground, the dogs, from their natural instinct and training, would pounce upon him, and, if not mortally wounded, a desperate fight would ensue. Oftentimes dogs were killed, and always some of them badly hurt. In very many instances Lige has rushed upon the bear or panther and despatched it with his long cane-knife, thereby saving his dogs. Once the animal was killed the "mort" was sounded, and the dogs allowed to drink some of his blood and eat the intestines. Then Bullet would be brought up through one of the freshly-cut trails to draw the game out to the open. This operation was performed by tying it to the tail of the horse, who, strange to say, made no objection to this kind of work, but could do no other. Once in the open the game was transferred to his back to be taken home.

In this short narration I have spoken of bear and panther hunting as identical. Some hunters pretended they could tell by the cry of the dogs which kind of trail they were on, but I always begged to differ, simply because I could discover no difference. J. D. H.

MANGE.

ABSTRACT FROM A PAPER BY DR. J. A. MUNN, FROM THE VETERINARY JOURNAL.

(Continued from our last number.)

FOLLICULAR MANGE.—This mange is also parasitical, and is also called follicular or pustular mange, in contradistinction to scabies or scurfy mange. It is due to a parasite, the *Acarus* or *Demodix folliculorum*, on the hair follicles and sebaceous glands. It seems as if this *acarus* is identical in both man and dog, but whereas in the former it is of but little consequence, with the dog it causes grave inconveniences. The *Acarus folliculorum* has a head, thorax, abdomen, eight legs and a pointed tail. It measures from 1-64th to 1-135th of an inch in length, and is from 1-35th to 1-335th of an inch broad. The head has lateral antennæ and a proboscis; the legs are jointed and hooked. These parasites are found in the sebaceous glands and hair follicles, sometimes thirty having been found in a single pustule. *Symptoms and Diagnosis.*—For a long time follicular mange was thought to be incurable, from its being so deeply seated. An animal was apparently better under treatment for a time, but soon relapsed. The symptoms were irritation and scratching, then on one or two circumscribed spots the hair fell off and the skin was reddened. The patch, though not entirely denuded of hair, is rough and harsh, and the hair is easily detached. Upon these bare patches small red pimples form, which turn into pustules. These pustules burst and become confluent, forming an indolent, foul ulcer, from which flows a thick fœtid pus, and sometimes even blood. A peculiar odor is noticeable. There is falling off in condition, though the appetite is not reduced, the dog being ravenous. *Diagnosis.*—The only positive one is by means of the microscope. For microscopic observation a pustule is punctured and the contents squeezed upon the thumb nail and transferred to a glass slide in a drop of oil. Examined under an inch objective, the *acarus* looks like a fish, but with a quarter inch lens the distinguishing characteristics of the parasite are easily seen.

RED MANGE.—This is known as *Eczema rubrum*, and is non-parasitic and consequently non-contagious. *Eczema* is the effect of some irritant applied either externally or internally, and is characterized by a number of small vesicles in the skin, usually crowded close together. This stage is seldom seen, there being usually a sore caused by scratching. This sore is slow in healing; a thick exudation runs from it and mats the hair. A reddened appearance of the skin follows, which is rough to the touch. This apparent roughness is due to the presence of a number of minute bladders or vesicles containing a clear, pellucid, serous fluid. The dog, by scratching, breaking up these vesicles, the serum seems to have an inflamed and irritating condition. As the disease progresses, a bad smell is apparent, and the hair becomes matted and sticky. *Eczema* sometimes happens in the ear, but is not to be taken for canker, because there are always some eczematous patches on other parts of the body. *Treatment.*—*Eczema rubrum* is mostly due to injudicious feeding. [We know of several cases of late when dogs which had been poor in flesh were overfed for coming bench shows.—ED.] Excessive feeding on oat-meal or on dog biscuit of inferior quality will bring on this skin disease. If the disease is due to systematic causes, a strong purgative should be given, such as castor oil, from four drachms to two ounces. If there be one or two patches use sulphate of zinc, thirty or forty grains to the ounce of water; but if there be a large surface, tannic acid is preferable. If there is much itching, an ounce each of tincture of opium and solution of belladonna, mixed with a quart of soft water, will be found useful. An ointment made of one pound of lard, 160 grains of benzoin reduced to powder, with eighty grains of zinc oxide, has been found most useful. As the condition of the animal may want strengthening, arsenical liquor, or two or five grains of sulphate of iron.

LONG BRANCH.—The Board of Commissioners of Long Branch seem to be hydrophobic themselves, if we consider their insane movement in regard to the slaughter of all spitz dogs found in or about Long Branch. The first proposition was to kill every spitz dog in the place whenever found; but as New Jersey has a law which makes dogs private property, the action was modified. Now all dogs found out of houses, either with or without muzzle, if led by a string or loose, may be killed.

FIRST LESSONS IN RETRIEVING.—A correspondent from Boston sends us the following:

"A friend of mine used a small rubber band on his dog's nose, to teach him to hold things in his mouth with great success."

We think there is little trouble in teaching any animal to retrieve. With dogs, when a person has patience, it can easily be accomplished. Almost as soon as a puppy can toddle he can be made to understand that he must go for an india rubber ball. He mostly will do it of his own accord. It is best at first to roll it quietly with the finger on the floor, and after a while to bounce it. The moment it rebounds any puppy will show delight and try to get it. A little chiding will soon make a young dog drop the object he holds. Stead-

fastness in holding something in the mouth is what takes longer time to teach. We do not like spike collars, and have no hesitation in saying so, and only believe that retrieving can be taught by their use in extreme cases.

ROSE TREE FOX-HUNTING CLUB.—The spring meeting of this club, takes place next week, Saturday. The programme includes a parade of the club in hunting costume, hurdle races, etc.

PALMERSTON II.—Some of our readers wishing to know the pedigree of Palmerston II, Mr. John M. Niall, of Killaloe, St. Clair, Ireland, sends us the following:

"Palmerston II., by Dash, 1st prize and cup, Dublin, 1875, ex Nell, 2d prize, Crystal Palace, London, 1875. Dash, own brother to Champion Palmerston, is by Mr. Cecil Moor's Old Shot, ex Mr. Moor's Kate (1st prize and cup, Manchester, 1871), when she was ten years old. Old Shot is by Mr. B Evans' Grouse, ex Mr. Hummington's Juno. Nell, own sister to Lilly II., for whom Purcel Llewellin, Esq., gave £150, and Ellie, both 1st prize winners at Crystal Palace and Birmingham, in 1872, 1873 and 1874, is by Major Cooper's celebrated Ranger, so well known as a great prize winner, for winnings see K. S. B. 1749, ex Mr. Jephson's Belle, K. S. B. 1711. Ranger by the world renowned Hutchinson's Champion Bob, K. S. B. 1700, ex Hutchinson's Lilly. Bob by Dash ex Quail. Belle, by T. V. Nugent's Don, ex Mr. Wallace's Dove. Dove by Grouse II. ex Fan, won 1st prize, Crystal palace, London, and 1st prize Birmingham Show. Bob (Champion K. S. B. 1700), is by Dash ex Quail. Dash is by Mr. La Touche's Ranger, who was sold by auction at Dycer's for £73 10s., ex Judy; Judy by Captain Goff's Dash, ex Fan. Palmerston has already won five prizes. He is 25 inches at shoulder, rich in color, with a profuse glossy coat without white, save a very small spot on the chest.

Far back the pedigree of Palmerston II. is traced from Ledwich's old red Irish setters, now almost extinct.

GOING AROUND BIRDS.—The habit of "circling birds" by pointers and setters is corroborated by a correspondent as follows:

"I see your correspondent, "G. K. M.," from Philadelphia, speaks of a peculiarity of his pointer bitch going around birds, and coming back to same place and pointing. I have an English setter bitch that has done the same thing several times. She only did it, however, when the birds had a tendency to slip off from her. On discovering their moving away from her, she always wags her tail a little, looks around to see I am on the look out, crouches almost to the ground, and creeps around them, making a complete circle, comes back to starting point, and stands, and the birds, after this dodge, almost invariably lie quiet as long as you wish. Yours,

Huntingdon, Pa., April 10. T. C. FISHER.

WHELPS.—My imported cocker bitch Fan whelped, on the 6th inst., nine pups from Mash's prize cocker Dush.

Hayloville, Ont., Canada. W. A. H. A'COURT.

—M. H. Brooks, Sec'y Greenville, Pa., Sportman's Club, lost by distemper his valuable pointer dog Billy.

DEATH OF FLAKE.—We regret to learn that Mr. E. Orgill's champion pointer Flake died on Tuesday, 30th April, on his return from the Baltimore Bench Show. Flake was 3½ years old, had been the recipient of innumerable prizes, and was among the finest dogs in the country.

DISCRIMINATION IN SCENT—*Lansing, Iowa, April* 17.—In your issue of April 11 I notice an article by J. H. H., headed "Discrimination in Scent." I indorse the views of this writer and believe it is a natural instinct of the true bird dog—setter or pointer—to distinguish the scent of live, dead or wounded game. While hunting pheasants last season in company with my friend Adam B——, my setter dog Rover flushed a pheasant. I fired at it, breaking a wing, the bird falling at some distance out of sight. Rover started in pursuit, but not returning as soon as I thought he ought, I started after him. He had the bird coming in. Suddenly he came to a firm stand, still holding the pheasant in his mouth. We proceeded to the spot and found him standing a covey of quail some 20 or 30 feet distant, and not a bird in sight, they being in thick hazel cover. We succeeded in bagging 10, when we sat down and discussed the smelling qualities of the dog. C. A.

Rational Pastimes.

CRICKETERS' ASSOCIATION.—At a convention of the American Cricket clubs held at Philadelphia, April 17th, representatives were present from the following clubs: Baltimore, Belmont, Chestnut Hill, Dorian, Fall River, Germantown, Manhattan, Merion, Philadelphia, Staten Island, St. Timothy, University of Pennsylvania and Young America. "The Cricketers' Association of the United States" was organized, and the object of the body set forth as the advancement of the Cricket interest in the United States. This is one of the most important Cricket meetings ever held in this country, and we may infer from the full representation of clubs a growing interest in the manly game. Among the more noteworthy rules adopted by the association was one relating to what is known as revolving, which reads as follows: That no player be allowed to play in matches with more than one club in the association, during the season, unless he shall actually have resigned from one club and joined another; but undergraduates of colleges may play with one other club besides their college club. The rules of the Marylebone Cricket Club were adopted as the laws of the association, with some modifications, which were specially recommended for trial during the year.

CRICKET.—The Australian cricket team arrived in San Francisco, last Sunday, per steamer City of Sydney. The following are the names of the players: T. Horan, W. C. Gibbs, H. Boyle, C. Bannerman, A. Bannerman, W. L. Murdock, F. Spofford, F. Allen, F. Bailey, J. Blackham, G. Garrett, A. Candate and D. Gregory.

MANHATTAN CRICKET CLUB.—At the Prospect Park match last week the following score was made:

GREIG'S SIDE.		JACKSON'S SIDE.	
Greig, c Lawler, b Jackson	4	Jackson, b Hooper	2
W Scott, b Rogan	3	Rogan, c Edwards, b Scott	14
G Scott, b Jackson	2	Edwards, b Hooper	0
Hassling, c G Scott, b Jackson	1	Lawler, c Rogan, b Greig	10
Gowdy, b Rogan	2	Dunnan, c Rogan, b Hooper	2
Jepson, c Lawler, b Jackson	0	Rippler, not out	0
Garrity, not out	1	L Love, c Gowdy, b Greig	4
R Hooper, b Rogan	11	S B Maken, h w b, Hooper	2
Byes, 4; leg byes, 1; wides, 1	6	Wides, 1; leg byes, 1	2
Total	30	Total	30

FOOT BALL.—An exciting and closely contested game of foot-ball at Prospect Park, Brooklyn, last Saturday, resulted in a score of 4 goals for the Polytechnic Foot-ball Club, and 3 goals for the Juvenile High School Club.

"BATING THAT O'LEARY."—John Hughes, who started out April 21 on his long walk to beat O'Leary's time of 520 miles in 5 days, 19 hours and 10 seconds, finished his attempt last Saturday evening. When the word was given the first day Hughes bounded off on the run, and kept it up for 3 hours and 44¾ minutes, making in that time 30 miles. At the close of the 24 hours, 100 miles were put down to his favor, and then both amateur and experienced pedestrians knew that his attempt would be a failure. He was then 17 miles behind O'Leary's time, and the record after that time may be learned from the following table of the miles gone over at the end of the days:

	O'Leary.	Hughes.
Second 24 hours	200	159
Third 24 hours	288	223
Fourth 24 hours	373	293
Fifth 24 hours	456	354
Sixth day, 19h. 6m. 10s	520—1,320ft.	389—8,485ft.

—In the Paterson, N. J., Wigwam, Capt. John H. Milligan, of that city, and Miss Paulina Von Saulsburg, of New York, started at 10:15 Friday morning for a 36 hours walk without rest, or stopping for food or drink. At 10:15 Saturday night the pedestrienne threw up the sponge, Milligan walked five minutes longer and was declared winner. He walked about 80 miles.

THE LONG DISTANCE CONTESTS.—The entries for the twenty-four hours amateur walk, and the thirty-six hours professional walk close next Saturday. There are a large number of competitors already registered for the competitions, and a fine record may be expected. The contests are appointed for May 10 and 11, at the Rink, this city.

ONE HUNDRED MILES.—W. E. Harding, the fifty mile champion of America, and John Ennis, of Chicago, who recently covered 400 miles in 128 hours at Buffalo, are to walk a match of 100 miles, and also for the two miles championship, at New York, June 8.

—C. A. Davenport and T. Allsskey, amateur pedestrians, walked a match of ten miles at the Scottish-American grounds, last Saturday. Davenport made it in 1hr. 47min. 27s.; Allsskey in 2hr. 2m. 6s.

—A four mile walk at New York, last Saturday, was done by James Fay, in 46 min. 4 s; his competitor, James Maiu, doing the same in 44 min. 15¼ s.

—John Ennis, the Chicago pedestrian, accomplished his 400 mile walk in 128 hours, having ten minutes to spare, at Buffalo, N. Y., last Saturday.

—O'Leary, the pedestrian, at Dublin, Wednesday evening of last week, completed a walk of 220 miles in sixty hours.

ANOTHER MAN TO WALK AROUND THE WORLD.—Yesterday James Duff Henderson of Toronto, Can., started to walk a distance equal to the earth's circumference. He proposes to cover forty miles each secular day for two years, walked in the United States, Great Britain and the Continent, and is to receive $10,000 if he accomplishes his task.

SOHMELL VS. BARTLETT.—The walking match between these two pedestrians at Cincinnati, resulted in a victory for the former, who walked 400 miles in 119½ hours.

FAST TIME IN ENGLAND.—The following remarkable time was made by R. Hancock of Hackney, Eng., and W. Howes of London, in the recent 50-miles' race at Agricultural Hall, London. We give the time for the last ten miles:

Miles.	Howes.	Hancock.	Miles.	Howes.	Hancock
40	6 16 50	6 19 30	46	7 17 13	7 19 49
41	6 27 40	6 30 21	47	7 [illegible] 36	7 30 9
42	6 38 22	6 41 8	48	7 37 36	7 40 13
43	6 49 2	6 51 40	49	7 47 45	7 50 13
44	6 58 17	7 0 28	50	7 57 44	7 59 49
45	7 7 25	7 0 52			

A MUTE'S FATE.—A deaf mute, Martin Brown, at the New York Institution of the Deaf and Dumb, was fatally injured while competing at hammer throwing with a number of companions last week. Brown was alone near the goal, with his back to the thrower. The mutes watching the hammer as it flew toward its destination saw the danger Brown was in, but were powerless. The hammer went swiftly downward, and the mutes dashed forward. It fell with force, striking Martin Brown on the head, hurling him unconscious some feet away. His skull was fractured, and he lingered until the following day. Brown regained his speech before he died. This is attributable mainly to the shock to the brain. Brown became deaf and dumb in consequence of scarlet fever, at the age of six. Instances of recovery of speech following accidents to the brain are on record.

TRINITY COLLEGE ATHLETIC ASSOCIATION.—An Athletic Association has been formed at Trinity College with the following officers: Pres., W. N. Elbert; Vice Pres., S. G. Fisher; Sec., A. T. Mason; Treas., D. B. Wilson; Field Marshal, W. E. Potwine; 1st Lieut, S. G. Fisher; 2d Lieut, E. D. Appleton. It is proposed to hold a field meeting the latter part of this month. We are glad to chronicle the formation of another college club for manly sports.

APRIL BASE BALL.—The International Association game for the month of April have been characterized by uniformly good fielding. The single figure games have been as follows:

April 6, Harvard vs Beacon, at Halemer field, 7—5; 11, Brown Freshmen vs Fall River, at Fall River, 8—3; 11, Worcester vs Beacon, at Worcester (6 in.) 7—6; Athletic vs California, at San Francisco, 5—2; 15, Harvard vs. Live Oak, at Boston, 3—1; Cricket vs Hornell, at Hornellsville, 4—3; Utica vs Rusty, at Utica, 5—0; Manchester vs Pittsfield, at Pittsfield, 2—1; 10, Hornells vs Cricket, at Hornellsville (10 in.) 8—0; Rochester vs Auburn, at Auburn, 5—1; Springfield vs Holyoke, at Springfield, 7—3; 17, Utica vs Rochester, at Utica, 6—4; Worcester vs Madden Bros., at Worcester, 9—1; Buffalo vs Essex, at Buffalo, 8—1; Yale vs Trinity, at Hartford, 6—1; 18, Harvard vs New Bedford, at Boston, 9—3; Hornells vs Cricket, at Binghamton, 5—1; Rochester vs Springfield, at Springfield, 7—0; Utica vs Auburn, at Utica, 7—2; Allegheny vs Zantha, at Allegheny, 3—3; 19, Hornells vs Auburn, at Auburn, 6—1; Hudson vs Madden, at Marlboro, 7—0; Haymakers vs Amateur, at Meriden, 2—0; Tecumseh vs Atlantic, at London, 4—3; Providence vs Yale, at New Haven, 4—0; 20, Yale vs Princeton Freshmen, at Princeton, 5—1; Lowell vs Rochester, at Lowell, 5—0; Brooklyn vs New Bedford, at Brooklyn (13 innings) 7—3; Manchester vs Live Oak, at Lynn, 3—0; Utica vs Cricket, at Binghamton, 7—3; Resolute vs Hibernia, at Elizabeth, 4—3; Holyoke vs Springfield, at Holyoke, 5—3; Allegheny vs Zantha, at Allegheny, 4—0; 22, Utica vs Hornells, at Utica, 3—2; Manchester vs Rochester, at Manchester, 9—0; New Bedford vs Pittsfield, at Pittsfield, 5—0; 23, Pittsfield vs New Bedford, at Pittsfield, 5—0; Hornells vs Springfield, at Springfield, 5—2; Star vs Auburn, at Syracuse, 8—3; Athletic vs Kleine, at Philadelphia, 5—3; Live Oak vs Yale, at Lynn, 7—0; Amherst vs Westmoro, at Amherst, 7—6; 24, Brown Freshmen vs Amateur, at Fall River, 5—3; Utica vs Star, at Utica, 4—2; Cricket vs Auburn, at Auburn, 9—7; Pittsfield vs Westhore, at Pittsfield, 3—0; 25, Rochester vs Live Oak, at Lynn, 3—2; Hornells vs Lowell, at Lowell, 2—1; Star vs Cricket, at Syracuse, 7—1; 26, Utica vs Cricket, at Utica, 4—0; Springfield vs Pittsfield, at Pittsfield, 3—0; Harvard vs Manchester, at Boston, 5—3.

Sea and River Fishing.

FISH IN SEASON IN MAY.

Trout, *Salmo fontinalis*.
Salmon, *Salmo salar*.
Grayling, *Thymamallus tricolor*.
Salmon Trout, *Salmo confinis*.
Shad, *Alosa*.
Land locked Salmon, *Salmo glovera*.

FLIES IN SEASON IN MAY.

BLACK MAY, No. 10.—Body, black; feet, black; wings, grayish hyaline.

COW DUNG, No. 10 AND 11.—Body and feet, brownish yellow; wings, yellow-gray.

GREAT DUN, No. 9 AND 8.—Body, purple brown; feet, gray brown; wings, dark gray hyaline; setæ, dark brown annulated with gray.

RED SPINNER, No. 10 AND 9.—Body, bright claret, ribbed with gold tinsel; feet, brick color; wings, gray hyaline; setæ, pale brick color,

YELLOW MAY, No 10.—Body and feet, pale yellow; wings, pale yellow, mottled with brown; setæ, yellow.

COACHMAN.—Body, peacock herl; feet, dark red hackle; wings, white.

KING OF THE WATER.—Same as queen of the water, with scarlet body instead of orange.

GOLD SPINNER.—Body, orange, ribbed with gold tinsel; feet, pale red hackle; wings, bright gray.

CAPTAIN.—Body, posterior half, peacock herl, anterior half, gray; white feet; red hackle; wings gray; setæ, scarlet green and wood duck feathers mixed.

SOLDIER.—Body, crimson; feet, red hackle; wings, gray.

KINGDOM.—Body, white, ringed with green; feet, peacock herl, and red hackle; wings, gray, mottled with brown.

Black Palmer, Brown Palmer, Red Palmer and *Gray Palmer* are made respectively of the different colored hackles that distinguish them.

FISH IN MARKET—RETAIL PRICES.—Striped bass, 20 cents; large do., 12½; green smelts, 10; blue fish, 18; frozen salmon, 35; green do., 50; mackerel, large, 15; do. small, 8; native shad, 25; Connecticut River, 50; weakfish, 15; white perch, 15; green turtle, 12½; halibut, 15; haddock, 6; codfish, heads off, 6; do., heads on, 5; black-fish, large, 10; flounders, large, 10: do., small, 6; sea bass, 20; eels, large, dressed, 18; lobsters, live, 8; do., boiled, 10; sheepsheads, 20; turbot, 20; scallops, $1.50 per gallon; soft clams, per 100, 30; do., large, 60; whitefish, 15; pickerel, 15; salmon trout, 15; Long Island brook trout, $1; soft crabs, per dozen, $1.50; red snapper, 20.

THE NONSENSE ABOUT SHAD.—It takes so little to make a skeer! Now here is the innocent shad supposed to abound with the *trichnia spiralis*, so as to be accounted a worse abomination than diseased pork. The story started a few days ago was somewhat as follows: That a doctor in Coytesville having observed sickness in his patients who had eaten shad, on examing the shad found that they abounded with *trichnia*. At once, as impossible facts must be lugged in to bolster up stupid theories, New York Bay was supposed to be poisoned. Now it turns out that the Coytesville doctor never said at all that he had found trichnia in the shad, but something like them. Dr. Apzell of the United States Army, a thorough microscopist, finds parasites in the gills of shad which were the ordinary *tricocephali* or pin worms, which are well-known and quite common in many fish. In fact, there is nothing in it at all, and people may eat shad with impunity, and snap their fingers at *tricocephali*, encysted psorosperms even if they have bifurcated tails.

MASSACHUSETTS—*Brookfield.*—The Podunk ponds pickerel fishing is furnishing famous sport, the town lease of these waters having now expired. It is estimated that over 600 pounds of fish were caught the opening day.

New Bedford, April 27.—The brooks hereabouts are in first rate condition, and quite large catches of trout have been made in seafishing, or rather trapping. A large amount of striped bass, tautog, scup, mackerel and rock bass are being taken daily in this locality. CONCHA.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals reported at this port the past week has been 38, 25 from Georges and 13 from the Banks; 8 of the Bankers brought halibut fares, about 300,000 pounds in all, and 5 brought codfish, some 400,000 pounds. This is the first considerable receipt of Bank cod for the season. The receipts of Georges cod have been about 250,000 pounds.—*Cape Ann Advertiser, April* 26.

CONNECTICUT—*Meriden, April* 28.—Mr. Watson E. Wilcox of Westfield, Conn., caught a brook trout last Thursday which weighed three pounds. He was placed on exhibition at the store of N. A. Roberts, Meriden, and pronounced the finest specimen ever taken from Connecticut waters.

New London, April 26.—Fishing in this vicinity is quite good now, but one should be armed with a bundle of permits to fish, as the brooks are well posted. MISAL.

Windsor, April 27.—Shad fishing this year in this vicinity is rather slim, and is so reported down the river. In four pulls of the seine at the mouth of the Farmington the following variety were taken: Shad, alewives, perch, suckers and one black bass, weight 2 lbs., one trout, weight ½ lb., and one

salmon, six inches long, which was put back into the river. Two miles below the Farmington, at one pull of the net, about 100 snappers were taken, the largest haul yet. BALSAM.

Walcottsville, April 26.—Largest recorded brook trout caught yet weighed 1 pound 7 ounces. Water a little too cold just now to be in good luck, as the fish seem to have very little life, and bite unusually weak on that account. K.

NEW YORK—*Eldred, Sullivan County, April* 27.—Mr. James H. McCorkle and friends have been here for several days, and had fine sport with the trout. J. M. BRADLEY.

"OLD CLOUD" DEAD.—Cloud Duelon, better known to all visitors at the Crossman House, Alexandria Bay, for the last thirty years as "Old Cloud," has gone the way of all good guides. For forty years he acted as guide, oarsman and friend, and many of our readers who may recall many summer days of enjoyment spent in his company, will learn with sorrow that the good old man has gone.

NEW JERSEY—*Hackensack.*—A bass, weighing twenty-eight pounds, was taken here in the Hackensack River the other day. It was a female fish with a very large roe, and is the largest caught within the memory of the oldest beat silver-haired piscator.

Utica, April 20.—Large fish have already been taken in the West Canada Creek and its tributaries, within an hour's rail from this city.

PENNSYLVANIA.—*Greenville, April* 25.—Striped bass are being caught in the Shenango here in large numbers; there should be a law protecting them this season of the year, as they are a game fish. B.

Sinnemahoning Station.—Trout fishing is reported by J. M. Shafer, proprietor of the Sportsmen's Headquarters, to be the best known for years.

MARYLAND.—*Point of Rocks,* April 29.—Ardent anglers all aglow; average ample 'auls. Big hold bass bite beautifully; bamboos bend, barely bearing burdens. Fine fish furnish famous fun. W. X. Y. Z.

VIRGINIA—*Berkeley Springs, April* 26.—Black bass fishing remarkably good this spring; large strings having been taken during the past few weeks. I notice that at this season they take the red worm as readily as the minnow. While fishing a few days since in the Potomac, I took a bass weighing 1½ lbs. that had a tape worm about 6ft. long, which I pulled from its mouth, the same was very full of "roe." Is it common for fish to have this worm, as I have never noticed anything of the sort before? TIP.

We have published a great deal about grubs, parasites and worms in fishes; and only so recently as the 18th of April just passed. Tapeworms are occasional in fish, and not confined to any one variety. Within a short time we *have* known of their being found in bass, trout and salmon.—ED.

KENTUCKY—*Stanford, April* 22.—Many strings of large bass have been taken from neighboring streams within the past two weeks, the largest that the oldest fishermen ever saw. Result of the partial observance of State Fish Law. Several that actually weighed four pounds have been caught. Such demand for reels and rods never before known, and the "Meek" stands head by a large majority. KENTUCKIAN.

TENNESSEE—*Nashville, April* 25.—Messrs. Parsons and Burgess returned last Friday from a fishing excursion to the mouth of Dog Creek, on Big Harpeth River. Fish are beginning to spawn up there also. This will put an end to good fishing for about one month. A number of fine trout have been taken in Drake's Creek, a stream thirteen miles from here, and a great many also at Lawrence's Basin. J. D. H.

WISCONSIN—*Ashland, April* 21st.—About 75 brook trout were caught in Whittlesey creek one day last week to one hook. C.

NO PLEASING EVERYBODY.—An anonymous letter, dated Cincinnati, April 28, says:

"Tell that correspondent of yours, who is instructing the uninitiated in black bass fishing, to take a tumble, or, in any event, to hold his next letter until after the bass season is over. Several of your readers and admirers unite in saying that such contributions are out of place in FOREST AND STREAM. Yours truly, BASS."

[If we had thought the communication "out of place," we certainly should not have published it.—ED. F. and S.]

SINGULAR ANGLING INCIDENTS.—*Boston, April* 22.—Having fished the lakes and streams of New England for thirty years, I have had some curious incidents occur, and thought the following might interest your readers: While fishing on a mountain stream, in swift water, I had a rapid bite, and thought I had hooked a large fish. On pulling out I had two trout on one line, one strung on the gut, the hook passing through his mouth and out his gill and hooked firmly into the side of the other. Fish No. 2 was ten inches long, and, pulling sideways against the stream, seemed a much larger fish. Second.—While fishing in what we call dead water, on a stream in New Hampshire, I saw a large fish go up stream. I waited with fisherman's patience for an hour or two, then I crept up to the stream, and threw at a venture under an overhanging bough, and at the first throw I had the trout fast. I saw that he was a large one, and thought I would play him. I then saw he was pulling sideways. I shortened my tackle and landed my prize, and then found that I had not hooked him, but in my throw had cast the hook and line around him, making a slip-noose. On my way home, passing a locksmith's shop, I laid him on the old gent's square, and he stretched sixteen inches—not a large fish, but a large one for that place.

CALIFORNIA FISHING PROSPECTS.

SAN FRANCISCO, April 5, 1878.

EDITOR FOREST AND STREAM:

We have had an unusually wet and stormy season up to a late date this spring, but the glorious sunshine beams again upon the earth to make it bud and blossom and prepare for the largest and most abundant harvest probably ever yet known on our coast; and there will be, also, it is confidently expected, the largest influx of trout, owing to the abundant water in our streams, that has appeared here for many years. The trout season commenced on the first of April. There were not many fish to be fooled on that day, however, or many days following, on account of the height and rolly condition of the creeks and rivers. This has been, thus far, an exceptional year, however, and, in general, in this mild climate, trout fishing, especially for the dwellers in cities (to have an equal chance for sport with the rustic population who as yet pay but very little regard to the game law), April is not too early, although no doubt a few of the fish at that time will be found not to have emitted their spawn. As soon as the spring opens, and indeed long before that time if not during the whole year, the dwellers in the rural districts in all parts of the country think they have a right, or at all events take upon themselves the privilege to catch trout in any manner they may think proper. Until a few of those unscrupulous and short-sighted gents are hauled up by persons appointed or voluntarily acting for that purpose, and made to pay a sufficiently large fine (fait to go to the informer) this very shameful, destructive and unlawful practice will go on here. I am afraid it will be a long time before the law will produce any very salutary effect in this matter, as our State is so extensive and the all-the-year depleting system has been so long in vogue. But we must make a commencement in this regard, however difficult and discouraging the effort may be, and we must be trustful that in process of time some substantial benefit for the preservation of all sorts of game animals on our slope may be the result. At any rate, near our metropolis and some of our largest cities there is a well-founded hope that good may be effected by enforcing this law so as to preserve some game for our markets and some healthful sport and recreation for our citizens.

We have had no young salmon worth speaking of in our bay this winter, and consequently we have been deprived of the pleasant amusement which we have enjoyed in bait fishing for them for three years previously. E. J. HOOPER.

A HINT TO BASS FISHERS.

CHICAGO, April 22, 1878.

EDITOR FOREST AND STREAM:

In your last issue "Norman" rather takes exception to my recommendation of a linen line for bass fishing, on the ground that it will bleach out white and scare the bass, which he considers to be a "shy" fish. You well answered that linen lines may be permanently dyed. Allow me to suggest another answer. A bass is never frightened by a line, and a white one is as good for him as any other. Let me ask "Norman" a question: Why does the bass seize the minnow on the hook in preference to the hundreds or thousands of others swimming freely about his feeding grounds? It is because it is almighty hard work for him to catch any of the free ones. They will swim all around him and not care shucks for him, but when he sees one in trouble fastened to a line unable to get away, with hardly life to swim, he goes for him. His reasoning faculties are not sufficiently developed to enable him to perceive the man at the other end of the line.

Yours, G. C.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
May 3	M		8	32	7	56
May 4	0	26	9	10	8	39
May 5	1	05	9	58	9	24
May 6	1	46	10	47	10	12
May 7	2	81	11	37	10	95
May 8	3	81	0	06	M	
May 9	4	17	1	01	0	30

DOINGS AMONG THE YACHT CLUBS.

EMPIRE YACHT CLUB.—Owing to the large influx of members from other clubs in the neighborhood, including many yacht-owners, the number of boats entered for the regular annual regatta has, even at this early date, reached the very satisfactory figure of 35, thus promising one of the best attended and most spirited events of the season among the junior clubs of the metropolis. The course is from the club-house, foot of 104th street, to the "monument" off Sands' Point and return.

NOVA SCOTIA YACHT SQUADRON.—The membership of this club has almost doubled during the past season, and two new yachts were entered on the list—the *Kestrel*, yawl, Vice-Com. White, and the *Hebe*, sloop, designed and built by her owner, Mr. J. E. Butler. There seems to be among the members a most praiseworthy zeal for the sport, and a desire to do everything possible for its promotion and popularity in the neighborhood, while its programme of events for the season indicates an amount of vitality among its members that many of the clubs in this vicinity might emulate to advantage. We notice with pleasure the regular dates set down for cruising in squadron under the flag officer's command, which form a prominent feature of the club's fixtures. The Hon. Secretary, Mr. F. C. Smithurst, has compiled a handy little signal book, which is supplied gratuitously to yacht-owners, and which is of practical use to skippers on cruising days. It has been found that these events contribute very materially to the success of the club and the high place it occupies in the public estimate, while they also serve to add to its membership many who were first attracted to the sport through means of the squadron cruising. We commend this feature to our own clubs, and hope that some of them will see fit to incorporate regular dates in their fixtures on which the Commodore will hoist his flag and take charge of the fleet for an exercise drill. The Nova Scotia Squadron has appointed six special days for cruising, as before announced in these columns. There is one other feature, in which the club in question takes the lead of every one in the United States, with the exception of the New York Yacht Club. We refer to the manner of measuring for time allowance. Paragraph VIII. of their by-laws provides as follows: "The length shall be taken on deck between fore part of the stem and the after part of the stern-post, and on the keel on the line of the garboard strake. The mean of these two dimensions shall be taken as the just length for tonnage. The breadth shall be taken from the outside of the outside plank, at the broadest part, whether above or below the main-wales, and the depth amidships, from the upper side of the covering board to the under side of the garboard strake. These three dimensions shall be multiplied together, and the product, divided by 100, shall be deemed the true tonnage. Any decimal of half or more than half a ton shall count as a ton, and any less shall be disregarded." This rule we have quoted *verbatim*, and, it must be confessed, is a vast improvement on the crude length measurements adopted by most clubs south of the St. Lawrence. It is quite possible though that it will admit of some simplifications in practice, but in theory the Nova Scotians have struck the true course, avoiding the alluring snare the simplicity of length measurement holds forth, and at the same time steering clear of the one-sided and fallacious show of arguments offered in extenuation of the ridiculous Thames rule. Boldly taking the bull by the horns, our friends in Halifax can congratulate themselves upon the adoption of a rule fair and equitable to all forms alike, and one that will admit of matches of instructive results between the deep keels of English model and the native American sloops that meet at the startling line for a friendly brush in Halifax waters. The Nova Scotia Yacht Squadron has made application to the British Admiralty for a warrant to fly the "Blue Ensign." Until this is received the plain "Red Ensign" will be carried. Cannot some of the flyers of the club be induced to meet their Southern brethren at Portland, the Isle of Shoals or Boston?

HALIFAX YACHT CLUB.—Overtures have been made this organization to consolidate with the Nova Scotia Yacht Squadron, the most vigorous of the Canadian clubs. It was found impossible, however, to effect any mutually agreeable arrangements for a union. This we regret since there can hardly be material enough for two prosperous clubs in Halifax Harbor; and if both would bear in mind the French proverb, "*L'union fait la force*," there ought to be no obstacle in the way of promoting the interests of yachting in Halifax by united effort. A little yielding of its autonomy on the part of the lesser club would conduce materially to the individual advantage of every yachtsman in Nova Scotian waters.

SAN FRANCISCO YACHT CLUB.—Sausalito property being held at fancy prices, it seems likely that the committee having the matter in charge will determine to build a floating house in preference. By all means do so, say we. The experience of our Eastern clubs will serve to those on the Pacific as a guide to select by. Permanent fixtures have seldom been found satisfactory, even with our older and wealthier clubs. The N. Y. Y. C. have abandoned the house erected by the late Mr. Garner, and the Brooklyn Y. C. have concluded to dispose of theirs at Graves End Bay. The Columbias and others have experienced trouble and expense in shifting from one locality to another, but those with floating houses on scows all declare themselves well satisfied with their accommodations. No trouble keeping the scows tight, and the expenses very moderate.

DUXBURY YACHT CLUB.—The famous old New England town, Duxbury, which once used to lead in the ship-building industry, still has some of the old fancy for the sea left among its good people. Two years ago a club was formed which now numbers 114 members, with thirty-nine yachts, certainly not a bad showing for so young an organization. The officers elected for the year are: Commodore, T. A. Hutchins; Vice-Commodore, G. A. Green; Fleet Captain, N. B. Watson; Recording Secretary, A. A. Green; Financial Secretary, G. A. Green; Treasurer, A. G. Collicott; Measurer, E. W. Watson; Regatta Committee, T. A. Hutchins, W. A. Drew, C. H. Thomas and L. H. Keith.

PROVIDENCE YACHT CLUB.—At the annual meeting of this club the regular regatta was set down for May 30; there will also probably be a ball race at Bullock's Point. The following officers were elected: Com., E. J. Anderson; Vice-Com., H. L. Clark; Sec. and Treas., E. F. Dustin; Regatta Committee, C. L. Manchester, H. L. Clark, Simon Cameron, W. I. Pierce and James Rogers.

COMMERCIAL YACHT CLUB.—This is the name of a new organization recently started in San Francisco. The yachting fleet consists so far only of the *Minnie*, and is consequently not very numerous. But as "out of little acorns great big oak trees grow," who knows but that ere long the new club will make more noise in the world than at present.

EMPIRE YACHT CLUB.—The date of this club's regatta has been changed from June 19 to the 18th. Twenty-one boats have entered and more in prospect. There will also be a gathering of catamarans, which will sail in the special class for ghosts.

NEW JERSEY YACHT CLUB.—The members of this club have concluded to hold their annual regatta June 18, and will sail over a course from 12th st., Hoboken, around a stake-boat moored off 85th st., N. Y., three times, making a total distance of about 18 miles.

KNICKERBOCKER YACHT CLUB.—The *Emma D.*, of the Empire Y. C., has been entered for the Knickerbocker regatta May 15. As the *Emma* is a fast boat and has a crack racing crew to work her, she will give a good account of herself.

LONG ISLAND YACHT CLUB.—The annual regatta of this club will take place June 11, off the Short Branch House.

YACHTING NEWS.

STEAM-YACHT BOYD.—The steam-yacht *Wm. Boyd*, Empire Y. C., Mr. Chase owner, is receiving a new boiler and engine, which, in connection with a large wheel, ought to make her a speedy launch. She has a very fine model made by Smedley, and is 65ft. 8in. long, and 7ft. beam. We must say that her lines are more nearly what is required for high speed than anything of her class we have seen in wood. She has small beam, is very sharp at both ends, small girth and sends an almost solid body of water aft to the screw aperture. The engine is from the shops of the Fitchburgh Machine Co., and that is saying enough as to its first-class quality. It embodies largely the ideas of Mr. Chase himself; among them being a crank planed out of a solid forging, a single eccentric arranged to reverse by the rod traveling on a rocker guide or solid link around the eccentric itself, making the reversing gear of the simplest character; brass bushings to all bearings; case-hardened nuts and an arrangement which throws automatically the bar used to pry the engine off the centre. The cylinder is 8x7in., and the whole structure strong and compact. It will work up to about 11 H. P. For power the yacht will receive a vertical tubular boiler 5ft. high, 30in. diam., with 114 tubes 1¼in. diam. The usual centre tubes will be omitted, since Mr. Chase's experience has led him to prefer dividing the fire and sending the heat up tubes near the outside of the shell in preference to allowing a large portion of the heat to pass off up the chimney through the direct passage offered by the centre tubes. The new plan will certainly save fuel, while the loss in heating surface will not be great, considering the increase gained in that most valuable portion, the tube sheet itself directly over the fire. The *Boyd's* propeller is likewise the result of some extensive experiments carried out upon her by her owner. The well-known Delamater and Philadelphia wheels and others had all been lately tried but did not produce results as favorable as the following contrivance of Mr. Chase. As he acknowledges, it may be a most unscientific concern, but there are the actual results, so what can be done about it? This propeller is no screw at all, and has no pitch, but consists simply of flat plates secured at an angle to the shaft to arms, in a manner similar to the fans of a patent windmill. This arrangement

does away with all the hub and useless central portion of the ordinary propeller which serves only to chum up the water and leads to a heavy sacrifice in power. As might be expected, Mr. Chase finds that he can get greater speed out of his boat with his fan propeller, or what is the same thing, the same speed at a saving of fuel. In the *Boyd* the propeller arms are of composition and the blades of shovel steel riveted to the arms, the diameter being 36in. In a smaller boat experimented upon, 31ft. 6in. long, the propeller was 28in. diam., and the shaft of only 1 3-16 in. steel, while her engine, a 4x4¾, worked up to 300 turns with a three-bladed fan, but with a two-bladed one fifty additional turns were required, showing that in this type of wheel there must be a material increase to the area of two blades to produce the same results as with three, a fact contrary to that observed with the ordinary screw propeller. Four blades to the fan were found less satisfactory than three. The *Boyd* will be supplied with Freedman's injector for feeding the boiler aside from her regular pump connected with the engine framing.

New Cutter Yacht.—Lawlor, of Chelsea, Mass., is making rapid progress on the new cutter building for Mr. J. E. Peabody, former owner of the *Violet*. The cutter is 53ft. over all, 43ft. on load line, and 15½ft. beam. From these dimensions it will be seen that though cutter-rigged the new craft will not differ much in model from the general run of American yachts, excepting that her sea-going abilities will be materially improved by a keel with lots of ballast on it, and more between the timbers. She is to have 6,800 lbs. iron on her keel, and 3,000 inside. She will be regularly cutter-rigged, and her owner no doubt will find his new rig a very handy arrangement if he expects to cruise out in the open, but if he proposes to confine his operations to the harbor and neighborhood, he has expended a good deal of money for nothing, and will find it necessary to keep on his rolls a larger crew than with the ordinary sloop rig.

Delaware Boat Sailing.—The boats of the Southwark Yacht Club, of Phila., will sail from Dickerson St. wharf to Chelsea Buoy and return, May 27. Boats are divided into three classes—the first 15ft. 3in. long, and 4ft. 6in. beam; the second are 4in. narrower; the third comprises boats with square sterns or "tuck-ups," as they are called in the local phrase. Length of course, thirty-five miles. Officers of the club: Commodore, John C. Saunders; Vice Commodore, Joseph P. Kennedy; Rear Commodore, C. W. Atkinson; Secretary, Jas. W. Winterbottom; Treasurer, Isaac Sharp; Measurer, Geo. W. Brugam. A large number of boats have been entered for the race, and a new one is building for Mr. Saunders.

Ocean Cruising.—The sloop *Maggie B.*, before noticed, has arrived safely at Charleston, S. C., whence she will put to sea again for Jacksonville, Fla.

YACHTING DRIFT.

Mr. D. C. B. Gibson, of the Jersey City Yacht Club, has had a steam launch 38ft. long, built by Joralemon; speed about 12 miles.....Jersey City Yacht Club will cruise up the Hudson in May.....Mr. Andrew Boulker is having a new boat built 19ft. long, 8ft. 6in. beam and 2ft. 6in. deep.....Joralemon has just finished a sloop for Mr. J. N. Westervelt, also one for a Squan Inlet gentleman.....Pat McGehan's new 24ft. racing jib-and-mainsail will sail everything she meets this summer. Her colors will be seen in the van during the coming Bay regatta, if she is at all like the model he generally fancies.....Pavonia Yacht Club has its headquarters foot of Pavonia Avenue, Jersey City.....Stephen Callahan has built the *Nathan B. Fowler*, a racer 27ft. 5in. long, 11ft. 8in. beam and 3ft. deep, for Mr. Wm. Taylor.....New Jersey Yacht Club has its club house in the old N. Y. Yacht Club quarters at Elysian Fields, Hoboken. Its annual regatta takes place June 14.....Sloops *Louisa*, *Mist* and *Mystery* have been bought by members of the New Bedford Yacht Club.....Mr. F. C. Smith, of that club, is building a new cat-boat. The club has received an invitation to attend the regatta of the Brooklyn Y. C. in June. Now there is a chance for the famous old *Silvie*. Her owner, Mr. Thos. Nye, Jr., we know to be an enthusiastic skipper, descending from a long line of sea-faring ancestors, and if he will but trip his book and give some of our New York cracks a rub we think famous *Silvie* will again show the stuff she is made of.....*Active* will have a new bowsprit 3ft. 6in. longer than the old one. This will give her 74 sq. ft. more in her jib, and make her look better besides. This increase is to make up for the shoe to be taken off aft.....The old *Amaryllis*, Mr. Hughes owner, held her own in a brush last week with *John Gilpin*, though the latter is the longer of the two.....Sloop *Undine*, formerly of the Brooklyn Y. C., but sold to Philadelphia parties, has been resold to a Boston gentleman.....Sawyer is making a new suit of sails for the *Triton* schooner.....*Idler* is to go into commission after all.....Sloop *Rambler*, of Riverdale, will liven up things about Yonkers.....The cabin sloops *Conway* and *Chester A. Arthur* will meet at the Empire regatta, and a lively brush between these two fast ones is expected.....At the same regatta a steam launch race is contemplated. If so, limit the steam to be carried, both for safety's sake as well as for simplyfying deductions from the result.....J. W. Clark, of Nottingham, N. H., has built a catamaran for W. H. Small, after a New York model. It will astonish the natives..... Sloop *Myra* is fitting out at Frank Bates' yard.....Steam-yacht *Chronometer* was launched by W. T. Malster at Falls Point, Baltimore. She was built for W. O. Dimprel, and is 43ft. long, 6ft. 11in. beam and 5ft. 8in. deep. Compound engine, 12in. stroke. Propeller, 46in. diam., three blades, expanding pitch.....The veteran Capt. Andrew J. Comstock will sail Mr. Wallack's *Columbia* as heretofore.....*Christine* is coming out as a racer this year. Mumm has her in charge and is giving her a mighty big stick.....*Dolphin*, Mr. Cooper, is one of the old style boys, but she is a comfortable cruiser with lots of room below. She will be put in commission in a few days.....*Siren* has been overhauled at the foot of Court st., Brooklyn, and will hoist her burgee at the truck of a new set of spars. If her owner could only manage to get rid of the incongruous panneling on her trunk she would look materially improved.....*Nomad* looks smart this season. She has been put in commission and seems to be lower in the water than formerly.....*Orion* flys the champion pennant at her moorings.....*Amaryllis*, progenitor of the double hullers, has received a cockpit in the shape of a pancake on her back. What with the fresh coat of red this fiery untamed steed is prepared to tackle any of your old slow coaches who still believe in the antiquated notions with a bottom to stand on and a roof over head.....The new sloop *Comet* has taken aboard a pile of pig, about 3½ tons, we understand, and an inch more draft would not seem much out of the way either.....The owners of the property about Gowanus Basin have not kept to their word so far. The wreck obstructing the fairway has only been partially removed. They are driving the yachting trade away from the neighborhood. Already we hear of parties about removing their establishments to Bay Ridge.....*Active* has been hauled out on the ways at Mumm's. There is some talk of her owner wanting to alter her pretty cutter stern into the characterless oval or elliptic style. It is to be hoped he will not.....Sunday last the crew of a prominent yacht at Gowanus pulled ashore stern first, fenders out and painter trailing overboard. Such hummerism should not be permitted.

THE OAR AND PADDLE.

The University Race.—Owing largely to the exertions of many prominent citizens and officials of New London, the race between Harvard and Yale has been secured to that locality, and we feel bound to give our entire approval to the selection, both from the standpoint of the competitors as well as from that of the public in general. It is a matter of satisfaction to all those who at a former college race were so outrageously swindled by Saratoga's worthy citizens—most notable among whom should be mentioned that kind, considerate philanthropist, Moon, who keeps a shop near the lake, where for the small sum of twenty-five cents the thirsty soul can relieve his feelings with a thimbleful of soda water—to know that the chances of such shameless extortion can hardly be practiced at New London under any conditions, even were the people there disposed to do so. Moreover, the advantages of the New London course are apparent at once. The only plea upon which the Saratoga neighborhood was selected—that of smooth water—proved to be an hallucination, for more than once do we remember a race postponed on account of inclement water, and so the possibilities of there being a little lop on the Thames, are no worse than what we find on every other open course in the East. A perfectly straight course to the southward, four miles long, can be obtained from Perkins' Point to a station off Winthrop's Point, opposite the city. But this course brings the crews rather nearer to the shore, in passing Navy Yard Point, than they desire to go; a slight bend is therefore recommended, and will probably be adopted by the regatta committee. The facilities of New London for the accommodation of a large influx of transient visitors, as well as for spectators, are ample and unsurpassed. The gradual rise of the banks afford excellent opportunities for viewing the scene, and the railroads along shore are to introduce the novel feature of a traveling grand stand, composed of cars supplied with terraced seats, and carrying 2,000 or 3,000 persons, which will follow the boats down to the finish. The hills on the banks, and Fisher's Island to the southward, protect the river from anything like seriously rough water. The representatives of the Yale navy went over the course April 20 and selected quarters for their crew at Gates' Ferry, half a mile above the starting point. They will board with Mr. Williams of that village, and their boat house will be but a few rods distant. The Harvards have decided to quarter at the Stoddard House, a mile further to the south.

Yale University Crew.—The following gentlemen form the university crew for the year: Bow, J. Curtiss of '79, or J. P. Clark of '78; No. 2, F. Hyde, '70; No. 3, H. Livingstone, '79; No. 4, Wight, '80; No. 5, H. Taft, '81; No. 6, Rogers, '81; No. 7, David Trumbull, and stroke, O. D. Thompson of '79. The average age is 20 years 5 months.

World's Championship.—Courtney, in reply to many derogatory articles published in consequence of his recent demand to select his own water on which to pull against Trickett, is out in a letter announcing his willingness to row any man in this country for anything reasonable on any reasonable water, and give or take reasonable expenses, all of which is certainly reasonable enough. He further states that had not the spurious challenge from Trickett appeared in the press this winter, intimating his willingness to come to America, he would ere this have been on his way to Australia to beard the lion in his den. However, as things stand, he proposes to pack his trunk for the Antipodes the coming winter, and give Trickett all the warm work he can want, over his own course at home, for the championship of the world. Courtney is also anxious to meet Johnny Bull's much vaunted men of the oar, and offers as an inducement $5,000 a side and $1,000 for expenses. Come now, Johnny, you can't shirk this time behind any amateur quibble. Send your man over or else keep quiet. In short, Courtney is willing and anxious to meet anybody on fair terms to establish his claim to the championship at home and abroad, and unless it be Trickett we don't know of any other man who could show Courtney the way across the finish. On the other hand, Trickett, who now dispenses hospitality as a sleek-faced Boniface at Sidney, will measure oars on the Paramatta River with any one who has a mind to try him on, and he very rightfully asserts that since his beating Sadler, the latter having left his American competitors astern, it follows that Courtney or any other American must come to Trickett and not the other way. So Courtney, true to his last letter we hope, will soon be on the raging main, bound for Trickett's worthy scalp. This clears up the whole imbroglio. The Australian remains champion until some one goes out there and beats him.

Harvard and Cornell Freshmen.—The Harvard freshmen crew claims to be willing to row Cornell freshmen when and where they want, and the Cambridge boys think it is a lack of spunk that troubles the Ithaca blades. The latter want to pull on Saratoga, but mosquitoes, professionals and Moon's outrageous charges don't suit the others, who propose the course on the Thames. What with the great university race to be pulled on its waters, the inhabitants of New London and its authorities have it within their power to make the Thames the centre of New England's boating interests, and it must be confessed that they have shown a laudable desire so far to do all in their power to protect visiting oarsmen and the public from the extortion and outrage so commonly practiced at all centres of aquatic events. Of the Harvard freshmen, four weigh over 180lbs. each and the average of the rest is over 165lbs. Glorious stuff to manufacture some of the future 'varsity sixes out of.

Henley Regatta.—The Columbia crew seems to be the only one likely to start at the Henley Regatta—at least, we have not yet heard of the six weeks' notice required by the stewards having been repealed, and so the number of American crews present will be narrowed down to a single one. It is to be hoped that, in the event of its defeat, our English cousins will be able to draw considerable satisfaction from their barren victory, though we fail to see how they can reconcile such feelings with their evident desire to put in Coventry every other American crew likely to give them their splash. The funds for the Columbias have been subscribed, and the crew leave in the City of Chester, May 23. They will put up at the Red Lion, an old landmark on the Thames, about three miles below the course. With so many crews to pull against, the odds are certainly against them. But let us hope for the best, and may the "blue and white" show up in the van at the finish.

Louisiana Amateur Rowing Association.—Twelve clubs belong to this union, which shows that boating in the Pelican State is not behindhand. Their annual regatta will be held at New Lake End, July 15, near New Orleans, and it is proposed to interest the oarsmen from Charleston, Galveston and other places in the event. The following clubs will be represented in every race: Perseverance, Magnolia and Hope. The Louisiana, St. John, Howard, Orleans and Southern have not yet decided definitely, but will, no doubt, send crews to the line in some of the races. The Riversides and the remaining three may not take any active part.

Potomac Boating.—The Analostans and Potomacs are actively at work. The former have received a challenge from their old friends and rivals, the Undines, of Baltimore, which has been accepted. It will come off over the Spring Garden course at Baltimore. The Potomacs are to receive a new paper four from Waters & Sons, of Troy. Mr. Richard Morgan, of the same club, has received a new single, and is in daily practice.

Passaic River Association.—The amateurs forming this association will hold a June Regatta, as usual, June 22. The National Regatta will take place at Newark in August.

Canoeing.—The *Rob Roy* canoe, of the MacGregor pattern, is 14ft. long, 8½in. deep and 26in. beam, and will carry from 125 to 175lbs. The *Nautilus* canoe, of the Baden Powell pattern, is 14ft. long, 23in. deep at bow, 19in. at stern, 0½in. deep amidships, 26in. beam, and has a sheer of 13½in. It will carry 300lbs., and is rigged with mainsail, jib and dandy. It is essentially a cruising or sea-going canoe, and can be sailed in almost any water.

The Herald Canoe.—To many tourists and sportsmen the *Herald* canoe is well known, and to those it is needless to expatiate upon this the model canoe. The *Herald* canoe is built somewhat after the Indian birch canoe, and possesses all the advantages of the birch, with many improvements. For strength, with the same weight, it has no equal, and is so shaped as to sit on the surface of the water, the advantage of which is apparent when we consider the many shoal places and rocks which one finds on a cruise or hunt. Another grand feature is the great speed attainable with but little power, and moves over the water noiselessly. This can be paddled by one or more persons, which is not the case with others with fixed decks or covers. The *Herald* is built with thwarts or without, to admit of sleeping arrangements. In order to be a canoeist you are not obliged to sleep in your canoe, however. You may take your canoe ashore and sleep beneath it, or take a tent with you for a shelter, and still be as much of a canoeist as the man who sleeps nowhere but in his canoe. The construction of the *Herald* renders it positively free from leakages, and will stand more service than any similar craft, and its model cannot be surpassed for beauty. The following remarks are offered in opposition to an article in *Harper's Monthly* for April: "As the *Herald* canoe is built for the use of sportsmen as well as for cruisers, it is purposely left open, but is decked over permanently, if desired, or is supplied with a covering which buttons on (which is much better), thus preventing the rain or spray from wetting the inside. The deck or covering is only put on when ordered, as the majority of canoeists do not care for them. The advantage of this covering is that it can be taken off and put on at pleasure. The covering needs no painting when made of close woven and middling thick duck. About 8 oz. duck is sufficient."

The objection made to an open *Herald* canoe on account of carrying the necessary trappings and provision in a bag is entirely imaginary, and in this instance theory and practice will not pull well together. All practical cruisers concede that there is nothing equal to a bag for the storage of provisions and equipments.

In making a canoe, which happens many times in a day during a voyage, everything can be taken out bodily when stored in bags and taken across the carry, and the *Herald* captain will have taken his canoe and load across really for a new start, while the man who puts his stores in the air-tight apartments of his craft is making preparations to do the same. Also when stopping to camp, the *Herald* man has all his trappings, etc., brought out together, and the cruiser who has no bags must trot to and from camp many times before he finally clears his canoe, or else he must pick up his canoe and load together, not a very easy task to perform, especially if he has provisions for any length of time.

If our friend who objects to the trouble of opening and closing a bag should at any time take a canoe trip, we think he would say on his return that there was nothing like a bag of some sort for the storage of articles, no matter what kind of a craft he might travel in.

The thwarts are not neccessary to hold the sides in position as stated by the opponent, but are put on for the convenience of the paddler, and can be dispensed with if desired. As to the amount of sail to be carried, that is left entirely with the purchaser, but one sail stepped in the proper place is considered better than two, as all the sail that is necessary can be had in one, and of course can be handled to better advantage. Another statement made in regard to carrying a cargo is decidedly inconsistent. He advises the canoist not to buy a *Herald*, but to use every argument possible to induce his friend to purchase one, so that when accompanying him, the friend can be induced to take most of the cargo, the stowage capacity of the *Herald* being so much better than in the other type of canoe, and then goes on to say that in case of a capsize the *Herald* spills everything overboard, and in a smart shower wets her cargo thoroughly. He says if by any means the *Herald* canoe fills she will quietly sink and leave the occupant to swim for his life. This is a mistake. The *Herald* canoe will not sink when filled, and there will be buoyancy enough to the craft to keep two persons from drowning.

The writer states that the *Herald* canoe does not paddle well, as each stroke of the paddle deflects her head from her proper course. This wabbling tendency, he says, is owing to her lack of keel. We wish to say that the real canoist requires no keel or rudder to keep his craft straight; with a stroke taken fair, fore and aft, with and near to the side of canoe, with the upper hand nearly upright over the lower one, followed by a very slight turn of the paddle coming out of the water will keep the canoe straight on its course. Inexpertness only causes wabbling.

The next statement made in *Harper's* is hardly worth making note of. He says the *Herald* canoe is not beautiful, and her model is not graceful, etc. We are perfectly willing to leave this to the judgment of one and all who may have examined the *Herald*. Examine for yourselves, and ask advice of those who have experience both in cruising and hunt-

ing if you wish to procure a canoe, that will be satisfactory—to the "*Herald*" advocates. WM. B. GARFIELD, Boston, Mass.

ROWING RIPPLES.

Riversides, of Cambridgeport, own eight boats and are about to add a new six-oar. They have got a new float and propose sending two crews to the city regatta and one to Silver Lake, Boston. Mr. Frank Burke is President and Henry Davis Secretary.....Frenchy Johnson, the colored hero of the spoons, has failed to come to time against Reagan, Boston's North End boy. Lack of cash the cause. Reagan has made a fortunate strike in obtaining Hanlon's Centennial boat, but is also to try a new paper.....The Silver Lake event promises well, especially for the pair-oared race. Reagan and Faulkner will paddle a boat together if the first prize is increased to $200.....Shawmut and City Point Clubs are to have two crack crews in Eastern waters.....Faulkner is at work on the Charles every morning.....Mr. Kennedy will not row at Watkins. This is a great pity.....Mr. Jona. Gillingham offers for sale in Philadelphia the four-oared shell used by the Dublin University crew at the Centennial.....Nautilus Club, of this city, will be represented by the well-known gentlemen, Messrs. William Walsh and Fred A. Levein at Watkins..... Passaic Rowing Association will hold their regatta on June 22..... Mr. Geo. Lee, of the Tritons, Newark, will show up at Watkins in the senior sculls where he will meet Fearon, Mills, Yates and others.....Mr. E. C. Cook, of Norwich, will coach the Yales the week before the race.....New London citizens will build boat houses for the university crews at their own expense. They will be 75ft. long and 20ft. wide; floats, 60x15ft.....The Evan Morris and Hanlon race will be rowed June 20 over the Hulton course, Pittsburgh, for a purse of $2,000, Hanlon receiving $200 for expenses. Morris is in good condition.....Layberger, of Pittsburgh, and Felsinger, of Wheeling, W. Va., will open the season on the Alleghany with a race for $600.....General Myer, more familiarly known as Old Proh., has purchased one of Lyman's bow-facing rowing boats, which he pulls on the Potomac.....Messrs. White, stroke; Campbell, Birney and Marshall, bow, will form the Analostan crew to beat the Undines of Baltimore. Capt. Jack White will coach them.....Clasper easily beat Messenger on the Ouse, April 10. The former used a boat only 27ft. long, 11in. wide, but comparatively deep; this helped him materially in the easterly wind blowing, as it did not throw all the work on one hand so much as in a flatter boat.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of his column.

H. M. P., Baltimore.—Twelve cats.

G. P., Philadelphia.—Send your bitch to Mr. P. McKoon, Franklin, Del. Co., N. Y.

JUD, Sing Sing.—Where can I obtain material for making flies? Ans. Sara J. McBride, 889 Broadway.

R. P. B., Troy.—A pair of deer's eyes will cost you from $3 to $6. Send to J. Wallace, 19 North William St., N. Y.

T. C., Brannen, Minnesota.—After looking carefully over lists of awards do not find that the pointer whose name you give had an award

A., Stamford, Conn.—There is a law against trap shooting pigeons in Connecticut. You can procure pigeons of C. E. Dexter Jamaica, Long Island, N. Y.

T. K. A., Mahonlugtown, Pa.—The open season for black bass in your state is from July 1 to March 1. If any one is taking them now he is breaking the law.

D. M. B., Scottsville.—The horse deadened by the report of a gun of which we made mention some weeks ago, our Cedar Rapids correspondent writes us, recovered from his trouble.

E. S., Portland, Me.—I received from Canada last month a "Doree" (*Canadienne*). Will you please give me its proper name and classification? Ans. Pond pickerel (*Esox reticulatus*).

C. S., Alpena.—Are the guns advertised by —— first-class guns? How do they compare with ——? Ans. Remarkably good guns and reliable, and all they are represented to be. We never compare one gun with another.

J. B., M. D., Philadelphia.—Western Texas, northern Michigan and southwestern Minnesota are good localities for a physician to establish himself. An immense immigration is now going on toward southwestern Minnesota.

A. A., Boston.—I would like to have a remedy for worms for a shepherd dog—or, rather, a pup—2½ mos. old, that is troubled by them? Ans. Too young to dose much, better give a little castor oil. Later give some areca nut powder.

R. T., Rochester.—There are no rules in use by the N. R. A. for handicapping, and we could not suggest any rules. The person you ask about ranks third—not higher—among the riflemen. He never was on the reserve of any team.

F. P. H., Syracuse.—A map of New York city costs fifty cents. There is no champion wing shot of the world. You will find at the Thousand Islands in July woodcock and possibly some ducks. The season is early for game. The fishing for bass and muscalonge is then good.

J. D. S., Boston.—My dog shakes his ears, and they seem sore. I do not know what canker is. Ans. Canker of the ear. Keep the ears clean with warm water, and pour in a little weak lead-water twice a day. Use some means to keep the ear flaps from being shaken.

A. B. C., Boston.—The "vermine" you send will require some further examination. As soon as we are satisfied as to it will answer in this column. The gun you ask about is a very safe and excellent arm. The parties who sell such arms are about the most reliable people in the country.

W. D. P.—1. Has a good, reliable, single-barrelled breech-loader ever been invented? 2. Where can I get one, and at what price? Ans. 1. Yes, a fair gun, though good makers do not make single breech-loaders unless so ordered. 2. Hyde & Shattuck did make a fairish single-barrel. Price, we think, $10 to $15.

C. N. R., N. Y.—For shooting snipe and shore birds there is no preference between a choke-bore and a cylinder-bore, save that which obtains between the two kinds of guns themselves. You will find woodcock, ruffed grouse and shore bird shooting at Clinton, Conn., in season. There is fair fishing there.

C. E. I., East Templeton, Mass.—What is the velocity per second of rifle bullets? Ans. Not an easy question to answer, as much depends on length of barrel, charge of powder and weight of projectile. The initial velocity, that is for first second after leaving muzzle, may vary from 700 to 1,500 feet. After that it decreases.

L. S., New York.—Greenwood Lake is a delightful place for camping, but you would not be very secluded. Black bass, mackerel and perch are found in the lake. There are a few woodcock in the vicinity. To reach the place from Newburgh take Newburgh branch of Erie Road to Sugarloaf Station, or Turner's, and drive in.

A. B. C., Rochester.—A black and tan of mine is suffering from a bad cough, and chokes from an accumulation of mucus in his throat. As he is an old family friend I want to save him if possible. Ans. Keep his bowels freely open for a short time by giving a little castor oil and laudanum, and keep him in a dry atmosphere, and feed no meat.

M. S. N., Johnstown, N. Y.—To render dry and cracked leather pliable we usually soak thoroughly in water, then when not quite dry grease thoroughly. You will find a good waterproof mixture to be one ounce of fine cut India rubber soaked for a week in a pint of petroleum (raw), or Seneca oil. Apply this with a brush until the leather is saturated.

A. M. J., Lawrence, Mass.—Please give me the dimensions of the ring target for 200 yards. Ans. In our issue of March 21 we gave a detailed description of target. See fourth paragraph. The distance between the rings is three-fourths of an inch. The central ring, the true bull's eye, from which the other rings start, is one and a half inch in diameter.

ORNITHOLOGIST, Benson Grove, Iowa.—1. Where is the nearest point at which I can obtain Dittmar's powder in small quantity? 2. Price per pound? 3. Is it a fact that a gun will not become foul by using this powder? Ans. 1. No agent yet appointed in your neighborhood, but there will be shortly in your State. 2. Seventy-five cents. 3. A perfectly clean barrel.

J. B. B., Red Bank.—Why does Tatham's chilled shot ball in a plain bore breech loading gun? I shot 20 loads and 19 of them balled, some loads making two balls and going entirely through an inch board. The soft shot in the same gun never do it. Ans. With some guns the load of chilled shot balls. It is an idiosyncracy, or peculiarity of the gun, and we have before this noted certain cases.

JUNIOR.—Have a —— breech-loader, weighs 8¼ pounds, 30 inch barrels, 10 gauge. Please inform me the kind, size and quantity of powder shot and wad to use in loading same for the separate shooting of snipe, woodcock, duck, grouse and deer? Ans. For snipe and woodcock use 3¼ grs. powder 1¼ oz. shot; for ducks and deer 4 grs. powder; for ducks 1⅛ oz. shot; for deer chamber buckshot.

T. C. H., Philadelphia.—Can you tell me what a setter pup four months old should weigh, and how long the hair should be? Also, at what age should he begin to feather? My dog is a cross between an Irish bitch and an English dog. Ans. Great difference in weights at that age, probably 25 lbs. will be near the average. Length of coat also varies much, probably about six months of age.

SUBSCRIBER, Woburn, Mass.—1. What is your opinion of the ——? 2. Does it injure the barrel or shooting qualities of a gun? 3. What is the best size shell for common sporting purposes? 4. What is the "everlasting shell?" Ans. 1. We have indorsed it highly. See late issue. 2. Not in the least. 3. We prefer the .44. 4. Is a heavy brass shell, which can be frequently reloaded, called everlasting as it does not wear out.

H. R., Philadelphia.—About twice a week my puppy, five weeks old, suffers from severe pain. Trembles as if frightened, and cries as if somebody was whipping him; goes to his kennel, and no amount of coaxing will bring him out. Think he may be troubled with worms. Ans. Give a teaspoonful of castor oil and five drops of laudanum each day for four or five days, and put sulphur in his water. Better leave off feeding meat, and he will probably come right in time.

C. W.—1. Is there such a work as Johnson's "New Universal Cyclopædia" published? 2. Can you give me the place of birth of Thomas A. Edison, inventor of the Phonograph? 3. Where can I find facts concerning him? Ans. 1. Published by A. J. Johnson, 11 Great Jones st., New York. Cost about $15, we believe. 2. Was born in New Jersey. For sketch of his life see *Phrenological Journal* for March or April. He has an article in the last number of the *North American Review*.

R. S., Holyoke, Mass—Will you be kind enough to inform me when you measure powder do you measure by apothecaries' measure or by avoirdupois measure? Ans. One drachm avoirdupois is one-sixteenth of 437½ grains—a little less than 27¼ grains; 1 drachm apothecary or Troy is ⅛ of 480 grains, or 60 grains. 27½ grains of powder is a drachm of powder measure, and 480 grains of lead to an ounce. You can get all needed information of this kind from Hallock's "Sportsman's Gazetteer."

WAVERLY, Md.—A, B and C challenge D and E to shoot a match at glass balls, each man to shoot at five balls. The aggregate of D and E ties A, B and C's aggregate. In shooting off A, B and C claim three shots to D and E's two, while D and E claim they are entitled to same number of shots as A, B and C. What is the correct decision? Ans. If the shots of A, B and C were aggregated to match the shots of D and E at first the rule should extend to the ties as well. We decide in favor of A, B and C.

STARS AND STRIPES, Malaga, Spain.—We have forwarded Englebert's "American Rowing Almanac" to address desired. It is a handy little book on rowing and training. In answer to your question concerning speed you will find a four-oared shell faster than a single scull. Do not allow the disparaging opinions of the native Spaniards concerning outdoor sports interfere with the manly practice of boat pulling. They will soon look upon your healthful exercise and pleasure with envy, and follow in your wake.

A. T. G., Philadelphia.—I expect to have a vacation the next three months. Would like you to advise me as to the best place to go. Where I can have good, cheap living with fishing, gunning, etc.? Ans. In the wilderness adjacent to the White Mountains, reached by the New York and Connecticut River Railroad; in the region traversed by the Chesapeake and Ohio R. R., or in that part of northwestern Pennsylvania reached by the Philadelphia and Erie R. R. are most excellent trout streams. There will be some woodcock shooting in July.

F. W. W., Secty., Boston.—What is the character of the road between New York and Philadelphia, over which the Coaching Club will drive in May? How much sand is there? Is it fit for velocipedes? Ans. The road for the most part is flat, or gently rolling, with no steep hills about one-fifth macadam; three-fifths red clay. At this time of the year, hard and good for carriages, but in places as yet lumpy. These lumps are said to wear off as summer advances. The remainder one-fifth sand, but not very heavy. A good traveling road for carriages, but not for velocipedes.

J. S. W., Rochester, N. Y.—1. How can I preserve birds' wings (especially large ones, such as crows', etc.) so that moths and other insects will not attack them? 2. What is the relative penetration of different sizes of shot? 3. Are the U. M. C. Co's. shells more likely to miss fire after being reloaded than Eley's? 4. What kind of wads, and how many do you recommend using over the powder, and also over the shot? Ans. 1. Dissolve a small piece of corrosive sublimate in water (it is a deadly poison), and brush the wing with it. 2. Generally the larger the shot the more the penetration—that is, under certain circumstances. 3. Not any more. 4. Over powder, two Eley pink wads; over shot, one Baldwin wad.

J. H. B., Delphi, Ind.—A pointer pup about eight months old had distemper about three months ago severely; when about over distemper was taken with weakness of hind quarter. Shortly after paralyzed in hind leg; not able to, walk and had some jerking of the muscles of fore legs. I gave him ¼ grain nux vomica and iod. pot., and gradually increased it for a month or more until it amounted to five grains nux. he got better by the treatment, until about two weeks ago did not seem to improve any. I discontinued the medicine for a week without much change, but have again commenced the nux in small doses. Ans. Treatment very good. Be careful how you increase the nux. Try quinine for a time.

AMATEUR, Fishersville.—1. Will a rifle, .41, using 77 grs. powder with 405 grs., be reliable at 1,000 yds.? 2. If not, what is the extreme range? 3. Why is it that bullets are blunt at projectile, and not pointed? 4. If a ball partly cuts a line on the target how does it count? Ans. 1. No, not powder enough. 2. From 500 to 600 yards? 3. Long answers necessary, which space precludes. The bullet could not in use be kept well pointed for use: then it would not materially increase the flight. Trajectory has to do with the powder in bolts—projectiles—more than the shape of ball. See numerous articles on this subject in former numbers of F. & S. 4. Credit is given to the higher score when a line on target is cut.

J. B., Concord.—1. What is the best breed of bloodhounds, and what would a young pup cost? Please send the address of some reliable man from whom I could purchase one. 2. What would a Scottish sleuth hound cost, and where can they be obtained? 3. Where can I obtain a good map of the Coulonge District, Canada? Ans. 1. We saw some good sleuth hounds (bloodhounds) in Boston, but believe at the Westminster Kennel Bench Show some of the best will be shown. If you write us then we will reply to questions 1 and 2. 3. A separate map of the Coulonge District we do not know of. Address some leading bookseller in Quebec or Montreal. We are of the opinion that the map you want comes in a set.

S. R., Bridgeport.—1. At Creedmoor in off-hand shooting, do the rules allow the butt of the gun to be placed beneath the coat? 2. The rules say that the little finger is not allowed to be held behind the trigger-guard, but if any of the other fingers were behind and the little finger out, would there be any objection made? 3. Is there any way in which I can reduce the charge of my Sharps' Creedmoor for off-hand shooting? I now use 75 grs. powder and 420 of lead. I think I could do better if I could get patchett bullets (45) of about 390 grs. and use 55 or 60 grs. powder. Ans. 1. Yes. 2. You can do anything which the rules do not implicitly forbid. 3. You might use sawdust or wads over paper. We prefer wads. Try it, though it is doubtful whether less powder and lighter projectile would insure accuracy. Do not know where you could get the bullets, however.

E. W. S., Washington, D. C.—Please give me some advice in regard to a valuable setter that has been suffering for several months terribly with canker in internal and external ear. He is three and a half years old. Had been shaking his head for at least a year before the external ear became sore. First used borax, filling the ear; then tannin and glycerine; then, according to Dinks, a decoction of oak bark with acetate of lead and charcoal; lastly, a mixture of carbolic acid, oil and tincture opium—all without effect. Have kept him lately on vegetable diet. He lies quietly, generally, in his kennel, but between 10 and 12 o'clock daily, he rushes out as if crazy, running air and the yard for an hour or two, shaking his head, and rolling on the ground as if in great agony. Ans. Probably cannot be cured at this stage. Keep the ears clean. Place a linen cap over his head, and pour in each ear dilute lead-water twice a day after washing, holding it there for a minute.

A. H., Montreal.—Please give the address of the manufacturers of the paper, or "paper mache" boat, also of those who make a kind of folding, or "packing up" boat for traveling from lake to lake, etc. Have heard of the latter, but never saw them. What I want is something light and handy for two and a boy in a rough country, such as could be put on a buck board now and again. An article on such would be very useful in your admirable paper. Ans. Waters & Sons, Troy, N. Y.; are the exclusive makers of paper boats, but they do not fold. There are several folding boats, of which Hegeman's, Balston Spa, N. Y. Penner's, Mystic, Conn.; Colvin's, R. C. Scott, Albany, and Osgood & Chapins, Battle Creek, Mich., are the best. They are made of canvas. Bond's metallic iron boat is made in two sections and can be carried handily on a wagon or buck board. We have printed thirty columns in our paper on the subject of portable boats. See also "Hallock's Gazetteer."

HELGRAMITES ON THE MOHAWK.—*Mr. Editor*—In answer to J. S. T., Oriskany, in issue of April 25, you can say that the helgramite or "dobson," or "dobsell," is found in the Mohawk River. I spent the summer of 1824 at Half-Moon (or Crescent), above Cohoes Falls, right on the banks of the Mohawk, and caught many score of black bass on that bait. When too lazy to get the bait for myself, I found that the boys around there had for several seasons made it a regular business to catch the dobsells, and keep them in pails or boxes on sale at one cent each, for bait. They caught them by holding a selve in the running water, just below a stone, then turning up the stone (usually about the size of a cobble-stone used in street paving), and quickly raising the selve, the dobsell would be found in it. The boys said that the helgramite would turn into a butterfly, the butterfly would dig holes in the river bank and lay eggs, and the eggs next year would hatch out dobsells again. They made a most taking and killing bait, and the bass bit acted as though they had been caught before, and knew how to shake the hook and get away. Black bass are as gamy as trout.

G. W. V. S.

F. W. C., Boston.—My pond is three-fourths of a mile long, by one-half wide, and was, I believe, stocked with black bass by the State some eight or ten years ago. This spring I heard that private parties have leased from the abuttors the right to the fishing for ten years, and the pond is closed for that time. Have the abuttors a right to lease interests in water of more than ten acres in extent? Have they a right to lease such interests in water where the State has become a party by stocking and protecting the fish? Ans. By the word "abuttors" we presume our correspondent means riparian owners; that is, owners of the shores of the lakes. Whether these owners can lease the privilege of fishing in the lake will depend mainly upon whether the waters are public or private, and also upon the manner in which the fishing is to be done. If the waters are private property the owners can certainly control their use for any purpose. But from the fact that the State has stocked the lake we should think the waters were public, as the law provides for the stocking of public waters only. The size of the lake, unless it was large enough to be navigable, would not make it public. In any case, whether the waters are public or private, the riparian owners can prevent fishing from their land. But if the waters are public your correspondent can get him a boat and fish from that. I should add that the fact that the State had once stocked the lake would not make it public. Something more would be needed to make private waters public property.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MAY 2, 1878.

To Correspondents.

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CHARLES HALLOCK, Editor.

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CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, May 3.—Running Meeting at Nashville, Tenn. Base Ball: Rochester vs. Utica, at Utica; Buffalo vs. Star, at Syracuse; Alleghany vs. Live Oak, at Lynn; Cricket vs. Manchester, at Manchester.

Saturday, May 4.—Coaching Club Ride to Philadelphia. Harvard Athletic Association Spring Meeting; Columbia College Athletic Association Spring Meeting, at Mott Haven; Princeton College Athletic Association Spring Meeting. Cricket: Merions vs. Germantowns, at Ardmore; Dorian vs. Old Haverfordians, at Haverford. Base Ball: Cricket vs. Manchester, at Manchester; Hornell vs. New Bedford, at New Bedford; Alleghany vs. Live Oak, at Lynn; Rochester vs. Star, at Syracuse; Buffalo vs. Utica, at Utica; Amherst vs. Springfield, at Amherst; Mass. Agricultural vs. Sharp, at Holyoke; Princeton vs. Brooklyn, at Princeton: Harvard Freshmen vs. St. Mark, at Southboro. Running Meeting at Nashville, Tenn.

Monday, May 6.—Return of New York Coaching Club. Base Ball: Hornell vs. Springfield, at Springfield; Tecumseh vs. Rochester, at Rochester; Alleghany vs. Lowell, at Lowell; Cricket vs. Live Oak, at Lynn; Racine vs. Northwestern University, at Evanston Ill.

Tuesday, May 7.—Base Ball: Cricket vs. Live Oak, at Lynn; Alleghany vs. Lowell, at Lowell; Tecumseh vs. Syracuse, at Syracuse; Buffalo vs. Springfield, at Springfield.

Wednesday, May 8.—Spring Meeting of the Massachusetts Rifle Association. Base Ball: Hornell vs. Utica, at Utica; Cricket vs. New Bedford, at New Bedford; Alleghany vs. Manchester, at Manchester; Yale vs. Cornell, at New Haven; Harvard Freshmen vs. Adams Academy, at Quincy. Trotting at Prospect Park, Brooklyn.

Thursday, May 9.—Massachusetts Rifle Association Spring Meeting. Base Ball: Alleghany vs. Manchester, at Manchester; Cricket vs. New Bedford, at New Bedford; Tecumseh vs. Springfield, at Springfield; Hornell vs. Star, at Syracuse; Buffalo vs. Lowell, at Lowell. Trotting at Prospect Park, Brooklyn.

MAY FLOWERS.—We acknowledge the receipt of a beautiful pyramid of May flowers (trailing arbutus) from a fair lady friend, E. B. F., of Plymouth, Mass. They are very sweet. We hope the smiles of our fair friend may be always as propitious.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Willbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sec'y, Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President
Missouri State Sportsmen's Association.

VERMONT.—The Washington County Association for the Protection of Fish and Game held their annual meeting at Montpelier, on Tuesday evening, April 9, and the following officers were elected for the year ensuing: Pres., Fred E. Smith; Vice-Pres., M. D. Gilman and Jonas G. Hall; Sec., W. A. Lord,; Treas., John W. Page; Directors, John E. Hubbard, W. A. Briggs, George W. Wing, Hiram Atkins and Charles A. Reed; Executive Com., Fred E. Smith, John Hubbard and George W. Wing; Counsel, S. C. Shurtleff and C. W. Porter. The society is in a prosperous condition, and voted to extend its usefulness by inviting all in the county who are in sympathy with its objects to become members. Meetings will be held at the above place on the evening of the first Thursday of each month during the fishing season.

MAJOR.

RHODE ISLAND STATE ASSOCIATION.—The officers for the ensuing year are: Pres., Henry T. Root; First Vice-Pres., Wm. E. Taber; Second Vice-Pres., P. S. Redfield, M. D.; Third Vice-Pres., John Howe; Fourth Vice-Pres., Rev. F. H. Hemperley; Fifth Vice-Pres., J. K. H. Nightingale.

FISH LEGISLATURE IN NEW JERSEY.—Lovers of true, legitimate sport, who are most desirous that those who fish for a living should not waste their subsistance, will be grateful to a good many people, and especially to Mr. G. V. Kinsey, of Barnegat, for their efforts in having proper legislation passed in New Jersey. The following is a synopsis of the act passed at the late session of the Legislature, relating to the preservation of fish in New Jersey waters:

"Sec. 1 provides that hereafter it shall not be lawful for any person or persons, either by day or night, to put, place, or haul any gill, drift or other net or nets for the taking or catching of fish in any of the waters of this State (except as hereinafter provided) at any time between the fifteenth day of May and the fifteenth day of July in each and every year, nor at any time whatever in any year from sunset on Saturday night until sunrise on Monday morning.

"Sec. 2 applies only to the waters of Burlington and Atlantic counties.

"Sec. 3 prohibits the setting of nets and seines across any channel, thoroughfare, inlet, creek, or any other waters of this State, at any time except from the first day of December to the first day of March.

"Sec. 4 provides that the restrictions of this act shall not apply to fishing above tide-water, nor to the use of purse-nets for catching mossbunkers, nor shall its provisions be held to apply to the waters of Barnegat Bay or its tributaries north of a line from the north shore of Barnegat Inlet to the Waretown dock.

"The remaining sections provide for the arrest and punishment of those found guilty of an infraction of the law, which goes into effect immediately."

—At the last meeting of the Central New York Sportsmen's Club at Utica, April 16, the following officers were elected: Pres., J. J. Flanagan; Vice-Pres., Charles W. Hutchinson, E. Prentiss Bailey; Rec. Sec., W. M. Storrs; Cor. Sec. E. B. Graham; Treas., John D. Flower; Prosecuting Attorney, I. C. McIntosh. Delegates to the State Convention at Buffalo, J. C. Smith, W. B. Sutton, E. B. Graham.

WASHINGTON, D. C., April 30.—Reckless people are scooping black bass out of the pot-holes in the Potomac River and from the beds where they are now spawning by the cart-load, and the proprietor of the hotel at Great Falls was serving black bass spawn to guests by the quart. Also pin-hook fishermen are taking fingerling white perch with worms, counting them by the dozen, and then throwing them away. The biggest weigh an ounce.

B. A. L.

[We wish the law could teach these persons common sense, if they do not already know that black bass are not now naturally or legitimately in season. We have been surprised to see so many reports of correspondents who write as if their catching gravid fish were exploits. Black bass will not now be in season before the first of June, whatever the law of different States may be, and June 1st is altogether too early, in our opinion.—ED. F. and S.]

MESSINA QUAIL.—The U. S. Consul at Messina has kindly sent us the following in regard to transportation of quail, etc.:

MESSINA, March 30, 1878.

EDITOR FOREST AND STREAM:

In reply to your letter of the 2d inst., asking information in regard to the shipping of the migratory quail, I have to say that it gives me great pleasure to comply with your request, and that at all times I am ready and willing to aid our sportsmen in the introduction of this valuable bird. As I learn from your journal, several numbers of which Judge Everts has kindly sent me, that your are conversant with the habits and nature of the birds, I will at once pass to the question in hand.

All orders for quail should be sent as early as February to insure attention, and should be accompanied by a draft or bill on a London banking house, the bill to be paid on the presentation of the shipping documents. Hitherto, and this year as well, the orders coming so late, I have guaranteed all bills, but it is better and more satisfactory to all concerned to adopt the above plan. The Messrs. Bonanno are agents for the Mediterranean line of steamers plying between Sicily and New York. All birds ordered from them will be sent by that line. Messrs. Phelps Bros. & Co. are the agents in New York. The charges will include cages and hemp seed for thirty days. I am not able to state what rates of freight will be charged, but it certainly will not be very much. The birds sent last year went free, but as there are already orders for fifteen hundred, and as necessarily they must be sent as soon as possible and by the same steamer, it cannot be expected this year. The steward's fees will be divided *pro rata*. If for the interior the birds should be consigned to the care of an Express Company, with orders to ship them at once to their destination. I would advise their being turned down as soon as possible after their arrival. For further information I can but refer your readers to Judge Everts' communication which covers all the ground.

As regards the flight this season, sportsmen differ. Some considering it an "off-year" and others saying that on account of the continual Sirocco we have had this month we shall next month have fine weather and favorable winds. Such being the case the birds will be as cheap as last year.

Excuse my delay in answering, and if at any time I can be of service to the patrons of your paper you have but to inform me.

I am, gentlemen, yours very truly, GEO. H. GWEN, Consul.

The Rifle.

WALNUT HILL, *Boston, April* 24.—The seventh renewed competition of the shot-gun match took place. Weather was thick and foggy, which did not, however, prevent Mr. Gerrish from making no end of bull's-eyes. Good or bad weather made not much difference to Captain W. H. Jackson, who rolled up 212 out of a possible 225. The following are the scores:

W H Jackson.

800	5	5	5	5	5	5	5	5	5	4	5	5	5	4—73
900	5	5	4	5	5	4	3	5	5	5	4	5	5	5—70
1,000	4	5	3	5	3	4	5	5	5	5	5	5	5	5—69—212

W Gerrish.

800	5	5	5	5	5	5	5	5	5	5	5	5	5	5—75
900	0	3	3	3	4	5	4	3	5	5	5	5	4	5—59
1,000	5	5	5	5	4	5	5	4	5	5	4	5	5	5—72—206

J S Sumner.

800	5	5	3	5	5	5	5	4	4	5	5	5	5	0—66
900	5	4	4	3	2	2	5	5	5	4	5	5	5	5—64
1,000	5	5	5	5	5	3	4	3	4	4	5	5	5	3 4—65—195

L L Hubbard.

800	4	5	4	5	5	5	5	4	4	4	4	5	5	5—69
900	5	4	5	4	3	4	4	4	5	5	5	5	4	5—67
1,000	2	4	4	3	5	5	3	3	3	5	5	4	5	5 3—59—195

H Tyler.

800	5	5	4	5	5	4	5	5	4	3	5	5	4	3 3—65
900	5	4	5	4	4	5	5	3	4	5	3	5	4	5 4—66
1,000	4	3	3	4	5	5	5	5	4	5	3	5	3	5 4—63—193

Wm Poland.

800	4	5	5	5	5	5	5	4	4	5	5	4	4	5 4—69
900	3	3	5	5	5	5	3	4	5	5	5	4	5	5 0—62
1,000	3	3	5	5	3	5	5	5	5	4	5	3	5	5 4—60—191

J F Brown.

800	4	4	5	3	5	3	5	5	5	4	4	5	0	4 5—61
900	4	4	4	5	4	3	2	5	5	5	4	4	4	5 4—62
1,000	4	0	4	5	4	4	4	5	5	0	5	5	4	3 4—56—179

J B Osborn.

800	4	4	3	3	5	4	4	4	4	5	5	5	5	3 3—61
900	5	5	3	4	5	5	5	5	5	3	3	5	5	5 5—68—129

On Saturday, April 27, the renewed competitions in the "Amateur Series" and no "Clearing Match" will take place.

Boston.—On Saturday last there was rain at the Walnut Hill Range. The only score worth recording of four entries was Mr. W. E. Guerner's—5 4 5 5 5 5 4 5 4 3—43. In the non-cleaning match, Mr. Tyler's three scores were the best.

H Tyler	200	3	4	4	5	4	4	4—28	
	300	5	5	3	4	4	3	4—28—56	
H Tyler, first re-entry	200	4	5	4	5	5	5	5—33	
	300	4	4	4	4	3	5	4—28—61	
H Tyler, second re-entry	200	4	4	5	5	5	5	5—33	
	300	4	4	4	2	5	5	3—27—61	
J S Sumner	200	4	4	5	4	5	4	3—31	
	300	4	3	3	4	4	3	3—24—55	

—Capt. W. H. Jackson writes thus sensibly in regard to the American Team muddle: "I believe that the team can only recommend to and advise with the National Rifle Association. The precedent has been established that the Palma is to be shot for by a team gotten up under the auspices of the N. R. A. I therefore decline to be bound by the action of the team, and I herewith tender my resignation."

RIVERSIDE RIFLE CLUB—*Pittsfield, Mass., April* 21.—The following are the scores made at a recent match. Distance, 200 yards; regular Creedmoor target, off-hand:

Ten shots.		Five sho's.	
Tracy	41	Tracy	20
Gale	41	Wentworth	21
Wentworth	41	Wood	22
White	42	Farrington	20
Wood	44	White	19
Farrington	40	Gale	21
Couch	38		

The officers of the club are represented by G. H. Gale, President; W. Tracy, Secretary.

Pittsfield, April 27.—200 yards, off-hand.

Geo H Gale	5	3	3	4	4	4	4	4	4	5	5—40
W W Tracy	3	6	3	4	3	3	4	4	4	4	4—37
Dr Wentworth	5	5	4	3	3	4	4	5	5	5	5—43
J Wood	4	3	4	5	5	5	5	4	4	5	4—44
F P Farrington	4	4	4	4	5	4	4	4	5	3	4—41
H W Dewey, Jr	5	2	4	5	4	3	4	4	3	4	3—38
D M Couch	4	5	5	5	5	4	4	4	4	4	4—44
W P Wood	4	4	3	4	4	4	3	3	5	5	4—38
W L White	3	3	4	4	4	4	4	5	5	4	4—40
C D Noble	4	3	4	3	4	3	4	4	4	4	5—38
W T Noble	4	3	4	4	4	3	4	3	3	3	3—35
W Smith	4	4	4	3	5	5	4	3	4	4	4 40

BRIDGEPORT RIFLE CLUB.—At the annual meeting of the Bridgeport Rifle Club, the following officers were chosen: Pres., Judge A. B. Beers; Vice-Pres., N. S. Warner; Sec., J. W. Range; Treas., Geo. D. Phillips. The club has secured a fine tract of land next to Sharps armory, and will put it in first class order immediately with four 200-yard targets, two at 500 yards and two at 300 yards, and as soon as convenient will put up one at 1,000, 900 and 800. Members have the shooting fever, and at the New Haven club on Fast day there was a fair attendance from Bridgeport, and among the prize winners was Capt. Kingman, S. H. Hubbard, and Geo. F. Hale, of the Bridgeport club. The New Haven club has a fine range, and no doubt it will be well attended this summer.

WHITE DISK.

CREEDMOOR.—*April* 24.—It blew a gale and was so unpleasant that the match for the Waters $50 gold prize, did not bring forth many riflemen. Conditions, thirty shots at 1,000 yards. Prize to be won twice before being finally held:

Isaac L. Allen	132	T. S. Dakin	107
H. Rathbone	129	R. H. Keene	106
H. Fisher	114	N. D. Ward	103
B. G. Doughty	113	W. S. Elmendorf	102
E. B. Sandford	110	H. F. Clark	91

At the lower range, the Wylie Badge was shot for. Conditions, 7 shots at each distance, 300 and 500 yards, military rifle without cleaning. Captain Livermore, U. S. A., one of the first officers in service who seems to take an interest in rifle matters, was for a second time the winner.

Capt. W. R. Livermore	39	J. Harris	28
J. H. Tearkle	36	E. A. Perry	27
J. R. Grohman	30	F. H. Holton	26
C. H. Eagle	30	J. R. B. Bagley	28
P. McMorrow	29	J. W. Maugam	18

The Eighth Regiment Club members shot for the Douglass Badge and Douglass Cup at 200 and 500 yards, ten shots per distance, with State model rifle. Dr. G. D. Hobart took first place with 79 in the possible 100.

ZETTLER RIFLE GALLERY.—At the weekly shooting at 307 Bowery, April 23, 100 feet, off-hand, at Creedmoor targets reduced, ten shots per man, possible fifty, the scores were:

R Zimmerman	49	J Levy	45
C J Zettler	49	D Miller	44
P Fenning	49	E Hunziker	43
C Judson	48	B Zettler	43
M L Riggs	47	H Oehl	42
M Dorrler	47	L Beutse	41
A E Moore	46	W Weigandt	40
G Culhane	46	M B Engel	
G A Schurman	46		

THE NEW YORK CADETS.—This new rifle club, just organized, shot at Zettler's Gallery, Creedmoor targets reduced for distance. The following were the scores:

J C Pradd	39	G Maag	24
G Hiwitzer	37	C Blast	24
C Recht	35	L Denis	24
T Schmager	34	W Ersinger	21
S H Spamer	30	O Borm	22
L Bishoff	28	D Falk	16
H Spiesser	25	C Demis	15
A Letterst	25	P Rosenbaum	11

Z. R. C.

CONLIN'S GALLERY, 1,222 BROADWAY, *April* 25.—Competition for the Blyden burgh Badge by the New York Rifle Club.

	200 yds.	500 yds	Tl.
C E Blydenburgh	48	48	96
S W Sloley	48	48	96
Dr Dudley	49	46	95
L C Bruce	47	48	95
C A Cheever	48	46	94
Fred Alder	46	47	93
D Banks	45	48	93
H D Blydenburgh	46	45	91
J S Conlin	47	41	91
J F Duckworth	45	41	89
F H Holton	45	43	88
V Daly	46	42	88
T Fitz	45	43	88
D Cameron	43	44	87
P J Cullinan	46	41	87
A J Howlett	45	39	84
N O Donnell	44	39	83
P Lorillard, Jr	43	40	83
W H Dunlap	43	39	82
A C Wericle	39	42	81
J A Ward	42	39	81
F H Potter	41	36	77
F H Lord	42	34	76
J H Meeker	40	36	76
F G Fullgraff	38	36	74
H Russell	39	34	73

HELVETIA RIFLE CLUB—MUZZLE AGAINST BREECH-LOADERS.—An interesting rifle match took place at the Union Hill Schuetzen Park. The Helvetia Rifle Club arranged a match among the members of the club. Breech-loaders against muzzle-loaders. Distance, 200 yards, off-hand; possible aggregate score, 2,250 points; ten shots each man. The following were the scores:

Muzzle-Loaders.		Breech-Loaders.	
A Knoepfle	203	J Kaegi	207
Ph Klein	207	Wm Hahn, Jr	205
J Aeschbach	198	L Vogel	199
R Daber	194	A Meyer	196
C Meyer	190	A G Helwig	194
F Landolt	169	L Dreyer	190
J J Tobler	169	R Weidmann	186
R Nagli	160	C Mattmann	132
F Kessler	158	Th Fisch	100
Total	1,649	Total	1,609

Average, 183 points. Average, 179 points.

NEW YORK—*Saratoga Springs, April* 19.—In the competition practice on the 18th of April for position on a team to shoot the Milwaukee Rifle Club, Mr. William H. Benson made, at 200 yards off-hand, with a Stevens rifle, three pound pull, 5 4 5 5 5 5 5 5 5 5—49 out of a possible 50, without any sighting shots. J. M. A., Jr.

[This is indeed a remarkable score.—ED.]

TELEGRAPHIC MATCH.—Saratoga v. Milwaukee.—This match which has been off and on for some time was finally shot on the 29th. The following is the Saratoga score: At the 500 yard range, out of a possible 75—Joseph W. Shurter, 74; George W. Ainsworth, 74; John Webb, 72; Jerome Pitney, 73; total, 292. At the 200-yard range, out of a possible 50—O. J. Wing, 44; Daniel Eddy, 45; total 176. Grand total, 468. The wind was blowing across the ranges and shifting.

MILWAUKEE, WIS.—*April* 29.—In the rifle match to-day between teams of the Saratoga (N. Y.) and Milwaukee rifle clubs, the Milwaukee team scored 283 points out of a possible 300 at the 500-yard range, and 159 out of a possible 200 at the 200-yards; total 452. The weather was cool and cloudy.

—A prominent member of the Milwaukee team writes to us privately, saying: "The shooting of the Saratoga club at 200 yards, off hand, 3 lbs trigger pull, is remarkably fine. If they can do such shooting every day, they can call themselves 'boss.'" OFF HAND.

THE SARATOGA RIFLE CLUB.—Want of space prevents our doing full justice to the very high scores made by the Saratoga Club in their match with the Milwaukee riflemen. In our next issue we trust to give the names in full.

JERSEY RIFLE ASSOCIATION.—It seems very likely that the range will be at Elizabeth, on the line of the C. R. of New Jersey. The ground will be some 120 acres, and the distance covered some 1,200 yards. The cost of arranging the grounds will be $5,000. Fourteen canvas targets are to be put up. Governor McClellan seems to take a very great interest in rifle practice in New Jersey, and has been of signal service to the various committees.

THE RIFLE AT RAHWAY.—Match at Rahway, April 27, for all-comers' badge:

F H Holton	4	4	4	4	5	5	5	2	4	4—44
D Banks	5	5	4	4	4	4	4	4	4	5—43
C Watson	5	4	4	4	4	4	4	5	4	4—42
H Fisher	4	5	4	4	3	4	5	4	4	5—42
Fred Alder	4	5	5	3	4	3	5	4	4	5—41
D F Davids	5	4	5	3	3	4	4	4	4	5—41
S W S Ioy	4	4	4	4	4	4	4	4	4	4—40
A G Helwig	4	4	4	4	4	4	4	4	4	5—40
P Lorillard, Jr	4	3	4	4	4	4	4	4	4	5—40
W H Dunlap	4	4	4	4	5	4	4	3	4	4—40
F L Sheldon	3	4	3	5	5	4	4	5	4	4—40
C E Blydenburgh	3	3	4	4	4	4	4	4	4	5—39
R A Vail	4	4	5	4	3	4	4	4	3	4—39
J S Conlin	3	4	3	4	5	3	4	4	4	5—39
E M Squier	4	4	4	5	3	5	3	4	3	4—39
H W Courlay	4	2	3	5	4	4	2	3	4	5—38
Dr Dudley	3	3	4	3	4	4	4	4	5	4—38
T Fitz	4	4	4	2	5	2	4	4	4	3—38
J W Todd	4	4	3	4	3	4	4	4	4	3—37
M S Sharp	4	4	4	4	5	3	4	3	3	3—37
B Squires	3	3	4	3	4	3	3	4	2	4—33

R. R. C.

REMINGTON RIFLE ASSOCIATION OF CARLISLE, PA.—This new organization, of which Capt. W. E. Miller is Pres., H. H. Newsham, Vice-Pres., and A. D. Boas, Secretary, have already commenced their work. The target is at the Carlisle Springs Road, giving practice of 1,000 yards. Practice will take place every Thursday and Saturday.

SALT LAKE CITY RIFLEMEN.—The Deseret Rifle Club of Salt Lake City, have decided upon a much larger range of work during the season of 1878. The firing points at 500 yards have been opened, and 2d class targets erected. At the spring meeting of the Utah Rifle Association, Mr. Jake Heusser, of the Deserets, led the 500 yards work with 49 in the possible 50, and at 200 yards three of the first prizes went to members of the Deseret club. A match by members of the club is held on the 24th of each month for a medal, which is to be won 5 times before becoming personal property. Mr. E. McLaughlin and Mr. John Sharp have each taken it four times. Mr. Jas. Sharp and Mr. Bolivar Roberts have taken it three times, and Mr. James Groesbeck and Mr. Jake Heusser once each. At present it is held by Mr. M. M. Young. The Deseret Club numbers 35 members and the officers are: Bolivar Roberts, Pres.; W. K. Conrad, Sec'y and Treas.; John Sharp, Jr., Vice-Pres.; E. McLaughlin, John Groesbeck and Jas. Sharp, Executive Committee.

SONORA RIFLE CLUB.—A rifle club has been organized at Sonora, Cal., with Joseph Phelps, Pres., S. S. Bradford, Vice-Pres.; H. H. Rowell, Treas.; and J. Shaw, Sec.

AUXILIARY RIFLE BARREL.—The manufacturers of the auxiliary rifle barrel of New Haven, beg us to inform the public, in reply to numerous inquiries made them, that they advise for use the Winchester Repeating Arms Co.'s cartridge, No. 32 and 38, extra long, and the No. 44, model 1873. These cartridges give the most precise results.

AT LONG BOWLES.—Some recent Austrian experiments, with soldiers picked indifferently from various regiments, armed with rifles, show what injury can be inflicted at exceedingly long ranges. Military men are looking at the effects of a better class of arms, introduced by Americans into Europe, as were especially used by the Turks. In Austria wooden targets were set up representing three guns in action, with men serving the pieces. At fifteen hundred yards distance a company of infantry, 236 men strong, opened fire. In three and a half minutes each man had fired ten times, and nine per cent.—over 262 balls—struck the target; sufficient to have put all the guns *hors de combat*.

THE RIFLE IN THE DOMINION.

HAMILTON, Ontario, April 23, 1878.

There has been nothing done in rifle shooting on this side all winter, and consequently but little of any importance in that way to write about. There have been several pigeon shooting matches around this locality, but they do not interest me, and think glass ball shooting far superior in every way. We had two small matches with the Sneider rifle here on Good Friday, which were the first of the season, and attracted a good many visitors to our Victoria Rifle Ranges. Being the first practice of the year, the shooting was not up to the mark, but it was as good as the weather, which is not saying much for either. The following were the prize winners:

Match No. 1.—Ranges, 200, 500 and 600 yards; five shots at each range.

	Score.	Prize Value		Score.	Prize Value
Sergt D Mitchell	56	$6 50	Priv Dow	45	$1 25
Private Morley	53	4 00	Priv Morris	46	1 35
Lieut Adam	53	3 00	Lieut Ryan	42	1 00
Sergt Pain	52	2 50	Priv Omand	42	1 00
Corp McGregor	52	2 00	Sergt Goldney	41	1 00
Sergt J Mitchell	50	2 00	Sergt Hancock	49	75
Sergt M Roberts	50	2 00	Lieut Storeman	39	75
Lieut M Moines	49	1 75	Capt Barnard	39	75
Q M Smith	48	1 50	Priv Lumsden	38	50
Corp Etherington	46	1 50	Priv Lewis	38	50

Match No. 2—Ranges 200 and 400 yards, five shots at each range.

	Score.	Prize Value		Score.	Prize Value
Lieut Col Gibson	45	$6 00	Lieut Adam	38	$1 25
Sergt Pain	41	3 00	Lieut McMonies	38	1 00
Priv Jos Mason	41	3 00	Lieut Stoneman	37	1 00
Priv Morley	40	2 50	Sergt McRoberts	37	75
Priv Morris	40	2 00	Priv Murdoch	37	50
Priv Thorne	39	2 00	Sergt D Mitchell	37	50
Sergt J Mitchell	39	1 75	Sergt Goldney	36	50
Priv Lewis	39	1 50			

Lieut.-Col. Bacon, of Quebec, has invented a new canvas target, the plan of which he has kindly sent me a copy of. It is, without doubt, the best target which I have seen, and have shot at those in use England, Ireland, Scotland and Canada. Indeed, with Lieut.-Col. Bacon's canvas target it is doubtful if there is anything left to improve upon. First, it does away with the necessity of the butt being inclosed or covered, which is very trying on the marker on a hot day. In this one the marker has all the ventilation which the marksmen have. Second, it can be converted to a first, second or third class target in about twenty minutes; third, it can be operated by a boy of fourteen or fifteen years of age, being balanced so that there is no labor worth speaking of. The frame is made of iron, and all the part exposed to the bullets is V shaped, so that there is no danger of the bullets splashing and hurting the marker. They go through the canvas, making a small hole, which cannot be mistaken by the marker, and consequently obviates any mistakes, which are often made on iron targets. It works as follows: The marker is sitting on his seat looking at the target, which is in front of him, with a rod or lever close to his hand. The bullet goes through the canvas and leaves a hole about half an inch in diameter. He then puts a disk on to the bottom part, showing the value of the shot, and pushes the lever, which brings the target down like an awning over him, and at the same time the disk goes up in full view of the marksmen, he hangs a small disk in the hole the bullet makes. He then pulls the lever, and up goes the target, so the marksmen not only sees the value of his shot by the first disk, but when the target goes up sees by a small one the exact spot his shot has struck. The next man shoots; down comes the target, again the marker putting on a disk as before. He takes out the little disk on the first shot, and pastes a small patch on the hole, and puts the disk into the last hole made, and so on. They were tested last year at the Montreal matches, and, although not completed, gave the competitors the utmost satisfaction. have no hesitation in saying that they will be generally adopted before long, being so cheap, the iron work of one convertible into first, second or third class class, only costing $50. I have received from a committee appointed by the N. R. A., of New York, a letter containing a proposal of holding at the annual meeting at Creedmoor, an International Military Match, open to all countries and colonies. I think the idea is a good one, and would be a very interesting match. And as suggestions as to the best arrangements for carrying it out is asked for, I take the liberty of giving you my views in a brief word as to wha I consider would be the best manner to make it a success. First, I would have it shot at the most difficult ranges (or rather two of the most difficult), say 300, 500 and 600 yards, ten shots at each range, and, for the benefit of foreign teams, sighting shots at each range. Second, I would suggest that the rifles to be used should be the *bona fide* ones, used by any regularly constituted battalion of Regulars, Militia or Volunteer force, and that the team should consist of twelve men chosen from any or all of the three above-mentioned grades. Fourth, I think that the prize ought to be a trophy to be yearly competed for on the range chosen by the victors, after the first year. It would also be, perhaps, advisable to give each of the individuals of the winning team a small badge as a memento of their victory. And last, though not least, I would suggest that the half of the proceeds of the entry money at the gate should be distributed in a proportionate way to the four teams making the highest aggregate scores. It would help to pay the expenses of those teams to and from the match. These are a few of the principal points which strike me, without going into it in full detail. But I don't think the arrangements could be placed in better hands than the three gentlemen appointed as a committee to carry it out, viz.: Messrs. Wingate, Wylie and Waters. SHOOTER.

NICK ON THE AMERICAN TEAM OF 1877.

There is a tempest in a teapot rising over the action of the American team of 1877, resolving to start out on an independent idea of their own in the selection of the team to shoot the next international match on behalf of the United States. However ill-timed and devoid of common gratitude such action on the part of the team may be, it finds a grain of reason in the loose manner in which the rules for the International match had been drawn up. Some weeks ago I pointed out the general fault in the literature of the N. R. A., but the team men cannot be so utterly devoid of all idea of logic as to suppose for a moment that because the conditions of the trophy do not specifically name the National Rifle Association of America as the managers of subsequent matches on the roll, that therefore such an irresponsible body, comparatively speaking, as an ex-team, should assume the right. What the team may and must do is positively laid down. They are to fix time and place for the next match, and there the work of the team as a body is done. They are collectively held responsible for the safe return of the trophy in time for the next match. Whatever faults the conditions may show, and many of them have never yet been broached, there is none so far as touches the duties and powers of retiring teams. They are given all the power which it is safe and proper they should possess, and all they would ask or attempt to exercise if their motives were alike guided by decency and discretion.

Go back a couple of years and recall the angry, even acrimonious discussion which followed the resolution of the Board of Directors N. R. A., to allow the members of the old team to stand on their previous record as against the efforts of new candidates for team honors. However improper this was, and none berated it more vigorously than old "Nick," it would have been tenfold more galling if such a notion had come from the team itself. If I remember aright some of the present team members were then most vigorous in fighting this concession to the "has been's," and now they bring up the very same motion in even a more indefinite and objectionable form. But the team will say that they represent the riflemen of the country, and in their capacity of the champions have the most undeniable claim to speak for the whole community of riflemen. There may be some truth in this, but are not the officers of the N. R. A. equally representative as the chosen ones of the leading association of America? The one body has won its way by works, and has not presumably any deliberative wisdom or managerial ability; the other body is chosen specially on account of its supposed merit in these respects. The taking of any steps by the team outside of the limits laid down for them at once raises the suspicion that the move is one for self-perpetuation, that the team having tasted how sweet to the soul is the unction of being the champion shots of the world, are not willing to step down and out.

The old team members can do much to help the N. R. A. in their selection of the next team. They have had a valuable experience, and by suggestion and co-operative labor can do much to make the perplexing task of selecting a representative team an easy one for the committee of the National Rifle Association. But it is entirely an unrivalled for piece of foolishness on their part to approach the work of supererogation they have undertaken by attempting to show that the National Rifle Association of America is not true to its name. Whatever the team is or has been, it owes primarily to that Association. The team organized and went into the competition with a full knowledge of the conditions governing it, the precedents which had clustered about it, and the written and acknowledged rules of procedure in regard to it. American riflemen, far and wide, are free to give all honor to the men who so skilfully held up the honor of all

on that September battle-field at Creedmoor. Let them see to it now that their bright laurels are not tarnished by any foolish after action, as this notion of choosing their own successors, or reelecting themselves, certainly is. The sport of rifle shooting has thus far been kept in a purer atmosphere than that which surrounds many other lines of sport. With that petty $200 pay, which each member of the team so willingly received after the last match, they took a big step toward making of themselves a poorly paid professional team, but there was a showing of excuse for that payment; but for the team to proceed out of its statute path to undertake duties no way devolving upon it, must compel the withdrawal of the aid, comfort and support which all right thinking patrons and advocates of the art of rifle shooting would otherwise willingly give them. All who have no designs in guiding rifle practice into certain channels of emolument or for the support of certain private interests cannot but deprecate the present position of affairs. NICK.

TIGER SHOOTING IN INDIA.

CHICAGO, March 4, 1878.

EDITOR FOREST AND STREAM:

Instead of No. 3 of my regular series on the sporting rifle, I send you herewith a verbatim extract from a letter, giving a description of an achievement in sportsmanship, which is worthy of admiration for the genuinely artistic manner in which it was done and the nerve displayed in its performance, no less than the simple, natural and exceedingly graphic style in which it is narrated.

The writer of the letter is Mr. W. T. Horneday, who is now hunting in India for the purpose of collecting skeletons and skins for Prof. H. A Ward, of Rochester, N. Y.

It was written to Mr. Chester A. Jackson, of Racine, Wis., who in 1876 was in partnership with Horneday, hunting for Prof. Ward in South America.

Having received a verbal account of the feat described in the letter, I wrote to Dr. P. R. Hoy, of Racine, for particulars, and he was kind enough to procure for me the following extract, which he sent with a request that I would send it to you for publication.

The rifle with which the work was done was a Maynard, of 40-100 calibre.

Since copying it for publication, I perceive that Professor Ward has published a letter from Mr. Horneday to himself, giving an account of the same transaction:

CAMP IN THE FOREST, AMANDAY HILLS, INDIA, Wednesday, Sept. 5, 1877.

Dear Old Pard: I am in my lonely hut, away out in the heart of the forest, with only my hunting gang and cook in camp with me. I have been in the hills just two months yesterday, and have done a good deal of shooting in that time. I have had a slight attack of fever, which kept me in camp for five or six days. I have fully recovered, however, and now feel tip top. "What have I been shooting?" Well, I have shot one bison, four Indian elks, one black bear, six muntjaks, or basking deer, sixteen axis, or spotted deer, thirty-six big black monkeys. I have made up twenty perfect monkey skeletons, and five beautiful skins of this species alone. It is a little larger on an average than the old howlers of South America. I have got so I can hit these monkeys every time, so that they will come to me out of the largest trees. But, old boy, give me your paw! By Jove, I've had a piece of luck lately! If you don't believe it go and look under that shed.

"Yes, sir, TIGER!"

"Kill it myself?" Why, of course I did, and with only two shots from my little Maynard, at that.

Read and see. I had never dared hope for such glorious luck, and had about made up my mind that I must content myself without ever getting sight of a tiger in his native jungles. But my luck ordered it otherwise. It was a week ago last Monday. The gang and all hands, myself included, depended solely on my rifle for meat, and that day there was no meat in camp. I had had a little fever the day before, but I concluded I could go out and bag a deer before the fever would come on again in the afternoon. So I took two of my men, and good and true men they were, and sharp hunters, and a boy who carries a No. 10 shot-gun, loaded with No. 5 shot for birds. I carried my rifle, and that was all my "battery," that Indian sportsmen always talk about, which with them generally consists of two or three thundering big double-barreled rifles, when they go tiger hunting. Well, it was a lovely clear day, so beautiful and sunny the forest was charming to go through. At 10 A. M. we had found no deer, but just then we came to a small creek, almost dry. A little water flowed over a broad level bed of yellow sand. The banks were steep up to the level, about fifteen feet or so. Here in the moist sand we saw the fresh spoor of a large tiger. The tracks were fully as large as saucers. Fancy a cat track that size, and then the cat to match it! I sighed, and wished I had been there when that old cuss was. The men asked me if I would dare shoot at a tiger with that small single rifle if we saw one. I said, "Yes, certainly;" and then I wondered what the dickens I would do if we should really see a tiger, for I had no idea we ever should. Well, we went down the bank of the little creek, and soon saw that the tiger had been loafing along down stream at his leisure. We had gone about half a mile from where we first saw the spoor, when suddenly the man ahead, who has the keenest eye I ever saw, griped me hard by the arm, and pointed through a clump of bamboos that was standing near. I looked. "Great Cæsar's ghost!" There in the middle of the creek, just thirty yards from me, standing broadside, was old Stripes himself, in all his glory. The sun shone full upon him, and he did look gorgeous, and he seemed as big as an ox. He walked slowly across the bed to the opposite bank, then turned and passed back to the middle, where he stopped short, raised his big head and looked full at us. I was ready, and knew exactly what I wanted to do. As I took aim I thought, "Now this shot may prove the death of me, but I'm going to fire, nevertheless." Taking a steady, careful aim for the left eye, I banged away, and without stopping to look reloaded in short metre—awful hurry. When I looked again the tiger was there on the same spot, slowly turning round and round in his tracks to the left. When his neck came round to me broadside, I let drive, aiming to hit the neck bone, and at that shot he instantly dropped. Reloading, I walked cautiously up toward him, keeping him well covered. The men were at my side, not having bolted, as I fully expected they would at the very first fire. But old Stripes was hard hit, and in three minutes was stone dead. Then I tried to realize that I had really killed a tiger. Wasn't he huge! He measured eight feet eight and a half inches as he lay, and weighed 495 pounds by the scales. Height at shoulders, three feet seven inches. Tigers rarely exceed ten feet in length, the average being eight feet four inches, so you see this is one of the largest class. He was a male, in the prime of life, and very fat. My first shot took him hang in the left eye, nearly nicking the lower lid, and the second was kind enough to hit the neck bone, as I intended it to do. Don't you bet we got a fine tiger skin, besides bones?

Just a week before a female tiger was killed by the other sportsman I mentioned. He was going down a little hill, and she came slowly walking toward him on the level at the foot; distance, twenty yards. He had a No. 12-bore double-barrelled rifle, and hardened balls, and he fired ten shots into that tigress to kill her! You should have seen that skin afterward. I skinned and skeletonized her, and found that no one ball had hit a really vital part. The brute was just hammered to death.

I was exactly thirty yards from my tiger. Old hunters had told me that my rifle was too small to kill a tiger, and advised me never to shoot at one with it; but I had studied and thought on the subject, and had made up my mind that if I could ever get a fair shot at a tiger's eye or neck, I could kill him, for I can depend on that little rifle to shoot straight when it is so necessary. Well, I got both these shots, and my calculations proved to be correct. All honor to the Maynard.

Dr. Hoy writes me, in addition to the above, that: "A later letter from Horneday states that the Government paid him an extra bounty of $50—the ordinary bounty for tigers being $35—and he was allowed to keep the skin, too. He had also shot four gaurs, a large species of wild ox, peculiar to the jungles of India, and used only five cartridges in killing them. That little Maynard is a great curiosity in India, its calibre being only 40-100, using a charge of forty grains of powder.

There are many points of vital interest to the sportsman in this recital, and as a whole it affords a magnificent illustration of such nerve and skill as are worthy of all honor. But the one essential fact to which I wish to call attention, as corroborative of what I have heretofore said, is the evidence it affords of the importance of a flat trajectory for the first hundred yards of the bullet's flight. If Horneday's bullet had gone a single inch too high, instead of piercing the tiger's eye at the first shot, he never would have written that letter, and probably even he would not have had the courage to fire if not perfectly sure that his rifle would carry exactly where it was aimed. H. W. S. CLEVELAND.

A QUESTION ON RECOIL.

DISMAL RANCHE, Neb., April 10, 1878.

EDITOR FOREST AND STREAM:

I promised some time ago that I would give you my opinion of shooting the running deer. Since then I have read the very able letters of T. S. Vandyke in the FOREST AND STREAM of March 7, and I really do not think there is anything more to be said on the subject. I agree with him in almost every particular. You must always hold ahead of the deer if it is over forty yards from you, and moving faster than a walk; that is, hold ahead of the spot that you expect to hit.

I have been much interested in articles on recoil, and would like to ask "Venator" or Mr. F. Hyde, or any of the numerous correspondents of the FOREST AND STREAM, who believe that the recoil takes place before the bullet leaves the gun, to try the following experiment: Rest the gun on a log of wood, and fire once. The recoil will be very slight. Now take another log, and place it, say three inches in front and two or three inches below the muzzle of the gun, and try another shot; the recoil is three or four times as great as at first. Now, if the recoil takes place before the bullet leaves the gun (and I believe it does) why should this be so? PLAINSMAN.

MORE RECOIL.—*Editor Forest and Stream:* It is a mathematical truth that action and reaction are always equal, act in exactly opposite directions and simultaneously. This being granted, we look at the conditions existing in the loaded rifle at the instant the powder is fired, and find a powerfully compressed gas, confined upon one side by the gun and upon the other by the bullet. Were this latter fitted tight enough to resist the pressure there would be no movement of the gun, and the initial pressure would be maintained until the gases were liberated. In actual practice, however, the ball starts, and the same power that impels it forward also pushes back against the breech of the gun with a force exactly equal to that exerted upon the lighter mass of lead, and in a direction exactly opposite; or, in other words, along a line passing through the centre of the barrel. The ball starting from a state of rest at the first instant of the explosion has a gradually increasing velocity imparted to it as long as the gases are being generated; and supposing that the charge of powder is large enough, we see that its greatest velocity is attained at the instant of leaving the muzzle. The gun is acted upon in exactly the same manner; that is, it starts backward from a state of rest at the instant of the explosion, and acquires a gradually increasing velocity until the ball is clear, when the compressed gases, having nothing but the atmosphere to push against, exert but a slight influence upon it. Calling to mind another principle of mechanics, that the effect or work performed by a moving body is in proportion to the weight or mass of that body, the velocity being the same in all cases, we deduce from it that the velocities of any two bodies acted upon by the same force are inversely proportionate to their weights. This, applied to the rifle and the bullet, will explain the fact that the ten pound gun does not have the same penetration as the one ounce ball, though both are impelled in opposite directions by the same force. W.

DOLCE FAR NIENTE.—There was one thing the Lotus Eaters lacked. They sailed away from home without an outfit of Seydel & Co.'s Mexican Pocket Hammocks. Just picture the weary voyagers swinging in their hammocks, munching the lotus and dreaming their lives away. To us prosaic moderns it is forbidden to rest on flowery isles, beneath summer skies, and far removed from the corroding cares of the world. But we have the hammock, and if any one sighs for delicious ease and restful indolence, let him swing a Seydel hammock and get peace unto his soul.

Game Bag and Gun.

MAY IS A CLOSE MONTH FOR GAME.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson snipe, per doz., $2.50; plover, $2.00; bay birds, large, $3.00; small, 75; wild pigeons, flights, $1; do stall fed, $2; Philadelphia squabs, $2.75; wild do, $1.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25½ cents; do., fowls, 18; do., turkeys, 18; do. ducks, 20; State and Western chickens, 18; do., turkeys, 15; do., fowls, 15; do., ducks, 18; spring chickens, 35.

SPRINGFIELD ROD AND GUN CLUB.—The newly elected officers of the Springfield, Mass., Rod and Gun Club are: Luther Clark, Statistical Officer; Dr. W. H. H. Young, Captain of the Long-range and S. S. Bumstead, Captain of the Short Mid-range Teams. Several new members were admitted, and it was voted to have three competitive trials of marksmanship for membership in the teams.

PENNSYLVANIA—*Greenville, April* 25.—Very few snipe here. The Sportsmen's Club was never more prosperous than just at present. B.

KENTUCKY—*Stanford, April* 22.—Quail have passed. "Bob White" is heard on every side, and prospect for full shooting never better. Squirrels abundant, but close season forbids till the 15th proximo. KENTUCKIAN.

CORINTH, Miss., *April* 29.—Weather magnificent; season at least four weeks in advance of the average spring; saw young blue birds on the wing on the 23d, nearly full fledged. The turkey hunters have killed several fine gobblers within the past few weeks. Bob White not mated yet. Have seen all our summer birds except the scarlet tanager. Cat birds came about the 20th. Baltimore orioles nesting. Have killed a good many squirrels, but as far as the sport is concerned, I had as soon shoot pigs in a barnyard, or "Hoppergrasses" over a poodle. GUYON.

WISCONSIN—*Westfield, April* 27.—The prospect for the coming autumn is good. From present appearances game will be comparatively plenty in this section. Grouse, quail, etc., are seen in numbers almost daily upon the meadows and in the thickets. The season thus far has been very favorable for breeding, and but few, if any, eggs have been destroyed by the too common practice of burning the dead grass upon the low-lands during the spring. During the past few weeks I have been regaled each morning with the cheery whistling of quail in the coppice and the resounding call of the grouse in close proximity to the house. W. W.

Ashland, April 21.—Have shot a few ducks. Saw lots of deer "sign" in the woods, also a bear trap set by the Indians. Partridges are drumming. The "Chequamegon" House, under the management of Messrs. Pratt & Andress, is first-class in its line, and a very popular summer hotel. C.

INDIANA—*Delphi, April* 26.—Snipe not plenty this spring Have good quail shooting in season. J. H. B.

MINNESOTA—*Nobles Co., April* 10.—Ours is an agricultural population, with gentlemen who have come here to recuperate, and comparatively little attention is paid to the game. Grouse, ducks, geese and cranes with which the country abounds, are sometimes shot—"potted"—by the farmers who keep a loaded musket at each end of their furrows. This region is frequented by the Bartramian sandpiper or Upland plover (*Actiturus bartramius*), being especially fond of the newly burned districts. It is extraordinarily and astonishingly fat—"fat as butter." It was the peculiarly retentive subsoil, I tried to say in a former note, that caused this "Undino" region to so abound in lakes, and the presence of the lakes insures the presence of the water fowl. R. E. DUGAIGNE.

PRESSURE ON BARRELS.—The London *Field*, in arranging the preliminaries of its trial of explosives, is amazed at the pressure shown on the breech of a 12-bore breech-loading gun with an ordinary load of powder and shot, "estimated in round numbers at from 2,000 to 3,500 pounds, according to the kind of powder used." Now, in the U. S. Ordnance Manual, the pressure of the gas from exploded gunpowder is stated to be 19,000 pounds per square inch on the Government Springfield Rifle, with 70 grains of powder. But a 12-bore shot-gun, as Major Merrill tells us, burns 82½ grains of powder, and it would appear from analogy that the pressure on the shot-gun might be even more than is claimed by our very thorough English contemporary. In fact, the London *Field* writes about an instrument used for measuring pressure, showing a pressure of 3,570 pounds to the square inch. As to the paper pad as a measure of penetration, the *Field*, like ourselves, is sick of it. Troublesome and expensive pads give no positive results, and it is time that something better and simpler was invented. We think the O'Neill plan, spoken about by us some time ago, would be a decided improvement.

DITTMAR POWDER.—Having been greatly pleased, as well as instructed, by the reports of experiments published from time to time in FOREST AND STREAM, I am led to give others the benefit of mine. Trying the Dittmar powder solely on game, I found it lacking in strength, as I thought, and in uniformity of action, and charged the remainder of a can, after two or three trials, up to profit and loss; but seeing something about mixing with black powder, I tried it, by placing in each shell one drachm black and two and a half drachms of Dittmar, mixing in the shell by shaking. This, to my surprise, proved sure fire; no hanging or delay about it; stronger than the black apparently, killing birds much cleaner, and perfectly uniform in action, giving no recoil and less smoke than the black. With the above charge I used 1⅛ ozs. of chilled shot in a 10-bore, 9-lb. (Greener) gun. With 3 drs. Dittmar and 1 dr. black (Orange rifle) powder, and 1¼ ozs. by measure of chilled shot, I got still better results; equal uniformity, but with slight recoil. With 3½ drs. Dittmar, 1½ drs. black powder and 1¼ ozs. shot, I got results just as good in every way, and far less smoke; in fact, none of account. In these proportions, however, the two powders should be thor

oughly mixed before loading, and a very little, just a priming, of black powder put in the bottom of each shell to make sure of proper ignition. YELL.

Jacksonport Ark., April 15, 1878.

STALLS FOR THE TRIGGER FINGER.—*Warsaw, Ill., April* 2.—*Editor Forest and Stream:* The many controversies carried on through the medium of your journal have been passed upon and fully discussed by our local authorities, and experiments resorted to to verify the merits or demerits of various arms, equipments, ammunition, etc. I have thought it a little strange that no suggestion even was ever made of marksmen having a ferrule or finger-stall made to protect the second finger of the right hand from abrasion by reason of recoil of the gun, especially in snap shooting, when the gun is not securely brought to the shoulder. I have been annoyed by the trigger peeling the skin from my knuckle, when shooting in cold weather with abundance of clothing on, which rendered it difficult to get the gun firmly to my shoulder. As such a rupture of the cuticle is generally apt to catch cold in and become sore, it would be a great blessing to have a protection of some kind; something a little pliable, so as not to hamper the freedom of the finger, would answer. I know of one hunter, a splendid duck shot, who wears a metal band as a protection. A. A.

CHOKE BORES—A RETROSPECTIVE VIEW.

In the early history of the old, long, flint-lock fowling-piece, when ammunition was expensive, birds gentle, plenty and more in flocks, and it was an object for the sportsman to kill a large number at little expense, the prevailing gun was straight bored to within eight or ten inches of the muzzle, from which point it opened like a bell. These guns were common one hundred and fifty years ago. Occasionally we can find one in museums of sporting antiquities. As people who liked to shoot became more numerous and game less abundant and wild, guns of greater range were required, and gun-makers, up to the occasion, were making straight-bore guns by the close of the eighteenth century. Guns at this epoch were small bore, from sixteen to twenty being common sizes.

Early in the nineteenth century, in France, choke-bore guns were the favorites for fowling, and no doubt a few were made in England and other countries. About the time of Napoleon I., as it is to-day in this country and in England, France had the choke-bore fever badly. England stuck to the old cylinder, and, as the sequel proves, did wisely, and was the principal gun-maker in the markets of the world. The fact is, France was fifty or sixty years in advance of the demand for extremely close shooting arms.

The celebrated French makers of choke-bore guns, of flint-lock times, were Boutet, who was armorer to Napoleon I., Perin, Lepage, Paris, Armand, Pirmet, Delpire, Autelet, Briere, Gasset and others. It is true these makers bored guns as ordered, but the choke was the favorite. As early as 1810 Boutet, in France, occupied about the same reputable position for his modified choke as now Parker Brothers do in this country.

In proof of the foregoing we give a few extracts from "Le Vieux Chasseur" (The Old Hunter), published by Deyeux in 1835, page 28: "Je l'ai vu par un canon legerement espingole a l'orifice, serre au centre et libre au tonnerre, tel que de bons canonniers pretendent qu'il est mieux de les etablir; je l'ai vu par un cannon etrangle de deux balles a l'orifice, et par un canon parfaitement cylindrique." (I have seen these results produced by a barrel slightly opened at the muzzle, choked in the center and free at the breech, such as some good gunsmiths pretend is best to make them; I have seen the same results by a barrel choked two sizes at the muzzle, and by a perfect cylinder gun.)

Page 36: "Le canon dont l'orifice est trop etrangle ne garnet pr'esque jamais au centre. Le canon dont l'orifice est trop ou vert garnit extremement de pres et perd plus promptement sa portee qu'un autre. Le canon parfaitement cylindrique ne porte pas aussi bien que lorsque l'orifice est par une insensible diminution, retreci dune balle an moins sur la longueur de 26 pouces." (The barrel, whose muzzle is too much choked, very seldom makes a good pattern in the center of the target. The gun, whose muzzle is too open, shoots very close at short range, but loses its strength quicker than any other. The perfectly cyndrical gun does not shoot as well as the one whose muzzle is by an insensible diminution contracted of at least one size on a length of twenty-six inches.) On page 62, after giving a description of a shot gun inclosed in a walking cane, he says: "On confectionne dans ce memi systeme de petites cannes a feu qui tuent tres bien l'oiseau avec 10 degres de prondre commune, mais, dans ces dernieres, l'orifice du canon est etrangle, pour donner plus de su cces a une petite charge de poudre qui pousse avec sneees une quantite double de plomb. (They manufacture in that same way small fire-canes, which kill birds very well with common powder; but in these latter the muzzle of the barrel is choked, to give more strength to a small charge of powder, which shoots quite well a double quantity of shot.)

Near the beginning of the present century there was existing at Tower Hill, England, an establishment for the manufacture of very fine guns; and these guns that have fallen under my notice, the barrels were about 3½ feet long, single, cylinder bore, stub and twist, gold bushed, and the outside construction of the barrel was converged from the breech to within about nine inches of the muzzle, where, perhaps, it was about 1-16 of an inch thick, and from which point it diverged to full ⅛ of an inch thick at the muzzle. In the old flint-lock days, for gentlemen possessed of means, the Tower Hill gun was regarded a rare acquisition, as they really were guns of great power. It will be seen that, notwithstanding these Tower Hill guns were straight in the bore, by their external construction of the barrel, at the muzzle they choked or compressed the charge slightly. How much, really, is the question? Simply the thick rigid muzzle arrested the expansion that attended the passage of the charge through the barrel up to this point, and caused it to pass through a non expansive muzzle. Nearly thirty-five years ago, in New York city, Mullins made graded draw-bore guns. To give a general view of Mullins' plan, we would say: Start at the breech with half a size, contract up about eight inches three-eighths of a size, and from this point to the muzzle one-eighth of a size.

There are many of Mullins' guns (muzzle loaders) about now, and I do not know but Mr. Mullins is also. The guns were good, even, hard shooters. I have owned a Mullins gun twenty-six years, and for twenty years I only occasionally used any other.

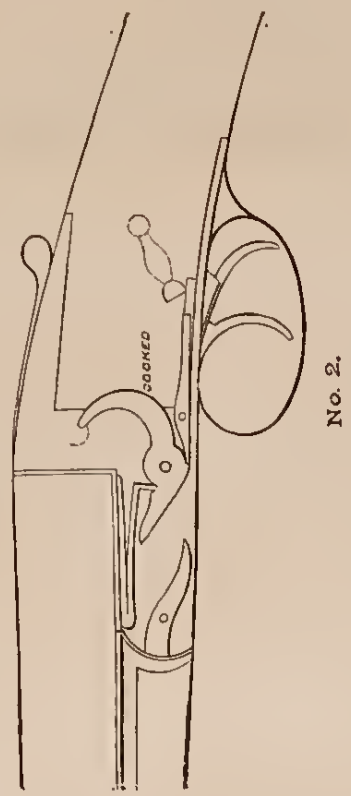
Mr. Mullins used to regard venting guns as an advantage, nd probably it did help the combustion of the powder and increase the strength of shooting. Your correspondent, with eyes getting dim and nerves shaky, cannot hold fine enough for the close work of a choke-bore, consequently, especially for average shooting, prefers a STRAIGHT-BORE.

NEWARK, N. J., January 5.

W. W. GREENER'S WEDGE-FAST HAMMERLESS GUN.

We have lately turned our attention to breech-loading guns without hammers. This description of arm offers many advantages, and it is the opinion of many sportsmen that it will eventually supersede the old style of gun with hammers. Of course there are objections to this new system, just as there were to the breech-loaders some twenty years ago.

The absence of the hammers make the gun very convenient,



No. 2.

especially for covert shooting.

In adopting a hammerless gun we have carefully considered the important questions of durability and simplicity, combined with safety and easy manipulation.

The wedge-fast hammerless gun will be found to possess these qualities in a high degree. The breech action has been well tested in every country for four years, and has been pronounced to be strong, durable and handy. The top lever is decidedly the best arrangement for the hammerless gun.

We adopt the Anson and Deeley lock arrangement for exploding the cartridge; the self-cocking is effected by the rais-

No. 2.

ing of the breech ends of the barrels for loading, and works smoothly and without requiring much force to open the gun and cock the locks, the great objection to other hammerless guns being the great force required to open them, but in the wedge-fast hammerless gun this objection is entirely overcome.

All the parts of the lock work are exceedingly strong and durable, especially the tumbler and sears. The locks contain fewer pieces than those of an ordinary gun (and the swivel, which is considered the weakest part of a gun lock, is altogether dispensed with), the needles or strikers and the nipples and hammers are also dispensed with, their office being fulfilled by the tumbler, the point of which strikes the cap of the cartridge. (See drawing No. 1, which shows the locks in a cocked position.

There is no half-cock, but in its place there is a safety bolt that works on the left side of the gun, as shown in the accompanying drawing.

This is exceedingly simple, and effectually bolts the triggers from behind. It can be worked by the thumb of the right hand whilst gripping the gun. For extra safety the triggers may be bolted before the gun is loaded, and the bolt can be withdrawn (in the act of raising the gun to the shoulder) by the thumb. We can also make this safety self-acting by connecting it with the lever that secures the breech action. In this case it is necessary to unbolt the gun each time before firing, which would by some sportsmen be considered an objection. We, ourselves, are in favor of the safety bolt not self-acting as being more simple in construction.

This gun has already been thoroughly tested by a number of first-class sportsmen, who have expressed themselves as being highly pleased with its mechanism and performance in the field.

Besides the actions and safeties already described, we make the Westley Richards & Co.'s gun as they themselves make it, at two guineas extra.

Gentlemen in search of hammerless guns should, before deciding, inspect the wedge-fast principal, as it will meet all the requirements that a sportsman can desire. We do not approve of the self-cocking guns with the hammers on the outside, as made by some of the London makers, as they possess no advantage over the ordinary gun.

St. Mary's Work, Birmingham, England. [*Adv.*

PIGEON MATCHES.

HOW TO PREPARE SCORES.—In sending their scores clubs are requested to give the following particulars: Place, date, name of club and of the competition, kind of trap used, distance of rise, boundary and rules governing. To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday, and earlier, if possible.

HIGH SCORES AT THE TRAP.

JACKSON, Miss., April 24, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I have noticed an advertisement of Mr. W. W. Greener in FOREST AND STREAM, in which he claims the shooting done by Mr. Cholmondley Pennell, at Monaco, in February, 1878, where that gentleman killed 19 birds out of 20, at say, 29 and 33 yards (London *Field* says 32) rise, as "acknowledged to be the best shooting on record." According to the report of the London *Field* the birds shot at were not fast birds, and the "only dashing, twisting blue rock easily eluded Mr. Pennell." At the Nashville Field Trials in December, 1877, Mr. E. T. Martin, in a match with Mr. Tucker, killed 19 birds out of 20 at 40 yards rise, the latter killing 20 birds straight at 31 yards. In "the second event," Mr. Martin in a match with Mr. Cheatham, the former killed 15 straight at 40 yards rise, the latter 12 out of 15 birds at 31 yards.

Please remember the shooting at Monaco was under the Hurlingham rules, allowing both barrels; at Nashville only one barrel was allowed with 1¼ oz. of shot. There are other scores on our record that would beat Mr. Pennell's, but I do not remember any but those of Messrs. Martin and Tucker. I am not a pigeon shot, and consider trap shooting but a sorry amusement, neither do I know any of the gentlemen above mentioned, and call your attention to the fact only because Mr. Greener's statement has been allowed to go unchallenged. Yours truly, GEO. C. ERWIN.

TRAP-SHOOTING EXTRAORDINARY.—Though not partial to pigeon-shooting myself, I have just received from Baltimore, Md., an account of the winning of a match over the traps well deserving a record in your widely circulating journal Mr. Donnel Swan, one of twin brothers—both of whom I saw shoot bay birds at Cobb's Island before they were in their teens—laid a wager with some friends of the Maryland Club, that he would score ninety-four out of a hundred birds at twenty-one yards rise. He used a 12-bore 7lb. Dougall gun, 3 drs. powder, 1⅛ oz. shot; 21 yds. rise, 80 yds. bounds, H and T plunge traps, with the following results, which, while it would be remarkable in a veteran professional, is really astonishing for an amateur: Killed straight, 27, missed 1; killed straight, 11, missed, 1; killed straight, 60; or 98 out of 100. The shooting was done inside of forty-six minutes. The shells were loaded by Alexander McConnas, who was selected by the parties to the match. It will be observed that he used 12-bore guns. No larger calibre is tolerated by the Maryland Gun Club, nor by the clubs of Europe This restriction should be adopted by our clubs generally, most of which, I believe, tolerate blunderbusses. The quail in this (Hamilton, Ohio) county, are exceedingly numerous this spring, and have already mated. F. G. B.

THROWING GLASS BALLS—*Editor Forest and Stream.*—In your issue of April 11 I notice "that S. A. Roberts did some novel shooting at glass balls at Buffalo," by having them thrown from behind him by another person. Over one year ago a friend and myself whilst at the pastime of glass-ball shooting were unfortunate enough to break the India rubber springs to our trap early in the sport, and were compelled to invent something to take its place, and before we had finished our morning's shooting we had, in my opinion, as excellent practice as it is possible to have, except at living flying birds. The method we adopted was the following: One of us stood close behind the shooter, who said "Ready," and as the ball was was discharged from the hand in any direction, the word "Fire" was at the same instant pronounced firmly and sharply by the person discharging it. You would be amused to see in how many directions the shooter often looked before he could get his eye, much less the gun, upon the ball. We found it very exciting, and the word "Ready" from the shooter and "Fire" from the lips of the one delivering the ball, out of sight of the shooter, seemed sufficient to cover all contingencies. To vary this, one of us paced twenty-one yards directly in front of the shooter, and then turning a direct right angle to the right, proceeded some twenty-five yards in that direction and discharged the balls (at the same words "Ready" and "Fire") across the shooter at directly a right angle to him. This we also changed by discharging the ball from the left toward the right in the same manner. The balls were thrown exactly as a base ball is delivered, and they passed with great speed through the air, and the direction of flight, especially in the

cross shots, was much more like the flight of a bird than balls thrown by a trap. The trajectory was not so curved and the flight was much swifter and more natural, the practice being, in our estimation, much more practical and natural than when balls are delivered from the trap. Let your readers try it, the exercise will do them good, and they will have to have sharp eyes to get on to the balls delivered from behind.

D. FRAZER.

LONG ISLAND GUN CLUB—MATCH AT CLUB GROUNDS.—*Dexter Park, Cypress Hills, L. I., April* 26.—Regular monthly contest for the championship of the club, shot for at seven birds each, from H and T traps, handicapped rise, 80 yards boundary, Long Island Shooting Club rules:

Lancake	21 yards	1 1 1 1 1 1	1—7
Broadway	23 "	1 * 1 1 1 1	1—6
Gildersleeve	25 "	1 1 1 0 1 1	1—6
Durfee	25 "	1 0 1 1 1 1	1—6
Madison	25 "	1 1 * 1 1 1	0—5
Dr Wynn	25 "	* 1 1 1 1 0	1—5
Thompson	21 "	0 1 1 0 1 1	1—5
D Byrne	21 "	1 1 0 1 1 0	1—5
T S Hinckley	21 "	1 1 0 1 0 0	1—4
Morton	21 "	1 0 1 1 0 0	0—3
Miller	21 "	1 0 0 0 1 1	0—3

Same Day—Sweepstakes shot for at three birds each, 25 yards rise, 80 yards boundary, L. I. S. C. rules.

Gildersleeve	1 1 1—3	Hance	1 1 1—3
Durfee	1 1 1—3		

Gildersleeve, Hance and Durfee divided first, second and third moneys.

Messrs. Broadway, Wynn, Miller, C. Hance, Hughes, Remney, Lancake, C. Williams, Thompson and Burdett each killed two out of three, and agreed to leave the deposition of fourth money to the best score in the next sweep.

Same Day—Sweepstakes, shot for at three birds each, 26 yards rise, 80 yards boundary. Ties shot off, miss and go out.

Broadway	1 1 1 1 1—5	P Williams	1 1 1 1 1—5
Miller	1 1 1 1 1—5	Wynn	1 1 1 1 0—4
Remney	1 1 1 1 1—5	Wyckoff	1 1 1 0
Lancake	1 1 1 1 1—5		

Broadway, Miller, Remney, Lancake and Williams divided.

Referee—Mr. Gildersleeve.

CHACK AMATEURS AT THE TRAP.—At Dexter Park, L. I., last Monday, a series of sweepstakes were shot at pigeons, 25 yards rise, 80 yards boundary, 1½ oz shot, H and T traps, the use of one barrel; ties shot off, miss and go out. Long Island rules to govern. The first match at 5 birds was won by Hughes with a clean score; the second match of 3 birds Williams and Atkins tied on clean scores and divided. Toll shooting was done by other contestants, ties and dividing being the order of the day.

HENDERMAN VS. MCGILL.—In a match shot at Columbusville, L. I., April 22, G. Henderman broke forty-seven out of fifty, and P. McGill broke forty-five out of fifty. McGill then killed seven pigeons straight.

L. E.

PALISADE GUN CLUB.—The formal opening of the club will take place in the latter part of May or the first of June. There are thirty-five members with the following officers: Captain A. Anderson, Pres; Captain Benjamin S. Payne, Vice-Pres.; Joseph J. Joutrass, Sec., and Captain Charles Dens, Treas.

Cohoes, April 28.—Match with Bogardus trap and balls.

L Lackman	1 1 1 1 1 0 0 1 1—7
A Grant	0 0 1 0 1 1 0 0 1 1—5
W Westover	0 1 0 1 1 1 0 1 0 0—5

Ties on five.

A Grant	1
W Westover	2

JERSEY CITY, *April* 27.—A Glass ball shoot was held on April 26, for the purpose of testing the glass balls designed by Mr. Read Gordon, of Roselle, was participated in by representatives of Elizabeth, Roselle and Central RR. shooting clubs:

First match, ten balls, 18 yards rise, Bogardus rules:

Central RR.

Clark	0 1 0 1 0 1 1 1 1 1—7
Houston	1 1 1 1 1 1 1 1 1 1—10
Quinn	0 1 1 0 1 1 1 1 0 1—7

Roselle.

Mulford	0 1 1 1 1 0 1 1 1 1—8
Shangle	1 1 1 1 1 1 1 1 1 1—10
Gordon	1 1 1 1 1 1 0 1 1 1—9

Elizabeth.

Dr Dart	0 1 1 1 1 1 1 1 1 1—9
Williams	1 1 0 0 0 0 0 1 1 1—5
Hall	1 1 1 0 0 1 1 0 1 1—6

Second match, cross-firing from right to left, 18 yards rise:

Clark	1 1 1 1 1 1 1 1 0 1—9
Houston	1 1 0 1 1 1 1 0 1 1—8
Quinn	1 1 0 1 1 1 1 1 1 1—9
Mulford	0 1 1 1 1 0 0 1 0 0—6
Shangle	1 1 0 1 1 1 1 1 1 1—9
Gordon	1 1 1 1 1 0 0 1 1 1—8
Dr Dart	0 1 1 0 1 1 1 1 1 1—8
Hall	0 0 0 1 0 0 1 0 0 0—2

Third Match—Shooter to walk toward traps, the man at trap pulls at any time he pleases after the shooter passes him.

Clark	0 1 1 0 1 1 0 1 1 1—7
Houston	1 0 1 0 1 1 1 1 1 1—8
Mulford	1 1 1 1 1 0 0 1 1 0—7
Shangle	1 1 1 0 1 1 1 1 1 1—9
Gordon	1 1 1 1 0 1 1 1 1 0—8
Hall	0 1 0 0 1 1 0 1 1 1—6
Williams	0 0 1 0 1 0 0 1 1 0—4

Fourth Match—Double balls, 18 yards rise, five pair balls.

Clark	00 01 11 10 01—5
Houston	11 11 11 11 00—8
Mulford	11 11 11 10 11—9
Shangle	11 11 10 11 11—10
Gordon	11 11 10 01 11—6
Williams	00 01 11 10 01—5

CENTRAL.

NEW JERSEY—*Marion, April* 20.—Fifth semi-monthly competition of Jersey City Heights Gun Club for the twenty-bird gold badge; three Bogardus traps ten yards apart; Bogardus rules; competitors handicapped.

J J Tolley	16 yds	1 1 1 0 0 1 1 1 1 0 1 0 1 1 1 0 0 w	
F M Thomson	21 "	1 1 0 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1	1—17
P W Levering	16 "	1 0 0 1 0 0 1 1 1 1 0 0 1 1 1 1 0 0 1	1—12
C H Y Pringle Jr	17 "	1 1 0 1 1 1 1 1 0 1 1 1 0 w	
G B Eaton	16 "	1 1 1 0 1 1 1 1 1 1 0 0 1 1 0 0 1 1 1	0—14
A Heritage	16 "	1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1	1—18
J Q Bird	14 "	1 0 1 0 0 1 1 1 0 1 0 0 1 1 1 0 0 0 1	0—10
J Beadden, Jr	14 "	0 1 1 0 1 1 0 0 0 1 1 1 1 0 w	
J A Van Gilder	15 "	0 0 1 1 1 1 0 0 1 0 1 1 0 0 1 0 0 1 0	1—10
J Harrison	13 "	1 1 0 1 1 1 0 1 0 1 1 1 1 0 1 1 1 1 1	1—18
J B Burdett	16 "	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1	0 0—16
F Cummins	16 "	1 1 1 1 0 1 1 1 1 1 0 1 0 1 1 0 1 1 1	1—16

On the shoot off, A. Heritage won gold badge.

NEWARK GUN CLUB.—Match April 27 for senior badge: Brentnall, 13; Le Roy, 12; A. B. Kay, 21; Miller, 13; Decker, 19; Duston, 19; Van Volkenburg, 15. The Amateur Gun Club shot for the Junior badge: C. Decker, 13 out of 15 balls; Gloze, 11; R. A Kay, 9; Montgomery, 7; Neelus, 9.

NEWARK GUN CLUB—*April* 27.—Kay's ball match, Bogardus trap:

Brentnal, 16 yds	1 1 1 1 0 1 0 0 0 1 1 0 1 0 1 0 0 0 1 0 0 1 1
1 0 1—13.	
Leroy, 20 yds	0 1 1 0 0 0 0 0 1 0 1 1 0 1 0 0 1 1 1 1 0 1
0 1 0—12.	
Kay, 20 yds	1 1 1 0 0 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1
1 1 1—21	
Miller, 16 yds	0 0 1 0 0 0 0 1 1 1 0 0 1 1 1 1 1 1 0 0 0 1
0 1 1—13	
Decker, 19 yds	1 1 0 1 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 1 1
1 1 0—19.	
Duston, 19 yds	1 0 1 1 1 0 0 1 1 1 1 1 1 1 1 0 1 1 1 0 1
1 1 0—19.	
Van Vinkenburg, 10 yds	1 0 1 0 1 0 0 1 1 0 1 1 0 1 1 0 1 1 1 1 1 0
0 1 0—15.	

Weekly shoot of Newark Gun Club for gold badge.

M. R.

MORRISTOWN GUN CLUB—*Morristown, N. J.*—Regular monthly pigeon match for club gold medal, 21 yds. rise, 80 yds. boundary:

Riggott, 25 yds	0 0 1 0 0 w
Beam	0 0 0 1 1 1 w
C H Raymond	1 0 1 1 1 0 w
Jack Steward	1 1 0 1 1 1 0
Fuller	1 1 0 1 0 w
Albro	1 1 1 1 0 0 1
Ayers	0 0 0 0 0 w
Quimby	1 1 1 1 1 1 0
Leek, 25 yds	1 1 0 0 1 1 1

Quimby won the badge.

Sweepstakes matches were won by Quimby, Beam and Quimby.

PENNSYLVANIA—*Dillsburg, April* 25.—Twenty-one yards rise, 80 yards boundary; birds good flyers.

J C Rupp	0 1 1 1 1 0 1 1—6
J J Ringwalt	6 1 0 1 1 1 1 0—5
F McCleary	1 1 0 0 1 1 1 0—5
P Uhler	0 0 1 0 1 1 1 1—5
R Moore	1 1 0 1 1 0 0 1—5
S Hauck	0 1 0 1 1 1 0 1—5
J D Rea	0 1 0 0 1 1 1 1—5
D Brandt	0 1 0 1 1 0 0 1—4
J Hamer	0 0 1 1 0 1 0 1—4
Dr J C Slyder	0 0 0 0 1 1 1 1—4
Geo D Keller	1 0 0 1 1 0 0 0—3
M Bailey	1 1 0 0 0 w —2
Scheaffer	1 0 0 0 1 w —2
B Uhrich	0 0 0 1 w —1
Allison	0 0 0 0 w —0

Rupp won first purse, ties for second and third—divide.

Second Match, Same Day—Glass balls, 21 yards, Bogardus' trap and rules to govern.

J C Rupp	1 1 1 1 1—5	S Bauck	0 0 1 0 1—2
D Brandt	1 1 0 1 1—4	M Bailey	1 0 0 0 0—1
Dr Bailey	1 0 1 0 1—3	D Uhrich	0 0 0 0 1—1
Hoffman	1 0 1 0 1—3	J D Rea	0 1 0 0 1—1
J Ringwalt	1 0 0 1 0—2		

Rupp won first purse, Brandt second, and ties for third—divide.

Third Match—Same day.

Ringwalt	1 1 1 1 0 1 1 1 0 1—8
Rupp	0 1 1 0 1 1 1 1 1 0—7
McCleary	0 0 1 0 1 0 1 1 1 1—6
Brandt	0 1 1 0 0 1 1 1 1 0—6
Uhrich	0 0 1 0 0 1 1 0 0 0—3
Uhler	0 0 1 1 1 0 0 1 1 0—5
Hoffman	0 0 0 0 0 0 1 1 0 1—3
Dr Bailey	0 0 0 1 0 1 1 0 0 0—3
M Bailey	1 0 0 0 0 1 0 0 0 0—2
Hamer	0 1 0 0 0 0 1 0 0 0—2
Noble	0 0 0 0 0 0 1 0 0 0—1
Rea	0 0 0 0 0 1 0 0 0 0—1

Ringwalt won first money, Rupp second and Brandt third.

Fourth Match.

Rupp	0 1 1 1 1—4	Ringwalt	0 0 1 0 1—2
Noble	1 0 0 0 0—1		

Rupp won purse.

SCHELL.

SEMPER FELIX CLUB—*Philadelphia, April* 22.

Dr C T Smith, captain	* 1 * 1 1 1 * 1 1 * 1 1 1 1 1 1 1 1 1 1 * * *
1 1 1 * 1 1 *—20.	
Richard N Wallace	* 1 * * * 1 * * 1 1 * * 1 1 1 * * * * * * * 1
* 1 * * 1 1 1—12.	
Henry Wright	* 1 1 * 1 1 1 1 1 1 * 1 * 1 1 1 1 * 1 * 1 1
1 * 1 1 1 * 1—22.	
T Barnewitz	* 1 * 1 1 1 1 * 1 1 * 1 * * 1 1 * * 1 1 * 1
1 1 * * * 1 1 1—18.	
T P Summers	* * * * 1 1 1 1 * 1 1 * * * * * 1 1 1 * * 1 1
* * 1 1 1 1 *—15.	

Regular weekly match; eighteen yards rise.

Dr C T Smith	1 1 1 * 1 1 * 1 1 * 1 1 1 1 1 1 1 1 * 1 1 1 1 1 1
1 1 * 1 1 *—24.	
Dr M A Wood	* 1 1 1 1 1 * 1 1 * 1 1 1 * 1 1 * 1 1 1 1 * 1 * 1
1 * 1 1 1—22.	
Henry Wright	1 1 1 1 1 1 * 1 1 1 * 1 1 1 * * 1 * * 1 1 1 1 1 1
1 1 1 1 1 - 24.	

G. H. S.

FOREST AND STREAM CLUB—*Philadelphia, April* 25.—Score:

Jno E Roberts	0 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 1 1— 4
A N Capper	1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1—17
Dr W W Fulton	1 0 0 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1—15
Jno C Handcock	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—18
Harry Shepperd	1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 0 1—15
Theo Glasgow, V S	1 0 0 0 0 0 1 0 0 1 0 0 1 1 1 1 1 1 1—10

CANADA—*Strathroy, April* 15.—Glass balls; Bogardus trap:

A Johnston	1 1 1 1 0 1 1 1 1 1—9
Jno Paine	1 1 1 1 0 1 1 1 1 0—8
Jno Saul	1 1 1 1 0 0 0 1 0 0—5

April 16.—Glass balls.

A Johnston	1 1 0 1 1 1 0 1 1 1—8
Jno Paine	1 0 1 0 0 1 1 0 1 1—6
L B Smith	1 1 1 1 1 1 0 0 0 0—6
Mr Beally	0 1 1 1 1 1 1 1 0 1—8
Mr Kent	0 1 0 0 0 1 1 0 0 0—3
Jno Saul	0 0 0 0 0 0 0 1 0 0—2

Friday, 19.—Pigeons, 21 yards rise, 80 yards boundary.

A Johnston	1 1 0 0 0—2	Jno Saul	0 1 1 1 1—4
Jno Paine	1 1 1 1—5	Wm Saul	1 0 1 0 1—3
Mr Despard	0 1 1 1—4	L H Smith	0 1 1 0 1—3

Glass balls; Bogardus trap, 21 yards rise.

Jno Saul	1 0 1 1 1 1 0 1 1 1—8
A Johnston	1 1 1 1 1 1 0 1 1 1—9
Jno Paine	1 1 1 1 1 1 1 1 1 1—10
Wm Saul	1 1 1 1 1 0 1 1 1 1—9
Mr Despard	1 1 1 1 1 1 0 1 1 1—9
L H Smith	1 1 0 1 1 0 1 1 0 1—7
Master Richard Smith	1 1 1 1 1 0 0 1 0 1—7

No ties shot off.

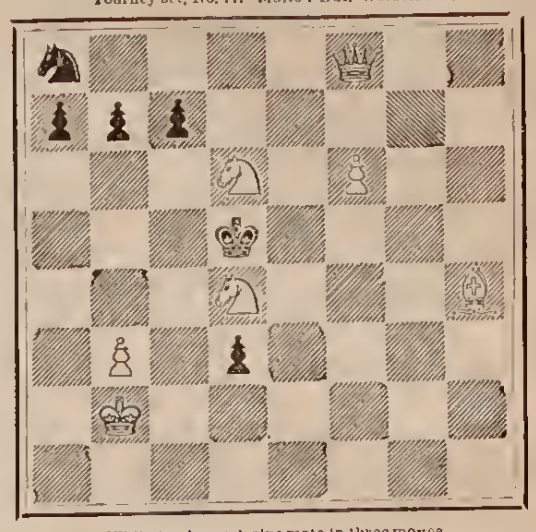
ANGELS.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 15.

Tourney set, No. 11. Motto: Auf. Weiderseln.



White to play and give mate in three moves.

SOLUTIONS TO PROBLEMS—NO. 12.

1—Q tks Kt ch	1—B tks Q
2—Kt tks Kt ch	2—K-K4
3—B mates	Several other variations.

Game No. 50.—PETROFF DEFENCE.

This and the following games of the same opening are translated from the *Handbuch:*

White.	Black.	White.	Black.
1—P-K4	1—P-K4	9—Q-Q Kt3	9—Kt-Q B3
2—Kt-K B3	2—Kt-K B3	10—B-Q B4	10—Kt-Q R4
3—Kt tks P	3—P-Q3	11—B-Q Kt5 ch	11—B-Q2
4—Kt-K B3	4—Kt tks P	12—Q-Q R4	12—B tks B
5—P-Q3	5—Kt-K B4	13—Q tks B ch	13—Kt-Q B3
6—P-Q4	6—P-Q1	14—Castles	14—Q-Q Kt3
7—P-Q B4	7—P-Q B4	Even game.	
8—P tks Q P	8—Kt tks P		

Game No. 51.—PETROFF DEFENCE.

White.	Black.	White.	Black.
1—P-K4	1—P-K4	10—Q-Kt3	10—P tks B P
2—Kt-K B3	2—Kt-K B3	11—Q tks Kt P	11—P-Q B3 (b)
3—Kt tks K P	3—P-Q3	12—B tks Kt	12—B P tks B
4—Kt-K B3	4—Kt tks P	13—Kt-K Kt5	13—B-K B4
5—P-Q4	5—P-Q4	14—Kt-Q B3	14—Q-Q2 (c)
6—B-Q3	6—B-Q3	15—Q tks Q	15—Kt tks Q
7—Castles	7—Castles	16—Kt tks K P	16—B-B3
8—P-Q B4	8—B-K3	17—K R-K	
9—Q-Q B2 (a)	9—P-K B4	White has the best game.	

NOTES.

(a) This move was adopted by the Pesth Club in a game with the Paris Club. The best move, however, is 9—Kt-K B3.

(b) If 11—B P tks Q P, then 12—Q tks R, 12—P-K Kt4; 13—Kt-Q B3, etc., and White has the advantage.

(c) 14—B-B is not advantageous.

Game No. 52.—PETROFF DEFENCE

The first ten moves are the same as in the preceding game:

White.	Black.	White.	Black.
11—Q tks Q Kt P	11—Kt-Q2	15—Kt-Kt5	15—B-Q1
12—B tks Kt	12—R-Q Kt	16—Kt-Q B3	
13—Q-R6	13—R-Kt3	White has the best game.	
14—Q-Q R1	14—P tks B		

Game No. 53.—PETROFF DEFENCE.

The first twelve moves are the same as in the above game:

White.	Black.	White.	Black.
13—Q tks R P	13—P tks B	17—Kt-K R3	17—Kt Kt5
14—Kt-Kt5	14—B-Q1	18—P-K Kt3	18—Q-K (a)
15—Q-Q R5	15—Q Kt-B3	Black has the best game.	
16—Q-Q B3	16—P-K R3		

NOTES.

(a) This variation is continued as follows; 19—Kt-K B4, 19—B tks Kt; 20—B tks B, 20—Kt tks R P; 21—K tks Kt, 21—Q-R4 ch; 22—K-Kt, 22—R tks B; 23—P tks R, 23—P-K6; 24—P-B3, 24—Q tks B P, etc.

Game No. 54.—PETROFF DEFENCE.

The first ten moves are the same as in the above games:

White.	Black.	White.	Black.
9—R-K	9—R-K	14—Q-Q Kt3	14—Q-Q B
10—Q-Q Kt3	10—P tks B P	15—B-K3	15—P-Q B3
11—B tks P	11—B tks B	16—Q R-Q B	16—Q-Q2
12—Q tks B	12—Q Kt-Q2	Even game.	
13—Kt Q B3	13—Q Kt K B3		

Game No. 55.—PETROFF DEFENCE.

The first five moves are the same as in the preceding games:

White.	Black.	White.	Black.
6—B-Q3	6—P-Q B4?	11—Kt-Q B3	11—Kt tks B P
7—P-Q B4	7—P-K B4 (a)	12—Q-R4 ch	12—B-Q2
8—Castles	8—P tks B P	13—Q tks Kt	
9—B tks P	9—Kt-Q B3	White has the best game.	
10—P-Q4	10—Kt-Q B4		

NOTES.

(a) If Black play 7—Kt-Q B3, or 7—P tks Q P, then White Castles.

A THEOLOGICAL HIGH KICKER.—They don't play football at Andover Theological Seminary any more. Last season the game was in great favor there, and the advocates of muscular Christianity entered with most commendable zeal into the giddy pedal propulsion of the inflated sphere. One day when the sport was at its merriest, a burly six-feet-three Middler delivered a frantic kick with both feet, propelled himself to the height of several yards into the air, and fell in a confused mass upon the bosom of mother earth. The doctor set the two broken bones of one leg, and applied plasters and bandages to the other injured members, and the various benevolent ladies' associations of the village cared for the invalid through several weeks of anguish. So they don't play football any more—because they never found the ball.

LOCUSTS AND WILD HONEY.

Rev. Myron W. Reed, of Indianapolis, recently read before the Saturday Night Club, of that city, an essay on "The Shooting Mania." Mr. Reed betrays a thorough appreciation of, and participation in, the sportsman's spirit. He has succeeded in telling, not without a great deal of genuine humor, so much truth about this same shooting mania, that we need make no excuse for introducing him to the wider and equally appreciative audience, which he will find in our readers:

"Some men and dogs are gun-shy, but the rule is otherwise. The boy-baby tends toward a gun with native drift and instinct. There are people who, failing to catch the whooping-cough in childhood, are caught by it late in life. These have it 'hard.' So with shooting. A man may lead a blameless existence until the white dust of the road of life is in his hair, and then fall. The gun malady will utterly possess him. The outward symptoms are, a new and absorbing interest in sporting literature; he subscribes for the FOREST AND STREAM; he sends his measure to Holabird for a suit of dead-grass-colored raiment. It is 'borne in upon him' that he must have an English gun and a liver-colored dog. He studies geography that he may know where marshes are, and wheat-stubble and other likely places for birds. Railroads are of interest to him, as they tend toward these happy hunting grounds. When there is no shooting by reason of the law or the season, it is no small satisfaction to him to clean his gun. He has been known to use up all the sewing-machine oil in the house—dividing it between the locks of his weapon and the sitting-room carpet; doing this on 'off nights,' when his wife was absent at prayer-meeting.

"All railroad trains that will take one to shooting grounds leave sometime between midnight and morning. The immediate family of the hunter are not altogether disinterested in this arrangement. On the night preceding his departure the watchman thinks from the light in the dwelling that there must be somebody sick inside, and there is. The whole household is sick, and it is an inexpressible relief when the spring-lock clicks behind the shells and gun and dog and man on their way to the station. An alarm-clock is a good thing for a shooting man to own. It would be better if one could remember whether he had set it or no. What with the night's vigil and breakfast eaten off the mantel-piece at an hour when no human being has an appetite, the hunter looks pretty haggard as he delivers his dog to the baggage master. It is the hour of night when the vital powers are at their lowest ebb. It is the hour when most people die. The atmosphere of the ordinary car at that hour is not bracing.

"Trains that carry men to good shooting grounds are all slow trains. The roads that lead thither are well provided with junctions. Some hunters are entertained at private houses, some at club houses, some live in tents. The private house, in the writer's memory, had a bed-room for six, and the sportsmen slept two in a bed, and between the beds—beds of feathers brought from the old country. The effect of this to one unaccustomed is peculiarly stimulating. Of six men one may be counted on to snore ably and with continuity. Club-houses vary in quality of comfort, and mere mention of tent life in November is enough. No use to paint the lily.

"The early bird catches the worm. To catch the early bird the sportsman habitually has his breakfast in the night. To dress is to pull down his cap and get into a pair of clammy rubber boots. He takes down his cold gun and staggers out to his boat. It is sharp at both ends, and shallow and narrow. The more uncomfortable it is the better duck boat it is. Four o'clock sees the hunter on his favorite bog, pounding himself to keep his blood a-going, and waiting for ducks to come to him. There is an uncertainty about their coming. A sportsman has been known to sit a long morning singing a variation on Tennyson's "He cometh not, she said." Maniacs have been known to pace the seashore for years looking for ships to come in that have long gone down. The sportsman must have a patience kindred to that. It is forbidden him to pace the shore. He must suffer and be still. The sailor hauling frozen ropes suffers, and the soldier in the ditch suffers. They are hired to suffer. The sportsman pays ten dollars a day to work harder than he ever did to earn fifty; lives and suffers like an Indian, and does it for fun. Quail shooting hath this in it; that it exercises the whole man. No curling up on a cold day waiting for them to come. They are most likely to be where there are burs. One day's shooting will give employment for the rest of the week for the whole family in picking Spanish needles out of one's garments and flesh. It would facilitate the movements of the hunter and add greatly to his comfort if the farmers would, in building fences, be careful to have the top rail flat and the fence not quite so steep. If the top rail could be upholstered it would not be so trying. The occasional introduction of a stile, similar to that on which the Irish emigrant and Mary sat side by side, would meet a long-felt want.

"Quails do not fly properly. They lack unity. Instead of scoring for a start they go any way, and by the time the hunter has selected his bird and leveled on him, he looks too young to shoot, and the hunter spares him. Quails must be taught to conform their line of flight to the direction indicated by the gun, or else a gun must be built that will take in more surface. Something modeled after the pattern of a mountain howitzer would be efficient. The novice at quail shooting ought always to hunt in company with abler men, fire when they fire, and if any birds drop, claim them. It requires as much nerve to retrieve birds as it does to shoot them. If one cares at all about making a show of game to his wife and children, he must learn to retrieve. It is astonishing how much lead a quail can carry and fly. I have seen one, handicapped with the loads of seven barrels, make for the woods like a streak of brown lightning. In war one man is wounded or killed to every five hundred bullets shot in his direction. The life of a quail is a better risk than that of a soldier. Many a quail sits and sings "more-wet," with the emphasis on wet, who has been caught in a hail-storm of shot and never lost a feather.

"A cross between the quail and the common farm-yard hen is the ideal game bird. Then let there be coveys of this bird taught to have their habitat in some dry, pleasant grounds, say "Central Park," where the sportsman can go after a late breakfast in a hack.

"While I am writing this there are men who leave their slippers and their firesides and their wives and children, forsaking all these to stand on bleak runways, in six inches of snow, in northern woods, waiting for a deer a day to pass them on a run. One chance in a winter a day for a shot by a shivering man at a vanishing deer! It is the allurement of hardship that draws. Men tire of an easy, comfortable existence, and must taste the tonic of frost and hunger and weariness—taste it until they have sympathy with Esau, who, coming in from hunting, and smelling hot soup, sold his birthright for a plateful. Curious it is how the memory of the disagreeable becomes dim. One thinks of the camp-fire, the pleasant company and the soothing pipe, and forgets the sleet, the chill, the fatigue and the ill luck. As a cold, historic fact, we remember that he never went on a hunt for fish or for game that he did not some time in the course of it call himself an idiot for coming. Nevertheless, that fact has no restraining power. He will go again and again. The native drift and instinct has come to him through a long line from grandfathers who had to hunt, and who sent the habit down. It is stronger than any personal experience, any skepticism of wife or child. Whatever it is in fact, pleasant is the memory of the bed of boughs and the crisp air of the morning. Pleasant is the remembered curl of smoke from the ambush of the hunter. The man who had a sore heel on a tramp always speaks of it with a grin."

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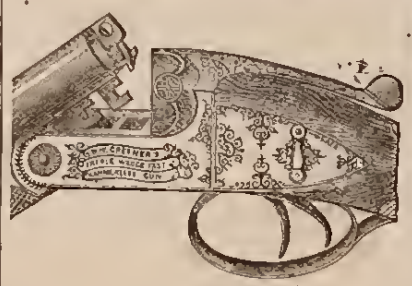

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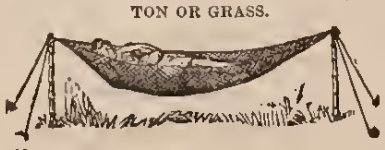

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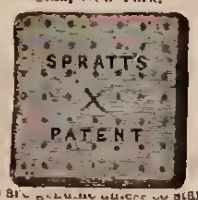

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A gentleman will be happy to enter into correspondence with any party with the view of establishing Decoy Ponds for taking wild fowl in large quantities, having had great experience in England, where he was very successful. The thousands of wild ducks that resort in winter to some of the Southern States can be made a source of great wealth at very moderate expense. The price of wild fowl in both the English and American market will justify any one entering into the enterprise. Address E. C. D., New Glasgow, Nova Scotia. apr18 3t

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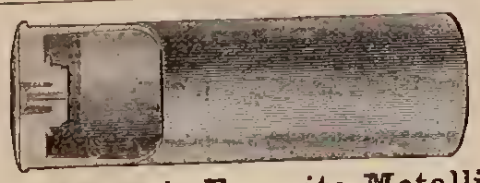

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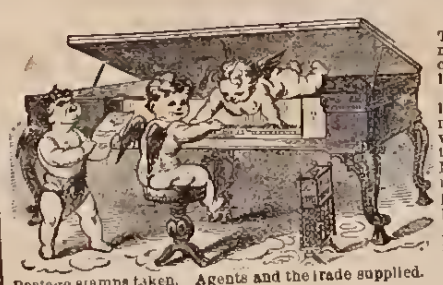

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Three-Piece Fine Hand-made Trout Fly Rod, Lancewood Middle-Joint and Tip, $5 each; German silver mounted, with two tips, $8, extra fine quality, $10 each.

Trout and Bass Flies tied to any pattern. Scarlet Ibis, Ferguson, Grizzley King, and all leading Bass Flies for casting and trolling. Trout Flies selected for any locality. Buell's, Mann's, and other makes of Trolling Bait from 25 cents to $1 each.

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STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

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Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

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also reach the best localities for

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Sportsmen who have cast a fly, or trolled a spoon in the

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In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

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By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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TROUT FISHING good this month.

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TELESCOPES, FIELD, MARINE and OPERA GLASSES MICROSCOPES, SPECTACLES and EYE GLASSES, ARTIFICIAL HUMAN EYES, Etc.

is really wonderful. Illustrated catalogue mailed on receipt of postage of four cents.

ESTABLISHED 1840.

Sportsmen's Goods.

A
WHITE RIBBON,
Blue Ribbon
AND
SILVER MEDAL

Were awarded to Messrs. G. W. SIMMONS & SON, of Boston, Mass.,

Through their agents and exhibitors, Messrs. Brown & Hilder, of St. Louis, Mo., at the Exhibition of the "St. Louis Bench Show and Sportsmen's Association," for an unusually fine display of Duck, Moleskin and Leather

HUNTING SUITS,

which attracted great attention and were much admired by all Sportsmen.

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SHOOTING SUIT.

Manufactured only by

G. W. SIMMONS & SON,
BOSTON, MASS.

NEW YORK AGENTS:

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200 BROADWAY,
The Best in Use.

ONLY ONE QUALITY MADE, AND THAT IS THE VERY BEST.

Flexible Waterproof, Tan-Color Duck.

Each article—coat, trousers, vest and hat cap—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

We make no discount except to the trade. The price of the suit complete is $13.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

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This is what one of our best sportsmen says of it, writing from camp: "Although I had been nearly eight hours under incessant rain, laboring and striving along under adverse circumstances, yet I found myself comparatively dry, and my clothes without a tear. For the benefit of our brother sportsmen, let me advise one of Messrs Simmons' (of Boston, Mass.) Waterproof Suits. Oh! what a relief it was to find one's tobacco was dry, and that one could light a pipe; that you could laugh at your miserable friend, who stood shivering and shaking as if he had the palsy; and then, next morning, oh! what fun it was to see him mending his clothes, while I had not a tear to complain of! Ventilation, that great bugbear of waterproof suits, is legislated for in the most ingenious manner. No sportsman should fail to supply himself with a suit which is at once cheap, practical, and will last an almost indefinite time."

Our Flexible Tan-Colored Water-Proof Leather Coats, Breeches, Vest, Leggings and Caps are considered the finest things ever made.

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WATERPROOF DUCK.

Suits, $13

Coat	$6 50
Pants	3 50
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Cap or Hat	1 50

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Coat	$14 00
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Pants	15 00
Vest	12 00
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An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

OUR HUNTER'S TENTS made of tan-colored duck; light; easily transported. Size, 7 ft. x 7 ft. Price, $10, complete. Made on the umbrella principle, folding into a neat roll, 4 ft. long.

OUR PATENT DECOYS have entirely superseded the old-fashioned, cumbersome, wooden decoys. The birds are hollow, and six of them occupy about the space of one wooden decoy.

Address,

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The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

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Cleans fifty shells in ten minutes. No water used. Knives elastic, self-adjusting, prevent the slipping of wads. Is unequaled as a breech wiper by cover-loglwith an oiled cloth. For sale by all gundealers, or sample sent free by mail on receipt of price, $1.50; 10 and 12-bore. J. F. RONAN, 788 Shawmut avenue, Boston, Mass. Liberal discount to the trade.

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25 to 1000 yds. range.

Target Pasters and Score Cards.

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Targets & Pads

For testing the pattern and penetration of Shot-Guns

Sold by Dealers in Sporting Goods.

On receipt of Ten Cents a 100 yd. Target will be sent by mail, with Circular, containing *Major Henry Fulton's* RULES FOR PRIVATE PRACTICE, by

DENNISON & CO.,
Mar14 3m 196 BROADWAY, NEW YORK.

LOST

BECAUSE HE HAD NO

COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union takes pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schnetzen Park, Union Hill, on

Monday, June 24, 1878,

at 11 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

H. BEHRENS, Cor. Sec., 37 Bowery, New York.

United States Cartridge Company,

LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and to use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

Cartridges for Target Practice.

Send for Illustrated Catalogue.

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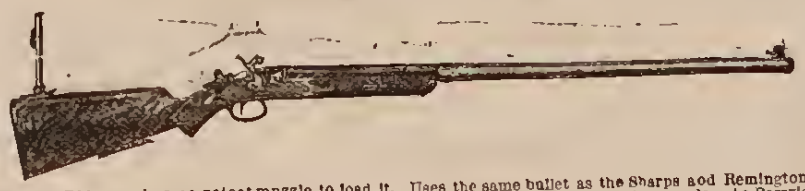
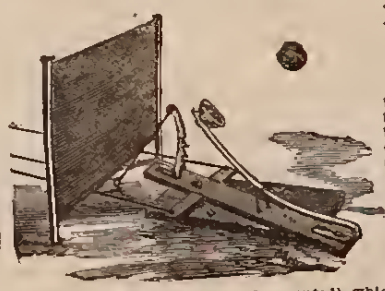
Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.



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These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. Price $8. Old Style, $6.

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Dec6 tf

IRA A. PAINE'S

FEATHER FILLED GLASS BALL.

PATENTED OCTOBER 23, 1877.

The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade

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W. W. Greener's Champion Treble Wedge Breech-Loader.

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At the internationat pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £105, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1875, beating 102 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,328. BEWARE OF INFRINGEMENTS OR IMITATIONS.

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Sportsmen's Goods.

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Fishing Pants, Coats, Leggins and Boots,

RUBBER CAMP BLANKETS,

COMPLETE

SPORTING AND CAMPING OUTFITS,

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India Rubber Goods of Every Description.

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For Guns, Cutlery and Surgical Instruments. Safe to handle, WILL NOT GUM, and will keep in any climate. Sportsmen everywhere in the United States pronounce it the best gun oil in the market. Judge Holmes, of Bay City, Mich., writes: "It is the best preparation I have found in thirty-five years of active and frequent use of guns."

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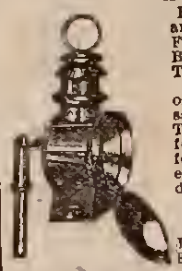
CANNOT BE SENT BY MAIL.

BOUDREN'S PATENT COMBINATION

Jack, Dash and Fishing LAMP.



For NIGHT HUNTING Deer and other animals, SPEARING FISH. Indispensable on any Boating, Yachting or Camping Trip.

Not affected by Wind, Rain or Jolting. Burns kerosene safely without a chimney. Throws a powerful light 200 feet ahead. As a DASH LAMP for CARRIAGES it has no equal. Fits on any shaped dash or on any vehicle.

PRICE.

Jack and Dash.....$6 00
Fishing Lamp..... 8 00

O. O. D., with privilege of examination.

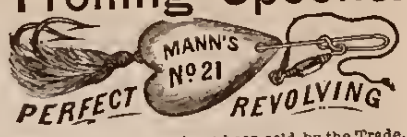
WHITE M'F'G COMPANY,
Jy12 tf BRIDGEPORT, Conn.

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address True & Co., Augusta, Maine.

Fishing Tackle.

MANN'S

Trolling Spoons.



Our Trolling Spoons have been sold by the Trade, and used by the best fishers in the United States for fifteen years.

We have continually added, year by year, new spoons, such as by actual experiment and trial have proved the best Spoons for taking fish. We now manufacture 59 different kinds.

OUR PERFECT REVOLVING

has proved to be the best Trolling Bait ever manufactured.

Dealers will please send for catalogue. We prefer the dealers to sell these Spoons at retail, but if not to be found at your fishing-tackle stores they will be sent by mail for one dollar each by addressing

JOHN H. MANN,
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Split Bamboo Rods.

THE ORIGINAL HEXAGONAL RODS.

The superiority of the Fowler Rod, AS IT IS NOW MADE, is beyond comparison with any of the imitations offered by parties in the trade.

Samples of my ROD may be seen at

JOHN W. HUTCHINSON'S,
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A. H. FOWLER.

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OCTAGONAL AND ROUND

EIGHT STRIP SPLIT BAMBOO

Fishing Rods.

Made of the most carefully selected Calcutta Bamboo; every piece having an imperfection being rejected. They are mounted with the best German silver nickel-plated joints and reel plates, which never tarnish.

Rods of any desired weight or length made to order. Every portion of the rod is made under my personal supervision.

I will send a rod to any address C. O. D., with privilege of examination before paying for it. See endorsement in "Forest and Stream and Rod and Gun." Four varieties of rod made.

H. P. BUCKINGHAM,
24 Broad St., Utica, N. Y.

may2 tf

FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MAY 9, 1878.

Volume 10.—No. 11. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

THE LOON.

A LAKE dark and lonely, from Nature's own hand,
Midst high towering mountains, wild, savage and grand,
Lies hidden secure, in its framework of green,
And reflects every object—rock, forest and stream.
From its dark surface oft, at close of the day,
Comes a cry, loud and shrill, from a far distant bay.

The sweet, timid doe, from the fastnesses still,
Seeks its lone sandy shore, to wander at will;
To nip tenderly leaves, bright grasses green,
And to playfully wander, a brown forest queen.
She listens! Again comes the sound loud and clear,
In shrill clarion tones to her listening ear.

The lone hunter sleeping 'neath rough-slant of bark,
In the shade of the forest trees, sombre and dark,
Is roused from his slumber when daybreak is near;
With his head raised he listens! What sound strikes his ear?
Far off on the lake, 'mid the darkness and gloom,
He hears through the forest the cry of the loon.

With voice of a fiend comes that sound from the gloom,
Now laughing, now shrieking, like ghost from the tomb;
Now, taunting, now crying, now screaming like mad,
As he rocks on the waves of the lake, free and glad.
He rouses the wolf from his brush tangled lair,
And laughs, Ha! ha! ha! in the lightning's red glare.

At crack of the rifle, down under the wave
Like a flash he is gone—to a watery grave?
No, no! See, he rises and shakes his black wing,
And he floats free as air; on the wave he is king.
Yes, king of the solitude, king of the wave,
Then hurrah for the bird so blithesome and brave.

When the Storm King's abroad and wild breakers dash,
Oh, he laughs and he screams at the thunder's loud crash;
In the elements dire he is king of the wave,
The wind and the waters his black plumage lave.
Then hurrah for the bird of the wilderness wild,
In darkness and tempest thou'rt Nature's own child.
Oh, bird of the woods and the waters so wild,
Thy praises I'll chant, thou true Nature's child.

Windsor, Conn., April 7, 1878. BALSAM.

Scenes in the Choctaw Nation.

No. 3.

NEXT morning, after picking up our traps, we searched all around the glade for some sign of our road, but without success, and as the next best thing we could do, we struck through the woods in a north-east direction, knowing that we would in time strike some regular trail. We had no compass, and the sun was not up when we started, but we easily told our position by the moss on the tree trunks. In Marcy's "Army Life on the Border," I find the following paragraph relative to this mode of guidance:

"It is said that the moss upon the firs and other trees in Europe gives a certain indication of the points of the compass in a forest country, the greatest amount accumulating on the north side of the trees. But I have often observed the trees in our own forests, and have not been able to form any positive conclusion in this way."

My experience in this respect has been different from Col. Marcy's. I paid particular attention to this point during this journey, and noticed that every tree which had moss on at all,—and most of them had more or less had the greatest amount on the north side of the trunks. These trees were mostly oaks, and perhaps in forests of other trees the rule would not hold good.

After travelling for several miles we met with an agreeable surprise in the shape of a traveled road; that is, a road in which were visible the tracks of wheels. It was the first sign of real progress we had seen in the Nation. We did not of course know whether this road led to Graham's Ferry, but we determined to follow it. It was fortunately the right one, and after a short ride along it, we arrived at Little River. This stream was not very wide, only about twenty yards or so, but the current was rather strong, and the water was apparently very deep. It ran behind steep banks, in which gulches had been cut to enable travelers to reach the ferry.

A short distance from the river bank was the hut of the ferryman, a very intelligent Choctaw, who spoke English tolerably well. His wife was a veritable squaw, a *fac simile* of those we had met on the road between Red River and Shawnee Town. There were, however, several bright-eyed boys, and one girl of about twelve years, who might well be called good looking, despite the coppery hue of her skin. Her features were regular, and her eyes were as large, dark and lustrous as a fawn's. If she retained her beauty for another decade one might easily imagine her a heroine of some border romance. Even young as she was, her superior appearance partially redeemed the whole red race from the not very favorable opinion I had formed of them. The old man and his boys ferried us across the river, and gave us directions as to the road to McCain's store, which he said was about twelve miles distant. He also gave us a couple of pounds of cold venison, for which, as well as for the ferriage, we paid him the customary "two bits."

After leaving the ferry the road was easily followed, and we saw much to interest us. The houses (log) became more numerous, and many of them were inhabited. We saw a number of corn fields, some of them surrounded with rude rail fences. In these fields we noticed Indians, male and female, engaged in cultivation. We noticed that invariably the men were better looking than the women, and some of them might have even been called handsome. Some of these corn fields were in natural openings, or glades in the woods, while others were planted in "deadenings," a method of clearing greatly in vogue in the wooded districts of the southwest. The settler selects the ground for his farm, and then, instead of cutting down the trees, kills them by cutting a circle around the trunk deep enough to prevent the upward and downward flow of the sap. Land cleared in this manner is called a "deadening," and is equally as available for cultivation as though the trees had been cut down, while the labor involved is infinitely less.

About noon we reached the Arkansas line, and just across it was McCain's store, known to map makers as Ultima Thule. It consisted, so far as we could see (we didn't explore the suburbs), of a single farm house, with the store building about a mile distant, and not another building within sight. A negro whom we met directed us to the store, and we rode up to it, though it was somewhat out of our route. We found it filled with loungers, whites and Indians, who stared at us as we entered, as though we had been persons of some importance. The store was a regular museum, and its contents, having nearly everything one could wish to purchase, or at least, that was likely to be called for in such a jumping-off-place as Ultima Thule. The only eatables they could furnish, however, were soda crackers, and there was not an implement in the store with which we could extract the broken tube from Nichols' rifle. We purchased some crackers, and took a lunch while our ponies were resting. During lunch we made a calculation. We had not brought much money with us, expecting to live principally by our guns, which, we had been assured, could easily be done, and on counting up our change we found that between us we had exactly seven dollars and forty-three cents, with which to reach St. Louis, a distance of nearly five hundred miles! Thus far the game had not shown itself, and now that my rifle was lost, and that of Nichols' broken, it would not matter whether we saw any game or not. Our only dependence for food was now our ready cash, and this was disagreeably scarce.

Our route from this time on lay over mountains of igneous rocks, pieces of which, strewing the road, made sad work with the unshod hoofs of our ponies. Near the summit of one of the mountain ridges, we passed a small scrubby oak tree heavily festooned with Spanish moss. It stood all alone, and seemed out of place so high up, and so isolated from all its kin. I did not know that the *Tillandsia usneoides* grew as far north as this, for it had always been associated in my mind with live oak swamps and everglades. It might, however, have been planted, or transplanted, in this place by accident. We saw no other specimen during our journey. Traveling along slowly, we were overtaken by another traveller who carried a pair of enormous saddle bags, each of them containing a water-pail full of groceries. He informed us that he worked in a mine up in the mountains, and made pretty good wages. The metal obtained was principally copper, though small amounts of gold had been found. He said the woods around here were full of game—deer, bear and panther—and that a small village not far off had been named Panther from the abundance of those animals in that neighborhood.

All that day and the next we met with nothing of interest, if I may except the purchase of six eggs at an old hut, and two of which proved to be rotten. The people in the few houses we passed seemed extremely poverty stricken, and could rarely spare us anything to eat, and as a result we began to grow distressingly hungry. The next day was Sunday. Early in the morning we came to a store, the owner of which lived in a hut close by. We asked him to sell us some crackers or anything else he had to eat, and, to our astonishment, he refused to do so on the ground that the law forbade the selling of anything on that day. It was in vain that we expostulated, and declared that we were as empty as contribution boxes. The most he would do for us was to advise us to stop at the first house and perhaps they might sell us something, as the law did not apply to private parties, but only to stores.

At the house to which the store-keeper directed us we managed to procure a quart of corn meal and some salt, and this made into a mush in a tin pail, was all we had to eat till the afternoon of the day following. Had our guns been still available we could now have lived like fighting cocks, for here the game was very abundant. Quails and rabbits were often seen, and the cheerful "Bob White" of the former was constantly in our ears. At night, the lonely cry of the whip-poorwill, and an occasional hoot from an owl, imparted an additional sense of loneliness to the woods. The blackberries, and the crops generally, were not nearly so far advanced here as those in the Nation, though the difference in latitude was only a few miles. At one spot we stopped for some time to examine what was to us a curious collection of mausoleums. When we first saw it we mistook it for a cluster of hen coops, but on a second glance we saw that it was a graveyard. Over every grave was built a small pen of narrow slabs, for the purpose, I suppose, of preventing the wolves from exhuming the bodies. We afterwards saw several cemeteries guarded in a similar manner.

For six days we continued our journey over those eternal mountains. It was up hill and down hill from morning till night. We passed through several towns—Waldron, Booneville, Ozark (on the Arkansas), Kingston and Berryville. Between the towns the houses were farther apart than angel's visits and not nearly so inviting, a general air of squalidness seeming to pervade them all. By stopping at nearly every house and trying to purchase food, we contrived among them all to procure enough to keep us from starvation. In the towns we usually laid in a good square meal, and, deceived by the genial influence of this, neglected to provide for the journey beyond. We got many interesting glimpses of unique characters, such as are probably commonplace enough in that region, but which struck us as being original. We noticed many queer ideas and many strange expressions. This last was especially true of their nomenclature of distance. During our ride we stopped at many houses to inquire the distance to the next town, and in no instance were we given intelligible answers. The people seemed devoid of all idea of distance as divided by miles. Some answered our inquiries with, "Waal, it's a right smart scope, I reckon." Others declared it was "a right smart chance of a ways." One informed us that it was "a mighty big step, I reckon," and another, most unique of all, asserted that it was not far, "only two straights and a crook." This last reminded me of the answer of a small boy to a traveler in Maryland, who had asked the distance to some point, "About two barks and a howl." Even when we pinned them down to a definite answer we found by experience that their miles were very elastic, and usually stretched to treble their length. I remember once, the day after we left Ultima Thule, wishing to get some idea of our rate of travelling, we asked a boy how far it was back to that place. He replied, as sober as a deacon, "A hundred miles," a distance our ponies had walked in less than ten hours! One day we passed three different guide-boards, each about five miles from the others, and on each one we read: "Waldron, 45 miles." Not satisfied with such indications of slow progress, we asked the next man we met how far it really was to Waldron, and he confessed he did not know; that he had lived in this place fifteen years and had never been ten miles up that road!

There was another trait possessed by some of these people, which jarred harshly on our preconceived opinions. We had heard much of the hospitality of the Southern people, and that many of them are hospitable it would be black injustice to deny. But we found exceptions. One night, just at dark we came to a house and stopped to get some food. We had had nothing that day, and were as ravenous as wolves. The woman of the house had only some corn meal, of which we bought a quart, offering for pay a dollar bill, the smallest change we had. The woman could not change this, and, as we had nothing smaller, she refused to let us have the meal until my companion untied his bundle and offered her a quire of note paper for the meal, when she reluctantly consented to the exchange. On another occasion, when the grass had almost disappeared on the mountain sides, and our ponies were nearly famished, we came to a farmer who had corn for sale, and procured "two bits" worth of him. He could not change a dollar bill, and talked as though we wanted to swindle him out of his corn, telling us, at the same time, of a man who went along that road not long before with a twenty-dollar bill, which no one could change, and boasted, when he arrived at Springfield, that the journey had cost him nothing. To silence this fellow's suspicious grumbling, I gave him an emerald doublet bosom pin which had cost me two dollars, which, I sincerely hope, amply repaid him for two dozen ears of corn. Even in Texas, the land proverbially hospitable, I have met with similar exceptions, having been forced on one occasion to pay ten cents for a bucket of water for my thirsty pony!

Our observations on the personal appearance of the people were not very favorable. The men had mostly the appearance of being extremely ignorant, lazy and filthy, and the women—well, perhaps it may be in accordance with Arkansas taste to see women smoking rusty clay pipes and chewing the eternal snuff stick, but it gave my conceptions of woman's inherent superiority over man a sad shock indeed. The younger women were, some of them, fair looking, but though women and the dead should never be spoken ill of, I must declare my belief in the superior personal charms of our Northern damsels compared with their sisters of the backwoods of the South. One thing caused us surprise. During the entire journey from Ultima Thule to Springfield, Mo., we saw only two negroes, and they appeared to be of a superior grade. The blacks of Arkansas must all be grouped in the eastern portion of the State.

As we proceeded northward we noticed that in direct proportion as the cotton fields became less abundant and wheat fields took their place, the appearance of the inhabitants likewise improved. There may have been no connection between these two circumstances, but the facts were there. The houses improved, the farms had a neater and thriftier appearance, and the countenances of the people seemed to bespeak more intelligence. Will some philosopher satisfactorily explain this phenomenon?

On the twelfth day after leaving Texas we arrived at Berryville, a small town fifteen miles south of the Missouri line, and seventy-five miles south of Springfield. Here we were forced to part with our ponies. We had ridden them on very little grass, and still less grain, until they were so exhausted we feared another day's ride would break them down completely. I sold mine, with saddle and bridle thrown in, for ten dollars, while Nichols sold his saddle for eight dollars, and made a present of the horse to the purchaser. We then reduced our bundles to the lowest possible weight, and set out to walk to Springfield, where the nearest railroad passed.

That night (it was Saturday) we slept at a farm house, and the next morning, or rather forenoon, we arrived at White River. I was surprised at the crystal clearness of this stream. As we paddled across in an old dug out, the smallest pebbles on the bottom were plainly traceable, and the depth seemed only about three feet at the deepest, when in reality it was over seven. The banks on both sides were thickly wooded, and seemed like probable resorts for game, but the only living thing we saw was a solitary crane strutting about on a sandbar in the river.

North of White River stretches a tract known in that region as the "Wilderness." It is a tract about thirty miles wide, with no houses, and only one spring. The road through it runs in most places along the crest of a ridge or hill, and through a continuous forest of pines. After taking a bath we started on this, our last or home stretch, with buoyant hopes that the journey, of which we were becoming thoroughly sick, would be soon and easily ended. Alas, we learned that the sickliest part of the trip was still before us. "I will wager," says the devil in Bailey's Festus, "the great archangel's tramp to a dog whistle, that whatsoever happens worse ensues," and before the sunset of that June Sunday we were bitterly echoing the same sentiment. If I should live to the age of the Patriarchs I shall never forget the experience of that afternoon. Its memory haunts me now like the recollection of a horrid dream. If my words fail to impress the reader with its painfulness, let it be accounted for on the hypothesis that I am not skilled in the language of agony. Never very strong, the starvation diet to which I had been subjected for two weeks had made me still more feeble. I had imagined, during our long ride, from the relieved feeling of my limbs when out of the saddle, that a walk of a hundred miles would be a mere bagatelle, as it really might under other circumstances. The first day on foot I had stood it very well, but the next morning I was so lame and stiff I could hardly stand. In addition to this, that night a bug or something else got into my only good eye—contraction of the cornea destroyed one of my eyes when young—and it was so sore and inflamed I could scarcely open it. Up to the time when we left White River I had, by continual resting, contrived to endure my aches and pains with equanimity, but after that they increased so as to be almost unendurable. We struggled along until about three o'clock, when it seemed to me that I should drop down at every step. The sun had come out extremely hot, and the reflection of the light on the road had increased the inflammation of my eye till the white was nearly all concealed by coagulated blood. At times everything seemed to blur, and I could scarcely discern the road before me. The least jar caused by an uneven step or a sudden turn of the head caused sharp twinging pains to shoot backward through my head, and increased a splitting headache from which I had suffered all day. At first I tried to moisten my eye with spittle, but soon this source of alleviation was dried, for my throat and mouth became so parched I could hardly swallow. My lameness and weakness had been all the time increasing until it was with difficulty I could lift my feet over the smallest stick or stone or inequality in the road. Once I sat down to rest, and on trying to rise could only do so by clinging to a young tree near by. But my greatest suffering was from thirst. All along our journey thus far we had found plenty of water, and the cool, clear springs gushing from the mountain sides had been our only source of real, unalloyed enjoyment. But here there was no water save only at one spot we had not yet reached. At last we met a man who told us the spring was about four miles ahead, and we would know the place by several square yards of clover growing beside the road. Shortly after Nichols had an attack of colic, and, declaring he could go no further, lay down, telling me, as I suffered most from thirst, to go on to the spring and there wait for him. The time taken to reach that spring, though probably only about three hours, seemed to me an age. I staggered along like a drunken man, at times stopping and leaning against a tree to rest, not daring to lie down for fear I might not be able to get up again. At last I reached the clover patch where I had been told the spring was, but in order to reach it I had to descend a hill about twenty-five yards. After a while I got to the bottom, and after taking a good drink tried to ascend the hill, but found myself unable to do so. After resting about an hour, however, I succeeded in crawling on my hands and knees to the top, where, selecting the spot where the clover was thickest I lay down for the night, hoping, almost praying, that the morning's light would see me either refreshed and strengthened or would see me dead. I was not especially particular which.

It would not be the exact truth to say that my hopes were fulfilled. When Nichols came up and awoke me in the morning I was scarcely more fitted for travel then when I lay down. My nerves were in a healthier state, but every bone and muscle was in agony almost beyond endurance. Only the dread, which had now returned, of leaving my bones beside that road gave me courage and strength to go on. Nichols, who was stouter and stronger than I generously consented to exchange bundles, mine being heavier than his, and we started. My comrade took the lead and looked out for the road, while I followed mechanically behind, listlessly dragging one foot after the other. I can recollect but little of the details of the next three days' journey, only here and there isolated facts standing out boldly in my memory. I remember that in some way we passed over the distance intervening between the wilderness and the city of Springfield. I remember that that Monday morning we stopped somewhere at a house and got a breakfast of corn bread and bacon, and that at this house there was a buxom young woman with black eyes and bare feet, supporting a pair of well turned ankles. I remember that we stopped at another house to buy some wheat biscuits to munch along the road; that the proprietor of this house had a nose like the dawning of day, and prophecied a revolution if Government did not do something to alleviate hard times. I remember stopping at still another house, where we heard the news that the Republican convention had nominated Hayes and Wheeler. I remember that somewhere we had to swim a stream too deep to be waded, and that Nichols, carrying my bundle and panther skin, got them both soaked to the centre. I remember that we at last came to a region of fences, many of them inclosing magnificent looking farms, where the wheat was shoulder high, and which were resounding with the clatter of reapers, and the merry badinage of the harvesters. And lastly, I remember that Wednesday afternoon we entered Springfield, tired and travel-stained, foot-sore and eye-sore, hungry and thirsty, with every bone and muscle and sinew feeling as though they had just emerged from the ordeal of the Inquisition, and looking as wild and haggard as a Pennsylvania "tramp." The people stared at us as we walked on through the streets; the proprietor of a restaurant stared at us as he saw the viands he had placed before us disappear down our insatiable esophagi. The conductor on the train which conveyed us to St. Louis, stared at us, as we requested him to carry us to the city of mounds for eighteen dollars—all we could scrape together—when the regular fare was twelve dollars a head, but, like the gentleman that he was, he gave his consent to the arrangement. And when we arrived at home, our friends stared at us, and wondered whether I was really the same being who not six months before had left there to go to Texas.

It was more than a month before I regained my former condition of comparative health, and even now at times I can feel the effects of that long and wearisome journey. Still however, the lessons learned and the experiences stored up through that trip amply repay me for all the discomforts attendant upon it, and I cannot say that were a similar expedition placed before me to-day I would shrink from the undertaking.

GUY RIVERS.

Fish Culture.

MIGRATION OF FISHES.—No. 4.

BY G. BROWN GOODE—READ BEFORE THE AMERICAN FISH CULTURAL ASSOCIATION.

[*Concluded from page* 194.]

MENHADEN MIGRATIONS NORTH AND SOUTH.

There is no satisfactory evidence that the menhaden pursue extended migrations north and south. The same evidence which tends to show that the shad, salmon and alewife do not follow this course, will apply, with modifications, to the menhaden. The menhaden schools at different points along the coast appear to have individual peculiarities, corresponding to those of the shad in the different rivers. A Maine menhaden may be easily distinguished from the Long Island menhaden, a Chesapeake or a Florida one by certain indescribable characters easy to perceive, but difficult to describe. The presence of the crustacean parasite in the mouths of the Southern menhaden, and its absence from those of the North, is a very strong argument in favor of local limitation, in the range of menhaden schools. That the same school of menhaden return year after year to the same feeding ground is rendered very probable by the statements of Mr. Miles in paragraph 72. The schools in the Southern waters do not receive any apparent increment at the time of desertion of the North coast, nor are the Southern waters deserted at the time of abundance in the North. There is, however, a limited North and South migration. The Maine schools, on their departure in the fall, appear to follow the southward tread of the coast until they strike the hook of Cape Cod, where they are detained for some days, they then round the Cape and are again detained by the hook of Montauk Point. They first strike the shore at Point Judith and are turned over into Peconic Bay by the line of islands stretching across the eastern end of Long Island Sound. In the same way the Chesapeake schools are said to be detained for some days by the projection of Cape Henry.

The questions of hybernation and extended migration having been considered, it only remains to discuss the third alternative—that of the possibility of sojourn in the warm strata of the open ocean. In plate is given a diagram section of the North Atlantic Ocean between New York and Bermuda, showing the soundings and isothermal lines obtained in H. M. S. "Challenger," April 24 to May 8, 1873. The vertical scale is necessarily enormously exaggerated, but the diagram shows the presence of strata under the Gulf Stream and between it and the American coast, the temperature of which exactly meets the requirements of the menhaden. At a depth of 50 to 100 fathoms there is a shoreward extension of the warm stratum of 50 deg. to 55 deg., which extends inward 120 miles. There are no means of determining the corresponding isothermal lines on the coast of North Carolina, but an extension of much less degree would approach very near the shore in that region. The diagram represents the condition of the sea temperatures near New York at the very period when the menhaden are approaching the coast in April, and a similar relation (not improbable) exists, in November, at the time of their departure. The schools of fish, swimming out to sea when the shore waters become too cold for them, and driven below the surface by the winds of November, would naturally strike these temperate strata, and being kept from descending deeper by the uniform coldness of the waters below, as well as by the increasing pressure, and their efforts to approach the shore being also opposed by a temperature barrier, they would remain in the temperate strata until they were enabled by the warmth of spring to regain their feeding grounds near the shores.

No authorities can be quoted in support of this hypothesis, but in the case of the menhaden, at least, it appears to explain more of the difficult questions in relation to periodical movements than that of hybernation or that of extended migration.

(1) It presupposes less sudden changes of temperature than that of hybernation. It has been shown that hybernation of fishes is never voluntary, but is a state of torpidity induced, like that of æstivation, by a change of temperatures and surroundings, which they have no power to avoid. Before entering upon hybernation or æstivation, fishes retreat to the deepest water, and only become torpid when they are followed thither by the changed conditions of existence. In the fresh water of temperate countries fishes do not become entirely torpid in cold weather, but are sufficiently active to be taken with hooks from under the ice. This is also the case in sub-polar regions. The kalleragritz, or American turbot (*Reinhardtiua hippoglossoides*), is taken with hooks in the dead of winter under the floe ice of North Greenland, at a depth of 300 fathoms, in South Greenland, on the oceanic banks, at sixty and eighty fathoms, and at Fortune Bay, Newfoundland, it is captured in the shore herring seines at the same season.

So long as the menhaden can avoid the extremes of temperature, which they so carefully avoid in summer, by seeking congenial warmth in the ocean strata under the Gulf stream, need we suppose that they will plunge into the colder strata below?

(2) It involves less radical changes than hybernation in the habits of the fishes. Some fishes, like the mud-minnow (*Melanura limi*), of the eastern United States, are peculiarly adapted for a life in the mud. Others, such as the "compound breathers" (*Labrynthici*), of India, are said to respire with ease with their head covered by liquid mud. Such fishes, however, are totally different in organization from the free swimming species of the open seas. All free swimmers are especially heedful to avoid contact with the bottom. This is especially so in the case of the herring family, of which the menhaden is a member. They are provided usually with deciduous scales, and never suffer themselves to come in contact with the bottom. If one of the herring or macker tribe is placed in an aquarium it will be noticed that it keeps itself always free from the bottom. Other fishes in the same tank, such as the sea-bass, tautog or king-fish, will be seen to rest on the bottom, and even to take refuge under the stones. It is extremely improbable that mackerel ever sink into the mud of the ocean bottom—still more so in the case of the menhaden.

(3) It accounts better than the other theories for the early appearance of the fish in the spring. Admitting a possibility of a winter's sojourn in the mud, we are met by a difficulty when we try to account for the prompt appearance of the fishes in the spring. The deeper strata of the ocean are now known to preserve throughout the year the uniform temperature of 35 to 40 deg. The fish, once mummified in the depths of the ocean, would remain so forever unless they possess powers unknown to exist in other animals.

On the other hand, if we suppose the fish to be swimming in the strata of mid-ocean, we know that they are just in the position to be susceptible to all the daily variations of temperature. Following with the advance of the season the inward curving of the Gulf Stream the warm strata below it gradually approaches the shore. The schools of fish are thus enabled gradually to draw nearer to the coast line, and when the strata of 50 deg. to 55 deg. in temperature touch the coast the menhaden are at hand.

(4) It explains as well as the hybernation theory, and better than the migration theory, the peculiarity of the different schools at different localities along the coast. This was discussed in paragraph 88.

(5) It explains better than the other theories, the appearance of the fish at the time of their arrival in the spring. The menhaden appear to be bottom feeders. If they migrated coastwise to the south they would find these feeding grounds. If they sank to the bottom they would find food, if they had sufficient vitality to resurrect themselves in the spring. If they passed the winter in the mid-ocean strata they could obtain no food and would naturally become emaciated, the accumulated fat of the preceding summer being absorbed.

Rimbauds classification, which is a modification of one recognized in the markets of South France is very suggestive, but it does not appear to me to be entirely applicable to the fishes of our coast, at least not in the way in which it has been usually adopted.

Rimbaud makes four divisions, viz.:

I.—Wandering fishes (*Poisson nomade*).
II.—White fishes (*Poisson blanc*).
III.—Bottom fishes (*Poisson de roche* or *Poisson de fond*).
IV.—Alien, or outside fishes (*Poisson forrain*).

The distinction between classes I. and IV, does not appear to be very clearly marked. In the western Atlantic some of the fishes making up class IV. belong to each of the other classes.

A more natural classification would be its three divisions which might readily be co related with the three kinds of migration mentioned in the preceding paragraph.

The first group would include the wandering fishes, the *Poisson nomades* of Rimbaud, whose migrations are entirely oceanic, and confined to the surface zone. The second group would include the bottom fishes of restricted range, the *Poisson de fond* of Rimbaud, which move to and from the shore or the shallows, and which do not range.

The third group would include the middle classes, those which take advantage of both methods of migration, and corresponds approximately to Rimbaud's second division. "White fishes" seem hardly an appropriate name. Coast fishes would probably be more expressive.

Col. Lyman in his report "On the Limits of Artificial Culture, and the Possible Exhaustion of Sea Fishes," p. 67 (Report of the Commissioners of Fisheries of Massachusetts for the year ending, January 1, 1870, pp. 58-67), speaks of the first class as the wandering or "schooling" fish of the high seas. The term schooling is liable to mislead, for the "white fishes" also school. Among the wandering fishes he mentions only "the herring (*Clupea elongata*), mackerel (*Scomber vernalis*), menhaden (*Alosa menhaden*), cod (*Gadus morrhua*), etc." The cod and herring most certainly are "white fishes," and the menhaden and mackerel are certainly not to be ranked with "those which appear on the coast only when 'migrating' and then in vast but uncertain troops," p 63.

A provisional classification by habits of the fishes of our eastern coast might stand somewhat as follows:

I.—*Wandering or Surface Fishes.*—These remain in our waters only for a short time, their movements being capricious or accidentally directed by the ocean currents, or else in search of food. They do not spawn on our coast, and their young are never seen in our waters. The best known examples are the sword-fish (*Xiphias gladius*), the spear-fish (*Tetrapturus albidus*), the bonito (*Pelamys sarda*), the tunny (*Orycnus thynnus*), the dwarf tunny (*Orycnus alliteratus*), the ceroes and Spanish mackerel (*Cybrium maculatum*, *C. caballa* and *C. regale*), the rudder fishes (*Halatractus zonatus*, *Nancrates ductor*), and (*Palinmichthys perciformis*), the dolphin (*Coryptræna*, two or three species), the remoras (*Echeneididæ*), the barracuda (*Sphyræna borealis*), the lady fish (*Conorhynchus albula*), the tarpum (*Megalops thressoides*), the Oceanic sharks, such as *Galeocerdo tigrinis*, and the numerous waifs from the West India fauna. Of these only the sword-fish bonito and the ceroes and Spanish mackerel are of economic importance at present.

II.—*Local or Bottom Fishes.*—These remain in our waters throughout the year, their movements being chiefly to and from the shore, though many of their species move for long distances up and down the coast. They prefer a somewhat uniform temperature, which they secure by going into the shallows in the summer and deeps in the winter in the northern districts of their distribution, while in the southern districts of distribution their movements are reversed. They spawn on

our coast, usually in shallow water and during their shoreward sojourn. The principal representatives of this group are the goose-fish (*Lophius piscatorius*), the flounder and flat fishes, the halibut (*Hippoglossus vulgaris*), of whose spawning habits little, however, is known, the lump-fish (*Cyclopterus lumpus*), and the two specie of *Liparis*, the cod (*Gadus morrhua*), haddock (*Melanogrammus æglefinus*), pollock (*Pollachius carbonarius*), and the hakes (*Phycis chuss* and *P. americanus*), the gunnards and sculpins (*Prionotus sp.* and *Cottus sp.*), the rose fishes (*Sebastes sp.*), the tautog (*Tautoga onitis*), and the chogset (*Ctenolabrus bergall*), the skates, the rays and the ground sharks.

III.—*The Coast or Ranging Fishes.*—These are in our coast waters for a portion of the year, and when absent from them are supposed to retreat to the depths of the ocean. When near the shores their movements are a combination of those of the two previous classes, and they wander widely up and down the coast. They spawn upon our continental slope, some entering the rivers, some upon the in-shore shallows, and some upon the off-shore shoals, their young coming to the shores with the parents. They all are summer visitors in the northern districts of their distribution, though some, like the herring, only appear in New England in the winter. The best known examples of this group are among the river spawning, or anadromous species, the salmon (*Salmo salar*), the shad (*Alosa sapidissima*), the alewife (*Pomolobus mediocris*), and, perhaps, the striped bass (*Roccus lineatus*), and the smelt (*Osmerus mordax*). Among the shore spawning species in the North the capelin (*Mallotus villosus*), the launce (*Ammodytes lanceolatus*), and the herring (*Clupea harengus* in the South), the scupping (*Stenotomus argyrops*), sheepshead (*Archosargus probatocephalus*), the sea bass (*Centropistes atramis*), the tautoga (*Chirostoma notatum*), the mullet (*Mugil sp.*), and the mackerel (*Scomber scombrus*); and among the off-shore spawners, the pompano (*Trachynotus carolinus*), the squeateague (*Cynoscion carolinensis*) and the menhaden (*Brevortia tyrannus*), and probably the (*Pomatomus saltatrix*).

SALMON IN THE CONNECTICUT.—Yes; three salmon at one haul, and more superb fish it is impossible to imagine. At last the labors of the State Fish Commissioners are being rewarded. The movement of the fish in the river is undeniable. People may be skeptical, but there they are. This morning (Wednesday), at Mr. Blackford's in Fulton Market, we saw the most superb salmon we ever set eyes on. It weighed eleven pounds, was a clean fish, and it came from the Connecticut. This means over and over again that fish culture is not a theory, a visionary thing, but a practical fact. The general public read about so many eggs having been secured, and all about their hatching, and that is an end of it. The great, greedy public now is satisfied, we hope, with the result. One, two, three—say that a dozen fish only are caught this season; they are the *avant couriers* of more. Eleven pounds of actual salmon which can be cooked is worth 10,000,000 of eggs in a hatching-house. We will grant you that. Still, let us, after the first expansion of pleasure, say a kind word for these "scientific persons," who have been preaching fish culture for so many long years. Let us not despise these minute eggs, and even the long paragraphs which have been written over them. As acorns produce oaks, so have these tiny eggs made the silver-sided salmon. The public have had a good deal of patience, and let us be thankful for this, which is not an American fruit. The trouble has been that the great American people have, in their blessed ignorance, imagined that an egg put into a stream one week would produce absolutely a ten pound fish in the next fortnight. All that fish-culturists or fish commissioners can do is to assist nature the least bit in the world. Nature cannot be forced; that's the whole secret of it. But, when one thinks of the great trouble these fish-culturists have had; how fishways had to be built; how private enterprise was often opposed to public good; how the fish themselves had to fight against almost nature for an existence in new streams, it is God's wonder how the adult salmon have ever been caught at all in the blue Connecticut. Now, what we want is good, positive protection for the fish. Our inventive power as to fish culture, at present, is in advance of any people in the world, but our administrative functions are null. People must open their eyes to such matters. What we want, then, for years to come, are stringent laws for the protection of the fish. The replenishment of streams by artificial means will make but little impression, if we over-fish. It is that natural sequence of fish that should be most depended upon. Fish culture is only an adjunct to the re-peopling of our rivers.

Concerning these salmon, Fish Commissioner, Wm. M. Hudson, writes from Hartford:

"Though we tried to procure a law to protect them from capture until July 1880, we were unable to effect it. We can only hope that the reappearance of so many will induce the legislature at its next session to pass such a law for their protection as will determine the question of their restoration to the Connecticut, in which they were formerly so plenty."

LOOK OUT FOR CALIFORNIA SALMON.—Prof. Baird is exceedingly anxious to get early reports of the presence of California salmon in our waters—say anywhere, either in the Mississippi or this side of it, and we are requested to call the attention of all fishermen to the differences which exist between the Atlantic salmon and the California salmon. The distinguishing point is as simple as can be. The California fish *have a considerably larger anal fin*, with three or four more rays than the Atlantic fish. They are, when adult, thicker, broader, more clumsy in appearance, and, for the same length, the California salmon will weigh more than the Atlantic fish.

TROUT HYBRIDS.—An inquirer asks how the California trout can be crossed with our speckled brook trout, when it so happens that one variety spawns in the spring and the other in the fall. Our omniscient friend, Seth Green, explains this apparent difficulty by stating that our brook trout begin spawning in October and continue to spawn until the last of March. March is the month in which the California trout spawn; so the problem becomes intelligible and lucid. *Sweet!*

FEEDING TROUT.—I notice that the author of "Domesticated Trout" and others, say that trout fry should be fed three or four times each day until cold weather, and that they should be kept in the shade. I never feed my young (or old) trout oftener than once a day from their very first meal, and I give them all the sunshine attainable until June 1, after which date they should have shade provided to seek when they desire it, and healthier or larger fry than mine I think it would be difficult to find. My reason for feeding them but once a day is that the fish have time to get hungry between meals, and therefore will clean all the food which may fall to the bottom. Mr. Stone says they will not eat the food that has fallen, which therefore remains to foul the water. My fish *do* gather it all and ask for more.

In regard to sunshine on the trout, I would say that two months since I placed five thousand fry in a pond shaded with a roof. They were dying by hundreds each day without apparent cause. I moved them at once to a pond the same size, supplied with water from the same pipe, but fully exposed to the sun, and the mortality ceased within twenty-four hours. Yours truly, THOMAS CLAPHAM.

Trout Brook, Roslyn, L. I., April 23, 1878.

A NEW SPECIES OF FISH ON THE COAST.—Professor G. Brown Goode writes us as follows:

"A new species to the coast just received from C. C. Leslie, Charleston, S. C. It proves to be *Rhomboplites aurorubens*, before known from Jamaica, Martinique and Dominica. It is known as the *Mangrove snapper* in Charleston Market. These specimens were taken on the Savannah banks."

LACUSTRINE JURISDICTION.—Last week, in replying to a Boston correspondent, F. W. C., regarding rights in pond property, we answered to the best of our ability with the light furnished us. We are therefore greatly obliged to the correspondent whose letter is appended herewith, for his assistance in stating the case more fully, and consequently making it more intelligible. We quote:

SALEM, May 4, 1878.

EDITOR FOREST AND STREAM:

I have read in your issue of May 2 a communication from "F. W. C.," together with your answer, with much interest. I think your correspondent must refer to Humphrey's Pond, in Lyndfield, Mass. If so, I think I can explain the matter to his satisfaction. This pond is one of two or three in this State which were granted before what is known as the "Colonial Act of 1641" was passed, and are therefore private property, and not included among the "great ponds" of the State. The fish commissioners were consulted in the matter, and assured us that our lease was good, and gave us all our title to the fish and fishing. In regard to the stocking of the pond, that was done by one of the owners at his own expense; the State had nothing to do with it.

F. T.

NEW YORK.—On Thursday, April 25, 100,000 salmon trout were put into Lake Ontario at Charlotte from the State hatching house at Caledonia. Also 20,000 of brook trout into Allen's Creek, at Wheatland Station, and 5,000 trout into Blue Pond, all from the Caledonia hatching house.

—Two more large salmon have been taken in the Delaware. One of them, which weighed twenty-two pounds, was sent to Gov. McLellan.

PENNSYLVANIA FISH CULTURE.—L. J. Wilt, of Franklin, Pa., has been appointed Fish Warden for Venango County, Pennsylvania.

Three thousand brook trout (fry) were recently received from the State Commissioners of Fisheries in good condition, and distributed in the several streams in this vicinity.

W. C. Parker, Esq., of Sugar Creek, has a very fine private pond, in which the trout show up to thirteen inches.

CALIFORNIA.—The Fish Commissioners of California have, during the past month, made several large distributions of land-locked salmon and eastern trout. Ten thousand eastern trout were put into Alder Creek, Donner Creek, Prosser Creek and Mardis Creek, tributaries of the Truckee; five thousand eastern trout into the Kaweah River, Tulare county; ten thousand land-locked salmon into San Francisquito and other creeks of San Mateo county; twelve thousand eastern trout and land-locked salmon have been distributed to Espinosa and Pajaro Lakes, Gabilan and other waters of Santa Cruz and Monterey counties; five thousand land locked salmon have been put in a reservoir in San Mateo county, for breeding purposes exclusively; five thousand eastern trout went to the headwaters of San Francisquito Creek; eighteen thousand McCloud River trout have been put into Santa Rosa, Mark West, Sulphur and other creeks of Sonoma county. On Saturday last 15,000 Eastern and McCloud trout were sent to Pescadero, San Gregorio, San Mateo, Aptos and Los Gatos creeks. A lot will be put into the headwaters of Alameda creek, and the remainder of the land-locked salmon which the Commissioners have on hand will be sent to Tulare Lake.

Natural History.

NOTES ON THE BIRDS OF HALIFAX INLET, EAST FLORIDA.—No. 1.

QUAIL—*Ortyx virginianus*. Bonap.
WILD TURKEY—*Meleagris gallipavo*. Linn.
GROUND DOVE—*Chamepelia passerina*. Swain.

The quails are very abundant in the scrub, being seldom molested by gunners. They are smaller and of a darker color than those of the Northern States. The wild turkeys are growing scarcer every year. Many have been drowned in the heavy spring floods of the last two or three years, and the nests have been broken up by the same cause. There are also many more hunters here than formerly, and some of those from the North are so reckless as to kill the hens in the breeding season, when they are really worthless for food.

The ground dove is a beautiful little bird of domestic habits, which frequents door yards and gardens, often feeding among the poultry.

FISH-HAWK OR OSPREY—*Pandion halietus*. Cuv. This is a very abundant species here, owing to the abundance of fish food. They breed in great numbers on the mangrove islands and other inaccessible places, and seem to get a good living, notwithstanding the depredations of the eagles. The mullet is their favorite fish, and is plenty at all seasons. I have seen them take the salt water trout and whiting, and have twice seen a fish-hawk pick up a dead catfish from the surface of the water. I should think, from my own observations for the last eight years in this river, that the eagles rob the ospreys of one half the fish they catch.

Yesterday, while out hunting in my boat, I saw an osprey descend and capture a fish. Soon an eagle was in chase. The osprey tried to escape by doubling, by ascending and by descending, but the eagle pressed her so hard that she did not venture on a direct flight for some time. At last she got a fair start, and I was hoping that she would escape, when a second eagle appeared on the scene. One attacked the poor hawk above and one below, so they soon made her drop the fish, which the lower eagle followed to the water, but failed to secure, much to the gratification of the spectators. As the food of the osprey is fish alone, she never depredates on mankind, and is consequently unmolested, except by those idiots who want to kill every thing they see. So the osprey has little fear of man, and carries on her fisheries near houses and boats, and in this way sometimes escapes the attack of the eagle, who is more suspicious of the human race, and keeps out of shot range.

WHITE HEADED OR BALD EAGLE—*Haliætus leucocephalus*. And. Why this eagle should have been called bald is a mystery, since she is no more so than Wm. C. Bryant himself, and has as well covered a head. She is no doubt a robber, and lives by the plunder of her weaker neighbors; but many great nations, crowned kings and belted knights, have got rich in this way without incurring the world's reproof. Being very fond of fish, and not knowing how to catch it herself, she is obliged to avail herself of the services of the osprey, who is her unpaid servant or slave. When these services are not to her liking, the royal bird condescends to eat carrion, and may sometimes be seen seated on the carcass of a dead hog, surrounded by a circle of turkey buzzards, who wait respectfully while their master satisfies his appetite. This eagle will sometimes, in failure of fish, prey upon ducks and herons, and in the interior of Florida will carry off poultry and young pigs. The fishermen on the coast say that in the fall, when they take great quantities of fat mullet with nets, the eagles will watch them, and if the heaps of fish are unguarded, will descend and carry away all it can grasp, always selecting these with the roe. I do not hear that this eagle is known to fish for itself, but will often pick up a dead fish from the surface. It is an abundant species here. I have observed five or six in sight at one time on this river, and most of them in chase of the osprey. If any one wishes to see a structure which combines the largest amount of power contained in a given weight, let him dissect an eagle. The body is a mass of leathery muscles and wire-like cords and sinews, almost defying the sharpest knife. S. C. C.

THE MINNIHAHA.—Apropos of this monster, an account of which was given in a recent number of FOREST AND STREAM, a distinguished zoologist writes to us, suggesting that there is no inherent improbability in the story which comes to us from South America. The animal is no doubt extremely rare, and might escape capture for a long time. It must be remembered that the country where it is supposed to exist is almost unknown to zoological collectors and naturalists. Our correspondent says:

"But little appears to be known of the animal, excepting from its works, although in one or two instances it is said to have appeared above the surface, very soon to bury itself again. In several cases, where the soft earth has been turned over as by a plow, an impression of plates or scales was distinctly visible, which would be an additional argument of the armadillo-like character of the beast. Estimates of its dimensions vary greatly, but upon the whole there seems to be some well defined foundation for the belief of the existence of a subterranean animal, probably a mammal of gigantic size, and not known to naturalists.

The fact that no specimen has ever been captured or even seen by naturalists is no argument against its existence, as it is probably extremely rare; and as there are numerous species of burrowing animals, such as moles, pouched rats, etc., which are very seldom seen, even in regions where they abound to a prodigious extent, their ridges may be seen in every direction, but the animal itself remains invisible."

TRAILL'S FLYCATCHER.—*Editor Forest and Stream:* In my letter last week to the Linnean Society, among other changes as printed in your paper, the word "genus" is substituted for where I wrote *form*, and the quotation marks are left off from "*traillii*." The impression then perhaps given was that but one species of *Empidonax* occurred across the continent. To many, however, the context would prevent a misunderstanding.

The only occasional breeding of the Little, or Traill's Flycatcher, (*Empidonax pusillus* "*traillii*") within the limits of the Alleghenian or even the Carolinian fauna in the Eastern coast States, is interesting as compared with its doing so regularly in Southern Ohio, Indiana and Illinois. With us the bird has been considered quite typical of the Canadian fauna, and practically is so still. H. A. PURDIE.

Boston, April 27, 1878.

AN ALBINO.—On last Wednesday, while out gunning for snipe with my friend Mr. A. D. Boas, as we were coming home we noticed a bird of some kind, with white plumage on the back and a red breast, fly across our path. Mr. Boas immediately followed it and succeeded in killing it. Upon examination we found the feathers on the back very nearly white, and close to the top of the wings, and under the wings, of a delicate salmon color. The plumage of the breast was exactly like that of a robin. The head and beak also resembled a robin's. We showed it to a great many persons, and they were unable to tell us what it was. If you can from this description tell us anything about it we would feel very much obliged. I should state that the eyes were not red, as is usually the case in an albino. I cannot close this letter without telling you how much I enjoy your paper.

Yours, GEO. D. KELLER.

Carlisle, Pa., April 27, 1878.

[Your bird was probably an albino robin. Albinos do not always have pink eyes.—ED.]

FLIGHT OF QUAIL OVER WATER.—*Editor Forest and Stream:* Noticing the article in your issue of April 18th on "Inability of Quail to Fly Across Wide Rivers," reminds me of some of my own experience, which may be of interest. I have seen coveys try to fly across the Mississippi and Missouri Rivers,

some succeeding while others of the covey were obliged to light on driftwood, and three fell on the deck of a steamboat on which I was traveling, so much exhausted as to be easily captured by some of the deck hands. Once when hunting in Texas I succeeded in getting a covey nicely scattered on the edge of the bank of the Colorado River, where it was about 300 yards wide. All that were flushed seemed much averse to flying across the river; there being no cover for them we killed nearly all, a few that did cross the river seemed much exhausted and confused when they reached the opposite bank, dropping down quite heavily and lying perfectly still, not attempting to run or hide. I shot and killed one about 20 yards from the bank only to see it swallowed by an immense gar, almost before it touched the water, leaving only a few ripples and floating feathers to gaze upon. In Virginia on the banks of the James River, where it is over 500 yards wide, I have followed coveys of quail from one bank to the other and back again many times, but only late in the season when the birds are fully grown and strong. A noticeable characteristic of Virginia quail, is their adroitness in eluding a dog by taking to trees; I have seen them run on the ground in pine thickets, until hard pressed by the dog, and then hop into the lower branches, letting the dog pass under them and then fly (often noiselessly) to a more secure shelter in the thick top of some large pine. I have seen good dogs put to their wits ends by such behavior. When a covey scatters in a clump of pines, flying from tree to tree, the dogs wind them everywhere, but seldom are able to get a point. C. B.

N. Y., April 19, 1878.

RUFFED GROUSE IN TEXAS.—We learn from an army officer now on duty in the Southwest that he saw last November five ruffed grouse in the "Brown Sand Hills," almost in the centre of the Staked Plains, west of Cedar Lake" (the water of which, with the exception of one small spring, nothing can drink). Ruffed grouse are migrating to Texas in large numbers, and the Indians and old citizens say that it is only within the last two or three years.

BREEDING OF BEARS.—A correspondent writes us to say that old mountaineers have told him that no man ever killed a female black bear that had cubs in her. He says that this idea is new to him, and asks us whether we can give any instance of the kind. This belief is a very widespread one and is well nigh universal among hunters of the old style. We have heard the same thing alleged in regard to squirrels. The fact appears to be that both bears and squirrels keep themselves so close during the period of gestation that it is extremely unusual for a pregnant female to be killed. With the black bear we have had no experience, but we know that the grizzly brings forth her cubs early in January, and that at birth they are very small, hardly larger than new born puppies.

DEER SHEDDING THEIR HORNS.—*Mr. Editor:* I would like to say a word more on deer shedding their horns, or rather burying their horns. I have just read the article from "Sycamore," in the FOREST AND STREAM of March 14, also the letter of Mr. W. H. Cassell, where he positively asserts that they do bury their horns. I am just as positive that in this part of the country they don't. About two months ago I was hunting cattle and came upon a deer track. Following a cow-path, I soon came in sight of him feeding. I stopped, and he moved off over a hill. He had not seen me and was not scared. Before I got to where I had first seen him, I found one of his horns lying beside the path. It had apparently fallen off as he walked along. I found the other horn where he had been feeding. I have seen at least forty horns this spring, and all of them had apparently dropped off of their own accord, and my experience has been that where there is timber they avoid it as much as possible about shedding time. Might it not be possible that deer have different habits in different localities? I for one should like to hear more on this subject. PLAINSMAN.

Dismal Ranche, Neb., April 15, 1878.

WHAT A CRAPPIE IS.—*Editor Forest and Stream.*—Some time ago I noticed some questions from an Iowa correspondent concerning the crappie. I am not familiar with the (Ohio) State report referred to by your correspondent, and know next to nothing of the grass bass, but suppose him to be identical with the crappie (*Pomoxis hexacanthus*), of Cuvier, which is very abundant in the eddy and lake waters of the Mississippi River and its tributaries. It breeds in the lakes or lagoons of the low bottoms, and is very prolific. Its eggs are usually found in a glutinous mass attached to limbs and snags just below low water mark. In some parts of Mississippi the fish goes by the name of "tin mouth." In this vicinity, on account of a fancied resemblance in marking to the dominick fowl, it bears the name of dominick perch. It is a very superior pan-fish, weighing from one-half to two pounds. For further and full technical description of this fish, I refer your correspondent to "Norris' American Angler's Book," p. 111, where it is fully described under the names of Crappie, Sac-a-lac or Chincapin Perch. YELL.

Jacksonport, Ark.

[The crappie is also called a goggle eyed perch, a strawberry perch, chub (South Carolina), crappie (St. Louis), grass bass (Ohio), chinkapin perch (Louisiana), sac a-lac (New Orleans creoles). See "Hallock's Sportsman's Gazetteer, pages 378-9. —ED.]

SNAKE FASCINATION.

MR. EDITOR—An article in a late issue of your most instructive paper, entitled "Snake Fascination," brings, in relation to the same subject, an incident to mind which occurred two years ago, to which I was witness, and which may be of interest to some of your readers. About five o'clock one June afternoon, as I was hastening through the woods to regain my carriage, having just left the stream "where I was wont with line and hook to deceive the leaping fishes," my attention was attracted by hearing on my right the shrill, discordant notes, as those of a bird whose eggs or young are endangered. I stopped, and saw that at a distance of twenty feet, on a horizontal branch of a stunted apple tree, was seated a cat-bird, from whose throat the tones proceeded. It seemed in great distress, as, fluttering its wings and swaying its body to and fro, it repeated the plaintive cries which first drew my attention to it. In all its seeming agony it moved not from the limb, but clung to it as if it were its only protection. In wonder I gazed, but not long. A rustling in the leaves below drew my eyes from the bird. Stooping, I crawled nearer and nearer. I looked again, and on the ground, beneath the branch on which the bird was perched, was a black snake from two and a half to three feet in length, with body in close coil, head erect, and moving with an undulating, pendulous motion, tongue flashing and eyes riveted on its victim, only three feet above him. Again he rustled the leaves with his tail, and quickly withdrawing it, left but a small portion—perhaps three or four inches—out of the coil, which part he caused to vibrate with dazzling rapidity. The motion of its head increased. I fancied its eyes gained brilliancy in its eagerness. All this time the poor bird continued its cries and fluttering, but, as I watched, its struggles grew weaker, its fluttering less. It would sit for a time with drooping head and closed eyes, as though asleep, and then, as if suddenly awakened, would feebly raise its wings and utter a low, sad cry. At last these ceased, and the poor bird, after vainly struggling to retain its hold upon the limb, fell as if lifeless to the ground. Immediately the snake uncoiled himself and stretched out its head to grasp the bird. At that moment I killed him. I gently raised the bird from the ground, and, placing it in the palm of my hand, I could feel the violent pulsations of its heart, as with closed eyes and tightly clenched feet, it lay inanimate. I carried it quite a distance before the first signs of consciousness appeared. Then a tremor ran through its body, its feet unclasped, its wings made a slight motion, its eyes opened, and, raising itself on its feet, it stood tottering. Then, as if endowed with new life and strength, it spread its wings and swiftly flew to its native woods. MISAL.

A HAMPERED DEER.

We present herewith an engraving of the deer's foot encircled by a ring of wood, which we referred to recently. The curiosity was sent to us by Mr. W. Kelleman, of Aberdeen, Miss., with the information that the deer so singularly

hampered was killed by a hunter near Winchester Station, Miss., on the M. and O. R. R. The growth of the hoof and of the toes leaves little room for doubt but that the specimen in its present shape is the growth of years.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING MAY 4, 1878.—One hog deer, *Cervus porcinus*, born in the menagerie; one opossum, *Didelphys virginiana*, presented by Mr. Geo. H. Penniman, N. Y. City; thirteen painted tortoise, *Emys picta*, presented by Mr. John Sutherland, N. Y. City; one gray squirrel, *Sciurius carolinensis*, presented by Mr. William Irving, N. Y. City; 12 pair fancy pigeons, presented by Mr. William R. Powell, N. Y. City.

W. A. CONKLIN, Director.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

A BIRD'S-EYE GLIMPSE OF TEXAS.

MEXIA, Limestone Co., Texas, April 7, 1878.

EDITOR FOREST AND STREAM:

Your remarks about Texas have induced me to write you a few lines. If you will spread your map of Texas before you, right in the middle of it you will see this county. It is easily approached, as the Houston & Texas Central R. R. passes through it, bringing you to this town with only one change from New York. It is in the cotton zone, and here that plant matures to perfection, whilst wheat is productive and certain, and corn almost a drug. Cattle in immense numbers dot the prairies, and horses are abundant and cheap. Narasoto Creek runs through the greater part of it almost north and south, affording good bottom lands and splendid timber. Game is abundant and in great variety. In the bottoms we hunt the bear and wildcat, with an occasional panther, and once in a great while the cougar strays from Mexico. The peccary, a wild hog, is still to be found in the impenetrable cedar brakes. Deer are more than numerous, doing great damage to the farmers, whilst the mule-eared rabbit (or hare) leaps up from under your feet while crossing the prairies, a perfect carpet of flowers in the spring. The grouse are also plentiful, and quail enough to gladden the heart of every true sportsman. Ducks and geese are also to be found in their season, though this winter our wild fowls have been scarce indeed. Woodcock none, and snipe but few.

The fishing is also good. Black bass (trout) very game and toothsome, and, in some streams, brook trout, though scarce. The scenery is lovely, being a rolling country, covered with rich grasses and starred with wild flowers. The climate healthy, as it lies almost 600 feet above the sea, and almost 200 miles from its shores. Sheep-raising is only beginning to be realized, as hitherto cotton has absorbed all minds (and well it might, were it not for wars in the Old World), but now it has become so unprofitable that many are turning their attention to wool raising, and truly for a man of small means nothing can pay better. Land is dearer here than in the west of the State, but this is compensated, as the products bring more, being nearer to market, and all necessaries are cheaper. It is difficult to condense this letter within the limits of your columns, and I must fain halt. If you desire more information I will gladly give it. The geese are going North; their honking is audible whilst writing this. The plover in myriads, and fat; very hard to approach unless in a carriage or wagon. I have lately killed many and eaten them, cooked as directed by "Elzear Blaze" for snipe.

Quail shooting has afforded me much sport, though hard to point, as the running dogs, which are such favorites here, scent and chase them, which makes them shy. Still, a good bag can be made any day within sight of my house. The grouse are now packed and difficult to approach, but, driving in a light wagon over the prairies, a good number can be killed. I have seen a few snipe, but they are very wild. A party has just returned from a turkey hunt, some twelve miles from here, and brought with them five deer and seventeen turkeys. These last are in prime condition. The warm weather is coming rapidly, and the protracted flight of wild fowl without tarrying with us warn that spring has come.

GENERAL.

REGARDING SPRING FLOWERS.

EDITOR FOREST AND STREAM:

In your "Answers to Correspondents" you are incorrect on the "Alligator question." The sweet gum tree belongs to the order *Hamamelaceæ*, and to the species and genus of *Liquidambar styraciflua*. Secondly, among wild flowers are some inaccuracies: *Dicentra cucullaria* is Dutchman's breeches, while *Dicentra canadensis* is squirrel corn; also, *Thalictrum anemonoides* is not a Rue, but an Anemone, consequently it must be *Anemone thalictroides*, and not *Thalictrum anemonoides*. As to the mitre wort, it is many years since I have seen it, although it ought to be plentiful enough around here to be readily found. It differs from the *Tiarella:* one is the *Mitella diphylla*, mitre wort, and the other, *Tiarella cordifolia*, or bishop's cap. Also, may I add that for those who can enjoy looking at without handling, there is much to be found in our own Central Park, as my notes include my walks in the Park as well as on Long Island and New Jersey, although in the latter walks I carry a gun, which somewhat distracts my mind from botany. The *Cornus florida*, flowering dogwood, and *C. stolonifera*, red osier, are now in full bloom; the *Benzoin odoriferum*, spice wood; *Lonicera sempervirens*, trumpet honeysuckle; *Cydonia japonica*, Japanese quince, and its companion, *Forsythia suspensa*. The *Forsythia* are very beautiful, although the frosts of March 25 and 26 have injured them some, and I fear that the magnolias and rhododendrons will make a poor show, while the hydrangeas will be a failure. C. B.

April 20.

[We are always happy to correct any inaccuracies or mistakes, and some of our correspondent's points are well taken. We acknowledge the corn, *i. e.*, squirrel corn, and will be glad to hear from C. B. again, more especially as we purpose giving a monthly statement of the most prominent native flowers to be had in bloom. At the same time we pin our faith to "Gray's Manual," who says: "*Thalictrum anemonoides* (Mich.), Rue-Anemone; and we have always known Forsythia viridissima to be the hardy variety, F. suspensa being more tender and not so highly colored. The Dog-woods belong more properly to May, and will be noticed then; they are not in full bloom with us yet.—ED.]

FLORIDA ORANGES—*Mandarin, Fla., April* 30.—This season's orange crop is gathered and marketed, and the results on the whole may be considered satisfactory to the grower. The golden fruit, much of it, hung a long time on the trees awaiting the discretion of the owner in regard to stripping, and as the prices showed marked improvement later in the season, those who delayed did not do so in vain. The orange is not fairly ripe until the latter part of November, and the quality of the fruit steadily improves on the tree if it be allowed to remain until the first of April. After that it deteriorates more or less, owing partly to natural decay and partly to absorption by the tree as it puts forth its new foliage and fruit. The blossoms break forth into fragrant bloom about the first of March; the petals soon fall from these and leave the tiny green orange formed in the centre, which day by day slowly adds to its size. It is a common thing to see the white blossoms on the tree intermingled with the ripe fruit, and it is not uncommon to see, later on, the small green fruit hanging side by side with the ripe. Thus graciously does the orange tree give a long time to try the market, keeping the oranges hanging sweet and fresh awaiting our pleasure, and overlooking our dilatoriness by driving ahead with the new crop, without reference to the old unpicked one on the trees. It is better, however, for the tree that the fruit should be picked before the new blossoms appear, for obvious reasons; and, if a fair price can be obtained, it is better for the proprietor, for there are risks to be run in keeping the crop until late in the season, which really entitles the owner to higher prices. December is a stormy month, in which high winds prevail, and by them many of the oranges are blown off, and, striking the ground, are bruised and thus rendered unfit for shipment. January and February bring occasional frosts, and these, if severe, will spoil the fruit and it will drop to the ground with the life killed out of it. These risks impel many to strip early in the season, and urgent need of money impels many more to do the same; while on the trees of those who can afford to wait and take their chances the fruit lingers late. Many fine trees have begun bearing this year, and thousands of orange seeds have sprouted into tiny trees, planted and tended by careful hands. One might think more trees were being raised than it would be profitable to use, but the orange business is in its infancy yet, and with more trees added to our groves we can gracefully come down to a lower price, if we have to do so in order to extend the market.

C. D. D.

MAGNOLIA GRANDIFLORA.—The Magnolias are in bloom earlier this season than last by about ten days. A northern lady, an invalid, was saying a while ago, "O, I hope I shall see the magnolias bloom before I go home," and here they are before us. The trees are from fifty to sixty feet high, say the size of an oak or elm. The leaves are dark, glossy green, three inches by six, but some of the latest comers of leaves are a pale sea green and here and there in front of them the flowers are set. Is there any need of describing the flower? It is as white as the calla, as large as a dinner plate, and the exquisite scent from it reminds us of the lemon verbena, only it is far more abundant and diffusive. The buds are the size of a man's fist, with a beautiful form and taper, and silken softness to the touch. I picked a bud and flower for Easter Sunday and laid them on the little desk in the church, where

their pale beauty was even more apparent. Roses were in their company but they were dwarfed to daisies. Callas swung gracefully above them from vases, and while they equalled the Magnolia in color, the latter was larger and had more transparency to its whiteness—a sort of pale luminosity. I have written all this knowing full well that the magnolia is a well known tree and its flowers familiar; but I write of it as it is in Florida, where in developement it exceeds its kind in other parts of the country.

The little steamer "Mary Draper" took down for me to Jacksonville this morning a bunch of five flowers, three being hardly opened. The captain swung it in the pilot house from the ceiling and it hung there swaying in the breeze, a bouquet fit for the gods, to say nothing of the steamboat passengers. I know what will become of it on its arrival. The friend to whom I sent it will place it in his doorway, and business men will turn their heads to look as they pass on, little children will stretch out their hands towards them, and ladies will stop many a moment to admire and exclaim with delight, as one did, a day or two since, "First magnolias!" Thus comes to us this season, the pride among flowers of every Southerner.

Mandarin, Fla. April 23, 1878. C. D. D.

CENTRAL (MASS.) POULTRY ASSOCIATION.—This new association was formed at Worcester, Mass., April 30, with the following officers: Pres., Henry S. Ball, Shrewsbury; Vice-Prests., Rufus Helman, of Leicester, Lucius Morgan, of Worcester; Sec. and Treas., W. H. Fitton, Worcester; Auditor, F. A. Stratton, Worcester; Ex. Com., Henry S. Hall, of Worcester; W. E. Cunningham, of Fitchburg; G. F. Lawrence, of Worcester; H. Watts, of Worcester; Joseph Marson, of Princeton; J. G. Holland, of Worcester.

OPENING OF THE PARIS EXPOSITION.—The Paris Exposition opened May 2. Its attractions are thus summarized:

"The Exposition buildings are situated on both sides of the Seine, and are vast in their proportions, and both imposing and convenient in their architecture. One of the most interesting features of the exhibition is a Japanese village in a separate inclosure, where visitors will have an opportunity to study the exact manner of life of that interesting people. A Chinese pagoda has also been put up by native workmen. Holland will beautify the park of the Trocadero Palace with a bed of forty thousand Dutch tulips, and a vast aquarium will have a place there; a cascade, thirty feet in width, will fall over marble steps into a basin six hundred feet distant; great stretches of gardens, containing many hothouses with rare plants, will lie to the right of the palace; two elaborate and beautiful fountains will throw their streams thirty feet into the air; a superb Algerian pavilion will adorn the grounds, and innumerable structures of varied architecture will be scattered about.

"The main building, situated on the Champ de Mars, is 2,000 feet in length by 1,000 feet in breadth. France will, of course, make the grandest show, but England also has made great efforts to have a representation which shall command admiration. Germany will not appear except in the way of paintings.

GEN. HARDING'S SALE OF YEARLINGS.—Gen. Harding's famous Belle Meade farm, near this city, with its large park of two hundred deer, model dwellings, outhouses, barns, stables, cowhouses, dairies, etc., all models of rural architecture, is the scene of an annual sale of fine blooded horses. At the sale last week some very fine stock was sold, but the prices ranged lower than on former occasions. There were twenty-five lots with an average of $656 per lot. The highest prices paid was $1,025 given by Col. W. H. Johnson, for Merry Lass, brown filly, foaled April 21 by John Morgan's dam Vesper Light (the dam of Vandelete), and $795 for Chancellor, b. c., by John Morgan's dam Sadowa, by Jack Malone.

J. D. H.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, ns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 14, 15, 16 and 17. Dr. W. Seward Webb, Secretary.

RAILROADS AND DOGS.

Mr. Editor: I would like to say a word upon the subject of "Railroads and Dogs," in continuance of an article in your valuable paper of the 18th inst.

I travel over the different railroads running out of Boston, with my associates, in the season for shooting, a great deal, and, with but one or two exceptions, we never had any trouble with the transportation of our dogs. But with one or two *particular* railroads we are very much abused by baggage-masters and breakmen, by extorting large fares for a short distance, and do not allow us to take care of them after we have paid their charges, but put them into a crowded baggage-car, between piles of trunks and cases, tolling about, liable to fall over at any time and kill or injure our dogs. We have often asked permission to sit in the baggage-car and look after them, after we have paid the charges, but are informed that we cannot, as it is against the rules of the road. At the same time there would be from six to twelve men, patrons or friends, sitting there, who commence fooling with the dogs at once as soon as they are left in their charge, getting them uneasy and discontented. We recently wrote to one superintendent about it, stating our case as clearly as possible, asking if we could not purchase a ticket for our dogs, and then either take them into the smoking or baggage car (not passenger car) under our own care, and rid ourselves of the abuse of employees who are vested with a little brief authority; but we got nothing favorable in reply, as he says that a large number of their patrons object to dogs, partly because they are filthy and partly because they are liable to get bitten; also saying it is a custom for all railroads to do the same (which all sportsmen know different), referring to the Metropolitan Horse Railroad for example, as they refused to admit them. I would like, for one, to see this subject continued until some arrangement can be made with *all* railroads to transport dogs, either by giving them a proper place by themselves, or charging regular fare and leaving them with their owners, making them liable for all damages while being transported from one place to another. TARGET.

Boston, April 27, 1878.

[We are in receipt of a great many letters fully indorsing our views as to railroad transportation. The principal question is this one—where the carrier receives no pay he incurs no risk. It is better, then, to pay for transportation of dogs, as it insures on the part of the carriers a certain positive amount of care, and if dogs are killed or injured through carelessness or willfulness of employees the company becomes liable. Nowadays, when a dog is worth as much as a horse, to have a dog killed and get no redress is contrary to all the rules of business and common sense.—ED.]

THE FOXHOUNDS AROUND GASTON.

EDITOR FOREST AND STREAM:

I can, without much trouble, give you the number of packs of hounds in this vicinity and within a circuit of twenty miles, taking my own house as its centre, which is on the Roanoke a few miles above Gaston. This county (Northampton, N. C.,) is a marginal one. Its upper portion is adjoining that of Brunswick and Greenville, Va., and Warren, N. C. The Roanoke separates it from Halifax. It will be seen, then, that the proposed circuit will embrace parts of all these contiguous counties.

I shall begin with its centre. My own pack, the season just closed, consisted of nine couple, having presented a fine couple after its commencement. My pack, with a solitary exception, is Byron in a more or less degree. Below me is a neighborhood pack, each neighbor keeping a couple, and all uniting on hunting occasions, of some six couple. These hounds are of no uniform breed, but many of them have Byron in them. Summerill, near Gaysburg, has some seven couple of wild, ranting and traitless proclivities, but quite successful, with no traces of Byron in their blood. Mr. S. is now breeding to obtain it, and with the addition of several couple, which General Ransom, of the U. S. S., which he obtained through the kindness of Governors Bonie and Hampton, has loaned him. The next season will find him with a pack of note.

In Halifax, and just over the Roanoke opposite my residence, is a neighborhood pack of seven or eight couple, mostly Byrons, headed by Daniel C. Hardy. This pack is equal to any in the State, well trained and up to all duties. Above Mr. Hardy comes Nat Shewin heading another neighbor pack with a large infusion in it of the Byron blood. He usually has in the field six or seven couple. They are very sure and speedy.

Above Mr. Shewin, in the Roanoke and in the county of Warren is a very fine neighborhood pack, hunted by Mr. Rodwell, of eight or ten couple. These hounds are very pretty in action, I learn, but indicate pretty unmistakeably the pointer strain. Mr. Russell, just above, has a pack of six or seven couple, represented to be pure runners. I hunted with a slut he sent W. E. Brodnax to have put up with one of his Byron dogs this season, and was favorably impressed with her action and general qualities, and think the Byron will neck well upon her.

Below Gaston, in Halifax, is a neighborhood pack of six or seven couple, headed by Captain R. E. Mosely. With the exception of two well-trained Byrons I gave him this season, his hounds have no Byron in them.

Near Weldon comes Messrs. Pope and Long's packs, which when united aggregate some ten or twelve couple. Those hounds are regarded very superior and very well bred. They have, however, no Byron in them, and how they would stand red foxes has never been tested. In the vicinity of Weldon only the gray fox is found. From Captain Mosely's to the mountains on the Roanoke both red and gray abound. The same is the case on each side of that stream, and as wide as it is the reds swim it when pressed.

In the county of Brunswick, Va., and six miles north of me, Mr. Basset Rawlings has a sure, reliable and game pack of six or eight couple. These hounds have (most of them at least) Byron in them, and some of them are nearly full Byron. I think this pack has been the most successful in killing the gray fox than any other of my acquaintance. But only his Byrons are fit for the red, in fact they won't run them. Just a few miles north of Mr. Rawlings F. Eroff and brother have three or four couple of mixed dogs, with no Byron interspersed. Some of them are fine gray fox hounds, but unless aided by Mr. Rawlings rarely succeed.

Mr. Ravenscroft Jones, on the Mahosin River, has a few couple of very fine hounds, mostly Byrons, which our mutual friend, W. E. Brodnax, gave him. Still further north, on the Nottaway and rather beyond my twenty miles' circuit, is Col. E. B. Tucker with a pack of diminutive beagles and Byrons combined, numbering seven or eight couple. They are nimble, quick and untiring, and just the thing for an old man after the gray fox. They are very musical, pack well, and afford splendid sport.

Clinton Harrison, a son of the late J. J. Harrison, who owned the famed racer Virginian and his dam Meretrix, hunts a neighborhood pack of seven or eight couple. This pack has in part a full share of the Byron stock and in part of Captain Epper stock of Dinwiddie county, Va. They are regarded fine dogs and very successful after the gray fox. They have not been fully tested after reds, but no doubt are well suited for that work. The past season they have been hunted well and constantly, with too unprecedented success. They are sturdy, speedy, true and untiring.

Some fifteen miles above me is the residence of W. E. Brodnax, who now owns and hunts the best pack of hounds within my circuit. They are mostly Byrons, and no fox, red or gray, can outbottom or outspeed them. I have been a huntsman for near forty years, and the manœuvring of his entire pack is superior to any I have ever owned or hunted; with the exception of one solitary dog, which a friend presented to him, his pack will hunt from morn till night without flag or slacking of pace. Mr. B. usually hunts some eight couple, though as his distributing puppies in the neighborhood has been so universal, he rarely hunts near home with so small a number.

I have in the above enumeration mentioned only *packs* of hounds. But the number of hounds of *pure blood* owned by individuals who never participate in the chase, fully equal those hunted in packs. There is a famous pack also hunted by Mr. C. Harrison. These dogs Mr. Brodnax considers of good stock and high bred.

Before Gen. P. B. Starke distributed his pack among his friends, (and I am proud to say that the first choice and larger share was tendered me,) he had what we usually term *a crack pack*. These I have now in my pack are certainly first-class, and will compare with any hounds in this country.

T. G. T., of Gaston.

THE CHESAPEAKE BAY DOG.

In describing the Chesapeake Bay dogs at the Baltimore Bench Show, we spent considerable time over this class trying to understand them. The types of dogs were so different, when we came to look at the awards, that we were quite puzzled to know which form of dog was the best. At our request some of our friends in Baltimore where good enough to promise that they would give us their ideas as to what where the points of a Chesapeake Bay dog, and we take great pleasure in reproducing a letter from a gentleman thoroughly conversant with the Chesapeake Bay dog:

BALTIMORE, May 3, 1878.

In compliance with your request, I will endeavor to give you a description of the "Chesapeake Bay duckling dog," what in old times was called the "otter water dog." This dog is said to be, and believed by many to have descended from the offspring of the old Labrador dogs crossed with the otter (it being asserted that the otter will mate with a bitch when in heat and chained near his den). The truth of this theory I do not undertake to vouch for, but if the appearance, coat and performance of these dogs in the water go for anything, they certainly go a long way toward establishing the truth of this theory; but be that as it may, my purpose here is simply to describe the dog so that he may be recognized when seen.

A Chesapeake Bay dog's size, in point of height, should not be more than that of a fair sized setter, say about 23 inches, though he should be much longer in the body and shorter in the legs, indeed, altogether differently shaped; weight should be about 60 or 65 pounds. I should be disposed to doubt his pedigree if he exceeded 70 pounds. In color he should be a very light liver, or between liver and yellow. His neck should be long, with head set on very much like an otter's. This head should be rather short and very decidedly tapering to the nose. His ears should be small and short and well set up toward the top of the head. The eyes should be mild and expressive, and in color and in keeping with his coat. Last, though not least, his hair should be very thick, short and perfectly straight, with perhaps just a slight disposition to be wavy or kinky over the loin, and next to the skin it should have a positive fur mixed as thick as possible with the hair. In short this dog seems to have been designed and fitted by nature in the best manner to bear exposure to the severest cold both of weather and water, his coat enabling him to come from the water almost as dry as when he entered it. His hair being straight and thick, he passes through the water with little or no resistance. It is almost impossible for the water to penetrate through the hair and fur to the skin, they necessarily can swim much more rapidly than a long or curly haired dog. No weather is too cold for them, and they will oftentimes dive for a crippled duck and recover him while under the water. These dogs are generally very intelligent and of good disposition. One of the best specimens I've seen for many years was a bitch named Fan (No. 269) with several pups at our Baltimore Bench Show, she was in class 13 and took second prize. Her pups were exceedingly beautiful and very much like an otter. OBSERVER.

THE NEW YORK DOG SHOW.—The success of this show seems now fully assured. The entries are already quite full, including 120 English setters, 100 red Irish setters, over 70 Gordons, and 100 pointers. The exhibition of true sporting dogs will be very complete. It must not be considered in the least as a show restricted to the metropolis. Fine animals from all parts of the country have been entered. It is not wise on the part of any one to endeavor to create jealousies in regard to a show if held in New York. We are sure that true sportsmen cannot have any narrowness of feeling. Shows in Boston, St. Louis and Baltimore have had the best dogs that New York possessed, and it is quite certain that there will be choice animals sent from the West to compete for the New York prizes. It is just out of the question that any one man, no matter how honest or competent he is, can always act as judge. There are idiosyncrasies of judgment which must be prevented. It would be unwise if, for two or three years, the same judge was to pass his dictum on all English or American dogs. There can be no special reason why one particular breed of dogs, or the offspring of a certain dog, should always take the laurels. If we want to lay down the law as to points, following closely the English taste, it is quite as well that we had Mr. Lort. We are positive that the decisions of Mr. Lort will be accepted as the judgment of a gentleman who has the fullest experience, and who, to his thorough knowledge, has gained the reputation of the most equal justice. It savors of bad taste to find any one who is inclined to cavil at decisions, even before they are promulgated. If any owners of dogs are fortunate enough to have prizes given their favorites, which dogs may have before this been accorded such awards, all we can say, then, is that the double distinction will be a most lasting one. Now we should not be the least surprised if Mr. Lort would in some cases decide on dogs as being the best at the coming show, which Mr. Davidson had also judged prior to this as winners.

In non-sporting dogs, in toys and pets, the show will be simply immense. There will be dogs good enough to eat—as the Chinese one—and some so small that a man with a moderate gullet could swallow one. There will be a big dog of 200 and odd pounds. The managers are very full of work, and as we commenced this article, sure of the success of the show, so are we convinced that it will surpass that of last year as to the entries of dogs, their excellence, and in the number of visitors who will attend the exhibition of the Westminster Kennel Club Bench Show.

BALTIMORE KENNEL CLUB AND THE FIELD TRIALS.—At a general meeting of the Baltimore Kennel Club, held on

the 24th of April, Edmond Orgill, Esq., in the chair, a discussion on the question of field trials, as suggested in a late number of the FOREST AND STREAM AND ROD AND GUN was held. Various subjects of interest were discussed by J. Addison Smith, Esq., President of the Baltimore Kennel Club, and by Messrs. Rowe, Higgins, Davidson, Preston, Sheppard and others. On motion of Mr. Whitford, it was proposed and carried that the 10th of November next should be the day for field trials. The President of the Baltimore Kennel Club kindly informs us "that in all probability the ground selected will be on the Rappahannock, some sixteen miles below Fredericksburg, the trials to be held by the B. K. C., who will also have gentlemen of the club to select the place at as early a day as possible."

NATIONAL DOG SHOW AT WORCESTER.—On May 21, 22, 23 and 24 a bench show will be held in Worcester under the auspices of several gentlemen. Mr. Charles Allen has been engaged, who will take charge of the dogs. There are in Division 1, for sporting dogs, free classes for champion English setters, for champion Irish, for champion Gordons and for champion pointers. In the open classes, there are 12 classes, for imported English setters or their progeny, 4 prizes; for native English setters, 4 prizes; for imported red or red and white English setters, 4 prizes; for native red and white setters, either Irish or cross-bred, 4 prizes; for black and tan, white and tan Gordons, either native or imported, 4 prizes; for pointers of 50 pounds weight or over, 2 prizes; for pointers under 50 pounds, 2 prizes; for pointer puppies under 12 months, 2 prizes; for retrieving and field spaniels other than pure Irish, 1 prize; for cocker spaniels, 1 prize; for fox hounds, best couple, 1 prize; for fox terriers 1 prize. In Division 2, non-sporting dogs, there are handsome prizes offered for mastiffs, St. Bernards, Newfoundlands, Dalmatians, collies, Italian grey hounds, bull dogs, King Charles spaniels, poodles, Siberian bloodhounds, pugs, black and tan terriers, Skye terriers, Yorkshire terriers. Entrance fee will be one dollar. The show will take place at Mechanic Hall. The prizes are fairly liberal, commencing with twenty-five dollars, the lowest being ten dollars. Mr. A. P. Peck is manager. Dogs will be received up to Tuesday, May 21. Entries will close May 15.

WORCESTER DOG SHOW.—Entries are coming in rapidly, and all indications are that, in number of dogs exhibited and general interest aroused, the show will be a decided success. ENG.

FIELD TRIALS IN MINNESOTA.—In connection with the Minnesota Kennel Club Bench Show, which is to be held at the State Fair at St. Paul, next September, it is proposed to hold a series of field trials, and as the grouse season is just then at its best and the canine material of the State is of an excellent quality, a superior event may reasonably be expected. The English colony of Martin county, who keep up the fox hunting and hurdle racing of their native country, are to be present in full force at the fair and arrange a coursing meeting.

RUPTURE IN DOGS.—In answer to some inquiries made in the FOREST AND STREAM in regard to rupture or hernia in dogs, I will give my experience with my pointer pup. When first discovered the rupture was quite small and very soft. I used plasters and bandages for some four or five weeks, but could not discern any change in my dog. At last, disconsolate about my pup (for he is a fine little fellow), I went to a surgeon and asked him to perform an operation on my dog, which he did, successfully. The operation was only of fifteen minutes' duration, taking six stitches in the muscles of his abdomen, leaving the skin opened to heal afterward. I then placed a piece of heavy muslin around his body, making a bandage to lace at the top with rubber cord, and continued to dress him in this manner about once a week for six or eight weeks, when I was safe in removing the bandage. He has not been sick a day since the operation was performed. He is entirely well now, and is pronounced a daisy by all who have seen him. TRACY.
Lafayette, Indiana.

A FIELD TRIAL WINNER FOR SALE.—Stafford, bred by L. H. Smith, Esq., of Strathroy, Canada, is to be sold. This fine dog was one of the Field trial winners at Memphis. A better dog, with finer pedigree and recorded performances, cannot be met with.—{See advt.

—The owner of a setter bitch, cream color, with orange ears, of small size, and answering to the name of Judy, was lost in Brooklyn some ten days ago. See the reward offered for her recovery, on her return to No. 80 Pierrepont street.

VISITS.—J. S. Jones' (Marshalltown, Iowa) dog Jet to Reno, owned by Dr. C. H. Field, Geneva, Iowa, April 2, and to Phœby (out of Bismarck), owned by Sh pman.
State Centre, April 14.
VJ. W. Foster, Leesburg, Virginia, Kirby to Leicester; J. N. Dodge, Detroit, Rose to Leicester; and Isaac Fiske, Worcester, Mass., Pearl to Gladstone.

WHELPS.—*Baltimore, May* 1.—Mr. J. Addison Smith's Lillie had a fine litter of pups, five dogs and five bitches, all white, with lemon markings. A choicer lot never was seen. Sire was Mr. Orgill's Flake, whose death we noticed in last week's issue.

MIRAH.—Mr. E. J. Robbin's Mirah, Irish setter, whelped, April 25th, six pups, two dogs and four bitches, by champion Rory O'Moore, Weatherfield, Conn.

A REMOVAL.—Mr. W. Waldstein, the well-known manufacturer of optical instruments, has removed from his former store on Broadway to 41 Union Square, 17th street and Broadway. At Creedmoor everybody should have a good pair of glasses, and at Mr. Waldstein's establishment is the place to purchase them.

Game Bag and Gun.

MAY IS A CLOSE MONTH FOR GAME.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson snipe, per doz., $2.25; plover, $2.00; bay birds, large, $3.00; small, 30; wild pigeons, flights, $1; do stall fed, $2; Philadelphia squabs, $2.50; wild do, $1.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25 cents; do., fowls, 18; do., turkeys, 18; do., ducks, 20; State and Western chickens, 15; do., turkeys, 15; do., fowls, 13; do., ducks, 10; spring chickens, 35.

CONNECTICUT—*Centre Brook, May* 6.—Snipe shooting poor this spring. Too much water on the river meadows. Largest bag heard from, 12. G. H. C.

MARYLAND.—*Elkton, May* 6.—Woodcock unusually abundant. F. S.

GEORGIA—*Americus, April* 27.—In some localities in the southern part of this State woodcock breed and remain all the year around. The country is open, except along the branches where the undergrowth is thick and land marshy. Deer are plentiful there, and if they were not shot down at all seasons of the year their numbers would afford grand sport. SHOT.

TENNESSEE TURKEYS.—"Forester," of Huntington, Tenn., thinks "Val's" reported 29 pounds turkey (F. and S., April 25) a wonderful bird. The average weight he puts at 19 pounds. What do our Tennessee turkey shooters have to say?

INDIANA—*Lafayette, May* 5.—Chicken will be plenty unless season is very wet. Saw large numbers while shooting snipe. Found a nest on April 30, with ten eggs. This within 18 miles of Lafayette. ASHLEY.

IOWA—*Pomeroy May* 1.—Close season commences to-day. Golden plover have been quite thick for some time, but no Wilson snipe are to be found; have only bagged two this season. I was out last Saturday afternoon and killed forty plover, one curlew, etc. On going over the ground after the great storm of the 21st ult. I found numbers of ducks and other smaller birds that had met a violent death during the war of the elements. ABE DACOTAH.

A MONTANA HUNTER'S LODGE.—Just what the poet meant when he sighed "for a lodge in some vast wilderness" we are at a loss to conceive. It certainly could not have been a hunter's lodge, for as this self-same poet wept bitter tears in good English rhyme upon the death of his pet hares, we cannot, by the boldest stretch of the imagination, think of him as mounted on a mustang, and, with shot-gun in hand, chasing the fleet jackass rabbit of the West. But the sportsmen of Helena, Ark., have a very definite conception of what will meet their needs. Having taken up a tract twenty-five miles north of Helena, near the summit of the main range of the Rocky Mountains, they propose to stock the lake with fish, build a club-house, and otherwise equip the grounds with the most approved appurtenances of a sportsman's park. The game, large and small, fur and feather, is abundant, and, with proper restrictions, will furnish rare sport for years to come.

A VETERAN SPORTSMAN.— The columns of the FOREST AND STREAM AND ROD AND GUN are frequently indebted to our very much esteemed friend, Dr. Garlick, for most interesting matter. In a late communication from Dr. Garlick he writes us: "I have to write lying on my lounge, and much of the time am suffering severely." We copy the following from the *Chagrin Falls* (O.) *Exponent* of April 18, which shows that the fire of former days still burns in the sportsman:

"Dr. Garlick, of Bedford, is a crack wing shot as well as expert angler, and although over seventy-three years old, a confirmed invalid, and unable to walk without the assistance of a crutch, he one day recently killed on the wing ten snipe out of eleven shots, each shot bringing a bird till the tenth, when, by more carelessness than lack of skill, he missed."

PORTABLE SHOOTING BOXES.—For several years we have been trying to induce builders to manufacture a portable shooting box or camping house which could be taken down or put up in a few hours, easily packed and transported, and sold at a cheap rate. Last year the Messrs. O'Brien, of Yonkers, advertised through our columns and received innumerable inquiries. Sportsmen did not, however, feel like paying the prices asked, and held off. This year the prices have not only decreased, but material improvements in construction have been contrived, and the Messrs. O'Brien are now prepared to suit all applicants.

What perfect structures of this kind can be made may be readily ascertained by visiting No. 51 Lafayette Place, New York City, where two models of the lightest, most graceful, durable and convenient kind are on exhibition. These are made by John M. Hoffmire, whose address is at 157 Broadway. The weight of a house 10x11 is only 600 pounds, and the cost $120. A house with five rooms, suitable for the lake or sea side, costs only $320, and weighs 1,650 lbs. The largest room is 10x16, and the other four rooms each 8x7. We verily believe that the time will soon come when the demand for these houses by shooting clubs, anglers, sportsmen and summer visitors on the sea side and in the mountains, as well as by fishermen, duckers, sheep rangers, cowboys, orange growers and pioneer settlers, will be almost as universal as the demand for canvas tents and blankets. We have critically examined the Hoffmire portable house with delight and fullest approval. It makes a man feel like putting out for the woods to step inside of one of them. These houses can be put up in two hours.

SMALL BORE GUNS.—*Mr. Editor*—The inquiry of H. M. S. in FOREST AND STREAM of April 11, in regard to the desirability of 14-gauge guns for upland shooting, recalls Frank Forester's favorite for general use—a 14-gauge 8lb. gun. The English makers are making 20-gauge guns that, with a charge of 2½ drachms of powder and ¾ of an ounce of No. 6 English shot (202 pellets), will make patterns of 165 pellets in a 30-inch circle at 40 yards. A circle 30 inches in diameter contains 706 square inches area, and, supposing the shot to be evenly distributed, 165 shot would give one pellet to every 4 square inches area, or place them about two inches apart. A 10-gauge cylinder bored gun could not approach this, either in pattern or penetration. If choked, the 10-gauge gun would make the same pattern, and the target would be increased in diameter 3 to 4 inches. This is the only advantage the large bore possesses over the small gauge for field shooting, when no one cares to use large shot. For large sizes of shot the large bores are best. For field use a 16-gauge, 6½ or 6¾ lb. gun, with a medium choke, will be found the best.

I own a muzzle-loading fine gun, made by Burke, of London, 15-gauge, 6¾ lbs., cylinder bored, making a pattern of 125 pellets at 40 yards, 30-inch circle, with a charge of 2½ drachms of powder and ⅞ oz. No. 8 American shot. A cylinder bored 10-gauge gun that will make a target of 140 pellets, using 3½ drachms of powder and 1¼ oz. No. 8 shot, must be a good one. Now is the "game worth the candle?"—one drachm more powder and ½ oz. more shot to put 15 extra pellets in a surface of 706 square inches, or one extra pellet in every 47 square inches! Of course those who wish to cover the side of a barn had better use large bores with bell mouths. In selecting a gun all depends on what you want it for; if for cover shooting, a light small bore is all that is wanted, the right barrel a cylinder and the left medium choke; if birds are wild and long shots are the rule, have the right barrel medium choke and the left full choke. For a duck gun get an 8 or 10-gauge, for a flock gun the right barrel cylinder, the left medium choke. When ducks will not decoy well and are shy, have the right barrel medium choke and the left full choke. Where ducks are scarce and the shooting is at single ducks at long distances, have the right barrel full choke, and the left *extra full* choke. Small gauge guns will not shoot *large* shot so well as the large bores; on the other hand the small gauges are markedly superior to the large bores in shooting *small* shot. The choking of a gun enables it to shoot larger sizes of shot well. TEN BROECK.

SOME PATTERN WITH A WEBLEY.—I send you the results of some experiments I made with my 12 bore Webley B L gun, at 5 O'Neil targets, 30 yards distant, and from the results I think they may prove of interest to those readers of FOREST AND STREAM who wish to secure the best possible results from their guns when shooting at either game, bird matches, glass balls, or targets. The conditions of the trials were as follows:

Targets, 30 in. circle, divided into 109 squares and parts of squares.

Shells, Hart's 2½ in. pickle cone, brass shells.

Loads, 3½ drachms Laflin & Rand's F. G. powder, 1¼ oz. Colwell's drop shot No. 8, on powder, one P E wad and one fibre wad; on shot, one cut pasteboard wad.

Gun, Webley, 12 bore, 32 in. barrel, 9¼ lbs. weight.

Distance, 30 yards.

Target No. 1 with left barrel, had 288 shot in circle and hit 92 out of the 109 squares. Target No. 2, right barrel, had 304 shot in circle and hit 89 out of 109 squares. Target No. 3, left barrel, had 331 shot in circle, and hit 89 squares out of 109. Target No. 4, right barrel, had 310 shot in circle, and hit 80 squares. Target No. 5, left barrel, 284 shot in circle, and hit 85 squares.

In No. 1 and 2 targets I wet the shot with raw linseed oil, and the results are plainly to be seen in the very even distribution of shot over the face of target.

In targets No. 3 and 4 the shot was in the same condition as when it came from manufacturer. The result is shown by the uneven distribution, but larger number of shot in circle.

In target No. 5 I wet the shot with common lard oil; its effect is in my opinion not so good as in No. 1 and 2, but is better than in 3 and 4 targets. The question will then arise are these results peculiar to my gun, or will any gun show the same? I will test it if I have an opportunity some future time, but in the meantime will some of your readers make a few trials and give the results? I had no means of getting the penetration, so cannot give that. CENTRAL.
Jersey City, May 7.

A GOOD, SERVICEABLE AND CHEAP GUN.—Now if any one had said that this season a good, serviceable gun, a central fire breech-loader, with patent top lever, direct bolted cam action, with a thorough lump, twist barrels, good locks and fore end, could be produced, imported from England and retailed at $35, we could hardly have credited it. But so it is. The gun is now before us, and quite a neat shooting-iron it is, one that no one would be ashamed of. We put the barrels to the light, and the work seems perfectly smooth and finished as the sun shines through them. We click the locks, the snap sounds clear and good. We work the top lever, it moves smoothly and does not grate. Now, in order that persons may examine these guns before purchasing, Mr. H. C. Squires, of No. 1 Courtlandt street, agrees, on payment of express charges *one way*, to send any of these guns on examination. Of course they differ in prices; starting at $35, they augment in cost to $85, with Damascus barrels. Mr. Squires is well known for his probity and square dealing, and for those who want a good and cheap gun let them consult the advertisement.

ALTERING MUZZLE LOADERS TO BREECH LOADERS.—The question of altering guns is one so frequently asked us, that it is worthy of a careful consideration. A man has a favorite gun, one he has shot with for years, which in muzzle loading times, was the best of its kind. Is it worth altering? We have, we may frankly state it, been so far very much on the fence. Questions of safety being paramount, after that came the economic question. As to the first, we are quite sure now that when an arm has sufficient weight at the breech it can be so altered. We are even inclined to think that comparatively light barrels can be made into breech loading guns, because shells, if metallic ones are used, very much strengthen a barrel, affording an additional thickness against the bursting effects of powder. We may mention too, that when an old barrel is taken to a good workman to be looked over prior to changing to the breech loader, the metal has to go through a critical examination. It is not always that a barrel is returned because at the breech the metal is too thin, but because from long use, or for some oversight, it may be from the muzzle end that the barrel is worn out or poor. Now as to the question of cost. As a good breech loading gun can be had of American make at from $50 to $100, or an English one from about the same price up to $125, when $75 has to be paid for an alteration, the question of cost comes in, or is "the play

worth the candle." Still we can fully appreciate the real respect a conservative sportsman can have for his good old gun, with which he has passed so many a happy hour. It would break his heart to think that his fine barrels should know his hand no more, and he is glad and willing to have his gun made over, and looks on his old gun, if satisfactory work is done, as a patriotic sailor would look on the frigate Constitution, which has been re-built from stem to stern a dozen times.

In Baltimore, we purposely spent an hour or more with Messrs. Clark & Snyder, looking over their work. We went to be informed, to be thoroughly posted, as to the character of the alterations they make; and we are fully satisfied that this house displays the most extraordinary skill for this special branch of work. We had never seen their altered guns, though familiar with the excellent guns made by them. We must declare that one of their altered guns does not really show any marks of change. By some process of their own, the very glaze of the skin on the barrel at the breech is unaltered, showing no effects of heat, and the fittings are absolutely true. It must be quite as difficult, and just as much of a job to alter a gun as to make a new one. A new breech, hammers, fire end, rebounding locks, engraving, re-chambering, brasing, soldering, wood work, lugs, etc., have all to be made new and fitted. An old gun has to be changed into a new one, and no patching must be visible. For the price, $75, for such alteration in a gun, which is what Messrs. Clark & Sneider are paid, this is not a penny too much. It is not a swap like Aladdin's lamp, a new one for an old one, for you get your old gun back again with all the modern improvements, and thus the rejuvenating of an old friend must bring back with it a thousand pleasures. Now we hear a great deal about Express rifles. At Messrs. Clark & Sneider's, we saw an Express rifle weighing some nine pounds, .45 calibre, which was just as perfect in every way as the finest work turned out by any crack English manufacturer. There was also shown to us a novel rifle, with a patent breech, which was excellent of its kind. At present, however, it is with the alteration from muzzle loaders to breech loaders that we have to do, and without any solicitation on the part of Messrs. Clark & Sneider we are quite willing to state that the work of alteration made by them is of the most superior kind, and that we were surprised ourselves at the fine character of their work. As to their guns, made out and out by them, their arms rank among the leading ones in the country.

PIGEON MATCHES.

How to Prepare Scores.—In sending their scores clubs are requested to give the following particulars: Place, date, name of club and of the competition, kind of trap used, distance of rise, boundary and rules governing. To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday, and earlier, if possible.

Massachusetts—*Amesbury, May* 4.—Powow Shooting Club had a glass ball match, 18 yards rise, Bogardus rules and trap with screen.

Geo Golsoe	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
J Rowell	1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—19
Chas Wales	1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 0 1 1 1 1—17
Ed Rowell, Jr	1 0 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1—17
Hatch	0 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1—16
F Eastman	0 1 0 1 1 1 1 1 0 1 0 1 1 1 0 1 1 1 1 1—15
D Folger	1 0 0 1 1 1 1 1 0 1 0 1 1 0 1 1 1 1 0 0—13
J Spofford	0 0 0 0 1 1 1 0 1 1 1 1 0 1 0 1 1 1 1—13
J Grieves	12
Chas Whitmore	12
J Robertson	9
H G Beetle	9
N A Folger	7
Geo Osgood	6
A McKenzie	5

New York, *May* 6.—Match between the five who tied in the late match at Sixty-third Street Rink for gold medal:

J. M. Young	1 1 1 1 1 0 1 1 1 0 0 0 1 1 0 1 0 1 0 0 1 1 0—16
Ed. Murphy	1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—24
W. R. Murphy	1 1 1 1 1 0 1 1 1 1 0 1 0 1 1 1 1 1 1 0 1—20
F. H. Dugro	1 0 1 1 1 1 1 0 1 1 1 0 0 1 1 1 1 1 1 1 0 1 0 1—19
J. P. Ontwater	0 1 0 1 1 1 1 0 1 0 0 0 1 1 1 1 1 0 1 0 0 1 0 1 0—14

Kings County Gun Club.—Monthly shoot at Brooklyn Driving Park, May 2, for the championship medal of the club; H and T traps, 21 yards rise, 80 yards boundary; L. I. S. C. rules:

Peter Moller	1 1 1 1 1 1 1 1 1 1—10
John M Moller	1 1 1 1 1 * 1 1 1 1 1— 9
C Tonjes	0 1 0 1 1 1 1 1 1 1 1— 8
C Meyer	1 1 1 1 1 0 0 1 1 1— 8
W Pickard	1 0 1 1 1 1 1 1 1 0— 8
G Moller	0 1 1 1 0 1 1 1 1 0— 7
J H Miller	1 1 1 0 1 1 1 0 1 0— 7
J Meyer	* 1 1 * 0 1 1 1 1 1— 7
John Moller	1 1 0 1 1 1 1 0 0 0— 6
W Mangel	1 1 1 0 0 1 0 0 1 1— 6
Dr Fitzgerald	1 1 1 0 0 0 0 1 1 1— 6

F Moller killed 5; F Volkman, 4; Conrad Moller, 4; J. Schultz, 3, and H Dick, 2.

Nassau Gun Club.—Fourth monthly shoot for club medal, at Dexter Park, Flatlands, L. I., April 30, 25 yards rise. Messrs. Smith and Ryder, former winners, 27 yards.

W A Dunbram	1 1 1 1 1—5	W Watson	1 1 1 0 —3
G Bergen	1 1 1 1 *—4	H L Wyckoff	1 1 1 0 —3
L H Smith	1 * 1 1 —3	W R Selover	1 * 0 1 —2
J Landcake	0 1 1 1 —3		

J J Ryder killed one in four, W. H. Garrett grassed one in three, as also did J. Van Wyeklen. L. Duryea retired after missing three birds.

Same Day—Match between L. H. Smith and W. R. Selover; six single and three double.

L H Smith	1 1 1 1 0 0—4	W R Selover	1 1 1 1 0 0—4
L H Smith	11 10 10—4	W R Selover	01 11 10—4

Ties shot off at two doubles.

L H Smith	10 11—3	W R Selover	10 10—2

L H Smith killed eleven and W R Selover ten.

L. H. S.

Newark vs. Clifton.—Match at Newark, N. Y., April 30; tie not shot off:

Newark Club.

Miller	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Pomeroy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Palms	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Duffy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—14
Lehn	0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—13
Quance	0 1 1 0 1 0 1 1 1 1 0 1 1 1 1 0 1 1—11—83

Clifton Club.

Briggs	1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1—13
Ellis	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Archer	1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Goodwin	1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Lay	1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1—14
Pierson	1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—14—83

Sweepstakes; same day:

Duffy	1 0 1 1 1—4	Ellis	1 1 1 1 1—5
Archer	1 1 1 0 1—4	Quance	1 1 0 1 0—3
Miller	1 1 1 1 1—5	Lehn	1 1 1 0 1—4
Briggs	1 1 1 1 1—5	Goodwin	0 1 1 1 1—4
Lapham	0 0 1 1 0—2	Lay	1 1 1 1 1—5

In shooting off the ties of 5, Miller and Briggs tied again on 5, Miller finally winning. In shooting off ties of 4, Archer and Goodwin tied on 5 twice, Archer winning finally.

Monroe County Sportsmen's Club.—The annual shoot of this club was held in West Brighton, May 3.

In the handicap, ten single birds shoot, Messrs. E. Redmond at 20 yards, G. F. Scilton at 22 yards, and W. A. Lyon and H. Walzer at 24 yards, tied on 10; Redmond and Walzer tied a second time on 5, Redmond winning shoot off; H. H. Hooker 21 yards, and H. Smith 22 yards, tied on 9, Hooker winning the shoot off. J. A Rice and E. P. Curtis at 20 yards, L. Smith, A. Brownell, Seth Green and R. Carlsefer at 22 yards, and G. W. Crouch at 24 yards, tied on 8; Brownell and Crouch tied again on 5, and Brownell won shoot off. Of four ties on 7, H. J. Babcock at 21 yards won shoot off. In the 10 pairs, double birds shoot, Crouch and J. H. Andrews at 19 yards tied on 18, Crouch winning shoot off. J. H. Brown and H. Walzer at 19 yards tied on 17, a second time on 5, and Walzer won shoot off.

Cohoes, May 4.—Matches between C. Young, of Poughkeepsie, and A. Paul, of this place; first two at pigeons, last two at glass balls:

Paul	1 1 1 1 1 0—5	Young	0 1 0 0 0 0—1
Paul	11 11—4	Young	01 10—1
Paul	0 1 1 0 1 1 1 1 1 0—7	Young	1 0 1 1 1 0 1 1 0 0—6
Paul	01 10 01 11 11—7	Young	10 10 10 00 00—4

W. J. A.

New Jersey—*Newark, April* 30.—A match between H. E. Winans and G. W. Wooden resulted in a tie of 5 out of 6.

New Jersey Gun Club.—Handicap pigeon shoot, May 2, 80 yards boundary, H and T traps, club rules to govern:

Pearson	25 yards	1 1 1 1 1 1 1 1 0 0—8	
Dusenbury	23 "	1 0 1 0 1 0 1 0 1 0—5	
Hepsley	23 "	1 1 0 1 0 1 1 1 1 1—8	
J Hughes	21 "	0 1 1 1 1 1 1 1 1 1—9	
Sanders	22 "	0 0 1 1 1 1 0 1 1 1—7	
Sedore	22 "	1 0 1 1 1 1 1 1 1 1—9	
Barlie	21 "	1 0 1 1 1 0 0 1 0 0—5	
Wm Hughes	23 "	1 1 1 1 1 1 1 1 0 1—9	

Tie shot off.

J Huges	1 0 0 1 0—2	W Hughes	1 1 1 1 0—4
Sedore	0 0 1 0 1—2		

W Hughes won.

Several sweepstakes followed, and were won by Hughes.

Mount Pleasant, May 1.—Glass balls, 18 yards, Bogardus trap:

Edgar Craven	1 1 1 0 1 1 1 1 1 1—9
Frank Worrell	1 1 1 1 0 1 1 0 1 1—8

Second match; both parties tied on three, Craven won shoot off.

Morristown Gun Club.—This club, of Morristown, N. J., is limited to fifteen members. In a short time their substantial club house will be completed. The monthly contests are for fine gold badge, to become the property of the person winning it the greatest number of times during the year, each shooter as he wins it being placed back to 25 yards, the others shooting at 21 yards.

Western Pennsylvania Association.—The regular spring shooting contest at Bridgeville, Pa., for the Association Cup:

J W Orth	1 1 1 1 0 1 0 1 1 1—8
J C Brown	1 1 0 1 1 1 1 1 1 1—9
D C Phillips	1 1 1 0 0 0 0 1 0 1—5
J E Umbstaetler	1 1 0 0 1 0 0 0 1 1—5
S S D Thompson	0 1 1 1 1 1 1 0 1 1—8
J B Reno	1 1 0 1 1 1 0 0 0 1—6
H A Stewart	1 1 1 1 1 1 1 1 0 1—9
J P O'Neil	0 1 0 1 1 0 0 0 0 0—3
H M Breckenridge	0 1 0 0 0 0 1 0 1 1—4
J L Lytle	0 1 1 0 1 1 1 1 0 0—6
H H Wilson	1 1 0 1 0 0 0 1 0 0—4
Dr McDonald	0 1 0 1 1 0 0 0 1 1—5
Dr Jno Dickson	0 1 0 0 0 1 0 0 1 1—4
J H Boghman	0 0 0 0 1 0 0 0 1 0—2
R H Dalzell	1 1 1 1 1 1 1 1 1 0—9
W Passavant	0 1 1 0 1 1 1 0 0 0—5
H Hartley	1 0 1 0 0 1 0 0 1 0—4
C A Carpenter	1 0 0 1 1 1 1 1 1 1—8
F H Kennedy	1 1 1 1 1 1 0 0 1 1—8
E Gregg	1 0 1 0 0 0 1 0 1 0—4
J N Thorpe	0 1 0 1 1 1 1 0 0 0—5
C W Balcanelor	0 1 0 1 0 0 0 0 1 1—4
H Eaton	0 1 1 1 1 1 0 1 1 1—8
D Ewer	0 1 0 1 1 1 1 0 1 1—7
E M Ferguson	1 1 0 1 1 1 1 1 1 0—8
Dr Dyer	0 0 0 1 0 1 1 1 1 1—6
Dr Duncan	1 0 0 0 1 0 1 1 1 0—5

Ties on nine.

Brown	1 1 1 0 0—3	Dalzell	1 1 1 0 0—3
Stewart	1 0 1 0 1—3		

Second tie.

Brown	0 0 1—1	Dalzell	1 0 1—2
Stewart	1 0 1—2		

Stewart and Dalzell tied again on one out of three, and in shooting off, miss and out, Dalzell won.

Erie, Pa., May 2.—Regular shoot for champion badge of Northwestern Pennsylvania Club; Huber traps:

T. W. Jarecki	1 1 1 0 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0—16
Capt. G. W. Hayward	0 1 1 0 1 1 1 1 1 0 1 1 0 1 1 0 1 1 1 1—15
W. W. Derby	0 1 0 0 1 0 1 1 1 0 1 1 1 1 1 1 0 1 1 1—14
S S Burton	0 0 1 0 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 0—11
Chas. Firch	1 0 1 0 0 1 1 1 1 0 1 1 1 1 1 0 0 0 1 1—13
P Diefenbach	1 1 1 0 1 1 1 0 1 1 1 1 0 0 1 1 0 0 1—14
Johnny Graham	0 0 1 0 0 1 1 1 0 1 1 0 1 1 1 1 0 1 0 0—11

Semper Felix Club.—Match between a picked four and the Semper Felix Club, of Philadelphia; 18 yards; screened trap:

Picked Four.

Dr G L Thomas, captain—1 0 1 0 1 0 1 0 0 1 0 1 1 0 0 1 0 0 0 0 0 1 1 0 1 1 1—14.

Wm Erwin—1 0 0 0 0 0 0 1 0 0 0 0 1 0 0 1 1 0 1 0 1 1 0 1 1 1 1 1 0—13.

John Boucher—1 1 1 1 1 0 1 0 0 1 0 1 1 0 1 1 0 1 1 0 1 0 0 1 1 0 0 0 0—17.

John Huff—1 1 0 1 1 1 1 1 0 1 0 1 1 0 0 1 0 1 0 0 1 1 1 1 1 0 0 0 —19.—Total 63.

Semper Felix.

Dr C T Smith, captain—1 1 1 1 1 1 0 0 0 1 0 1 0 1 1 1 0 1 0 0 1 1 0 1 0 0 1 1 1 1—19.

Dr M A Wood—0 0 0 0 1 0 0 1 1 0 1 1 0 0 0 1 1 1 0 0 0 0 0 0 1 0 1 0 0 0—10.

T Barnewitz—1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 0 1 1 1 1 1—24.

H Wright—1 1 1 1 1 0 0 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 —25.—Total 78.

Edwin Parker and O. D. Jones, referees. G. H. S.

Forest and Stream Club—*Philadelphia, May* 4.—Glass balls, 21 yards rise:

A H Capner	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—19
Dr W W Fulton	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
J C Hancock	1 0 1 1 1 0 1 1 1 1 1 1 0 1 1 0 1 1 1 1—16
Whittaker	0 1 0 0 1 0 1 1 1 0 1 1 0 0 1 0 1 1 1—12
L Holtzscheider	1 0 0 1 1 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0—10
J C Roberts	0 0 0 0 0 1 1 0 1 1 1 1 1 0 1 1 1 0 1 1—12
T Glasgow, V S	1 0 1 1 0 0 1 1 1 1 1 0 1 1 0 0 1 1 1—14

Cap.

Carlisle, May 3.—Match for championship of town; Bogardus rules, 18 yards:

R Shearer	1 1 1 1 0 0 1 1 1 0 1 1 1 1 0 1 1 1—14
H Noble	1 1 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1 0—14—28
John Stein	1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1—16
Willis Bumer	0 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1—14—30

Louisville Gun Club shoot on May 1. Match at ten single and five double rises. Griffith, 10-bore, 23 yards; Green, 12-bore, 21 yards:

	Single.	Double.
Joseph Griffith	0 1 0 1 1 0 1 1 1 0—6	10 00 W
John E Green	1 1 1 1 1 1 1 1 1 1—10	01 01

Match at ten single birds:

John E Green	1 1 1 1 1 1 1 1 1 1—10
P B Fields	1 1 1 1 1 0 1 1 1 1— 9

Third match; four double rises, 20 yards:

S Hutchings	01 10 10 10—3	Dr I H Bedford	10 10 10 11—6

Sweepstakes match; single birds, miss and out:

Col Thompson	30 yds 1 1 0 —2	P B Field	30 yds 0 —0
H Smith	23 0 —0	W Watson	30 1 0 —1
W Thompson	20 1 1 1 0—3	T Hastings	27 0 —0
J V Cowling, Jr	30 0 —0	Dr Bedford	30 0 —0
John E Green	28 0 —0	S Hutchings	30 0 —0
H S Gilmore	23 1 1 1 1—4	Robt Bonnie	23 0 —0

Fifth match; sides; five single birds:

Green	21 yds 1 1 1 1 1—5	Cowling	23 yds 1 1 1 1 1—5
Hutchings	21 1 0 1 1 1—4	W Thompson	23 1 0 1 1 1—4
Fields	23 1 1 0 1 1—4	Watson	21 1 0 1 0 1—3
Bonnie	21 1 1 1 1 1—5	Bedford	23 1 1 1 1 1—5
Gilmore	21 1 1 1 1 1—5	Col Thompson	23 1 1 0 0 0—2
Total	22	Total	19

Sweepstakes match; double birds, miss and out:

Green	18 yds	11 11 11 01 11 11—11
Hutchings	20	11 11 01 — 5
Cowling	20	01 — 1
Gilmore	18	11 11 01 — 5
W W Thompson	20	11 11 11 10 11 01—10
Griffith	23	11 10 — 3
Bedford	20	11 11 11 10 10 — 9
Bonnie	18	01 — 1

Sweepstakes match; both barrels; miss and out; single birds:

Hutchings	32 yds 1* 1* 1 0—3	Cowling	32 yds 1 1 1* 1—4
Bonnie	30 1 1 1 1—4	Bedford	32 1 1 1 1—4
Gilmore	30 1* 1* 1 1—4	Watson	32 1 0 —1
Green	30 0 —0	Griffith	33 1* 0 —1
Fields	32 0 —0		

* Killed with second barrel.

Ties on four divided sweep, birds giving out.

Gulf City Gun Club.—The following is the initial score of this recently organized club of Mobile, Ala. The ties were not shot off:

Tunstall	1 1 1 1 1 1 1 1 1 1 1 1—12
Scales	1 1 1 1 1 0 0 0 1 1 1 1— 8
Marston	0 0 1 0 1 0 1 1 1 0 1 1— 7
Primo	1 0 0 1 0 0 0 0 0 1 0 1— 3
Fehler	0 1 1 1 1 1 1 0 1 1 0 1— 9
Carre	0 0 0 1 1 0 1 0 0 1 0 1— 5
Harwell	0 0 0 1 1 1 1 1 1 0 0 1— 7
Gillespie	0 0 1 0 1 0 1 1 1 1 1 1— 7
Turner	1 0 1 0 1 0 1 0 0 0 1 1— 6
Bush	1 1 1 1 1 1 1 1 1 1 1 1—12
Vass	1 0 1 1 1 0 1 1 0 0 1 1— 8
Shelton, F	0 1 0 1 0 0 1 1 1 0 1 1— 7
Shelton, W	0 1 0 1 1 1 0 0 0 1 0 0— 5
Goode	0 0 0 1 0 1 0 0 0 0 0 0— 2
Webster	1 0 0 1 0 1 1 0 1 1 1 1— 9
Guimond	0 0 0 1 0 1 0 0 1 1 1 0— 5
Alston	0 0 0 1 0 0 1 0 0 1 0 0— 3
Bissell	1 1 0 0 0 0 1 0 1 1 0 0— 5
Davis	0 1 1 1 1 0 1 1 0 0 0 0— 6
Goodall	0 1 1 1 0 1 0 1 0 0 1 1— 7
Alexander	1 1 0 0 1 0 0 0 0 1 1 0— 5
Sherrard	1 0 1 1 1 0 1 1 0 0 0 1— 7
Farley	0 1 1 0 0 1 0 1 0 0 0 0— 4

Black Gronor.

Tatham Gun Club.—Contest for team of five to shoot at Mai Fest on May 9; 18 yards rise, Huber revolving trap:

John Thompson—1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—28

W. S. Almond—1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—27

E. Early—1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—28

E. McCall—1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—27

G. B. Gerald—1 1 0 1 1 0 1 1 1 1 1 1 0 1 0 0 1 1 1 0 1 0 0 1 1 1 0 1 1 1—20

H. M. Thompson—0 1 1 1 1 0 0 1 1 0 0 1 1 0 1 0 1 0 0 0 0 1 0 1 0 0 0 1 1 1—15

C. M. Downs—1 1 1 0 1 0 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 0 1 0 1 0 1 1 1 1—23

C. Hubby—1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 —27

C. C. McCollock—1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—28

Ties, miss and out.

W. S. Almond	1 1 1 1—5	C. Hubby	1 1 1 1 0—4
E McCall	1 1 1 1—5		

Tatham.

Iowa—*Pomeroy, April* 30.—Bogardus rough balls; 15 yards, 7 single rises:

A Lockie	1 1 1 0 1 1 1—6	J J Levy	0 0 0 0 0 0—0
M F Millan	1 0 0 0 0 0 0—1	Sherman	0 * 0 0 1 0—1
C M Billings	1 1 1 1 1 1 1—7	F M Virden	0 0 0 0 1 1 1—2
T Briggs	0 1 1 0 1 1 1—5	R M Wilbur	1 0 1 0 0 0 1—3
W T Ivey	1 1 1 0 1 1 1—5		

Ada Dacotah.

—The first annual shooting tournament of the Keosauqua (Iowa) Sportsmen's Club takes place next Saturday. There is a full programme, with a variety of prizes.

Rational Pastimes.

The Coaching Club Drive.—The ride of the New York Coaching Club to Philadelphia and return may be recorded as one of the notable events in American amateur coaching annals. From its start, leaving the Hotel Brunswick at 6.33 Saturday morning till its arrival in Philadelphia, the famous "Tally-Ho" and its twelve passengers made a triumphal progress. The whole trip was a continual ovation. The streets of the cities and towns were thronged with multitudes of enthusiastic people who cheered and waved their handkerchiefs as if the coach bore a conquering general. The road through the country was lined with spectators, and in many instances during the drive the progress of the coach was materially hindered by the hosts of sight seers. The return was made with the same *eclat*. The riders were Messrs. Delancey Kane, Belmont, Parker, Bronson, Rogers, Fritsch, Wetmore, Neilson, Rives, Nicholson, Kane, Fearing and Havemeyer. The distance was ninety-five miles, and there were nine relays of horses.

Manhattan Athletic Club.—The Manhattan Athletic Club will hold its spring games on its new grounds, at Fifty-sixth street and Eighth avenue, on the 14th inst., beginning at 5 P. M., when the following programme will be presented: Handicap 220 yards, handicap one-mile walk, handicap half-mile run, one-mile walk against time by T. H. Armstrong (H. A. C.), amateur champion; quarter-mile run for amateurs. Entries to be addressed to G. D. Parmly, Secretary, 19 West Thirty-eighth street. There will be no entrance money charged either to the grounds or for the several contests.

ORION ROWING AND ATHLETIC ASSOCIATION.—This club, of Jersey City Heights, N. J., will hold their Second Annual Spring Games at West Side Driving Park, Marion, N. J., May 30, at 3 P. M., when the following events will be contested, open to all amateurs: One hundred yards run, one-mile walk, half-mile run, running high jump, 220 yards run, 120 yards hurdle race, quarter-mile run, three-mile walk, one-mile run, tug of war, 100 yards (club handicap) run. Gold medals to first and silver to second in each game, except tug of war, when silver medal will be given to each man of winning team. Teams to consist of five men. An entrance fee of one dollar per man for each game must be sent with all entries, to be returned to those who compete, except in tug of war. Color of handkerchief or cap and pants to be sent with entry. The right to decline any entry is reserved. Entries close positively May 20. Address, O. H. Taylor, Box 452, N. Y. City.

MYSTIC B. C. GAMES.—The spring Athletic Games will be held at Waverly Park, near Newark, May 25. The following competitions will be open to all amateurs: 100 yards and 220 yards hurdle, 440 yards, half-mile and one-mile runs and one-mile walk, all handicaps; throwing heavy hammer and running high jump. Also a novelty in the way of a "relay race" (two miles), which will be open to club teams of four men each, the prize to be an elegant silver goblet. In the first relay a representative from each team will start and run half a mile, and when each man crosses the score his place will be taken up by the next representative of his team, and so on, until the team shall have covered the two miles. In the handicap races the prizes will be gold, silver and bronze, to first, second and third.

THE LONG DISTANCE WALKS.—The entries for the championship walks, which begins at the Rink, this city, to-morrow, are very large and as will be seen, include many men who have made their mark. Among those already entered are: T. H. Armstrong, Harlem, the amateur champion of America; E. C. Holske, Harlem, the 3-mile champion; G. Bruce Gillie, the 25-mile champion; Charles Connor, Scottish-American 10-mile champion; R. H. Pelton, Greenpoint; J. W. Goodwin, American A. C.; Hugo Wiese, Western Union Telegraph Co.; Julian Schmidt, Brooklyn; Julius P. Mackey, American A. C.; J. Stern, Amateur A.C; Frank L. Edwards, S.A.A.C.; G. Cook, Brooklyn; James Dugun, N. Y.; John Byrnes, N. Y.; W. A. Clark, N. Y.; W. Wilson, N. Y.; John Holyman, N. Y.; and M. J. Ennis, Harlem. The professional list will contain John Ennis, of Chicago, O'Leary's antagonist; Charles A. Harriman, of Haverhill, who, it is claimed, can beat the best 100-mile time on record; Wilson Reid, one of O'Leary's earliest opponents; W. S. O'Brien, the 500-mile walker of Newark; Frank Clark, of Philadelphia, the trainer of O'Leary; E. Wigzell, the champion short distance walker of New York; George Coyle, Weston's old opponent; Peter Van Ness, O'Leary's last antagonist in America; George J. Law, the 50-mile walker; James L. Downey, who recently attempted to walk 400 miles in 100 hours at Central Park Garden; Ben. Curran; James McIntosh of Ithaca; J. C. Moore, of Australia, Harding's entry; and Carl Temple Forrester, of Newark, and several others. The conditions and stipulations governing these championships are as follows: In the professional the winner will receive the belt and $200; the second man will get $100, and the third $50. Twenty-five dollars will be given to the man who beats the American record at fifty miles (8h. 52 min. 18s), and $25 to the man who beats the record at 100 miles (18h. 53m. 40s).

INTER-COLLEGIATE ATHLETIC ASSOCIATION.—The third annual meeting of the Athletic Association of American Colleges will take place on the grounds of the New York Athletic Club, Mott Haven, May 18. The following is the programme: Standing broad jump, mile walk, running high jump, half-mile run, polo vaulting, one hundred yards dash (trial), putting shot, running broad jump, one-fourth mile run, standing high jump, 220 yards dash (trial), throwing hammer, mile run, hurdle race (120 yards), two mile walk, one hundred yards (final), mile walk (graduates), 220 yards dash (final), one hundred yards dash (graduates). Handsome medals will be given to first and second in each event. Entries close May 11, and must be addressed to E. S. Mellvaine, University of Pennsylvania, to whom also must be sent the name of the judge (if any) appointed by each college. All communications to the Executive Committee should be addressed to Princeton, N. J.

PRINCETON ATHLETICS.—The annual spring athletic meeting of the Princeton College students was held last Saturday. The winners in the fourteen contests are to represent the athletic ability of the college at the coming inter-collegiate games at Mott Haven. The contests and winners were as follows:

Standing Long Jump—F. Larkin and H. Minor, both of the class of '79. Won by Larkin; distance, 9ft. 10½in.

Half-Mile Run—W. Phraner, '78; A. Scribner, '81. Phraner won in 2m. 16⅕s.

Putting the Shot—F. Larkin, R. Karge, '78, and H. Stevenson, '78. Three throws, the ball weighing sixteen pounds. Larkin won.

One Hundred Yards Dash—J. Duffield, '76; A. Hunt, '78; H. Stephenson and H. Minor, '79. Won by Hunt in 10s.

Pole Vaulting—J. Washington, '80, and F. Larkin. Won by the former, 8ft.

One Mile Run—W. Phraner, and M. F. Peyton, '80. Won by Peyton in 5m. 19⅗s.

Throwing Hammer—R. Blackwell, '79; F. Larkin, R. Karge, and H. Stephenson. Blackwell won, 75ft.

Quarter-Mile Run—T. W. Cauldwell, '81; J. A. Stewart, Jr., '79. Won by the latter in 56⅘s.

Running Long Jump—A. Hunt, 18ft. 10in.; A. H. Stephenson, 17ft. 10in.

Running High Jump—J. Withington, A. Hunt, H. Minor. Latter won, 5ft.

Hurdle Race, 120 yards, 11 hurdles, 3 feet high—H. Stephenson and H. Cutts, '80. Won by former in 19 4-5s. Won by same party last year in 18⅕s.

Standing High Jump—F. Larkin and A. N. Dennison, '78. Won by former, 4ft. 6in.

Two Hundred and Twenty Yards Dash—H. Stephenson and L. P. Smock, '79. Won by latter in 23s.

The sports were concluded with a tug of war—Captain B. Ballard, '80; J. Kirk, '81; F. T. Bryan, '80, and L. P. Funkhauser composing one team; and Captain A. McLavee, '80; H. Cutts, '80; R. Karge and C. Wigton, '79, forming the other. The event was decided in favor of Captain McLaven's team.

COLUMBIA COLLEGE GAMES.—The twelfth field meeting of Columbia athletes was held at Mott Haven, last Saturday. The events were as follows:

One mile walk.—W. B. Parsons, 8m. 43⅜s.; W. Barnes, 8m. 54¾s.

Running high jump.—J. P. Conover, 5ft. 4in.; N. L. Bogart, 5ft. 4in.; E. T. Browning, 5ft. 1in.

Half-mile run.—A. J. Borton had a walk-over in 2m. 21s.

Pole vaulting.—Bogart, 7ft. 6in.; Pryor, 7ft. 3in.

One hundred yards dash.—W. Walton was the only competitor; 11⅘s.

Throwing hammer, 16 pounds.—O. D. Parmley, J. Vansinderen and J. H. Montgomery. Parmley won; first throw, 71ft. 9in.; second, 73ft. 7in.

Four hundred and forty yards dash.—A. J. Borton and G. Taylor. Won by former, 56s.

Two hundred and twenty yards Dash.—Waller, Borton and Bogart. Waller won in 25s., Borton second.

Running broad jump.—Won by Conover, 20ft.

Hurdle race—120 yards, 10 hurdles, each 3ft. 6in. high, 10 yards apart.—Conover and Pryor ran a dead heat in 19¾s.; second heat Pryor won by 15 inches in 19¼s.

Tug of war.—Freshman vs. Seniors. The Freshman team was made up of Messrs. W. Foster, J. Vansinderen, J. H. Montgomery and G. Ward. Their opponents were Messrs. W. B. Parsons, A. H. Kingsbury, C. E. Eldridge and R. D. Rhodes. The Freshmen won the first tug in 20½s., and the second in 19¼s.

One mile race.—C. S. Allen, C. W. Eldridge, F. Klopetko. Won by Allen in 5m. 13⅕s.

Strangers' half-mile run.—Won by F. Burnham, N. A. C., in 2m. 15⅕s.

Steeple race, one half mile, mostly out of the inclosure over the broken ground to the east. Messrs. Pryor and De Forest were the runners. At the start De Forest led slightly, but upon the rising ground both runners kept nearly side by side. On the home stretch they had five hurdles to jump, which they took nearly together. At the finish De Forest by a splendid effort came in two feet ahead. As he touched the line he fainted and was carried away by his friends. The time was 2m. 26⅕s.

FOOT BALL.—The Liberty Club, of Jersey City, and the Union Club, of Hoboken, had an exciting game of foot-ball, at the West End Ground, Jersey City, last Saturday. The first two goals were won by the Libertys, the next two by the Unions, and the final one by the Libertys.

CRICKET.—The St. George's Cricket Club, of this city, has decided not to join the newly formed Cricketer's Association.

GEORGIA PEDESTRIANISM.—"Professor" Consigney, who finished a walk of 500 miles in 500 hours at Atlanta, Ga., May 1, may now be consigned to the ranks of the long distance walkers.

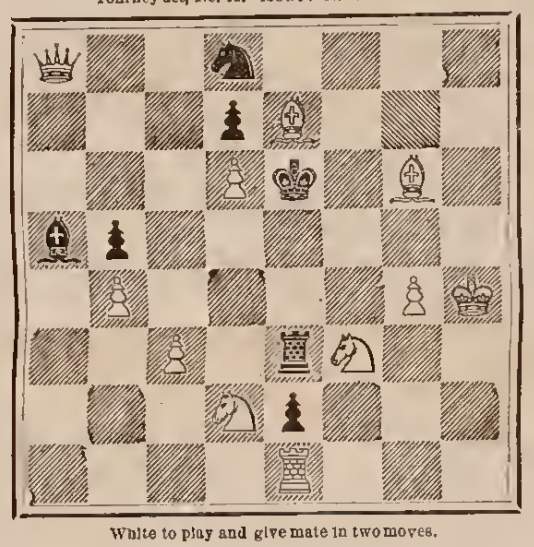
—The 125-yards run, in the N. Y. A. C. meeting, May 30, is a handicap. Entries for the contests close May 20.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 10.

Tourney set, No. 12. Motto: On to Richmond.



White to play and give mate in two moves.

SOLUTIONS TO PROBLEMS—NO. 12.

[The solution published last week should have read, Problem No. 11.]

1—B-Q7	1—Any
2—Mates	

Game No. 56.—BISHOP'S OPENING.

The following fine correspondence game was played in the pending correspondence tourney of the Hartford *Globe*, and is pronounced by its editor the best game of the tourney thus far:

White. E. Delmar.	Black. W. J. Berry.	White. E. Delmar.	Black. W. J. Berry.
1—P-K4	1—P-K4	24—R-K8	24—R-Q3 (k)
2—B-B4	2—Kt-K B3	25—R-K4	25—P-K Kt5 (l)
3—K Kt B3 (a)	3—Kt tks P	26—B P tks P	26—P tks P
4—Q Kt-B3 (b)	4—P-Q4	27—P tks P	27—R-R2
5—B tks Q P	5—K Kt-B3	28—Q-Q1	28—R Kt sq-R
6—B-Kt3	6—B-Q3	29—Kt-B	29—R-R5
7—P-Q3	7—P-K R3 (c)	30—Q R-K	30—R tks P
8—B-K3	8—Q Kt-B3	31—Kt-K3	31—Q-Q Kt3
9—P-K R3	9—Q-K2 (d)	32—R-K2 (m)	32—R at R-R5 (n)
10—Q Q2	10—B-K3	33—R-Q B4	33—Kt tks R ch
11—B tks B (e)	11—Q tks B	34—Q t. s Kt	34—R tks R
12—P-Q R3	12—Castles Q R (f)	35—P tks P	35—Q-Q5 (o)
13—Kt-Q Kt5 (g)	13—P-Q R3	36—K-B2	36—R-B5 ch
14—Kt tks B ch	14—R tks Kt	37—K-K	37—Q-R8 ch
15—Castles K R (h)	15—P-Q Kt4	38—Kt Q	38—Q tks P
16—Kt-R2	16—R-Kt	39—P-Q B3	39—R-R2
17—P-K B3	17—Kt-K R4	40—Q-Q B2	40—R-R8 ch
18—K R-Q Kt (i)	18—Kt-K B6	41—K-B2	41—K-Kt
19—P-Q Kt4	19—Kt-Q5	42—Q-Q3	42—Q-Q B8
20—B tks Q Kt	20—R tks B	43—Kt-K3	43—Q-K8 ch
21—R-K	21—P-K R4	44—K-B3	44—R-R5
22—Q-K6	22—Q-Q B3 (j)	Resigns	
23—Q-K B2	23—P-K B3		

NOTES.

(a) Inferior in the opinion of the best authorities to Kt-Q B3. The move made reduces the game to a variation of the Petroff Defence, that should, with the best play on both sides, ultimately yield Black a somewhat superior position.

(b) Authorities differ upon the efficacy of this move. We consider it the best at White's disposal.

(c) Mr. Lichenhein, who first brought this defence into notice Castled at this point. It appears that P-K R3 is necessary at the same time, hence we think the move in the text is preferable, as leaving Black his option of Castling K R or Q R.

(d) Black evidently intends Castling Q R. We think this to be better play than the more obvious move of Castling K R, as, in that case, attack can be made upon Black's K R P by P-K Kt1, R-Kt, etc.

(e) This seems best, but should have been followed up by Castling on Q's side.

(f) Threatening the following: P-K6, and if Kt tks P, then Kt tks Kt and if P tks Kt, B Kt5.

(g) Injudicious. It lessens White's chances for an attack, and removes a piece which could be used defensively to great advantage.

(h) White is now weaker on K's side than Black is on Q's side.

(i) White is in no condition to commence an attack, and this move turns out lost. R-K would have been better.

(j) A very strong move, if 23—Q tks P, Q tks B P, etc.

(k) Good again; preparing to bring the R into play in a quarter where White is most vulnerable.

(l) This move looked very tempting when the R was at Q5, but is now almost decisive.

(m) There is nothing better.

(n) Far better than taking the exchange at once. The game has now become very agreeable for Black.

(o) From this point to the end is only a question of the number of moves.—*Hartford Globe.*

Game No. 57.—SCOTCH GAMBIT.

White. Herr Klieforth.	Black. Dr. Schliemann.	White. Herr Klieforth.	Black. Dr. Schliemann.
1—P-K4	1—P-K4	12—K-R	12—P tks P
2—Kt-K B3	2—Kt-Q B3	13—Kt-Q B3	13—Kt-K4
3—P-Q4	3—P tks P	14—Kt-Q5	14—Q-Q
4—B-Q B4	4—B-B4	15—P-B6	15—Castles
5—Kt-Kt5	5—Kt-R3	16—P tks P	16—K tks P
6—Q-R5	6—Q-K2	16—Kt tks R P	17—Kt Kt5
7—Castles	7—Kt-K4?	18—Kt tks R	18—Q tks Kt
8—B-Kt3	8—P-Q3	19—Kt-K B6	19—Q-K R
9—P-K R3	9—B Q2	20—Q-Kt5 ch	20—Kt-Kt3
10—P K B4	10—Kt Kt3	21—Kt-R 5 ch	21—Q tks Kt
11—P-B5	11—P-Q6 ch	22—R tks P ch	22—Resigns

Game No. 58.—BISHOP'S GAMBIT.

White. Anderssen.	Black. Kieseritzky.	White. Anderssen.	Black. Kieseritzky.
1—P-K4	1—P-K4	12—P-K R4	12—Q-Kt3
2—P-K B4	2—P tks P	13—P-R5	13—Q-Kt4
3—B-B4	3—Q-R4 ch	14—Q-B3	14—Kt-Kt
4—K-B	4—P-Q Kt4	15—B tks P	15—Q-B3
5—B tks Kt P	5—Kt-K B3	16—Kt-B3	16—B-B4
6—Kt-K B3	6—Q-R3	17—Kt-Q5!	17—Q tks Kt P
7—P-Q3	7—Kt-R4	18—B-Q6!	18—Q tks R ch
8—Kt-R4	8—Q-Kt1	19—K-K2	19—B tks R?
9—Kt-B5	9—P-Q B3	20—P-K5	20—Kt-Q R3?
10—P-K Kt4	10—Kt-B3	White mates in three moves.	
11—R-Kt1	11—P tks B		

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
May 10	5	17	1	56	1	30
May 11	6	18	2	55	2	32
May 12	7	19	3	58	3	34
May 13	8	18	4	58	4	30
May 14	9	16	5	55	5	25
May 15	10	14	6	45	6	16
May 16	11	10	7	35	7	00

THE OAR AND PADDLE.

SCHUYLKILL NAVY.—The thirteenth stone boat-house of this association is now being built above Fairmount Dam for the West Philadelphia Barge Club. This house, like all the others, is built from ornamental designs, and completes an array of fine boat-houses and appurtenances such as no other city in the world can show, even the metropolis being far behind her sister city in this respect. Good for Philadelphia, say we; may others follow her lead! The clubs located on the Schuylkill comprise the Bachelor, Crescent, College, Fairmount, Malta, Pacific, Pennsylvania, Philadelphia, Quaker City, Undine, University, Vesper and West Philadelphia. Capital invested, over $100,000 in houses alone.

HENLEY REGATTA.—The stewards of this regatta have finally complied with the demands of justice and common sense, and have removed the six weeks' restriction against American crews, the entries for British and foreign competitors closing on the same date, June 22. This will afford the winners at Watkins an opportunity to send over representatives to Henley, as intended.

WATKINS REGATTA.—The Secretary announces that no crews will be sent to Paris, as originally proposed, since our French cousins have not seen fit to arrange any races on the Seine, but the propositions with regard to Henley will be strictly carried out.

HARLEM ROWING MATTERS.—Messrs. West and Mack will go in a pair at Watkins, and Mr. Rathbone will try his luck in a single, as will also Mr. Geo. Gaisel, of the Gramercy Club. The night and day clerks of the Post-office pulled a four-oared race on the Harlem, May 2. Day crew broke an oar, and dusky night got the best of Helias' sons. Distance, three miles, with turn; time, 21m. 25s; winning crew pulling easy The May turn-out of the students of the college of the City of New York took place last week, thirty-five boats in the fleet.

HARVARD AND CORNELL FRESHMEN.—The freshmen crews of these two colleges will offer all-meet at Saratoga Lake, the Harvards having reversed their decision not to row on the Saratoga course.

THE AMATEUR QUESTION.—The London *Field* makes a mistake in speaking of Courtney as an amateur. He is now a professional, and no longer recognized under the N. A. of A. O. as an amateur. It is by just such oversights of the English press that the Henley difficulty arose, and that American amatsurs are placed in bad repute in Europe.

PARIS INTERNATIONAL REGATTA.—The utter decay and stagnation of French nautical interests may be gauged by their failure to offer prizes of any description at the coming *Exposition Universelle*, either for yachting matches or rowing races. The condition in numbers and spirit of the aquatic clubs of a country can always be taken as a true index of the prosperity of the national nautical interests, and the elimination of yachting and boating from the list of French sports is only in unison with the disgraceful display of the incapacity of their navy during the Franco-German war. It seems almost incredible that a government, while voting away vast sums of money for grand State dinners, could not find a few crumbs left with which to initiate a series of competitions which would materially add to the brilliancy and *eclat* of the season. Such things as our international meetings at Cape May and on the Schuylkill will, as it appears, not form a prominent part of the French exhibition.

BOATING AT BALTIMORE.—Our Baltimore correspondent sends the following:

"Considerable interest is being awakened in our yachting and rowing clubs for this season, and already the Patapsco is dotted in the afternoon with crews practicing for the summer regattas. The Undine, one of the best of our Baltimore crews, will have a spurt with the famous Analostan Club, of

Washington. The affair comes off May 25, but I fear the Baltimore boys will stand a poor show. Still the tide of affairs may turn. Our famous L'Hirondelle Club, the champions of the Patapsco, and our crack Baltimore crew, will challenge the winning crew of the above race for a pull on the Patapsco, in four-oared shells, subsequent to the race on May 25, and before June 10 proximo. The challenge was sent last Friday by Mr. John Redwood, Secretary of the L'Hirondelle. One thing is certain, if the Analostans get the best of the Undine, the L'Hirondelle will get the best of them. Altogether, I think the Patapsco navy will have pretty lively times this season. Yours truly, TRAYMORE."

REAL ESTATE AFLOAT.—The pretty club-house built by the late Mr. Garner and occupied by the New York Yacht Club as a club-house at Stapleton, S. I., and which had recently been abandoned by them, was moved bodily to a new place of rest at Alpine Grove, on the Hudson. Pontoons were floated under it at low tide, and the structure raised from the dock and then towed up the bay. It formed a novel sight to the Battery shellbacks, who were in doubt as to what the strange monster really was—Noah's Ark resurrected or a Russian privateer. The building is 40x80ft., weighs 200 tons, and the job was executed by John F. Baxter, of the Baxter Wrecking Company.

CANOEING ON NEWARK WATERS. — *Editor Forest and Stream:* The Passaic canoeists, lured by the forwardness of the season, are out in force. Any pleasant afternoon the flashing double-paddle or the white sails of some tiny cruiser may be seen at Newark, and the variable spring winds have already scored a capsize for two of our most prominent canoeists.

During the last of March the *Qui Vive* cruised some forty miles on the rivers Passaic and Hackensack, her captain spending the intervening night within his little craft alone on the marshes.

On April 19th, the *Rambler*, in company with the *Qui Vive*, cruised from Newark to New York; the run, on account of light winds and adverse tides, occupying six hours.

Two "Qui Vive" built canoes, the *Spray* and *Arrow*, under the respective paddles of Messrs. E. Doane and F. Peniston, started a few days ago for the Water Gap, via Morris canal.

Some changes are observable in the rigs of the various canoes. The *Passaic* and *Qui Vive* have discarded the lug and adopted the gaff-mainsail. These canoeists declare that the projecting fore-end of the lug renders it dangerous in the uncertain, gusty Passaic breezes; and affirm that the safety gained by the use of the gaff, more than counterbalances the extra trouble in setting and furling.

Of the "Qui Vive" canoes, the *Rambler*, Mr. C. R. West; the *Don*, Mr. Percy Chubb; and the *Blue* canoe, Mr. J. H. Connell, are at Gowanus. The *Passaic*, Mr. F. Hussey; the *Delaware*, Mr. T. F. Lemassena; the *Thetis*, Mr. Johnson; and the *Dragon*, Dr. H. G. Fish, are at Newark. The *Qui Vive*, Mr. I. F. West, is at New York. Mr. John Hahberton's wooden canoe *Alice*, is at Newark, where the *Kaloolah*, Mr. Kingman Putnam, of New York, has recently paid the *Lady Alice* a short visit. MAGUA.

CANOEING CRUISES.—The canoe *Psyche* desires company on a cruise on the Housatonic about June 1. Answers or inquires may be sent to our office. The Housatonic is a very picturesque and interesting river, and a cruise in company on its waters would no doubt be remembered with pleasure.

THE HERALD CANOE.

EDITOR FOREST AND STREAM:

Mr. Wm. B. Garfield has a letter in your last issue criticizing certain assertions made by me in a recent number of *Harper's Magazine* concerning canoes. Owing to Mr. Garfield's evident want of knowledge of his subject his criticisms are not very withering.

I found fault with the *Herald* canoe because her thwarts render sleeping in her impossible. Mr. Garfield says:

"The thwarts are not necessary to hold the sides in position, as stated by the opponent, but are put on for the convenience of the paddler, and can be dispensed with if desired."

To this I reply that Mr. Herald himself says that canoes of the *Herald* patent cannot be built without thwarts. Perhaps he knows as much about his boat as does Mr. Garfield. The latter is, of course, unaware that no canoeist ever sits in a thwart when paddling a *Herald*. Mr. Garfield next says:

"The objection made to an open *Herald* canoe on account of carrying the necessary trappings and provision in a bag is entirely imaginary, and in this instance theory and practice will not pull well together. All practical cruisers concede that there is nothing equal to a bag for the storage of provisions and equipments. If our friend who objects to the trouble of opening and closing a bag should at any time take a canoe trip, we think he would say on his return that there was nothing like a bag of some sort for the storage of articles, no matter what kind of a craft he may travel in."

This is amusing in view of the fact that "our friend" introduced canoeing into this country, founded the N. Y. C. C., built the first "Nautilus," ever built on this side of the Atlantic, designed the "Shadow," and has made more canoe cruises than any other American. An ordinary bag, or rather a number of bags, carried in water-tight compartments, are very useful. It was to the water-tight bag, the mouth of which must be laced up, that objection was made. Mr. Garfield proceeds:

"The *Herald* canoe will not sink when filled, and there will be buoyancy enough to the craft to keep two persons from drowning."

Like all other wooden boats, the *Herald*, if turned upside down in the water, will hold enough air to support two or more persons clinging to her. If, however, a *Herald* is filled with water while her owner is sitting in her, she sinks; whereas in like circumstances a "Nautilus" or a "Shadow" can be paddled ashore. This is what I referred to in saying that the *Herald* sinks when full of water, and it is founded in the testimony of a veteran canoeist who uses a *Herald* exclusively. Mr. Garfield further says:

"As to the amount of sail to be carried, that is left entirely with the purchaser, but one sail stepped in the proper place is considered better than two, as all the sail that is necessary can be had in one, and of course can be handled to better advantage."

This simply shows that Mr. Garfield knows nothing whatever about sailing a canoe. With one sail the *Herald* will, of course, sail before the wind, but the after sail is absolutely necessary when sailing on the wind, and even with its aid she cannot be tacked unless she is helped around with the paddle. A "Shadow" or a "Nautilus" will sail close hauled under mainsail alone, but neither of them will tack unless the jib and dandy are also set. The remark that "all the sail that is necessary can be had in one," will appear sufficiently ridiculous in Mr. Garfield's own eyes when he learns how to sail a canoe.

These are all the points in Mr. Garfield's letter that require notice. With the merits as well as the faults of the *Herald* I am perfectly familiar, having made three long cruises in company with *Herald* canoes. The *Herald*, after her thwarts have been turned upside down so as to give room for sleeping; after she has been decked over, and after she has been fitted with air-tight compartments, all of which must be done by the purchaser, is a strong, swift, safe and commodious canoe. She is nevertheless much heavier than a "Nautilus" or a "Shadow" of the same length; her full bow makes her throw water all over herself in a head sea, and owing to her want of keel she cannot be dragged out on a rocky shore without scraping her bottom planks. I gladly concede her merit when intelligently set forth by a canoeist. Mr. Garfield, however, is not a canoeist, as his letter clearly shows. Two years hence, after he has made at least two good cruises in company with a "Shadow" and a "Nautilus," his estimate of their comparitive merits will deserve consideration. W. L. ALDEN.

EDITOR FOREST AND STREAM:

Dear Sir—I see in your valuable paper of May 2 a statement—or advertisement, or whatever it may be—in which Miss McBride accuses me of advertising her flea and not keeping them. In justice to myself will you kindly publish this, my absolute denial of the same?

Yours respectfully, W. HOLBERTON.—[Adv.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

F. M. B., New York.—Duck shooting is now against the law in New York State.

A. D. B., Carlisle. There was no show in 1877. This year the winner was Echo.

M. A., Milwaukee.—For duck shooting go to Oconomowoc and the region round about.

L. A. C., Jersey City.—The name you mention is a trade name, and is not put on first-class guns.

D. J. B.—For American champion amateur wrikers see our Rational Pastime column this week.

W. M., Ohio.—Messrs. Peck & Snyder, of Nassau St., New York, will sell you boxing gloves. Price from $2.50 to $6.00.

J. W. B., Boston.—Has Mr. Colton made a new map of the Adirondacks after recent surveys? Ans. No new map made.

A. B., Panpack, Pa.—For woodcock shooting within 150 miles of New York go to Pine Brook, N. J., or to Florida, Orange Co., N. Y.

C. M., Otsego Lake, Mich.—The two handed rifle musket, .50 cal., 70 grs., was discarded by the U. S. Army in 1875, and the .45, 70 grs., issued in its place.

J. R., Sag Harbor.—I have broken my hard rubber reel, not badly Can you please tell me how to mend it? Ans. Take your reel to a jeweler, or buy a new one.

S. R. T., Ithaca.—Do well-bred setters ever have five toes on each hind foot? Ans. It is simply an abnormality, quite possible to a well-bred dog as well as to a cur.

NATHAN, Saranac Lake.—The little red fire fishes you refer to are name "shiners." The white ones are all females, the red ones males. You ask old Steve Turner, the guide, when you see him.

W. F., Harrisburg, Pa.—Salmon paste was formerly imported in very limited quantity, but cannot be procured at present. Salmon eggs for the purpose are not obtainable. You must search the fish markets.

C. E. L., St. Paul, Min.—Where can I get a book on pistol practice and the cost of the same? Ans. Buy "How to use the Pistol," Industrial Publication Company, 176 Broadway, New York. Price 75 cents.

A. S. G., Lowell, Mass.—Have sent you form. Your pedigree is excellent. Write to Arnold Burges, Hillsdale, Mich., who has the pedigree books in his charge. Would be very glad to hear from you when your club is under way.

W. E. F., Boston.—For snipe go to Marblehead, Ipswich, Lynn, Salem, or other coast towns. You will find good trout fishing about Natick. Yes, break your own dog. For shooting in Massachusetts keep yourself posted by consulting our game columns.

OBSERVER, Kane, Ills.—Where can I procure a copy of a work entitled "Prairie and Rocky Mountain Life," written by an Eastern attorney some years since? It is a book of a 1,000 or more pages. Ans. Apply to Henry Miller, bookseller, 82 Nassau St.

W. J. W., Cohoes.—1. Please let me know through your paper if my 28 in. 12 gauge can be bored to give a pattern of 200 No. 6 shot, 40 yds. 30in. circle? 2. Who would you recommend? Ans. 1. Yes it could. 2. Send it to Mr. H. C. Squires, No. 1 Cortlandt street.

C. E. C., Oil City, Pa.—Is Coues' "History of North American Mammals," published by the Government, and mentioned by you April 12, ready for distribution yet? Ans. Not yet issued, as a whole. A volume on the Fur Bearing Animals has been issued. It is printed by the Government.

W. R.—For map of Hudson River send to People's Line Steamboats, Pier 41, New York, or to the Scribners, this city. It would require a very large and a very powerful coiled spring to propel a boat 20ft. in length. It would take a team of mules to wind it up. Your idea is as old as the centuries.

PSYCHE.—R. R. transportation for canoes varies so much as to distance as to render it impossible to give you a satisfactory answer. We can at least give you freight on New Haven R. R. to Bridgeport, $1.52; to Norwalk, $1.44; to Portchester, or anywhere this side of it, $1.30; to New Haven, $1.68; to Hartford, $2.08; to Springfield, $2.24.

T. A., Indianola, Calhoun Co., Texas.—1. What will it cost to have an extra pair of choke-bore barrels made for my Daly, of good quality, laminated steel? 2. Who would you advise to make them? Ans. 1. Cost of new barrels is generally one half of cost of gun. 2. Clark & Snelder, of Baltimore, would make you an admirable pair of barrels.

J. C. C., Shillingstown, Pa.—My Laverack bitch has mange, the red mange, I think. What shall I do for her? Ans. Feed no meat. Open the bowels occasionally and apply kerosene oil once a day. Wash with carbolic soap. If this does not cure; write again. The dog pedigree it will take us some time to look up. Will try and reply to the inquiry later.

SUBSCRIBER, Providence.—I have a setter, 18 mos. old, with a mania to gnaw everything within his reach. About ten days ago he had a slight eruption of the skin, hair coming off in a small patch. Used carbolic acid, and the trouble of the skin disappeared. What shall I do? Ans. Open his bowels a few times by giving him castor oil, and feed very little meat.

E. B. S., Canada.—1. What reputation have ——, of London? I have a 12 bore, double-barrelled, breech-loading shot-gun (No. 3,004), bearing this name, and also the name —— (No. 7) on under side of barrels. 2. What is the proper charge of No. 3 Falcon duck powder, Oriental Mills, for this gun? Ans. Not names well known, never heard of them. 2. 3½ grs. powder, 1⅛ oz. shot.

J. T. P., Bellefontaine.—Please describe the everlasting shell. Are they sold by the dozen? If so, what are they worth? I want to get Nos. .32, .38 and .44, two dozen each. Ans. The everlasting shell has great thickness of walls, and is made to last. Can be used many times That is about the principal difference. Cost, we think, about $8 per 100. Write to Schiverling & Daly about them.

J. F. S., Bridgeport.—I have a fine —— laminated steel double barrel muzzle-loader, 14 bore, 34 in barrels, weight 7 lbs. 1. What would be a proper load? 2. With such a load what would you consider a good pattern with No. 6 shot, 30 inch target, 40 yards? 3. Would you advise reducing length of barrels? If so, about how much? Ans. 1. 2½ drs. powder, 1 oz. shot. 2. About 200. 3. Yes, make it 30 inches.

H. R., Philadelphia.—My puppy, five months old, has fits. He froth at the mouth, jumping and striking his head on the floor. Spell lasted about an hour and a half. Ans. Give your puppy two teaspoonfuls of castor oil, and ten drops of laudanum once a day for three days. Keep him free from excitement, and warm and dry. It is very difficult to determine the cause of such a trouble without seeing the animal.

E. R. T., Providence, R. I.—I use one of ——'s best shot-guns and their brass shells, which are 2 9-16 in. long, and I suppose, of course, fit the gun. Would it affect the shooting of the gun to use the U. M. C. Co's. shells, 2½ in. long? Gun has no shoulder, but is tapered at the breech. Ans. To do good shooting length of shell must be made to the chamber. It would not injure your gun, but might not make good shooting.

FLY TRAP.—The trap you want can be had of Messrs. Benham & Stoutenborough, No. 270 Pearl St., New York. The retry trap it is called, and it goes by clock work and gobbles up every fly within a circuit of many miles. The circular says, "The public and press universally acknowledge their value as a pleasing novelty," but whether flies cry for it has never been stated. (We have lost your address or would send you circular.)

A. B. B., New York.—The birds you describe as having been seen on Long Island which had long bills and legs, making short flights from tree to tree, could not have been bitterns, as bitterns only frequent marshes. The birds might have been night herons which breed in trees. If you could get a specimen we could of course decide the point. The night herons breed all along the coast of Long Island, and this is just the time for them.

RACQUET CLUB, New York.—Can you inform me of the best and quickest way by which to go to the Nepigon, the best time to go there, and the average daily expense? Ans. Take rail to Toronto and Collingwood, Canada, and thence steamer to Red Rock Landing, Nepigon. The best time to go is from middle of June to 1st August. It will cost about $50 for the round trip including incidentals, and $2 per day on the river for canoe and men.

H. A. F., Woonsocket, R. I.—Inclosed is a specimen of a small fish caught while fishing for brook trout. It took the bait like a trout. Will you tell me what it is? Ans. Your pretty fish is the black-nosed dace (*Leuciscus atronasus*). It is also known as the brook minnow. Body above greenish brown; top of head black; a dark brown lateral line from the gill covers to the tail; body below lateral line silvery. Dorsal and caudal fin brown; the other fins bright orange.

MACK, Bellefonte.—1. Have a pointer which six weeks ago bit the end of his tail. It has been growing sore. The hair has almost entirely gone from the end of it. He is licking it all the time. What shall I do for him? 2. Have a setter whose father is one half Irish, one half English; mother full English. What is the division of blood in the pup? I claim three-quarters English, one-quarter Irish. Ans. 1. You feed too much meat. Soak the end of the tail in kerosene oil once a day for a few minutes. 2. You are about right.

C. S., JR., Phillipsburg, N. J.—1. I have an 8 lb., breech-loading —— gun, London twist. Is it a safe one with an ordinary load? 2. After firing one load it becomes very dirty. Is it poor powder, or wads, or what is the cause and the remedy? 3. Please inform me whose make of powder and wads you would recommend? Ans. 1. A perfectly safe gun. 2. Must be the fault of your gun. 3. Use Hazard's or Dupont's, either; Eley pink wads, two of them over powder, and one Baldwin wad over shot. Mr. H. C. Squires, of No. 1 Courtland st., will furnish you.

C. O. E., Boston.—1. Is the Connecticut River navigable from Springfield to Long Island Sound for a row boat large enough to hold three or four persons, and is the current too swift to row up from the sound to Springfield? 2. How long would the trip take? 3. Is it a pleasant route, and what sort of fishing is there? Ans. Quite navigable for stern-wheel steamboats used to run to Springfield. You will have to carry around the Holyoke Dam. You ought to make two miles an hour easily. You will find some shad, salmon and black bass in the river but cannot guarantee a mess of either.

H. S. H., Boston.—1. What is a good pattern for a gun 7½ lbs., 12 bore at breech, 13 at muzzle; load, 3½ drs. Hazard's Fd powder, 1⅛ oz. No. 8 chilled shot (409 to oz.); 30 inch circle, 40 yds.? 2. The same at 30 yds.? Also, the same load No. 4 chilled shot, 30 inch circle, 40 yds.? 3. Also, at 30 yds.? Is No. 9 chilled shot large enough for shooting glass balls at 21 yds. rise? Do you or any one else publish score books for each class (1, 2 and 3), target separately, each class in a book by itself? Ans. 1. About 200. 2. 275. 3. One-half the counted number of pellets. No score book published such as you speak of.

H. E. S., Sparta, Mich.—1. Is the —— gun a good, serviceable and durable gun? 2. What is the best action for a double gun? 3. What is the price of glass balls by the barrel of 500? 4. What are the different modes of waterproofing hunting suits which leaves the cloth most pliable? Ans. 1. Yes, quite so. 2. Either a top lever, Purdy bolt, or a double grip. 3. Smooth balls, $1.50 per 100; Bogardus and Paino balls, $1 per 100. 4. Take ½ lb. sugar of lead and same weight powdered alum; dissolve in a bucket of rain water; pour off the fluid, and steep clothing, etc., in it.

H. E. D., Albany.—1. In what year was the first breech-loader manufactured, either rifle or shot-gun? 2. Can you tell me where I can find any good trout fishing near this city? Ans. 1. Research seems to prove that the further we go back the older are breech-loaders. Marshall Saxe armed cavalry in the seventeenth century with breech-loaders. For practical purposes they may be said to have had their renaissance at the World's Fair in 1851. The pin-fire gun is as old as 1836. 2. We know of no fishing in your immediate neighborhood Six hours' ride from Albany via the Utica and Black River will put you in good fishing country.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS AND THE INOCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MAY 9, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, May 10.—American championship walking at Rink, New York. Base ball: Buffalo vs Lowell, at Lowell; Cricket vs Springfield, at Springfield; Allegheny vs New Bedford, at New Bedford; Harvard vs Princeton, at Princeton. Trotting at Prospect Park, Brooklyn.

Saturday, May 11.—American championship walking as above. Cricket: Germantown vs Philadelphia, at Germantown; Dorian vs Belmont, at Haverford; Belmont vs Philadelphia, at West Philadelphia; Young Americas vs Germantown, at Turnpike Bridge. Base ball: at New Bedford as above; Hartfords vs Rochester, at Rochester; Tecumseh vs Lowell, at Lowell; Buffalo vs Manchester, at Manchester; Harvard vs Princeton, at Princeton; Amherst vs Holyoke, at Amherst; Trinity vs Wesleyan, at Hartford; Harvard Fresh. vs Yale Fresh., at New Haven; Chicago University vs Northwestern University, at Evanston. Stamford Conn., Rifle Club Match. Running Meeting, at Lexington, Ken.

Monday, May 13.—Base ball: Buffalo vs Manchester, at Manchester; Cricket vs Utica, at Utica; Tecumseh vs Lowell, at Lowell; Star vs Rochester, at Rochester. Trotting as above, and at Suffolk Park Philadelphia.

Tuesday, May 14.—Westminster Kennel Club Bench Show, New York. Base ball: Cricket vs Star, at Syracuse; Allegheny vs Springfield, at Springfield; Buffalo vs Live Oak, at Lynn; Tecumseh vs Manchester, at Manchester. Trotting as above.

Wednesday, May 15.—Westminster Kennel Club Bench Show. Newark Rifle Club vs Zetilers; Stamford Rifle Club match, at Stamford, Conn. Knickerbocker Yacht Regatta, at Port Morris. Hanlon vs Paterson. Base ball: Tecumseh vs Live Oak; Rochester vs Cricket, at Rochester; Buffalo vs Live Oak, at Lynn; Yale vs Princeton, at Princeton. Trotting as above, and at Goodwater, Mich.

Thursday, May 16.—Westminster Bench Show. Portland Yacht Club Challenge Cup Regatta. Base ball: Cricket vs Hornell, at Hornellsville; Allegheny vs Utica, at Utica; Tecumseh vs Live Oak, at Lynn; Buffalo vs New Bedford, at New Bedford. Trotting as above.

EXCURSION TO LABRADOR.—Mr. M. M. Chick, of Boston, who has gotten up several summer excursions to Labrador, but whose attempt last year failed, is out again with another prospectus for the coming season. Having once aided in organizing a Labrador expedition ourselves, we know that it can be made most enjoyable. For further particulars refer to advertisement in our columns, or address the projector, 41 Franklin street, Boston.

THE CROTALIDÆ.

The rattlesnakes and their nearest allies possess a peculiar interest in view of the fact that they are the most venomous of the North American ophidians, and are, at the same time, those which the sportsman or naturalist is very likely to encounter in his wanderings. There is really less danger, however, from the rattlesnake than from some other species—the copperhead, for example, or the moccasin—which are not provided with the characteristic appendage of the genus *Crotalus*. It is very unusual for a rattlesnake to strike without first sounding his note of warning, which so closely resembles the crepitating noise made by some grasshoppers as to be easily mistaken for it. The popular belief that the number of rattles increases annually by one, thus indicating with certainty the individual's age, is, like many other widely accepted statements, so far unsupported by any direct and absolute proof; and, until we have some definite evidence of its correctness, cannot be accepted as a fact. A very similar erroneous impression, namely, that the number of tines on the horns of the common deer is an index of the age of the animal, has recently been exploded. As suggested by Drs. Coues and Yarrow in their recent paper on the herpetology of Dakota and Montana, "the growth of the organ must depend largely, as in all parallel cases, upon the vigor of the individual, which is not the same at all periods of life, granting even a continuous state of perfect health."

The question, of what use is the rattle to its possessor, has often been asked, but no altogether satisfactory explanation of its function has as yet been given. Certain it is, that in all of its relations to its enemies, this appendage seems to be a positive disadvantage to the snake, informing them of its proximity when otherwise they might have passed it by, and giving them ample warning of any intended hostile demonstration. Two hypotheses have been advanced concerning the possible uses of this organ, either of which, although not fulfilling all the necessary conditions, seems likely enough to be correct. The first of these is that the rattle is a call by which the sexes may be brought together at the breeding season; the other suggestion is that, owing to its resemblance to the sound produced by one of the large Western grasshoppers, the call may be used as a means of attracting the birds or smaller animals, which feed upon these insects, within reach of the snake. The question, however, is still an open one, and calls for closer observation on the part of those favorably situated for investigating the habits of this most interesting group than has yet been given.

The mechanism of the poison apparatus and the method which the snake employs in striking, form a most interesting topic, and one which we should like to describe at length, did our space admit of it. The reader who is interested in the subject is referred to the paper from which we have quoted, where the process is described in detail.

The enmity which exists between the black snake (*Bascanion*) and the rattlesnake is a very curious one, and is not easily to be explained. That such an enmity exists can hardly be doubted in view of the testimony which has been adduced. We are told that the black snake invariably conquers the rattle snake, and, having killed him, makes a meal of his victim. The same state of things is said to be true of the king snake (*Ophibolus*) and the moccasin. We have in the past printed occasional notes on this subject, and should be glad to receive further communications on the matter, if any of our readers can furnish us with evidence on so interesting a point. The food of the rattlesnake consists chiefly of small birds and mammals, and of the former those species which nest upon the ground are, of course, most often captured; mice, shrews and squirrels in the East, and mice, rats and spermophiles in the West are the mammalian victims.

Among the enemies of the rattlesnake, besides the ophidians already mentioned, are deer, hogs, and the peccaries of the Southwest. Hogs, being protected by their great development of adipose tissue, the venom of the snake is prevented from entering into the circulation, and hence these animals face the rattler without danger, and make many a hearty meal of his flesh. Deer kill these snakes by springing upon them with their hoofs. Of course, man is their worst enemy, and the number killed by him far exceeds those destroyed by other agencies. "The seed of the woman," you know.

A WONDERFUL SOUP.

PROBABLY no greater difference in customs and habits of life exists among the various families of the Caucasian race than among certain of the Indian tribes who roam along our western frontier and throughout the mighty West. Between the Sioux, Blackfeet, Pawnee, Arapahoe and Apache warriors of the plains, and the Ute, Pi-Ute, Snake, Assiniboine and Owyhee hunters of the mountains, there are in certain things as distinct lines of demarkation as those drawn between the Chinaman and the Frenchman, the Japanese and the American. Each of these various tribes has certain peculiar customs that are exclusively their own, governing them in peace and in war, at home and abroad. The plain Indians, differing as they do among themselves, differ yet more widely as a great class from their brethren of the mountains. The riders of the prairie are natural warriors, the climbers of the peaks are as naturally born hunters. Yet, strange as it may seem, the lowland tribes are in the main better providers than are those of the upland. The fighters' family generally runs less danger of starvation during the winter than do the squaws and papooses of the sportsman. Why this is so is beyond my knowledge, but personal observation has often called my attention to the fact. Winter among the Rockies is not always so grim and terrible a king as upon the plains, yet seasons come when the swarming game, from the mountain lion to the gray rabbit, flees southward from before him; and then it is that the thoughtless Ute, less provident than the squirrels who hybernate about him, finds the gaunt wolf of starvation at the door of his tepee hut, glaring at the bare walls and the closely-gnawed bones that strew the floor. Then it is, at last, that the Indians must eat or die; and rather than die he will eat anything, such food even as his first cousin, the coyote, would refuse.

Throughout the Rocky Mountains grow the yellow and white pine; young trees when blistered by the suns of twenty summers, nor yet old when toughened and twisted by the storms of three score winters. The pine has two barks, or, more properly, a bark and a skin. The one is the overcoat worn all the year around, the other is the epidermis of the tree, through which, in the spring, courses its life blood up and down. Now, visit with me an encampment of Ute or Pi-Ute Indians in March, when for four or five months the unblushing, unsoftened snow has lain like a great white blanket over peak and level and canyon. There is no game; for days and weeks the forest has been as silent and deserted as the northern ocean, and as cold. There is in the whole camp neither meat nor fish nor vegetables, and yet the Indians are cooking and eating.

Examine the contents of the copper kettle, black and green without from the smoke of a hundred fires and the verdigris of years, stolen perchance from some far-away rancher, whose wife yet bemoans her loss. As it hangs over the coals, themselves growing dull and brown, a faint piney odor exhales from the thick grayish soup that slowly stews within. It is breakfast, dinner and supper, three meals in one for the group of gaunt figures who surround it, watching with hungry eyes the bubbles that come and go, and secretly regretting the loss of the very vapor which drifts from it as it simmers. It is bark soup, made from the skin of the young pine. Stripped from the trees, chopped into small pieces and cooked with snow water for hours, the glutinous or gelatinous portion of the wood is extracted, concentrated—not refined, however—and forms a thick gruel-like soup, with just enough nourishment in it to sustain life. And so, sometimes for weeks even, these miserable human beings, if such they may be called, exist until spring releases the streams and the disappearance of the snow brings again the game from the southward.

This strange food I have seen in the camps of the Utes and Pi-Utes, and nowhere else, and I believe its use to be confined to these and neighboring tribes of the Rocky Mountain Indians. Certainly the custom is as strange a one as that of the Chinaman who eats rats, the Frenchman who loves frogs, or the American who devours oysters. F. E. HAMILTON.

HOW TO PROTECT FISH.

WANTON WASTE OF SHAD IN NEW YORK BAY.

IT is from the State of Oregon that we are to receive our lesson how fish should be protected. It is as simple as possible. It makes the fisheries of the community provide the revenue for the fish culture operations of the community. In the fishery legislation now being enacted at Olympia, two bills are under consideration—one to regulate salmon fisheries in the waters of the Columbia, and the other to encourage the establishment of hatching-houses on the said waters. The proposed bill—at least, that portion of it which particularly attracts our attention—is as follows:

"No person is to be allowed to take salmon upon the river, except by first having license therefor. For each boat a license of ten dollars is to be paid, and every fisherman taking salmon with a gill net must pay five dollars license for the season. For each seine used the license is to be ten dollars, and for each weir or trap, fifty dollars. Licenses cannot be transferred. Penalties are provided for fishing without license, or otherwise violating the law. All moneys received for licenses or as penalties are to constitute a fund to be applied to the assistance of hatching establishments and to the propagation of salmon. The funds are to be paid over to such person or company as may successfully inaugurate the business; or if there shall be more than one establishment, said funds are to be distributed *pro rata* according to the number of hatched salmon."

Mr. Livingston Stone, whose knowledge of the salmon streams of the Pacific and the legislation necessary for their protection is second to none, writes us: "The adoption of this principle by Oregon and Washington Territory is, I believe, an entirely new thing in this country, and has never been contemplated in any of the Eastern States. You must see at once how important the principle is and how valuable it may possibly prove in giving permanency and certainty to the fishcultural labors of the States." Mr. Stone asks, "Why should not the shad fisheries of Eastern rivers pay for the hatching of the shad in these rivers?"

As far as we can see, we consider the plan proposed in Oregon an admirable one. Possibly, if fishermen were made to pay directly for fish culture in re stocking the streams they fish in, they would be more interested in the results. Such cases of utter waste as we directly noticed in the fish market last week with shad, we take just here the opportunity of giving publicity to.

Thousands of small shad, the largest weighing something over a pound, the smallest less than three-quarters of a pound, were found exposed for sale. Ten of these fish weighed less than fourteen pounds. These shad were caught in fyke nets,

in the bay. How is it possible for shad to be found of size or in any quantity, when, at the very threshold of our river, there is such wanton destruction? As food, such fish are useless, and they are peddled about the streets, selling for a few cents. We must particularly call the attention of the Fish Commissioners of New York to this dreadful waste, and we hope the American Fishcultural Association will memorialize the Legislature in regard to it. This kind of thing has been going on for years, and putting to naught the earnest efforts of fish culture. It is time that such stupidity—to call it by no better name—should be checked, and a stringent law should be enforced, preventing any further repetition of this indiscriminate waste of fish.

THE "PACIFIC LIFE," the representative journal of the sportsmen of California and the west side of the continent, has been of late in charge of our esteemed friend R. L. Ogden, Esq., Commodore of the Yacht Fleet, and leading sportsman of the Pacific slope. Mr. Ogden has been long and favorably known by the sobriquet of "Podgers," over which he has written some of the raciest bits of sporting literature. When the *Pacific Life* sporting paper was started, Mr. Ogden told us personally that he "would give it ten months in which to live." Now that he has become its master spirit we will vouchsafe to it a hundred times ten, and wish the enterprise all success. There is ample material of natural resources, men and measures in that part of the country, requiring an especial exponent. The information to be constantly mined out of the rich and unworked lodes, leads, gulches, pockets, or whatever they may be called with which that country abounds, needs a sensible and experienced purveyor. There are men in other parts who should be supplied as well as the home consumers.

HOW TO PROCURE THE GRAY PARTRIDGE.—The article in our last issue, relative to the gray partridge (*Perdix cinerea*) of Sweden having caused numerous letters to be addressed us as to the method of procuring the birds, we are glad to give some information as to how they can be obtained, John H. Stevens, Esq., U S. Consul at Stockholm, having kindly given us the methods of transportation, cost of birds, etc. Mr. Stevens says that the gray partridge can be obtained in southern Sweden, and could be caught from August to the middle of November, but that about September would be the best month to transport them. The cost of delivery on steamer would be from five to six crowns a brace, male and female—from $1.35 to $1 60 per pair (the Swedish crown is about 26 to 27 cents). Transportation from Stockholm to London or Liverpool could be easily arranged. Any one desirous of importing these birds should address Col. Nere. A. Elwig, No. 13 Duttninggatan, Stockholm, Sweden. Our thanks are due to Mr. Stevens for his kind attention.

A FLATTERING LETTER.—A gentlemen in Pittsburgh, Pa., sends us the following. Such acknowledgment of our usefulness is exceedingly grateful to us. All we can say is that it will be our desire to merit the many expressions of friendly feeling which we receive:

While your columns are not given up to the discussion of subjects of the lower order of sports—and is not this word greatly abused by many—you furnish the true sportsman with such reading and reports as none but a true sportsman can appreciate. Though ranking specially as a sporting journal, your columns are treasures to the naturalist, the historian, the anatomist and students of other scientific and scholary pursuits. Allow me to thank you specially—and I know I speak for many—for the manner in which your columns devoted to inquiries are conducted. One cannot peruse these questions and answers without finding much that is of interest. In keeping up such a column for inquirers, you not only exhibit enterprise, but bestow in many cases a great favor to the inquirer.

ANOTHER INDORSEMENT.—Here is another gratuitous indorsement from one of our advertisers:

EDITOR FOREST AND STREAM: BOSTON, April 2, 1878.

We were led last year by emphatic assurances of a number of our neighbors, dealers in sportsmen's goods, etc., to have high expectations as to the results of advertising in your paper, and it gives us pleasure to say that our hopes have been more than realized. From the time we began until now we have been constantly receiving letters of inquiry and many orders for our goods. They come from almost every part of our continent, and from all sorts of people—from army officers, civil engineers, surveyors, college professors, divines, sportsmen, miners, trappers, and campers-out generally, and also from dealers; and for this reason we have kept our advertisement in your paper in season and out of season, so much longer than we at first intended. We have never been so well satisfied in all of our advertising experience as we have with you, and deem it no more than justice to say so,

Respectfully yours, GALE & Co.

Mr. Ingram Fletcher, Esq, of Indianapolis, has returned from his third expedition down the Kissimmee River and around Lake Okeechobee in Florida. He found the mouth of Fish Eating Creek and saw Al Fresco's "old dead cypress," which be beheld afar off when the lettuce and drift forbade his near approach to that great inland sea—Okeechobee.

A MONSTER PARTY.—On Saturday last the Prospect Park and Coney Island R. R. Co., of Brooklyn, sent out invitations to some 30,000 people. To accommodate so many persons, some 75 trains of 5 cars each were kept running all day. Mr. Culver, the President, and Mr. Washington, the Vice President of the P. P. & C. I. R. R. may be said to have reinvented Coney Island. It is indeed surprising that this wonderful place, right on the ocean's side, and in close proximity to to some 2 000,000 of people should have waited so long to be practically developed. A railroad may lead, it is true, to nothing, but this largely syllabled little railroad has for terminus Tom Cable's famous restaurant. On the occasion we refer to, there was a magnificent band of music right before Cable's establishment. The day was quite a festive one, and will inaugurate a series of pleasant summer junketings.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New Hampshire State Sportsmen's League, Manchester, April.
New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fromont, May 21st and 22d.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President
Missouri State Sportsmen's Association.

BREEDING CALIFORNIA QUAIL AND PINNATED GROUSE.

BAY'S END, Md., April 16, 1878.

I received in the winter a number of California quail of both the mountain and valley species. I took good care of them during the remainder of the winter, and turned them loose in the spring. All disappeared but one pair, which stayed around the house and fed with the chickens. This pair was frightened off by some means, and went to a neighbor's, where they made a nest and were said to have laid several eggs. Whether any of the eggs were hatched or not I do not know, but none of the young ones were ever seen. I see no reason why they should not succeed in this region, especially the mountain birds, as they must be accustomed to quite as severe a climate as we have here. I also received five pinnated grouse from Ohio. Three of these were shot before breeding season. The remaining pair laid thirteen eggs, every one of which they hatched, and were all raised. They increased, till in a year or two, there were between seventy-five and one hundred birds. These stayed on the marshes most of the time, only coming off to feed in the fields. In spite of a law made to protect them, these have all fallen a prey to the pot-hunter. I do not think there is a bird left. I consider this a very hardy bird, even more so than our native quail. DR. T. S. PURNELL.

SHAD AND NUTMEGS.—It has been left for the broad-minded and public-spirited Connecticut farmer, with his extended views of political economy and inter-State courtesy, to make an important discovery in scientific farming. This brilliant tiller of soils long since exhausted by the continual bearing of wooden nutmegs has found that his barren acres may be restored to their pristine fruitfulness by a generous deposit of fish, as manure. And the rustic experimenter has determined that of all the fish in the Connecticut rolling past his door, the tender young shad posseses virtues the most potent. So when the Massachusetts fish commissioners, with much labor and unstinted outlay of money in the last few years, turned their attention to the artificial propagation of these fish, the riparian possessor of landed estates in the sister State, smiled in his sleeve, mended his nets, and then took his slate and worked out this little problem: "So much money expended by Massachusetts fish commissioners; so many shad fry; so much shad manure to an acre; so many bushels of nutmegs." Then he chuckled again and wrote to his Boston commission agent to get up a corner in nutmegs. But how foolish it is for Massachusetts to complain that having expended her dollars she should have a shad or two! S'had ought to.

LONG LAKE CLUB.—We took occasion upon the organization of this club to express our gratification at the action of the Adirondack guides, and we now take pleasure in noting the good results of their work. From a letter to a gentleman in this city, under date of April 20, we learn that the rules of the club have been most rigidly observed, both in regard to shooting and fishing, and as a consequence the prospects for both of these sports is all that could be desired by sportsmen. No deer are to be killed until after July 10th.

KENNEBEC ASSOCIATION.—The officers of the Kennebec (Maine) Association for the Protection of Fish and Game, are: Pres, Dr. G. W. Martin, of Augusta; Vice-Pres., Geo. P. Haskell, of Augusta, and S. B. Glazier, of Hallowell; Sec. and Treas., R. B. Capen, of Augusta.

VIRGINIA ASSOCIATION.—At the annual meeting of the Virginia Fish and Game Protective Association, at Richmond, May 3, the following officers were elected for the ensuing year: President, Charles T. Palmer; Vice-President, Dr. O. A. Crenshaw; Secretary, Edward H. Fisher; Treasurer, John Ott; Executive Committee, Moses Ellyson, A. Q. Holladay, W. Russell Robinson, A. G. Babcock, Philip Haxall.

OHIO FISH LAW.—The new fish law of Ohio, which went into effect the first inst., reads as follows:

"SECTION 35. Whoever, in any of the waters of any creek, river, canal, lake, pond, or reservoir, or in any body of water, whether artificial or natural, lying within the State of Ohio, except the waters of Lake Erie, injures, or kills, or catches, in any other way than by hook and line, any fish, except minnows, or owns or possesses any fish pond, fish net, fish trap, or fish seine, except seines to catch minnows, in or connected with any waters in the State of Ohio, except the waters of Lake Erie, or in any way maliciously disturbs any fish in any private fish pond, shall be fined for each offence not more than fifty dollars, nor less than ten dollars, and be imprisoned in the jail of the county not less than ten days nor more than sixty days. And provided further, that it shall be unlawful to catch, or destroy fish in any manner during the spawning season, excepting in reservoirs containing one thousand acres or more, from the 1st day of May to the 15th day of June, in each year."

The Rifle.

DR. CARVER.

IN VERMONT.—The National Rifle Club at South Vernon, Vermont, will hold their spring meeting May 29. This club uses old fashioned rules and old fashioned rifles. As questions are sometimes asked us as to handicapping, we copy from the programme of the club. What a rifle a 40-pounder must be! There must be some of the old English fire-locks in Vermont to this day. The standard weight of rifle barrels being 15 lbs, all over must give the following odds:

From 15 to 20 lbs, 1-4 inch to the lb for every 10 shots,
" 20 to 30 " 3 16 " " " " "
" 30 to 40 " 1-16 " " " " "

MASSACHUSETTS.—*Boston, Saturday, May* 4.—First trial of the May amateur series, and sixth renewed competition of the "dirty match." Wind high, rendering fine shooting impossible. Contestants were not numerous, owing to the bad weather. The following are the scores at 200 yards:

J Wemyss, Jr.	4	5	5	4	4	4	4	4	4	3—41
W E Guerrier	4	4	4	4	3	4	4	5	4	4—40
J B Parker	3	5	4	4	3	4	4	4	5	4—40
W Arthur	3	5	4	4	4	5	5	3	4	3—40
W Poland	4	4	4	4	4	3	4	4	4	4—39
E B Souther	4	4	4	4	4	4	3	3	4	5—39
Irving James	4	4	4	5	4	4	4	3	3	3—36
W C Gioia	3	3	4	4	3	4	4	3	3	4—34

But few marksmen entered for the non-cleaning match. The result of this match at 200 and 300 yards was as follows:

	200 yards.	300 yards.
W Poland	5 4 4 3 4 4 4—28	3 3 4 4 4 3 5—25—53
J Wemyss, Jr.	4 4 4 4 4 4 4—28	4 3 4 4 4 3 3—25—53

Gardner.—The rifle club have elected the following officers: President, Henry C. Knowlton; Vice-president, C. D. Bent; Clerk and Treasurer, G. F. Ellsworth; Executive Committee, A. Coleman and S. B. Hildreth.

AT WALNUT HILL.—Want of space prevents our giving more than Captain Jackson's remarkable score, with two others at the range near Boston. The total 218, fifteen shots at 800, 900 and 1,000 yards, is a marvelous one. It is true 218 have been twice beaten, Dudley Selph, at New Orleans, scoring 219, and the same number having been made by Mr. Bruce. Making 149 out of a possible 150, at 800 and 900 yards, is marvelous. Mr. Tyler's 209, and Mr. Poland's 196, are excellent.

W H Jackson.

800	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5—75
900	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5—74
1,000	3	4	5	5	4	5	4	5	5	5	5	5	4	5	5—69—218

H Tyler.

800	4	3	4	4	5	4	5	5	5	5	5	5	5	5	5—69
900	5	5	4	5	5	5	5	5	3	5	3	5	4	5	5—69
1,000	5	5	5	5	5	5	5	5	5	5	2	5	5	5	4—71—209

Wm Poland.

800	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5—74
900	4	3	2	5	4	3	0	3	3	4	5	3	5	5	5—52
1,000	4	5	5	3	5	5	5	5	4	5	5	5	4	5	5—70—196

At the second competition for champion gold medal, presented by Zettler Bros., at Guttenberg, Sunday, May 5, 1878, although the weather was very unfavorable for good scores, the following scores were made:

M. Dorrler	191	J. Dahl	173
G. A. Schurmann	188	F. Fabarius	172
M. L. Riggs	183	H. Miller	165
B. Zettler	205	P. Fenning	159

G. A. Schurmann Sec.

Boston April 30.—Best scores at rifle gallery, 655 Washington street, for three rises, eight shots per man, distance 150 feet:

F. Hollis	5 4 5 5 4 5 5 5—38
J. E. Harris	4 4 5 4 5 5 5 5—37
H. T. Rockwell	5 4 5 5 4 4 5 5—37
J Fitzpatrick	5 5 5 5 5 4 4 4—37
J. Cowen	3 3 4 5 5 5 5 5—35
D. F. Wing	5 4 5 4 5 4 2 4—35

E. B.

STAMFORD AMATEUR RIFLE CLUB.—Yesterday, May 8, at 10 o'clock, the all-comers' short-range match took place. On the 11th will occur the fourth competition for the Sharps rifle; on the 15th for the Tiffany cup; on the 18th for the Harris revolver; on the 22d for the bull's-eye badge, and on Wednesday the first competition for the "Teackle Cup."

—Harvard and Yale are to have a rifle match.

JAMAICA ROD AND RIFLE ASSOCIATION.—The first challenge badge of the season at 200 yards took place on Saturday at the range. Mr. T. Rogers, with a score of 43, won the first prize. The second was won by Mr. J. M. Crane with 38, possible 50.

CREEDMOOR—*Saturday, May* 8.—In spite of the strong wind and squally weather, the shooting was fairly good. The leading match was for the Sharps' prize, $250 gold, which commenced shortly before 11 o'clock. Match open to all comers, with any rifle. Distances, 800, 900 and 1,000 yards; 15 shots at each range. Mr. Weber's score, 215 out

of a possible 225, was superb. There were sixteen entries, but eight withdrew.

	800 yds.	900 yds.	1,000 yds.	Total.
L Weber	74	73	68	215
I L Allen	69	70	69	208
Frank Hyde	72	69	53	194
B L Doughty	68	60	65	193
H F Clerk	68	63	55	186
H Fisher	63	60	62	185
J Johnston	65	60	60	185
G L Morse	63	56	61	180

The *Turf, Field and Farm* challenge badge was next in order. Ten shots at 200 yards; badge to be won three times. The following are the scores.

F H Helton	42	J W Todd	34
D F Davids	40	J F Duckworth	34
D C Pinney	40	Thomas Lloyd	34
S W Sibley	39	Dr S T G Dudley	34
S J Gorman	37	J H Grohman	34
C E Blydenburgh	37	J L Fanelling	33
A Anderson	37	H W Gourley	32
J S Conlin	36	L G Bruce	32
A G Weber	36	J E Irwin	32
F Alder	36	E W Candee	32
Capt C F Robbins	36	Capt C D Truslow	31
C H Eagle	36	J Butkowski	28
Homer Fisher	35	Lewis Cass	28
W H Dunlap	35	A W Dimock	26
Wallace Gunn	35	F L Eames	26
Capt W C Reddy	34	R W Day	25
T Fitz	34	S C Kingman	17

The Seventh Regiment Rifle Club shot a competition for the regimental diamond badge. Private C. H. Engle was the winner with a score of 61 points out of a possible 70, at 200 and 500 yards.

The Irish-American Rifle Club held the third competition for the Maltby rifle. Mr. N. D. Ward won for the third time, which makes it his property.

For the Frazier Prize—Military teams intending to compete for the Frezier prize for rapid shooting, which will be shot for on the first day of the spring meeting, will be supplied with the new cartridge box for rapid loading on application to the superintendent of the Ordnance Department, N. G. S. N. Y.

ZETTLER RIFLE GALLERY.—Scores made at Zettler Gallery, 207 Bowery, on April 30, at Creedmoor targets reduced to gallery distance; possible 50:

P Fenning	49	M D Engel	44
D F Farbarus	49	H Oehl	44
C G Zettler	48	R Zimmerman	43
B Zettler	46	W Wiegandt	42
M L Riggs	46	W E Moore	40
D Miller	45	J Culane	40
C Judson	46	J Levy	40
M Dorrier	46	E Hunziker	40
G Schurman	45	C Vellars	40
J Dutil	45		

AMATEUR RIFLE CLUB.—A lease of the property in rear of the range at Creedmoor having been obtained by the club, and the necessary openings in the range fence having been made, members may now practice at the distances of 1,100 and 1,200 yards. An arrangement is now being made with the National Rifle Association, whereby the club will secure the use of two targets for its members, on each Wednesday and Saturday from and including May 15 to October 30. These targets will be for the exclusive use of members of the club, free of charge. The programme of matches will be as follows: Short-range match and mid-range matches during May, and the long-range prize in June. Fourth match for the Leech Cup, May 23.

SARATOGA AND MILWAUKEE.—In our last issue want of space prevented our giving in detail the score of the two clubs. At 200 yards ten scoring shots were allowed, at 500 yards fifteen. Individual possibles then were 75, and for teams of four, 300. The aggregate possibility of each club in the match being 500, it will be seen that the Saratogas approached it by 32 points, and the Milwaukee Club by 48. At each range the score was:

	200 yds.	500 yds.	Total.
Saratoga Rifle Club	176	292	468
Milwaukee Rifle Club	159	293	452

The individual average of each club is shown thus:

	200	500		200	500
Saratoga Rifle Club	44	73	Milwaukee Rifle Club	39¾	78¼

The following was the score of the Saratogians at 200 yards:

D Eddy	5	4	5	5	4	5	4	5	4	4—45
G J Wing	5	4	5	4	4	5	4	4	5	4—44
F D Wheeler, Jr.	4	5	5	4	5	4	5	4	4	4—44
G W Ainsworth	5	4	4	5	4	5	4	4	4	4—43—176

At 500 yards:

J W Shurter, R.	5	5	5	6	4	5	5	5	5	5	5	5	5	5	5	5—74
G W Ainsworth, R.	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5—74
J Webb, R.	4	5	5	4	5	5	5	5	5	5	5	4	5	5	5	5—72
Jerome Pitney, R.	4	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5—72—292

—It is proper to state that in the telegraphic match between the Saratoga and Milwaukee rifle clubs there was some misunderstanding as to the selection of the men constituting the Saratoga team, which might have arisen from the Saratoga gentlemen not understanding the terms of the Milwaukee challenge. The same Saratoga men who shot at the 200-yard range did not shoot as a team at 500 yards. We are pleased to have had a visit paid us by J. Johnson, Esq., of Milwaukee, one of the most active officers of the Milwaukee Rifle Club.

RIFLE SHOOTING IN NEW JERSEY.—The Rahway Rifle Club held their match on Saturday for a gold badge. Distance, 300 yards; ten shots; possible 50. We give the score:

F H Helton	44	C E Blydenburg	39
L D Banks	43	J S Conlin	39
F Alder	42	H W Gourlay	39
Homer Fisher	42	E M Squire	39
C Watson	42	B Vail	39
D F Davids	41	S T Dudley	38
F Sheldon	40	L Fitz	38
P Lorillard	40	M Sharp	37
W H Dunlap	40	J W Todd	37
H G Helweg	40	B Squire	33
S W Sibley	40		

—Major Fulton, as was reported, has not resigned from the committee of the New Jersey Rifle Association range team, but is still chairman of that committee. The range will be at Elizabethport. The name of the range has not yet been decided upon. All the gentlemen on the various committees are warm in their praises of Gen. McClellan, the Governor, for the great interest he has taken in rifle shooting.

OFFERS FOR A TELEGRAPHIC MATCH.—*Editor Forest and Stream:* We have our long range in order now, and have got fairly under way in our practice. As we are isolated from other long-range clubs, we desire to have matches during the summer with other clubs by telegraph. That seems to be the only way we can have competitions at present. If any amateur club will open correspondence with us we will be glad to hear from them, and make arrangements for some contests of a friendly character. This, of course, is not intended as a challenge to clubs, but as an expression of a desire to afford amusement for ourselves and others. We have eight members who are supplied with Maynard Creedmoor rifles, and as many more not yet armed. We can get up a team of four at any time for a long-range contest.

Respectfully yours, etc., CHAS. E. DWIGHT,
Wheeling, W. Va., April 20. Pres. Maynard Rifle Club.

GEORGIA—*Savannah.*—On the 1st of May a team match was contested for between the Georgia Hussar team and the Guards, which was won by the Hussars. The shooting was done with the Springfield rifle, 45 and 50 cal., six pounds pull; distance, 200 yards:

J W McAlpin, captain of team	44	Lieut W E Johnston, captain	41
Lieut G B Pritchard	39	J G Heyward	40
L M Ryals	39	E J Keiffer	34
W F Preston	37	H G Black	39
James W Schley	40	J M Bryan	34
S McA White	41	Geo Appleton	37
C M Cunningham	40	Lieut. W P Hunter	35
O L Tilton	35	M Maclean	41
B B Minor	39	R T Harden	35
B C Wright	25	J H Hunter	34
Julian Schley	38	A McNully	34
George C Gaillard	37	J O Postell	44
John S Coburn	38	Maj Jos Phillips	35
John D Martin	34	A B Calder	22
D M McAlpin	40	Geo Allen	43
Total	505	Total	548
Average per man, 37 2-5.		Average per man, 36 8-15.	

DENNISON'S TARGETS.—The attention of rifle clubs and associations is invited to the advertisement of Messrs. Dennison & Co., No. 198 Broadway, New York City. These gentlemen offer paper targets, Creedmoor pattern, sizes from 25 to 1,000 yards, also pasters and score cards, at moderate prices. These targets can be readily set up in frames, and will be found of great advantage in team matches, each man's target being separate and distinct. The N. R. A. intend to use a number of the Dennison 200 and 500 yards targets during the coming spring meeting.—*Spirit of the Times.*

THE WINCHESTER REPEATING ARMS COMPANY.—The manufacturers of this well-known rifle are now fitting up an extensive establishment at No. 245 Broadway. A full line of their arms will be kept constantly on hand. In a subsequent issue we will be able to give a full description of the new store of the Winchester Repeating Arms Co., with a history of the company.

EXPRESS BULLETS.

THE INFLUENCE OF RECOIL ON FLIGHT OF BALLS, ETC.

SAN DIEGO, Cal., March 19, 1878.

EDITOR FOREST AND STREAM:

I notice in F. AND S., of Feb. 28, an interesting letter from A. G. Menu on the penetration of Express, or rather expensive, bullets, in which the results of his experiments differ very decidedly from those of mine. The expansive ball, from my rifle, has only about one-half the penetration in wood that the solid ball of same size has, and has still less in flesh. The hole cut in a block of dry cottonwood was the shape of a beet—44-100 at the entrance and about three inches across at the bottom of the hole—the whole penetration being only about five inches. On deer the effect was precisely that described by "Viator" in his letter in issue of Feb. 7, viz., "generally lodging against the ribs on the opposite side."

This difference results, mainly, I think, from the difference in the bells, and it would be well to try experiments before adopting any particular one. The best one for hunting is undoubtedly that described by Mr. Mann—"one which will expend on striking a soft substance, and retain its form when shot into a hard substance." If Mr. M. has tried that ball often enough on both hard and soft bodies to be sure of this conclusion of his, I wish he would give us the dimensions and hardness of the bell, and the depth and width of the hole. The ball I have used is a .44 cylindrical, one inch long, with hole of the diameter and depth of a .22 long cartridge. After abandoning the use of explosive cartridges, I cut off the plug so as to make the hole the length of a .22 short. This increased the penetration of the ball without diminishing the diameter of the hole cut by it. This ball was driven by only seventy grains of powder, but I do not think that would effect the expansion in a solid body. I think the best ball for hunting is not one which flies into "splash" upon striking, as mine did before I shortened and narrowed the bottom of the hole, but one which will open out like an umbrella and still hang together. The "splash" of a light ball is too fine to penetrate far, and as the ball will under high velocity cut a four-inch hole even if it stays together, the "splash" principle is unnecessary. The diameter of the hole cut by a ball depends, first, upon the calibre, and, second, upon its velocity on striking. A .55 round ball will cut about twice as large a hole on flesh as a .44 round at same velocity; and a .44 round, with seventy grains of powder, cuts about three times the sized hole on flesh that it will with only ten or fifteen grains. I think, therefore, the best ball is that which, with the very highest velocity, will expand to twice or thrice its diameter without flying to pieces. And this would depend upon the shape and size of the hole, and the toughness of the ball.

The same considerations doubtless influence the accuracy of the flight of the ball with the hole open. Mr. Rigby, in F. AND S. of Feb. 21, says it makes no difference whether the hole be open or closed. I think he is correct as to some balls, and not as to others. Where the hole is small and short it would probably make no difference. Since shortening the hole in my bullet, as above stated, I have not tried it with the hole open; but before that it was very wild at 200 yards and over, though true enough at 20 or 25. It is certainly better to have them of such shape that the open hole will make no difference, and I think the ball described above as the best for hunting will travel true for a long distance without closing the hole.

In F. AND S., of Feb. 28, Mr. Rigby proffers to Mr. Ferris and others the following poser: "Why does a rifle bullet *not* leave the barrel in the same direction the axis of the bore had when the trigger was pulled?" I think the great majority will jeer at Mr. Rigby as a blunderer in making this assertion. He is, however, perfectly correct as to some guns and rifles, and has raised a very important point, which I have never seen discussed or even mentioned before. This recoil question is of far more practical importance than one would suppose, and conclusions should not be hastily jumped at, nor the subject shoved aside as a mere abstraction of no real value. A long time ago I noticed that some rifles will not throw a heavy cylindrical ball on the same line with a round ball, or on the same line with the same ball with light charge of powder. I refer entirely to distances at which gravitation can make no difference. I have a .44 Maynard of 9¼ lbs. weight, 32-inch barrel, and charge of seventy grains, the long ball of which weighs one ounce. This rifle, like every other Maynard I ever saw, is, when properly loaded (hardened balls should generally be used, even if shot without patch), extremely accurate. At 200 yards I have shot five successive balls with it into a four-inch circle, and at twenty-five yards five into a ⅝-inch circle, all with a coarse ivory-front hunting sight, and a large hole in the back peep sight. This rifle will, however, throw round balls with 70 grains, and the long ounce ball, with only 30 grains, four inches higher at 25 yards than it will the long ball with 70 grains. I have tried this over and over, with dead, double rest, and taken every precaution to eliminate all chance or accident from the problem, so that there is no question as to the fact with this rifle. Each set of balls is, however, perfectly true on its own line. Make a diagram with a one-inch bull's-eye with six successive balls in it, and another group of six balls all cutting into each other just four inches above it, and you will have the target as it has appeared after several trials. A Sharps rifle, bought three years ago from factory, 28 inches in length, round barrel, about 8½ pounds weight, 77 grains of powder, does precisely the same thing—throws the heavy ball down four inches at 25 yards below the round or heavy ball with light charge. On sighting these rifles at a mark, and then looking through the barrel, the axis of the bore is found pointing at the exact spot where the upper set of balls hit. A Frank Wesson rifle, of .40 cal., about 8 lbs. weight, 60 grains of powder, 30-inch barrel, and a conical ball of about 300 grains, shoots both sets of balls to the same spot, and the axis of the bore corresponds to the level sights. A No. 40 old style Maynard I once had also shot both kinds of balls to the same spot. These are all the rifles I have tried upon this point. The conditions of this throwing down are: a very heavy ball and heavy charge of powder.

But now comes a singular fact. A shot-gun overloaded, or fired with both barrels at once with heavy loads, will generally kick up over the mark. So will, generally, a short, light carbine or pistol if overloaded. Most all the modern cartridge pistols will throw far above the axis of the bore and the line of the sight with which they are furnished. This I have often noticed and been annoyed with; but to put the point in more definite shape before writing about it, I tried this morning a large "Russian Model Navy" revolver, .45 cal., with round balls and half charges, and the long balls full charges of the regular cartridges. I fired with dead rest at only seven paces. Both sets of balls went perfectly true, but on entirely different lines; but the heavy balls with full charge cut into one hole 2½ inches above the round balls, which were all in the bull's-eye aimed at, exactly the reverse of the rifle balls.

Another singular fact is that neither of these rifles can be made to kick up, or any way but down, and always to the very same spot (provided care is taken to get always the exact charge of powder). I have rested the end of the muzzle in one end of a balance with a purchase that would be sure to lift it, and hung a weight on the other scale just touching the surface of a pan of water, which an attendant watched, and which one-quarter of an inch downward pressure on the end of the muzzle would raise out of the water. The ball was thrown down to the exact spot as before, but the weight was not raised from the water, but the contrary. As this might have resulted from the tilting up of the breech, I then hung the breech part in the scale, and weighted the muzzle to see if I could make it throw down any further, but the ball went on precisely the same line as before.

I varied these experiments in several ways, and tried by tying down both breech and muzzle, hanging on weights, etc., to make the heavy ball and charge take the line of the axis of the bore, but could not succeed. Every ball went almost into the same hole, but just four inches below the line of the others. In every case the muzzle was plainly seen to jump up on firing, and by no arrangement I could devise could I or others detect it jumping down. It certainly must do so at first, or else the barrel must bend, which seems impossible. I did not try a vise, as I have none proper for the purpose where I live. I never knew a rifle to kick to either side, though a pistol sometimes will if overloaded and loosely held off-hand. It will then often spring toward the place where the grip is the lightest. A Frank Wesson's .32 light pistol I have, throws to the left if loosely held in the right hand, and to the right if loosely held in the left hand. This I have often noticed.

I have no opportunities for careful experiments, and wish some one who has would investigate this subject carefully. My view of recoil is this: The backward pressure of gas begins at the same instant with the forward pressure, but cannot at once overcome the inertia of the gun. The recoil, therefore, commences at the time the ball starts, but is not complete until after it has escaped the muzzle. If, therefore, the weight of the gun is great enough in proportion to the charge, it will not yield enough before the ball escapes to throw it (at least, not apparently,) in a line different from the axis of the bore. If the weight of gun is not great enough it will yield sooner; but if the disproportion between the weight and charge is not too great, the amount of deflection will be so regular as to amount practically to no inconvenience, except that of requiring different adjustment of sights; while if the disproportion be excessive the jump of the gun may (I do not say will, necessarily,) be too irregular for correct shooting, and I think I have seen rifles and pistols that were inaccurate mainly for that reason. T. S. VAN DYKE.

P. S. The most convenient way to put light charges in a long shell is to drop in a stick of one-half the diameter, and pour the

powder around it. Will some one having a Creedmoor rifle try this and give us the results?

MR. RIGBY TO THE PRESIDENT OF THE SHARPS RIFLE CO.—*To the President of Sharps Rifle Manufacturing Company: Dear Sir*—Press of business prevented my replying sooner to yours of March 5th. I do not think any useful purpose can be served by discussing further the points raised in your letter.

It has been published at length in the American Press, whereas mine, to which it was a reply, has been passed over. Thus the public are liable to be misled by having one side only of such arguments. I am not "getting away from my original challenge," but you seek to fasten on it a meaning which it does not fairly bear. I do not need to be instructed in the capabilities of breech-loading rifles when rapidity and accuracy are combined. My experience of breech-loading arms is perhaps of longer date than that of any one now connected with the Sharps Company, and I am perfectly aware that by slightly modifying the method of loading you could render any time match between a muzzle-loader and a breech-loader absurd.

My "challenge," as you call it, was to test the muzzle-loading match rifle used at Wimbledon against the American breech-loading match rifle as used at the Centennial.

This is proved by the context as my remark came at the end of a letter giving a description of those rifles. This would be fairly tried by following the conditions laid down in my last letter, to which I must adhere.

If they do not suit you it is open to you to give at Creedmoor a public exhibition of the capabilities of your rifle in shooting against time at 1,000 yards, and so attain the object you have in view.

If you prefer to accept the conditions in my last I shall be glad to hear from you in course of post.

I am faithfully yours, JOHN RIGBY.

Dublin, April 20, 1878.

Sea and River Fishing.

FISH IN SEASON IN MAY.

Trout, *Salmo fontinalis*.
Salmon, *Salmo salar*.
Grayling, *Thymmallus tricolor*.
Salmon Trout, *Salmo confinis*.
Shad, *Alosa*.
Land-locked Salmon, *Salmo glaveri*.

FLIES IN SEASON IN MAY.

BLACK MAY, No. 10.—Body, black; feet, black; wings, grayish hyaline.

COW DUNO, No. 10 AND 11.—Body and feet, brownish yellow; wings, yellow-gray.

GREAT DUN, No. 9 AND 8.—Body, purple brown; feet, gray brown; wings, dark gray hyaline; setæ, dark brown annulated with gray.

RED SPINNER, No. 10 AND 9.—Body, bright claret, ribbed with gold tinsel; feet, brick color; wings, gray hyal; setæ, pale brick color.

YELLOW MAY, No 10.—Body and feet, pale yellow; wings, pale yellow, mottled with brown; setæ, yellow.

COACHMAN.—Body, peacock herl; feet, dark red hackle; wings, white.

KING OF THE WATER.—Same as queen of the water, with scarlet body instead of orange.

GOLD SPINNER.—Body, orange, ribbed with gold tinsel; feet, pale red hackle; wings, bright gray.

CAPTAIN.—Body, posterior half, peacock herl, anterior half, gray; white feet; red hackle; wings gray; setæ, scarlet green and wood duck feathers mixed.

SOLDIER.—Body, crimson; feet, red hackle; wings, gray.

KINGDOM.—Body, white, ringed with green; feet, peacock herl, and red hackle; wings, gray, mottled with brown.

Black Palmer, Brown Palmer, Red Palmer and *Gray Palmer* are made respectively of the different colored hackles that distinguish them.

FISH IN MARKET—RETAIL PRICES.—Striped bass, 20 cents, large do., 12½; blue fish, 12½; frozen salmon, 30; green do., 60; Connecticut River, 75; mackerel, large, 15; do. small, 10; native shad, 30; weakfish, 15; white perch, 15; Spanish mackerel, 75; green turtle, 15; halibut, 15; haddock, 6; king fish, 25; codfish, heads off, 8; do., heads on, 6; black-fish, large, 12; small, do., 8; flounders, large, 10; do., small, 8; porgies, 16; sea bass, 20; eels, large, dressed, 15; lobsters, live, 8; do., boiled, 16; sheepsheads, 25; turbot, 20; scallops, $1.50 per gallon; soft clams, per 100, 30; do., large, 60; brook trout, wild, 50; Long Island brook trout, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.25; red snapper, 15; pompano, $1.

During the last ten days no less than 46 very fine salmon have been caught in the Connecticut River and sold in Fulton market. Connecticut River has also furnished shad weighing seven pounds each. At Mr. Blackford's, trout from Moosehead Lake were exhibited weighing four pounds. This is a season of wonders. Blue fish, coming from Baltimore, have been in market weighing 7 pounds, fat and in splendid condition. At this time of the year in former seasons, blue fish seldom are heavier than 1 to 1½ lbs. This advance of the season is notable in pompano and sheepshead. Fish are cheap and plenty.

PARASITES IN FISH.—Relative to the very stupid alarm about the trichinæ in shad, a correspondent writes to us: "Many of our fishes are infested with pin-worms. The late Prof. C. F. Hart told me that, while studying under Prof. Agassiz, he discovered that the flesh of the codfish was invariably "alive" with parasites, to a greater degree, in fact, than that of any other fish."

RICHARDSON LAKES—*Oxford Co., Maine, May* 3.—The ice went out of the lakes this year April 26. Fishing may be expected to commence about May 10th. Last year, which was an early one, the ice went out on May 9, and the fishing was quite good May 20th. In 1876 the ice did not go out until May 26th, and in 1875 until May 28th. WHITNEY.

MOVEMENTS OF THE FISHING FLEET.—There have been no home arrivals from the Southern mackerel fleet as yet. The Georges fleet continue to bring in very small fares for the season, and the average trip will do little more than pay expenses, while many fail to do this, and but few show any respectable margin of profits. The number of fishing arrivals reported at this port the past week has been 14 from the Banks, with 80,000 lbs. codfish and 230,000 lbs. halibut, and 47 from Georges, with 550,000 lbs. codfish.—*Cape Ann Advertiser, May* 3.

CONNECTICUT—*Windermere, April* 16.—The fishing in the lake this year is remarkably fine. Some large strings are caught almost daily.

SALMON IN THE CONNECTICUT.—*Centre Brook, Conn., May* 6.—Hurrah! for Connecticut salmon are ascending the Connecticut River. I have a piece of a twelve pound salmon, one of the fifteen caught near the mouth of the river within the last few days. They are probably just beginning to ascend the river. Average weight, ten to fifteen pounds. Trouting fair this season. I took a basket of trout April 15, ten largest weighing over ten pounds, largest one weighed one pound nine and a half ounces. G. H. C.

RHODE ISLAND.—*Newport, May* 7.—Scup have begun to arrive in goodly numbers; some blackfish and tautog are being taken off Brenton's reef.

LONG ISLAND.—Menhaden fishing is active at the east end of Long Island, and some of the largest catches on record are reported as having been made last week.

NEW JERSEY—*Barnegat Inlet, Kinsey's Ashland House, May* 1.—Bluefish made their first appearance to-day; over 2,000 lbs. taken. They run from six to twelve pounds. The inlet is swarming with them and moss-bunkers. Previous to this year, the earliest ever known was the year 1872, when the first taken was May 18. Noah Taylor and John O. Bailey caught on that day 1,460 lbs. B.

Greenwood Lake, April 27.—From present indications the bass fishing will be very fine. Several salmon trout, six to eight inches long, are reported to have been seen. Pickerel are taken in large numbers at the lower or Jersey end of the lake. GREENWOOD.

PENNSYLVANIA—*Erie, May* 3.—Fishing very fine for the last week. A good number of black bass and muskalonge have been caught in our bay. "Jake Graham," who is well-known among sportsmen, has leased "Massassangie Point," a well-known shooting and fishing ground, situated five miles from our city at the head of the bay. SNIPE.

Pottsville, May 6.—Trouting good in the Tobehana. DOM PEDRO.

MARYLAND—*Baltimore, May* 6.—Numerous fishing parties are embarking daily on trips down the Chesapeake. Several visited Cobb's Island during the past week, and report the sport very good and active. Gudgeon are still being caught by the thousands on the Patapsco and other surrounding streams. Nearly eight thousand people visited the Relay, B. & O. R. R. in one week gudgeon fishing. A party of six of us went down last Saturday and caught thirty dozen in four hours, but the season for them will soon be over now. The first crab of the season was caught at the Ferry Bar last Friday by a little boy. Old fishermen say the coming season is going to be a very good one, and already there are lots of elegant perch coming to the markets, and last week I saw the finest fresh shad in our markets I have ever seen. TRAYMORE.

VIRGINIA.—Bass weighing six pounds have been caught in the river near Clifton Forge. The propagation of these fish has been completely successful around Forecastle. Bass yield fine returns in the Shenandoah at Warren. Trout fishing is good about Wytheville.

TENNESSEE—*Nashville, May* 3.—A catfish weighing 83 lbs. net was caught last week in Big Harpeth by Messrs. Parr and Crumpler. It measured 4 feet 3 inches in length, by 9 inches around the body. We have had too much rain for the last two weeks for good takes of fish, besides the fish are now shoaling and will not bite. For the last few nights some parties have been out seining Mill creek, which with the fish shoaling has virtually put an end to any legitimate sport in that stream for this year. J. D. H.

KENTUCKY—*Lexington.*—The observance of the laws is followed here by a noticeable increase in the supply of game fish in the waters hereabouts. Several large fall fish have been caught, and the prospects are that in a year or two there will be sport and profit for all.

THE WILDERNESS TROUT REGIONS OF VERMONT.—The New York and Connecticut River Railroad enables the angler to reach the White Mountain region in one day. Within easy access of the famous hotel resorts are wilderness districts, almost unknown, except to the natives, which abound in small mountain trout. From these sources the guests of the hotels are kept supplied. As many as 100lbs. are known to have been taken from a single stream in the course of a season. Exceptional fish are large, but those weighing one and a half pounds are seldom caught. The average run of a basket would possibly not exceed a quarter of a pound. But the streams are ice-cold, having their sources in the snow deposits of the higher mountain valleys, and the trout are very beautiful to look upon and very gamey. The Ammonoosuc River and its tributaries are well tenanted with trout; and if the angler has only pluck enough to stroll beyond the sound of the hotel gong or the farm-house horn, he will be able to refute the oft-told story that the White Mountain streams are drained and depleted. The stage roads throughout that region make a large area of country accessible, and a night or two in camp will not only satisfy, invigorate and embrown the tender young men who go abroad, but make heroes of them in the eyes of the damsels. The girls will never fail to inquire, with eyes enlarged, if they saw a bear. The scenery of the White Mountains is justly celebrated, while the comforts to be obtained on every hand are greater than in other regions less frequented and circumscribed.

THE HEAVIEST AMERICAN SALMON.—Some weeks since we answered a correspondent who inquired the weight of the heaviest salmon. Our information was of rather an indefinite character. We are haply now able to give an authentic figure, namely, 83 pounds, the weight being attested to in the following letter dated:

WALLA WALLA, April 22, 1878.

EDITOR FOREST AND STREAM:

In answer to a request made by you in one of your numbers, in regard to the weight of salmon, I would say that there was one caught by a fisherman in the employ of Booth & Co., near the mouth of the Columbia River, which weighed 83 pounds. Yours truly,

JOHN GOUDY.

CHUB, *et al.*—*Albany, April* 24, 1878.—*Mr. Editor:* I have caught them in the Mohawk as heavy as two pounds; noticed that most of the larger ones had short horns on the nose, something similar to the horned dace. These were always darker than the others. In this river I have caught them on all varieties of bait—on the fly, and a few times on the spoon when trolling. They are principally taken in spring and fall, but few being caught in summer as compared with other seasons. When caught among the rifts in swift water, on a light rod, they afford considerable sport, and are nice eating while the water is cold. Most of the residents of the Mohawk region call them whitefish. Have never heard them called windfish. DEXTER.

Carlisle, Pa., April 20.—With us they are called fall fish, and are taken with red and line nearly all the year round. We use the white grub, dough bait, grasshopper and mussel, the common red worm and pieces of minnow. I notice that one of your correspondents says that they very seldom weigh more than a pound. I have seen them taken from our creeks here measuring from 16in. to 27in. in length, and weighing from two to three pounds. They are a very beautiful fish, the large ones especially, the back being a dark blue color, and the sides of a silvery whiteness, while the fins and under part of the body are a beautiful scarlet. I would mention here that we have some of the finest fishing in this country to be had anywhere. We have trout, black bass, pike, and in fact almost any kind of fishing a true angler may desire. GEO. D. KELLER.

MOVEMENTS OF SPORTSMEN.—All the Florida visitors have returned home, and the mosquitoes, alligators and moccasins can now have it all their own way.

Mr. John Johnston, of the Milwaukee Rifle Team, sailed yesterday for the Paris Exposition.

A. E. Hume, of Charleston, S. C., owner of one of the island cottages in the St. Lawrence River, has gone to London for the summer.

Dr. W. H. Daly, of Pittsburg, Pa., sailed for Europe a few days ago in company with his wife, to be gone a year or two.

Fayette S. Giles, late President of the Blooming Grove Park Association, recently rejoined his family at Geneva, Switzerland.

Messrs. Geo. M. Slee, of Poughkeepsie, and J. Ordway take charge of the Ordway House at Blue Mountain Lake, Adirondacks, the coming summer.

E. C. Litchfield, Esq., of Brooklyn, has just returned from an extensive tour through the West Indies.

Fred A. Ober, the naturalist, is at Granada, West Indies, and expects to go thence to Martinique and return home to the United States. He is well, and is doing good work.

Coulin Campbell, of Tarrytown, has just returned from Nova Scotia, where he has been salmon fishing. He and Saul the Indian broke space in the ice for fly-casting early in the season, and landed many goodly fish. Saul always takes his first fish in March and sometimes in February. The best of the season in Nova Scotia is over before it begins on the St. Lawrence. Campbell says the salmon run up the river under the ice all the winter through, and he has a theory that they go up on an errand of pure gallantry, namely, to escort the smolts down in the spring on their first visit to salt water—just as if a smolt coulda't drift down to the ocean with the tide without being piloted by friends! But "it may be true—yes-h—it ma-ay be true."

NOT A OCTENARIAN.—In our last issue, in correspondents' column, Mr. G. W. V. S. attempted to give some information about the dobson, purporting to say that he caught dobsons and black bass on the Mohawk in 1824. But really he didn't do anything of the kind. The types lied when they said so, and Mr. S. doesn't mince matters much with the compositor in asserting the fact. It is true that Mr. S. is the editor of a work first published in 1406, entitled "Fyssbe and Fysshing," (and a very readable book it is—for sale at this office, price, $1.50), but it does not necessarily follow that he is now 400 years old, and was a comparative youth in 1824! The author of that book died long since, lamented by the angling fraternity of which *she* was a noble part, in everything but sex—Dame Juliana Berners by name. It is only the editor who lives (†), and we cannot tell what mercies may yet be in store for him! But by all that's gracious, we cannot divine why the man "S." is so chagrined at being considered old! Had it been the woman, Dame Berners, who protested, we would have attributed the protest to the natural diffidence of the sex; but as it is—well, as the old woman herself said: "It is as it is, and can't be any tisser!" Let the reader pay heed while he speaks:

"Helgramites in the Mohawk, 1824! O, Lord! 1824! When was I born! Will you please sentence your proof-reader to angle for tom-cods in Bowery Bay? It was 1864 when I used 'dobsons' for bait in the Mohawk. There are three gray whiskers on my right cheek now—but don't say 1824! And don't let your proof-reader correct my spelling. It is not the *printer's* fault; because it happens twice in four lines. The right way is 'sieve,' not 'seive.' But 1824! Guess I'll apply for a pension. There were plenty of helgramites left in 1864. G. W. V. S."

THE FIRST BITE.—A veteran angler, whose flies have danced upon the waters of every more important trout and salmon stream in the United States and Canadas, remarked to us th

other day that the first bite of a young fish was very like the first sip of the flowing bowl. If the young fry escaped his fate when he swallowed his first hook, the chances were as one thousand to one-thousandth that an unquenchable appetite for swallowing hooks would be contracted, which would finally land him in a confirmed biter's grave. Our own experience gives some plausibility to the theory, and doubtless the piscatorial experience of our readers will confirm this view. Here is a bit of testimony from the *Hartford Times:*

"Frederick A Chase and a friend, George Wilson, of New York, were fishing on Saltonstall lake last Friday, and hooked a very large fish, but it got away because the line broke. Mr. J. P. Studley, of New Haven, and a friend were fishing there some days afterward, and they caught this same fish. It was a six-pound black bass, and in the upper jaw was Mr. Chase's hook, with the sinker and four feet of line attached."

THE HOME OF THE DOBSON—*Albany, May* 3.—Tell J. S. T., of Oriskany, if he will overturn the large stones on the banks of the Mohawk soon as the spring freshets subside, he will find all the Dobsons he wants. Then let him get a cheese box and place a large sod in it. By changing the sod and sprinkling a little water on occasionally, he can keep them for some time, as they will burrow in the sod and thus keep moist. Be sure to place your cover on the box, and bore some small holes in it. DEXTER.

SILK WORMS.

NEW SOURCES FROM WHENCE GUT CAN BE HAD.

In my last communication I gave a brief account of the history and the habits of one of our native silk worms, the *Attacus cecropia.* I now give you a short description of another one, the *Attacus prometheus.*

Both of these native silk worms can be reared, and silk gut of the best quality, and even silk, can be manufactured from these silk worms, without difficulty, where suitable food can be obtained for them. The larva, or worm, of the *Attacus prometheus* feeds on the leaves of the sassafras and spice bush, both of which are too well known to need a description; and it probably feeds on the leaves of other trees or shrubs. The silk of this worm is of the finest and strongest quality—white and glossy.

The worms invariably spin their cocoons on or in the leaves of the tree on which it feeds, by folding over the edges of the leaf, forming a suitable place for the cocoon; but before spinning its cocoon, it fastens the stem of the leaf to the twig on which the leaf grows. So securely do they do this, that I have seen near a hundred cocoons on one Sassafras tree, the most of which had hung on the tree for many years after the moths had left them.

These cocoons can be collected in great numbers where the Sassafras and Spice Bush are abundant, as it is in this region. Silk can be drawn from this worm, from three to four feet long and strong enough for salmon fishing, of the very best quality: the Italian worm does not produce a stronger or a finer silk. Like the *Attacus cecropia*, the cocoons should be collected in the fall of the year, or it would be equally well, to collect them early in the spring, before the foliage of the trees are out.

The same rules should be observed in the management of this worm, as with the *Attacus cecropia*, with the single exception of the kind of food it requires.

Bedford, O., April 25, 1878. T. GARLICK.

SPRING BALANCE FOR ANGLERS.—Competitors for biggest fish will be delighted with the compact little spring balance which Brother Holberton sells at his Sportsman's Emporium, 117 Fulton street. It is made of German silver, is only three inches in length, and indicates the weight of a fish of twelve pounds or less. It is not registered for speckled trout which weigh over twelve pounds. Price 75 cents.

HOOK EXTRACTOR.—When your fish swallows a hook which you cannot detach, Dr. E. Sterling, of Cleveland, Ohio, has

recommended us to use one of these. You can buy them of the surgical instrument dealers. For bluefish, pike, muscallonge and sharks and the like, long handles will be needed.

TO DISLODGE FOUL HOOKS.—The pleasure and profit of bait fishing are frequently interfered with by the hook catching into rocks, limbs or rubbish on the bottom. When thus entangled, the usual method of relieving the hook is to move the line back and forth, pull upon it gently, or let out several feet of line and then pull upward gently, and, if that is not successful, to pull until it is torn from the fastening, or the hook or line is broken, causing a loss of time and patience as well as loss of bait, and it may be hook and line. When fishing from a boat and the hook becomes thus fouled, it can be almost immediately loosened by slipping a short leaden tube over the loose end of the line and letting it slide down the line. When it strikes the hook it will, by its weight, loosen it some. A three or four-inch section of a half-inch (inside diameter) lead pipe is best, for should it strike the point of the hook it will not dull it like iron or other metal.

Barington, Yates County, N. Y. SNOOK.

[This is a good method. It is similar in its operation to the iron ring long in use by English anglers.—ED.]

HOW TO PREPARE FISH.—From the *Fishing Gazette* we take the following, which may help some angler who may be desirous of putting under a glass case the next big Moose-Head Lake trout he may catch:

"The most difficult operation in fish stuffing is the skinning. Lay your fish on a damp cloth, best side down, then, with a sharp knife, open the side from the head to the tail (this enables you to place the seam out of sight when set up in the case), proceed to remove the skin from the back and sides with a sharp pen-knife, and take away the body; the flesh can be easily taken away in small pieces. The fin bones must be cut off as close to the skin as possible, taking care not to cut the skin or displace the scales. The skull must then be thoroughly cleaned and the gills taken out. The next process is to preserve the skin from rotting, which is done by washing the inside of the skin with preservation unction, which may be purchased at any naturalist's shop. More than half an hour must not elapse after using the preparation before the fish is placed in proper form, or the skin might stiffen and crack when handled. Next place your skin on a board and fill the inside with fine dry sand and roughly sew up the side. Having properly shaped your fish, lay out your fins and tail by pinning them between pieces of card; these must remain till the whole is perfectly dry, when they may be removed. Next proceed to varnish your fish; first size your fish with three thin coats of size, which must be applied hot, letting each coat dry before applying the next coat; when the size is properly dry thin coats of crystal varnish must be applied in the same manner. When your varnish is quite dry you must take out the sand and proceed to fill the body with cotton wool, taking care to disturb the skin as little as possible during the process, then neatly sew up the opening in the side and give the finishing touch to your specimen, which will be ready to put in the case. Stuffed fish are mostly put in a swimming position, but the best plan, I think, is to represent lying on a mossy bank with rushes and sedges growing behind. The sloping bank can be made with stiff card bent to the required shape and moss glued on. The rushes can be painted on the back of the case. It is almost impossible to get a perfect specimen unless operations are commenced within three hours after capture, but the fish will keep twelve hours if wrapped in wet rushes or grass. After this time the fish become difficult of arrangement and the scales loosen. The flints or eyes can be procured at the naturalist's and are fixed with putty.

J. B. CROOK & CO.—For over forty years the name of Crook has been associated with sportsmen. Season after season the fathers, and after the fathers the sons, have bought their rods, their lines, their books and lures, their guns and their ammunition at the old stand in Fulton street. In the very self same place, year after year, has the business been carried on. But all things must change, and change often for the better. In token of this, the old stand, No. 50 Fulton street, has been enlarged by absorbing a store right alongside of it. The handsome display Messrs. J. B. Crook & Co. make wanted an ampler display. Now the sportsman can select from a full stock everything he may want in the fishing or shooting way. The new catalogue issued by this house we would call especial attention to. It tells of rods, reels, flies, hooks, nets, spoon baits, guns, double, single, muzzle or breech-loaders, pistols, rifles, air-guns, game bags, dog collars, fencing goods, fishing suits, hammocks, and most everthing else. As to their rods, they are all hand made, and manufactured at their factory at Rutherford, N. J.

LEONARD'S ROD FOR THE SPORTSMAN'S CONVENTION.—Mr. Leonard has taxed his ingenuity and his best efforts to produce an inimitable rod to be presented as a prize for the fly-casters at the coming Sportsman's Convention at Buffalo. It is an eight-strip bamboo rod of selected material, heavily mounted with German silver, and is capable of *eight* combinations. It can be made long or short, and slender or stumpy; the but is reversible, so that the reel can be used either above or below the hand; and, in fact, it is one of those comprehensive rods so much desired by the universal angler, which will do all kinds of work—the heaviest and most delicate—equally well. We think Mr. Leonard has succeeded admirably in making a kind of rod for others to use which he does not use himself. It is a rare faculty to be able to do this. Should Brother Reuben Wood, Seth Green, or Hon. Robt. B. Roosevelt be so fortunate as to win this prize, we are certain they will lay it by and preserve it with greatest care as a memento. The cost is $75.

THE BUCKINGHAM FLY RODS.—Mr. Buckingham, of Utica, seems to have entered as a competitor in the manufacture of fly rods. He is now making a really superior article of eight-strip rods, German silver mounted, which he sells at $20, $25 and $30. There are so many manufacturers of first-class rods now at work that every sportsman who is competent to use one can suit himself. We do not recommend fine rods for amateurs.

—Holberton's fly books are in great request now. They keep the gut lengths straight and ready for use. You can buy them at 117 Fulton street, price $8.

COMFORT FOR THE MUCH-ABUSED.

EDITOR FOREST AND STREAM: NEW YORK, May 4, 1878.

I am displeased at your printing, in the May 2 issue, that extract from the letter of "Bass," of Cincinnati. I think that an anonymous letter, and one so unnecessarily unkind, is out of place in FOREST AND STREAM. Who is "Bass," that he should criticize so sharply? You rightly say, "No pleasing everybody." Certainly the very lively, agreeable articles on bass fishing (the writer of them is unknown to me) have pleased some of your readers. For myself, I ask you to urge their author to give us the additional article hinted at in the second letter, published April 15, and I believe many readers will join me in this request. But even if the articles did not suit at all, it seems to me that "Bass's" letter is cruel: worthless as the opinion of an anonymous writer is, this must have mortified, and very unnecessarily, the author of those articles. Permit me to hope that he will not, however, be deterred by this rude and unjust critic from giving us more of his pleasant articles You have my name and address. If "Bass" makes his known, you can give him mine. Yours, G. W. V. S

New Publications.

THE MAY MONTHLIES.

THE ATLANTIC this month contains a paper devoted to the "May Days," extracts from Thoreau's note book. Thomas Bailey Aldrich has a felicitous record of travel, entitled, "From Pontapog to Pesth," and H. James, Jr., writes of "Recent Florence." Warner continues his series entitled, "The Adirondacks Verified," this month, giving us "A Character Study" of an Adirondack dweller, whom, Mr. Warner thinks, approaches the type of the primitive man of the Champlain period. Mark Twain, in a cold-hearted sort of a way, explodes some of the fondly cherished illusions of "Magnanimous-Incident Literature." Of fiction there is the installment of W. H. Bishop's "Dit mold," and "The Dancin' Party at Harrison's Cove," by Charles Egbert Craddock. Horatio C. Burchard discusses the question, "Who Pays Protective Duties," and N. S. Shaler contributes "The Silver Question Geologically Considered." Of poetry there is "Evolution," by Boyesen "The Captain's Drum," an incident of the Revolution, by Benj. F. Taylor; "Daffodils," by Laura N. Fenling; "The Rank and File," by H. H., and a nature study, "Monotony Lake," by J. T. Trowbridge.

The publishers of SCRIBNER'S tell us that Maurice Thompson's paper on archery in that magazine last year brought to him nearly five hundred letters of inquiry. The present number contains a fresh subject for the questioners in Mr. Thompson's paper, "Merry Days with Bow and Quiver." The new material is interesting and instructive and the contest between the rifle and archery teams, in which the former were defeated, will spur our riflemen to look to their laurels. Mr. Wm. L. Tileston has a finely illustrated paper on non-sporting dogs, in which we recognize some of the favorites of the show bench. Dr. Brewer begins this month a series of papers on "Bird Architecture," describing Bower-birds and the wonderful gardens and cabin-building bird discovered by Dr. Beccari, this being the first full account of the bird in English. Two camping-out papers are "Camps and Tramps about Ktaadn, and a humorous sketch by Frank R. Stockton, entitled, "Camping Out at Rudder Grange." Edward Eggleston describes in a finely illustrated paper, "The New York Post office." Another illustrated paper is by Margaret B. Wright, who writes of artist "Bohemian Days" near Paris. The serials, Mr. Eggleston's "Roxy," and Miss Trafton's "His Inheritance," are continued. Of the unillustrated material, there is "An Impossible Story," by Bayard Taylor; "Lissy," a short story by Margaret H. Eckerson; "Little Rose and the House of the Snowy Range," a Colorado bit of travel, by H. H.; and an essay, "Concerning the Use of Fagots at Geneva," by Leonard W. Bacon.

The paper in APPLETON'S, which we may denominate the paper of progress, is that devoted to an illustrated review of the slow progress and final fulfillment of New York's dream of "Rapid Transit," Mr. Wm. H. Rideing writing on this topic in his usual happy vein. Dr. A. H. Guernsey gives a description of Stanley's convert, the African king Mtesa, presenting the explorer in a character little accorded to him. The English biographer of Poe, Mr. J. H. Ingram, contributes a series of hitherto unpublished letters by the poet, which may serve to throw some light upon his career. Lucy Hooper writes of "French Pictures for the Paris Exposition;" and in "Real and Ideal Houses," O. B. Bruce puts in some clever hits at the bric-a-brac mania of the day. The serial story, "Jet; Her Face or Her Fortune," is continued, as is also "By Celia's Arbor." Other pieces of fiction are: "Mrs Gainsborough's Diamonds," by Julian Hawthorn; and "For Love of Her," by Nora Perry. The poems are: "The Heavenly Harmony," Cornelius Matthews; "Not Wholly Dead," John Moran; and "Wind from the East," Paul H. Hayne.

THE NATURALIST.—While several of the papers in the May number of the *Naturalist* are rather technical, and others of interest only to special readers, there are not lacking a number of articles which will prove attractive to all. Prof. W. J. Beal contributes an interesting account of "Hairs and Glandular Hairs of Plants, their Forms and Uses," and Prof. C. V. Riley continues his valuable narrative of the "Transformation and Habits of the Blister Beetles." Mr. Arthur E. Brown, Superintendent of the Philadelphia Zoological Gardens, discusses the Sirenia in a very agreeable style. This group is but little known even to naturalists, and, perhaps, a majority of our readers do not even know that it is the order which contains the manatee and dugong. Since several manatees have been kept alive in the Fairmount Gardens for some time, Mr. Brown has enjoyed exceptional facilities for studying their habits, and much that he tells us is new. Mr. Hays' discussion of the 'Origin and Formation of Prairies" is an interesting contribution to the literature of a long-mooted point, and one which is not likely soon to be settled. The article on "Methods of Labeling Oological Collections," though brief, is practical and to the point, and suggests a way out of difficulties that have long been felt by collectors. "Notes on Indian Manners and Customs," such as those presented in the present number by Dr. Palmer, should be diligently collected at the present day. If our Indians are not dying out, at least their customs are constantly changing under the influence of contact with the whites, and before long it will be impossible to find any tribe which retains the customs of its forefathers. Recent Literature and General Notes contain many items of interest.

UPLAND GAME BIRDS AND WATER-FOWL OF THE UNITED STATES, by A. Porter, Jr. Scribner, Armstrong & Co., New York.

As this work has additional numbers issued it increases in excellence. In the fourth part now before us, we have the ruffed grouse and the blue-billed duck. The *Bonasa umbellus* in the cleverly executed plate, almost, if not quite, the size of life, has that peculiar pugnacious strut, which that bird assumes. He stands as cock of the walk on a fallen limb, with possible intention of drumming, while the hen bird surveys the scene from a weed-covered patch. Both birds are full of spirit and life. The birds have just that fullness of feather which is characteristic, and the russet color, with the little green irideacence of the neck ruff, is truthfully given. The work is natural, and is no poor copy of a taxidermist's stiff work. As to the blue bill, or broad bill, or raft duck, as the Marylanders call him, the print is suggestive of blinds and cold fingers and canvas-back ducks. There sit the duck and drake. Perhaps it is the most careful of all Mr. Poe's pictures that we have seen reproduced so far. Your blue bill is a dandy duck, and all his feathers are close and snugly fitted to his body. The pretty, soft, curly mottle on his back, that ripple of plume, is quite exact. For a swift flyer when he wants to go, commend us to the black duck. The artist has brought in a capital bit of background. Your two ducks are well off from shore, and there stretches back white dunes, with a spectral lighthouse. Two comrade ducks are coming in under easy sail, and will probably flutter down near the two who are paddling at their ease; but away off there is an uncertain flock, which may be going seaward to find a reach some twenty miles or more beyond. We have already expressed the pleasure these prints have given us, as recalling to our mind the characteristics of birds, far more strongly than can be impressed by the common ornithological works.

BOOKS RECEIVED.

"THE MATCH MAKER, a Society Novel," by Beatrice Reynolds. Philadelphia, T. B. Peterson & Bros. Price $1.

THE DOG, with Simple Directions for his Treatment, and Notices of the Best Dogs of the Day and Their Breeders. By Idstone. Twelve full page engravings. Fourth edition. Cassell, Petter & Galpin, London and New York. With the coming dog we should suppose that this book would be very acceptable.

ZIMMERMAN'S HISTORY OF GERMANY.—With 600, illustrations, by P. J. N. Calcar and others. Parts 19 and 20. New York: Johnson and Miles, 27 Beekman St.

BIRDS OF A FEATHER FLOCK TOGETHER; OR, TALKS WITH SOTHERN.—Edited by F. G. De Fontaine. New York: G. W. Carlton & Co., 1878.

THE MAN IN BLACK.—A novel. By G. P. R. James. Philadelphia; T. B. Peterson & Bros. Paper; 75 cents.

AN AMATEUR GUN-MAKER.—We predict that the young man will be heard from again some day:

Carl, a seventeen-year-old son of Professor Ed. Muller, of this city, cut down an apple tree which stood in his father's yard the other day. From a portion of the tree he whittled a full-sized gun-stock, which for shape and general workmanship would do credit to a skillful artisan. Then he found a rusty, demoralized-looking old gun-barrel lying around loose somewhere, and by applying plenty of perseverance and oil succeeded in making it look almost as good as new. Next a second-hand lock was purchased for twenty-five cents and carefully fitted to the stock. After the amateur gunsmith had the weapon in perfect working order, a bit's worth of varnish was applied to the wooden portion, and the gun was finished. It had cost this enterprising and ingenious young man but 37½ cents to manufacture a weapon that shoots truer and stronger than nine out of ten guns fresh from the factory. Master Carle, while out hunting a day or two since, killed fourteen robins with his new gun, and thus thoroughly proved its shooting qualities. —*Nevada City (Cal.) Transcript.*

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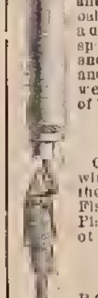

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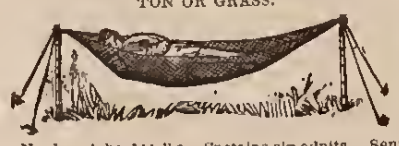

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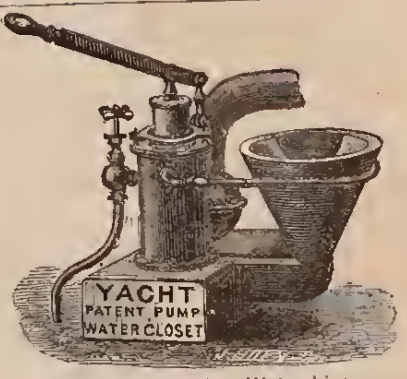

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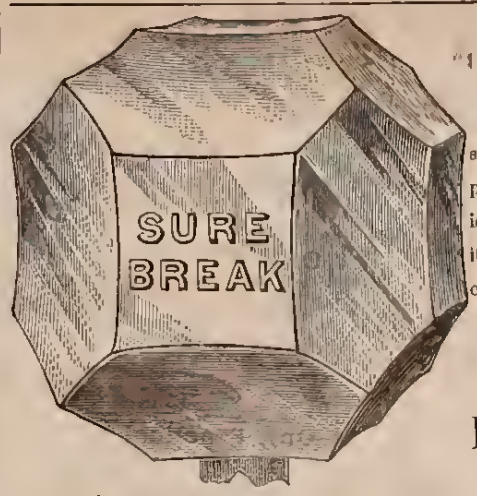

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No. 2. Fine hand made, three piece, brass, full-mounted fly rod, lancewood middle-joint and tip; rubber click reel, twenty-five yards braided oiled silk line, one dozen best trout flies, one dozen hooks on gut, leader and fly book, $10. Above outfit, with German silver mounted rod and extra tip, $13 50.

No. 3. Three-piece, brass, full-mounted bait rod; bass multiplying or click reel; twenty-five yards braided oiled silk line, one dozen hooks on double gut, three-feet double leader, $6.50.

No. 4. Extra fine finished, hand-made, three-piece, brass, full mounted black bass rod (suitable for fly or bait fishing), lancewood middle-joint and two tips, wound hand piece, fine multiplying click reel (new pattern), thirty yards best enamelled waterproof line, one dozen hooks on double gut, half oz. bass flies, two double gut leaders, fly spoon, $20. Above outfit, with German silver mounted rod and German silver reel, $25.

A club taking six outfits, one outfit furnished at half price; taking ten outfits, one outfit free. Goods sent by express on receipt of price, or C. O. D. if funds sufficient to defray express charge accompany order. All goods, from the **cheapest to the finest quality** furnished as low as they can be sold. We shall be pleased to quote prices on any different styles of outfits or single articles that parties may desire.

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FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

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MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

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ORDERS FOR THE NEW MILITARY AND LONG-RANGE RIFLE ARE NOW BEING FILLED.

SEND FOR ILLUSTRATED PRICE LIST.

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NEW YORK WAREROOMS, 177 BROADWAY.

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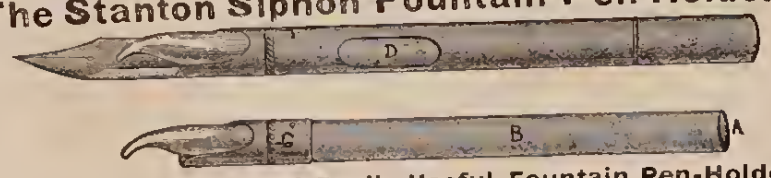

The Only Practical and Really Useful Fountain Pen-Holder Ever Manufactured.

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Is a very handsome and convenient pocket article; is made of strong metal, heavily nickel-plated and polished. Contains sufficient ink to closely write *twenty pages of foolscap;* will feed to the point of the pen until the last drop of ink is exhausted, and being air-tight the ink can neither evaporate nor mould. Is easily replenished, *always perfectly clean* and any steel or gold pen can be substituted for the handsome *Esterbrook Indestructible Golden Pen* furnished with each holder.

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Will carry sufficient ink for TEN DAYS' ordinary use. Especially adapted to the use of Doctors, Lawyers, Commercial Travelers, Collectors, Government Officers, Railway Officials, Tourists, and all who can appreciate the immense comfort in always having their own pen and ink with them.

Sent by mail on receipt of 25 cents, with full directions.

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The Trade Supplied. Send for Catalogue of Useful Novelties.

TATHAM'S
IMPROVED CHILLED SHOT.

American Standard Diameters.

(RED LABEL.)

Gives **greater penetration** and **better pattern** than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found **free from shrinkage, more spherical, more uniform in size, harder, heavier** and of **brighter** and **cleaner finish** than any other. SEND FOR CIRCULAR.

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English Sporting Gunpowder.

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Nos. 2, 3, 4, 5, 6, 7 and 8. Superior Rifle, Enfield Rifle, and Col. Hawker's Ducking. W. STITT, 51 Cedar street, N. Y. Agent for the United States.

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THE GREAT NEW YORK AQUARIUM, BROADWAY and 35th street.—New stage, new scenery, new effects. Grand initial performance of the new company of star artists in English, German and Italian Opera, commencing at 8 o'clock with the

First act of Il Trovatore.....Italian.
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Mlle. Agnetti Rassilla, prima donna; Mlle. Emma Meltier, mezzo soprano; Herr Jacob Graff, tenor; Signor Julian Francisco, baritone; Felix Prenssier, basso.

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Admission to aquarium and performances, 50 cents; reserved seats, 25 cents extra.

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Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

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The Only Route via White Sulphur Springs.

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CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
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People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, except Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the office on the pier, at all Westcott Express offices, at all the hotel and Ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. E. MAYO, Gen'l Passenger Agent.

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

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The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

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Route via Saratoga and Adirondack Railroad to North Creek.

Daily Stage to House.

Quickest and Cheapest Route to the Adirondacks.

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☞ Guides, Boats, Camp-Kits, etc., furnished.

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NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING NOVEMBER 26, 1877.

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 6:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept13 1y H. P. BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep 28 1y

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THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

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also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing, Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN. CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
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FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St. at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

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Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

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ST. AUGUSTINE, FLA., NASSAU, N. P., HAVANA, CUBA.

From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

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For all particulars, illustrated guide, &c., apply to

MURRAY, FERRIS & CO.,
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FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad.

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FOR PIKE, PICKEREL, BASS, ETC.,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

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The first-class steamer ELM CITY leaves Pier 25, East River, daily (Sundays excepted) at 3 P. M. Passengers to North and East at 12 P. M.

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Sportsmen's Routes.

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Leave Brooklyn via "Annex" boat at 4:30 P. M.

Tickets and State Rooms secured at all principal hotels and ticket offices, at the pier and on steamers.

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Philadelphia and Southern Mail S. S. Co.,
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TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids.

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THE ONLY DIRECT RAILROAD from Chicago to St. Louis, and Chicago to Kansas City,
WITHOUT CHANGE OF CARS.

FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

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Brook Trout, Grayling and Black Bass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

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GRAYLING Season opens June 1.

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TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

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The Hotel accommodations are good, far surpassing the average in countries now enough to afford the finest of fishing.

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Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

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South Clark Street, Chicago.

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Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison Square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

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CENTRALLY LOCATED.

Headquarters for Sportsmen attending the Twentieth Annual Convention of the New York State Association for the Protection of Fish and Game, May 20, 21, 22, 23 and 24. Passenger elevator and newly furnished.

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By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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SPLENDID TROUT FISHING—Fine fish and a good catch guaranteed at reasonable terms. ED. H. SEAMAN, Ridgewood Station, Southern RR. of L. I. april 6t

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P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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BRADNER HOUSE, Greenwood Lake, N. Y.
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Terms $1 per day till June 20th. Favorable rates for the season. Boats and bait furnished. P. O. Address, Greenwood Lake, Orange Co., N. Y. may2 4t

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Moosehead Lake, Maine.

TROUT FISHING good this month.

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SPORTSMEN who love good brook trout fishing will find a great number of good streams and trout plenty, pure mountain air, with good accommodations, at J. M. BRADLY, Eldred, Sullivan Co., New York. my9 2t

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GOLD Any worker can make $12 a day at home. Costly Outfit free. Address True & Co., Augusta, Maine.

Sportsmen's Goods.

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WHITE RIBBON,

Blue Ribbon
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SILVER MEDAL

Were awarded to Messrs. G. W. SIMMONS & SON, of Boston, Mass.,

Through their agents and exhibitors Messrs. Brown & Hilder, of St. Louis, Mo., at the Exhibition of the "St. Louis Bench Show and Sportsmen's Association," for an unusually fine display of Duck, Moleskin and Leather

HUNTING SUITS,

which attracted great attention and were much admired by all Sportsmen.

THE BOSTON

SHOOTING SUIT.

Manufactured only by

G. W. SIMMONS & SON,
BOSTON, MASS.

NEW YORK AGENTS:

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300 BROADWAY,

The Best in Use.

ONLY ONE QUALITY MADE, AND THAT IS THE VERY BEST.

Flexible Waterproof, Tan-Color Duck.

Each article—coat, trousers, vest and hat cap—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

We make no discount except to the trade. The price of the suit complete is $13.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are copper-riveted, and nothing is neglected to make the whole suit complete in every way.

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Our Flexible Tan-Colored Water-Proof Leather Coats, Breeches, Vest, Leggings and Caps are considered the finest things ever made.

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BOSTON SHOOTING SUITS.

Made Only by G. W. SIMMONS & SON.
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WATERPROOF DUCK.

Suits, $13

Coat	$6 50
Pants	3 50
Vest	3 00
Cap or Hat	1 50

CORDUROY, Black or Brown.

Suits, $22

Coat	$12 00
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Cap	2 00

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Suits, $25

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Pants	6 00
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Suits, $60

Coat	$22 00
Pants	15 00
Vest	12 00
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An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

OUR HUNTER'S TENTS made of tan-colored duck; light; easily transported. Size, 7 ft. x 7 ft. Price, $10, complete. Made on the umbrella principle, folding into a neat roll, 4 ft. long.

OUR PATENT DECOYS have entirely superseded the old-fashioned, cumbersome, wooden decoys. The birds are hollow, and six of them occupy about the space of one wooden decoy.

Address,

G. W. SIMMONS & SON,
OAK HALL, BOSTON, MASS.

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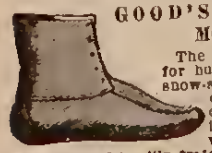

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Cheap and Elegant Colored Pictures.

FIELD SPORTS, FISHING & GAME.

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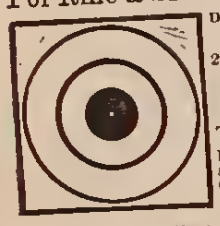

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SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union take pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 11 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of each teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. BARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

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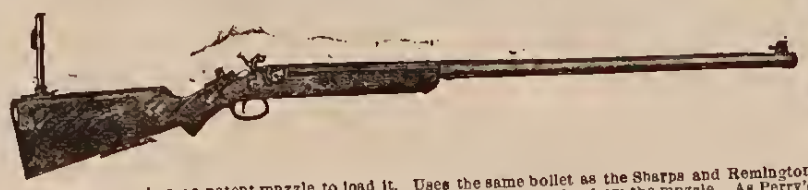

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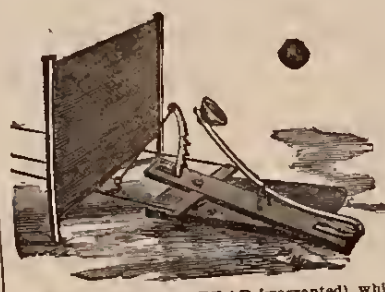

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FEATHER FILLED GLASS BALL.
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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MAY 16, 1878.

Volume 10.—No. 15. No. 111 Fulton St., N. Y.

Selected.

THE WAY I WON HER.

WE walked among the flowers and ferns,
Talking of things botanic,
When first my passion found release
In words and signs volcanic.

She was from Boston, so was I—
It was the same old story,
Of talent, beauty, love and youth
In a conservatory.

"Alice," I cried, "thy soul is pure
As yon white Phyllocactus!
And thy sweet lips are like the core
Of the red Leptomachtus!

"Dearer to me are thy blue eyes
Than burrs concurbitaceous!
And that rare plant Linnæus said
Had ovules cinchonaceous!

"No herb exotic, to my mind,
Hath odor so delicious
As thy sweet breath, like pinks in June,
Or leaves holosericeous!

"I cherish germs of love for thee;
In thy heart I would plant them!
More rare than sepals pentaloid,
Or bright Ixionanthum!

"Answer me, love, my living rose,
Dispel these vague doubts hideous
Let me but call you for all time,
My own Monochlamydeous?"

Blushing she reached a covert spot,
Where parents no'er would think us;
And gave me with a charming smile,
A purple Leptorhynchus!

I knew its meaning well, and plucked
An Eucalyptus Willis,
Which she placed in her corsage, with
A yellow Machrophyllus.

Among sweet Blepharadiæ,
And fragrant Lophostralis,
I won that learned Boston girl,
The blonde æsthetic Alice.

—*Cupid Jones in N. Y. Sun.*

For Forest and Stream and Rod and Gun.

Two Bear Stories.—No. 1.

BY PENOBSCOT.

THE true history of the bears has yet to be written. I believe that naturalists advance two theories to account for their existence through the the winter without food. One is that they go into their dens extremely fat, and that this fat is slowly absorbed during the winter, thus sustaining life, and that the bear comes out in the spring in a lean and famished condition. The other theory is that the temperature of the animal's body, instead of being fixed like ordinary mammals, varies with that of the surrounding atmosphere, being always at a point a little above it, consequently when cold weather comes on it is cooled down to such a degree that there is no wasting of the tissues, and the animal remains dormant.

During my first winter in the woods I officiated as cook to a small crew employed by my father, and as the cooking did not occupy half my time I used to join the gang in the woods between meals. Coming to camp one afternoon to cook supper I was aroused by the well-known voice of "Old Tigress," a large, black slut, famed as a "moose dog" throughout that whole region. I knew by her bark that the game was at bay, and as she never deigned to notice anything small, I was all excitement in a moment. Hurrying into camp I seized my gun, and hastily providing myself with some buck shot, I ran down to where the dog was barking, scarcely twenty rods from camp. On reaching the spot I was greatly disappointed to see her standing alone and barking at a hole under the roots of an enormous hackmatac stub. Going up to her I was about to reprimand her for fooling me, when I caught sight of a lot of freshly picked boughs sticking out of the hole. I had listened to too many hunters' stories not to know at a glance what that meant. Only one animal in Maine has sufficient intelligence to stop up the mouth of its den with boughs after going in. Hurriedly drawing out the fine shot with which my gun was loaded, and putting in a charge of buckshot, I stepped up to the roots of the tree, and, boy-like, thrust the muzzle of my gun into the mouth of the den and pulled the trigger. The charge merely grazed the bear's thigh, cutting a shallow groove in the fat with which it was overlaid. It was a very cold day in the latter part of December, but I never saw an animal any less dormant than that bear! With one movement of his powerful hind legs he forced himself through the aperture at the mouth of his den, throwing the earth outward in every direction, and in much less time than I have taken to tell it he stood before me, one of the largest bears ever seen in that country. It was the first I had ever seen, and his enormous size, so much larger than I had ever dreamed of, appalled me; but he was within ten feet of me, and I dared not turn my back on him. Coming so suddenly into the strong light seemed at first to blind him, and he stood for a moment motionless, winking incessantly. The dog, partly between me and the bear, but a little to one side, stood like a statue with hair erect and glowing eyes fixed on those of the bear, which commenced to turn its head slowly from side to side to discover the foes who had so rudely disturbed his repose. As his vision cleared he caught sight of me, and laying back his ears and opening a capacious mouth well garnished with yellow teeth, with a snort like the puff of a locomotive, the seemingly unwieldly animal bounded at me with the lightness of a cat. With a leap that I can truly say was for life, I placed nearly the same distance between us, as that which first separated us, and, dropping my gun, sprung to the foot of a scrubby spruce close at hand, and began to ascend it with all possible despatch. Fortunately for myself I was not pursued. Scarcely had the beast's feet landed in the tracks which I had so kindly vacated for them, when the dog, executing a skillful flank movement, fell suddenly on his rear, with a fury which completely turned his attention from myself and gave me ample time to ascend the tree, from the summit of which I watched the combat below. This, however, was all one way, as it consisted of a series of charges by the infuriated brute upon the dog, which did not attempt to bite the bear after the first rush, but contented herself with simply dodging its attacks. After expending his fury in a score of vain attempts to get the dog into his power, he desisted, and, walking toward the den, actually endeavored to re-enter it. Being again attacked by the dog, he turned and once more drove her back, and then sullenly retreated into the forest, closely followed by his tormentor. As they disappeared I descended from my perch, and, picking up my gun, proceeded to reload. By the time this was accomplished my drooping courage had wonderfully revived, and I started on the trail, determined to risk another shot, the hunter's instinct being, even then, strong within me. I soon overtook him, as he turned continually to drive back the dog, which of course rendered his progress slow. When I started I had made up my mind to advance within twenty feet of the monster so as to deliver a fatal shot, for sure. But the thought obtruded itself, as I came in sight of the huge beast, that my gun might miss fire. I confess that I had not the nerve to go so near. Turning to drive back the dog, he came within thirty paces of me. As he turned broadside to me to continue his retreat, I delivered the charge full at his right shoulder, and a tremendous charge it was, nearly knocking me off my feet. The heavy coat of hair and the thick layer of fat arrested the shot before they could penetrate to a mortal depth; but they wounded him quite severely and roused him to a pitch of fury impossible to describe. The roar of mingled rage and pain which he gave as the shot struck him I shall never forget to my dying day. When it struck on my ear I instantly sprang for the nearest tree. The brute bounded toward me with a speed no one would have believed him capable of, and although the dog fastened to him before he had made half the distance to the tree, he paid not the slightest attention to her, but swept her along as though she had been a feather, and gained the foot of the tree before I was well out of his reach. But although the dog could not prevent his reaching the tree, she did hinder him from making any attempt to seize me. The bear, indeed, seemed to think he had a sure thing on me, and, turning furiously on the dog, he drove her before him for several rods and again rushed toward me, but the noble brute fastened to the bear as often as he attempted to return to the tree, and invariably ran away from it when he charged on her. Being defeated in every effort to return to the tree, the contest ended as before, the bear slowly retreating followed by the dog. By this time I had come to the conclusion that bear hunting, as a sport, was not a success, and vowed if ever I reached camp with a whole skin to become one of the most exemplary cooks ever known on the river.

On again reaching terra firma, I could not, however, resist the inclination to follow the trail for a few rods just to observe the effect of my shot. He was bleeding slowly, and following the trail for a short distance I came upon a sausage-shaped substance nearly two inches in diameter and about six in length, evidently just ejected by the bear, and followed by a stream of fluid as black as ink, which extended for nearly a hundred feet; there must have been several quarts of it. My curiosity was greatly excited. This, then, was the "plug," as the hunters called it, which I had often heard them declare the animal provided itself with before going into winter quarters. I had always supposed it to be a fable; but here was proof positive of its truth. I examined it carefully, and tried to break it in pieces, but it was as tough as copper, and almost as hard, being evidently composed principally of pitch. Since that time I have had opportunities to examine a number by dissection, while in position. It is placed at the extremity of the rectum. It not only fills the passage, but adheres to it perfectly on all sides, rendering it perfectly air-tight. I have always found the intestines empty, with the exception of the black fluid of which I have spoken, which appears to be extremely astringent in its nature. Whether it is secreted naturally, or obtained by the animal from some peculiar plant, I, of course, have no means of knowing. It is evidently slowly absorbed during hibernation, as it always occurs in less quantities as winter advances. In company with a companion, I once killed one in its den, the 18th of March. It was, I think, the fattest one I ever saw; a perfect mass of fat inside and out. As the animal would have left of its own volition in a couple of weeks, it will readily be seen that it had not existed by absorption of fat. There is not the slightest doubt but the animal comes out of his den in precisely the same condition in this respect in which he entered it. It is probably equally true that the bear could not exist without this mass of fat which envelops him, as it serves in some mysterious way to perfectly protect the tissues and muscles from any waste. Having served its purpose, it rapidly disappears when the beast leaves his den, and in two or three weeks after that event he is as lean as a rat, and correspondingly voracious.

Perhaps I ought to say in regard to the bear with which I began this article, that he was followed the next day by two of the crew a distance of six miles, and killed in a new den which he had dug for himself. The dog had followed him about half that distance. He proved to be one of the largest ever killed in that part of the country.

[TO BE CONTINUED.]

THE HUNTERS OF TOPEKA.

TOPEKA, Kansas, April 27, 1878.

MR. EDITOR:

The sporting men of the city of Topeka will not only compare favorably with those of any other section of our country, but in many respects they excel. It must be understood that I am a New Yorker speaking of Kansas men, and I find them a class who may be designated as gentlemen in every sense of the word. They follow the game with a true relish for all that is noble in the sport. Among the more prominent I will mention Judge Morton, who is a dead shot and a jovial, whole-souled fellow, and who is well posted as to the best hunting grounds.

"Squire" Auter is another of the same sort who is thoroughly at home on the prairie in the game season. The "Squire" shoots over a pair of fine pointers of his own training. They are liver and white, very fast, staunch, and for prairie chickens can hardly be beaten. "Bob" Hawley also may be mentioned as one of the fine sportsmen of this locality who appreciates a good gun, good dogs and a good field. He has a fine and very promising young pointer over which he shot quail last fall, which was the dog's first experience. He will be used for chicken shooting this season, and promises well. "Bob" has also a young Irish setter by Thorstine out of Loo II, which is being trained now and will be put to work this season. Ward Burlingame and Judge Brockway are not a whit behind the others, either in their love of the sport or in the good taste which marks the true sportsman. They both have fine English setters which are much admired, not only for their beauty but for the work they can do.

The Rawley brothers, "Jim," Emmet and "Kirk," are all good shots, and it is difficult to tell which of them best enjoys the shooting season. "Jim" Rawley has an English setter, lemon and white, a beautiful worker, never makes a mistake and is always busy. "Kirk" Rawley has a red Irish setter of the finest blood, which can be traced back through some of the finest of his race.

There is another sportsman here whose name I must not forget to mention, and that is W. F. White, who, I believe, takes as much pleasure in giving information to Eastern sportsmen as to the best shooting ground, as he does in enjoying the sport himself. He knows a good gun, and he has two splendid dogs, the red Irish bitch Ruby by Rufus, and an English setter, young but well broke, out of Stewart's Bell.

Sportsmen from the East will find any of these gentlemen most willing to give all needed information as to the game of this locality and west of here. I will add that the chicken season commences August the 1st, and all are looking forward to rare sport, as the prairie fires have not been severe this spring, and the season being early the birds will be in fine condition for the early August shooting. This kind of sport is pursued here in what is to me a very civilized manner. A party of say five gentlemen go out in a three-seated spring wagon, which will hold all, including dogs and driver. When the ground is reached a pair of dogs are let loose—they have been taught to hunt ahead of the team—and when they point the hunters get out and shoot the birds, put them in the wagon, get in and go on. When the dogs get tired they are put in the wagon, a fresh pair let loose, and you go on as before. Considering the exceedingly hot weather in which the shooting season opens, a man can certainly appreciate this mode of doing it. Teams can be hired at any of the stations along the Atchison, Topeka and Santa Fe Railway, on the land grant of which company the best shooting is to be found for from $2 to $3 per day, and when you divide the expense up between five men this certainly is the cheapest hunting I know anything about. The railway company I have mentioned have a way of treating the hunter which to me has been very agreeable. They make no charge for carrying dogs, and do not under any circumstances permit the baggage

masters to accept anything unless it be for feeding. Guns, if they are in a case, can be taken in the passenger coaches, if not they are taken charge of by the baggage master, who gives a free claim check for them. This enables you to travel without annoyance, and you feel that you are among men who try to encourage gentlemen sportsmen to shoot along their line.

The chicken shooting ground is anywhere from Cottonwood Station to Great Bend. At Florence it is said to be fine, and at Eldorado still better. Quail shooting commences in this State very late, too late in fact to enjoy it to its full extent; the season does not open until December the 1st, but the next legislature will be asked to change it to a month earlier. The Cottonwood Valley has been the great quail ground, but last year they took a turn westward, and the best shooting was found at Sterling. They keep mostly in the timber along the streams, but in hunting them, by judicious management the first fire brings them into the open ground, where they can be hunted almost as easy as chickens. C.

Fish Culture.

NEW HAMPSHIRE.—There are to be two fish ways on the Nashua River at Nashua, thousands of salmon and shad fry having been placed in the waters of that part of the stream that flows through the northern part of Massachusetts by the Commissioners of that State. The Nashua used to be a famous stream for salmon and shad within the memory of many of our citizens. WEBB.

CONNECTICUT.—Under the direction of the Waltonian Club, of New Haven, 165,000 land-locked salmon have been hatched in North Branford and distributed as follows: 5,000 to Valley Pond in Woodbridge; 15,000 to Willimantic in Rogers' Lake in North Branford, and 10,000 to lakes in Salisbury, Spectacle Pond in Kent, Squange and Green Ponds in Sherman, Long Lake in West Winsted, Gardiner Lake in Salem, Hog Lake in Lyme, Hampton Pond in East Hampton, Waramaug Lake in Warren, Bantam Lake in Litchfield, Snipsic Lake in Rockville, Stafford Springs, Wamgamhog Pond in South Coventry, Thompsonville and Saltonstall Lake.

CONNECTICUT.—Fish Commissioners Hudson and Mr. Porter have put into Lake Waucumbaug, Coventry, Conn., 30,000 California salmon fry and 15,000 land locked salmon.

NEW YORK.—There have been distributed from the New York State Hatchery at Caledonia, during the past season, which closed May 1, the following: Two hundred and ninety-three thousand five hundred brook trout eggs to the streams of Greene, Westchester, Dutchess and Oneida counties and to the Adirondacks and Nevada; 610,000 brook trout fry to the streams of Oneida, Sullivan, Essex, Clinton, Livingston, Orange, Cayuga, Tompkins, Herkimer, Otsego, Wyoming, Albany, Jefferson, Rensselaer, Saratoga, Alleghany, Fulton, Westchester, Wyoming and Columbia counties; 536,000 salmon trout eggs to Fulton Chain and other lakes in the Adirondacks, Green and Longloskey lakes in Green County, and to Pennsylvania; 1,586,180 salmon trout fry to the lakes of Essex, Dutchess, Warren, Otsego, St. Lawrence, Fulton, Onondaga, Tompkins, Cayuga, Steuben, Saratoga, Washington, Orange, Oswego, Ontario and Monroe Counties; 68,900 California salmon fry to the waters of Livingston, Monroe and Tompkins counties. Many orders were yet to be filled at the date mentioned.

—The artificial culture of trout at Meacham is bearing excellent fruit. Large strings are taken, and the fishing is reported all that can be desired.

ANOTHER DELAWARE SALMON.—Fish Commissioner E. J Anderson, of Trenton, N. J., tells us that a salmon was taken in the Delaware, three miles below Trenton, on the 7th inst., weighing twenty-one pounds, and measuring thirty-eight and a half inches. This is the fourth reported this spring. Some time a New Jersey reader of this journal will come across this item and say: "The 'fourth salmon!' Why, didn't we always have salmon in the Delaware?"

PENNSYLVANIA.—The Game and Fish Association of Johnstown have leased a stream in Yoder township, Cambria County, for the purpose of stocking it with fish.

VIRGINIA.—Two hundred thousand young shad have been, placed during the past week, in the Mattaponi, near Milford. The joint operations in Albemarle Sound are reported by the Richmond *Whig* to have been quite successful, from five to ten millions of shad having been hatched and distributed in the waters of North Carolina, Virginia and Maryland. Col. McDonald has established a hatching station on the James River, at Berkley, and another on the Rappahannock, at Tobago Bay. The catch of shad in the Sound has been very small; but the herring catch, though late, was large beyond any of previous years. The Fish Commissioners are delighted over the discovery by the fish agent, Mr. Nicholas, of abundant ripe rock in Weldon. This is what they have been long wanting.

—Eight thousand California salmon fry have been deposited in the Shenango, at Greenville, Pa.

—Fifty thousand young shad have been placed in Smith's Creek, Va., which is one of the streams forming the Nansemond River.

KENTUCKY.—The Fish Commissioners recently made the following shipments of native salmon: To Smithfield, 5,000; to Eminence, 15,000; to Frankfort, 11,000; to Midway, 12,000; to Lexington, 10,000.

FISH HATCHING IN WISCONSIN—*Madison, May* 6, 1878.—*Editor Forest and Stream:* The State fish hatchery located at the "Nine Springs," three miles from our city, is in a flourishing condition. The State has forty acres of land at this point, and every effort is being made to make the hatchery second to none in the country. It is now two years since the hatchery has been located here. The other hatchery, located at Milwaukee, is doing good work. The Madison hatchery is used for the breeding of brook trout and California salmon. The Commission have begun the distribution of 120,000 brook trout and 65,000 salmon, making a good showing for the Madison House. A few days ago 40,000 trout were placed in Beaver Lake by the State Fish Commissioner. The State Superintendent reports that 12,000,000 white fish have been planted this spring from the Milwaukee house. ROVER.

Natural History.

For Forest and Stream and Rod and Gun.

HABITS OF RUFFED GROUSE.

(Continued from April 25.)

IT will be necessary to know something of the habits of the "Ruffed Grouse" before you can expect to become successful in their capture. You will find this knowledge most useful in a country that you are unacquainted with, where you will be able if you have been a careful student to tell at a glance almost their usual places of resort, and by unfailing signs to determine if there are enough birds in the vicinity to pay for looking them up. For this wary bird, although so shy, leaves many "signs" of his presence, some of which you will not fail to see. The most prominent of these "signs" are their "wallow holes," which are small depressions in the ground made by them when they take their dust bath. You will most frequently find these holes in the debris of a rotten stump or an "ant hill." Often on the sunny side of woodlands you will occasionally see their droppings, or perhaps a stray feather, or the disturbed leaves where they have been scratching will proclaim at once their proximity. You must not expect to become proficient in discovering these indications without large experience and close application; then they will be to you as an open book that you may read as you run.

You should also become acquainted with the many varieties of food that this bird, not very fastidious as to diet, lives upon, as you will generally find him in the immediate neighborhood of his favorite dish in its season. Thus, in August and part of September, you will find them where berries are plenty, especially whortleberries and blackberries, for they are very fond of these. At the same time they take their daily rations of green herbage, consisting of tender leaves of many kinds, they also eat large quantities of grass, and season the whole with an infinite variety of insect life. A little later you will find them under the grape vines, and when the frost comes, and the acorns, chestnuts and beechnuts fall, you will be fortunate if you find them at all, for then they often take long journeys in search of their favorite food, and no matter how fresh the "trail" your dog will often be at fault, as they frequently take short flights, which is very reprehensible in them, as it leads to much vexation of spirit, and often the poor dog has to suffer in consequence. About the first of October, sometimes a little earlier, often later, occurs a very notable and curious episode in their life. This is called by some "running time" or "crazy time." Both are very appropriate, as they certainly run and fly in all directions, and have every appearance of being stark mad. At this season you will often read in the papers items about their flying against buildings or through a window, and many other queer antics that no sane bird would be guilty of. This season extends over a period of ten days to three or four weeks, during which time this proverbially uncertain bird is reasonably certain not to afford you much sport. Some writers tell you that this "spell" is caused by fear. "That the noise of the falling leaves fills their minds with apprehension, and in their imagination peoples the wooded aisles with foes innumerable." Now I don't believe this, for I have many a time seen these same "wooded aisles" pretty well sprinkled with deadly foes and have seen these same birds so deftly "sell out" the entire party that I cannot for a moment accept the proposition. I can also recall several seasons that entirely disprove this theory, as "running time" commenced, and in at least one instance, was over before the leaves began to fall. Nor do I believe that the all wise Creator ever made such a mistake as this would appear to be. Just look at it a moment and see if it is rational that the God of nature should place these birds in their forest home and then implant in their breast a deadly fear at the fall of a leaf. A far more satisfactory solution of the problem to my mind is that this is a wise provision of the great ruler of the universe that this beautiful bird, when he arrives at maturity, shall seek a mate outside the family circle; that their descendants may not deteriate through "inbreeding." I presume that I shall catch it for this, as many very able writers contend that inbreeding is not injurious. Now I abhor a newspaper controversy, and rather than bring on my devoted head their united wrath I will cheerfully admit that their inbred animals are just what they need, and I shall not try to induce them to part with them.

After a few hard frosts, our feathered friends who have been "so wildly roaming" begin to settle down to a more quiet life. You will now very often find them in moist alder runs, where the skunk cabbage grows in profusion, for they are very fond of the seeds of this highly flavored plant. They also eat with avidity the fruit of the common thorn, and occasionally they will visit the borders of grain fields where they are contiguous to their haunts and pick up the scattered grain. There are many other seeds and fruits that they often eat, as they are voracious feeders, and many things that are meat to them would be poison to us.

When the deep snows of winter cover the ground for weeks at a time, it may seem to you that they must suffer many a long fast, and perhaps perish of cold and hunger. Do not worry on their account, as they are abundantly able to take care of themselves, and when almost any other living thing would starve, they do not fail to find a bounteous repast whenever hunger calls. They eat the buds of several varieties of trees and shrubs, more particularly the different varieties of birch, poplar and apple. Some persons claim that they are very injurious to the apple tree. I have examined a great many birds in order to obtain light on this subject, and am fully satisfied that they very seldom touch the fruit buds, and as they only destroy the leaf buds, we can safely leave the tree to re-leaf itself.

It would be something unheard of to write an article on ruffed grouse and not devote a little space to their "drumming." Nearly every one has heard them, some favored ones have seen them in the act, and some, judging from their written descriptions, have not seen this peculiar performance. It requires a vast amount of patience to creep up close enough to see an old cock grouse on his "drumming log," and nine times out of ten, when you do get close enough, there will be no bird there to see. If you should be so fortunate as to obtain an unobstructed view of him at his devotions, you will see him crouching, apparently asleep, close to the log, or stone, or perhaps the bare ground, as I have seen him in all these situations. Keep very quiet and you will soon see him raise up and shake himself together, as it were. His head will come up with many a jerk and twist, his feathers will each stand on end, and he will nearly double in size. His "ruff" will stand out, and his crest will be nearly erect. After a few preliminary steps, or rather struttings, he will suddenly erect himself to his full height and expand his wings to their greatest extent and bring them forcibly together, or nearly so, in front of his breast, making a sound similar to the boom of a distant gun. This is repeated at gradually lessening intervals until you cannot distinguish the strokes, and our friend looks like a bunch of feathers in a whirlwind. After his ecstacy is over he takes a general survey of the field, and generally subsides into the recumbent position in which we first found him, soon to repeat the performance, which he continues to do sometimes for hours. You will hear them drumming oftener in the early fall than at any other time, although I have heard them nearly every month in the year and at all hours of the day, and several times I have heard them late at night. The question is often asked, "Why do they do this?" Tell me why the cock crows and the turkey struts and wherefore the little birds sing, and then I will explain this to you.

A RARE BIRD AT CENTRAL PARK.

WE have at present on exhibition at the Central Park Menagerie for a short time, while in transitu for Europe, a specimen of the Megapodiidæ family—*Megapodius pritchardii.* This is the first specimen ever brought alive to this country, and will be the first living example of the species ever seen in Europe. It is a native of one of the East Indies, called Nina Fou or Proby Island, which is situated about half way between the Feejee and Samoan islands. The bird takes its name from Mr. W. T. Pritchard, who sent a skin to Europe in 1863. It is of a uniform blackish-brown color, cheeks and upper part of neck vermilion red, slightly feathered with small black plumes, bill bright yellow, tarsi and toes pale yellow, claws black; length from bill to end of tail about fourteen inches.

This is one of about twenty species that form the family of Megapodiidæ, so named from their large feet; a series of birds remarkable for the extraordinary contrivances resorted to by them to obtain the artificial heat necessary to hatch their eggs. They are found chiefly in the tropics, and inhabit dense forests and swamps generally in the vicinity of the sea beach. Some of them form mounds for the purpose of incubation, and hence are called mound-builders. The mound is composed partly of vegetable matter, which becomes rotten while the birds are engaged in laying their eggs, usually a period of two or three months. The materials used in the construction of these mounds, which sometimes reach to fourteen feet in height, with a circumference of 150 feet, are gathered by the birds, carrying a small quantity at a time in one of their large feet. In the middle of this mound, at various depths, from eighteen inches to several feet, the females deposit their eggs, some in the form of a circle, while others of a different species place them in an irregular manner. When all the eggs are deposited the centre is entirely covered in, and the mound raised several feet in the form of a cone. The heat produced by the fermentation of the vegetable matter is then retained within the mass, and brings the eggs to maturity. The Celebean megapode has a different mode of hatching its eggs. It is said to scratch out a hole in the rotten stump of an old tree, and there deposits its eggs, afterward covering them up with vegetable matter. Other members of this family burrow into the sand along the sea-shore to the depth of three or four feet, obliquely downward, and deposit their eggs at the bottom, afterward covering up the mouth of the hole, then trying to conceal its foot-marks leading thereto by scattering the sand about.

What is most remarkable about these birds is, that after all the trouble and care taken for the preservation of their eggs they should be so utterly indifferent to the fate of the young birds, leaving them to scratch their way out of whatever position the eggs were placed in, and take care of themselves afterward.

The exact period of incubation is not known. A Mr. Motley, writing from one of these islands, says: "Some eggs that had been buried in the sand for six weeks were found to contain merely the embryo of a chick as much advanced as a hen's egg hatched four days." Other eggs were brought to him, but he had no means of ascertaining how long they had been laid. He buried them in a box of sand about three feet deep, exposed to the weather, and at the end of three weeks a young bird came up, not downy, but covered with little shafts or pens ready to form feathers. One of the Malays employed by Mr. Motley saw it emerge, and said that it just shook off the sand and ran away so fast that it was with difficulty caught. On the next day, when Mr. M. saw it, it appeared to be about half grown. From the first it fed without hesitation, scratching up the earth like an old bird. Other birds afterward emerged in the same state.

The habits of the *Megapodius pritchardii* differ from the other species in some particulars. It scoops out its nest in the side of a little lake in the centre of the island, between one and two feet in depth, laying about forty eggs in the months of September and October. These eggs are very good eating, and are considered the property of the King or Chief of the island, and only by his permission can the birds or eggs be procured. In captivity it feeds on soaked bread, and

when it sleeps it places its head on the back or interscapular region, covering it with the feathers. W. A. C.

SIXTH REPORT OF THE ZOOLOGICAL SOCIETY OF PHILADELPHIA.—Although with diminished receipts from admissions, thanks to greater thrift and economy the Philadelphia society is in an admirable condition. We have referred already to the decrease of visitors, and in studying the case of zoological societies in this country we are quite satisfied that they should be made independent of public patronage. The report of Mr. Arthur E. Brown, whose contributions have been published in our journal, is of a most interesting character. The exceedingly mild season may have, of course, in a certain measure, been the reason for the present excellent condition of the animals and the fractional loss. But a great deal may be attributed to the excellent care of the superintendent. Mr. Brown writes: "The estimated loss of the animals this year is about four per cent. on the value of the animals, a rate much lower than that of previous years, and which is believed to be as small a percentage of loss as has ever occurred in a garden of its character, and at the present time—the most trying season of the year—the collection is in a condition of health and vigor which it would be difficult to surpass. The collection, during the last season of 1877-78, has had added to it 237 mammals, 149 birds, 109 batrachians and 192 reptiles, making the total number of specimens now living in the garden 1,008, valued at some $57,623. The following animals among many have been bred this year: Two Macaque monkeys, four common leopards, two black leopards, twelve dingos, two coates, two capromys, one aconeby, one beaver, three deer, one zebu, Angora and Yemen goats, one Bactrian camel, two llamas, three kangaroos, etc., etc. One of the great items of expense has recently been diminished by feeding the animals on horse flesh. Crippled horses are purchased at a low cost, are slaughtered at the garden, and the skin, bone and refuse being sold, the cost of meat has been reduced to the lowest figure. The condition of the garden is admirable, all the improvements are of the most ornamental, lasting character, and Philadelphia may be truly proud of having the finest zoological collection in the country.

THE BIRDS OF CONNECTICUT.—All scientific work is, of course, praiseworthy, but that which is undertaken to fill some evident void, to supply some long-felt want in any department of science, merits our special approval. It is true that this is but another way of stating that, in science, judgment and common sense are as desirable as in the ordinary business of life, but the fact is too often overlooked, and therefore when a case is brought before us in which these qualities have been specially exercised, it is well to point it out and to emphasize it by a few words of notice. Such a case we have before us in a paper on the "Birds of Connecticut," by Mr. C. H. Merriam.

It is now thirty-five years since the last enumeration of the birds of that State appeared in the Rev. Mr. Linsley's "Catalogue of the Birds of Connecticut," and during this interval the advance in our knowledge of ornithology, though perhaps no greater than that in other branches of science, has been something marvelous. It was high time, then, that we should have some authoritative statement of the present ornithological standing of our neighboring State. Bird lists, more or less complete, of all her neighbors, had been published, but nothing had been heard from Connecticut. Yet, an inspection of Mr. Merriam's list shows us that nearly one-half the birds known to the United States are found in the territory, less than 4,700 square miles, included within her borders.

In preparing the present paper the author has relied for his facts, not alone on his own observations and on what had already been published, but has wisely drawn on the experience of all the ornithologists and collectors in the State, and has personally examined many of the collections. The list, notwithstanding its modest title, is thus a very complete *resume* of our knowledge of Connecticut birds up to the date of its publication. It contains 291 species, several of which are new to the State. Among the rarer birds we may mention: *Polioptila cærulea, Parus hudsonius, Dendroica cærulea, D. dominica, Oporornis formosus, Milvulus forficatus, Empidonax acadicus, Nauclerus forficatus, Ibis alba, Ardea cærulea, Porzana jamaicensis, Tachypetes aquilus, Stercorarius buffoni, Sterna fuliginosa,* and others.

The special lists, which are appended to the paper of which we write, giving in tabular form the residents, summer and winter visitants, etc., add greatly to the value of Mr. Merriam's list, which is, in truth, a model of its kind. We should add that this notice, prepared immediately after the publication of the list, was unfortunately mislaid, and has been overlooked until the present time.

CARDINAL GROSBEAK (*Cardinalis virginianus*) IN NOVA SCOTIA IN WINTER.—Observing a note in your Natural History column, headed "A Cardinal Grosbeak in Central Park," stating that the writer had seen one of these birds in that locality on the 17th March, and expressing his surprise at the occurrence, I may mention that a pair of these birds were found in the spruce woods at Point Pleasant, near this city, on the last day of January, 1871. The male bird was preserved by Mr. T. J. Egan, our local taxidermist, and its perfect plumage precluded the idea of its having escaped from confinement. J. MATTHEW JONES.

Halifax, N. S.

[This note is of unusual interest, as this is the northernmost locality on record for the species, we believe.—ED.]

A PLAGUE OF FIELD MICE.—Mr. Stab, corresponding member of the Society of Arts, at Smyrna, reports that the plague of field mice, or rats, has again broken loose, and that they are wasting the fields far and wide, digging up the seed-corn, and devouring all they can. This is the plague from which Homer records that Apollo Smynthius delivered the Greeks. As the Smynthnian Apollo no longer has believers, Mr. Stab wishes to know what remedy can be recommended.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING TUESDAY, MAY 7, INCLUSIVE.—One pinche monkey, *Mitias œdipus*, presented; one Virginia deer, *C. virginianus*, born in garden; one great kangaroo, *Macropus giganteus*, born in garden; one spotted sandpiper, *Tringoides macularius*, presented; two chimpanzees, *Troglodytes niger*, purchased; two gray foxes, *V. virginianus*, presented; one zebu, *Bos indicus*, born in garden; one lizard, *Holbrookia maculata*, presented; one lizard, *Crotaphytus collaris*, presented; two Carolina parrakeets, *Conurus carolinensis*, presented. ARTHUR E. BROWN, Gen'l Supt.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE FLOWER GARDEN.

SUMMER is approaching, we are fixing up our gardens and what to plant and how to plant it is giving us some concern. At present fashion decides greatly in favor of "foliage" plants, that is, plants as Coleuses, Achyrantheses, Alternantheras, Centaureas, and the like, whose leaves and not their flowers are the main attraction. As edgings or otherwise sparingly used, such subjects are welcome on account of their aptness and contrast, but as the main composition of the flower garden we greatly prefer "flowering" plants. The oval, circular, diamond, square, and somewhat similar simply-shaped beds are decidedly superior for any purpose whatever to circuitously curved, acutely angled, or other intricately disposed shapes; for not only can the mower ply around them easily, but they are much more readily filled to advantage, and when full, far prettier and more satisfactory than they could be in the other case. If we want a star-pattern, the same can be designed in a circle better than in a star-shaped bed, as can also almost any other design. A multitude of little beds either in proximity or spread about are an annoyance, as they admit of only a few—perhaps only two—kinds of plants being used in each of them, and even then look crowded. Goodly-sized beds when practicable are always advisable, with, of course, as place and taste may demand, a few smaller ones. Flower beds are prettier when displayed on grass than when intervened by gravel paths; but we cannot deprecate too strongly the mutilation of a croquet green or handsome sweep of lawn by their presence.

In planting the flower beds, no matter what design be used it should be clearly defined and as vivid in outline when seen from a distance as when close by. Complicated patterns should be avoided unless the ability to execute them be masterly, and the material used in their composition be choice and suitable, and at no time will they be neglected as regards pinching into shape. In choice beds such transient material as Lobelias, or snugglers as Petunias had better not be used. Heliotropes and Verbenas too are such wide wanderers that they had better fill beds by themselves, being bordered with white or yellow. We like a border to every flower bed, but we cannot recommend ribboned flower beds, we prefer masses and panels.

It would be difficult to recommend what to plant in the flower garden, as the plants at our disposal may vary so much, and each of us will want to utilize our nurslings of the window, cellar, frame or greenhouse, but we append a few examples that existed last year, and which looked pleasing enough: 1st, Circular bed—Verbena venosa, violet-purple, and Plumbago larpentæ, deep blue, mixed, banded with variegated sweet Alyssum, white, and studded over with Vallota purpurea, scarlet; 2d. An oval bed of Heliotrope, banded with scarlet Pelargonium, and studded through with Gladioli and Tigridias; 3d. An oval, banded with Centaurea gymnocarpa, white, then a line of Coleus verschaffelti, crimson; and massed in the centre with scarlet Pelargonium; 4th. A six-angled star, banded around with variegated Mesembryanthemum (cream color), centred with a large specimen of Centaurea gymnocarpa (white), from which belts of Alternanthera paronychioides (reddish) radiate to the six inner angle corners, like the spokes of a wheel, thus dividing the bed into six diamond panels. Nos. 1 and 4 (the opposite ones) of these panels contain Centaurea candidissima (white); 2 and 5, Kleinia repens (blue), and 3 and 6, Golden Feverfew; 5th. A corresponding bed with the last was banded with Alternanthera amœna (red), divided with Achyranthus Lindeni (crimson), centred with Coleus Verschaffeltii (crimson), and the panels filled, 1 and 4 with Black Douglas hooze Pelargonium, 2 and 5 with variegated Stevia (white), kept clipt, and 3 and 6 with Abutilon vexillarium variegatum, pegged and pinched.

Flower-beds, centred with Palms, green leaved Dracænas, Boucarnias, and the like, we consider more preferable than the flat representations first referred to.

Neither do we like ribbon borders, because we cannot see beauty of arrangement in long belts of plants of one kind, and to mix up several kinds would be confusion. But the effect can be brightened and the monotony destroyed by converting the ribbon into a chain pattern, making every link a panel of some different kind of plant or plants. If one bright edging stretches from end to end, it will add richness and finish to the design. The following are a few ribbon borders that existed last year:

1. A wide border with grass verge in front and evergreen hedge at back: First line, Alternanthera amœna, red; second, Kleinia repens, blueish; third, variegated Stevia, white; fourth, General Grant Pelargonium; fifth, Coleus Verschaffeltii, with alternate plants of Gladioli; and sixth, a row of Dahlias alternated with Hollyhocks.

2. A long, wide bed on grass-lawn, and forming side boundary to garden of flower-beds: First, or middle line, double flowering scarlet Pelargonium, interplanted with Gladioli; second, a line on either side of Centaurea gymnocarpa; third, a row on either side of the last, of Achyranthes Lindeni: fourth, the outside or border on either side of Golden Feverfew.

3. A long, narrow bed on grass: First (central row), Centaurea gymnocarpa; second (on either side), Master Christine Pelargonium; third (outside line on both sides), Alternanthera paronychioides.

CARPET BEDDING has become quite popular of late years; a style introduced from Europe, and rather inapt for this country. It consists of scroll or checkered pattern work, the representation of crowns, monograms, or any other conceivable device, painted or woven, as it were, into flower beds, using for the purpose very dwarf-growing plants of different leaf colors. We have not many kinds of plants suitable for this purpose, and such as we have are so determined of growth, beyond bounds, that the amount of labor expended in rigid shearing and pinching is far too cheaply wasted. And the least neglect murders the desired end, for if the limbs or leaves of the different plants intermingle, they will obliterate the pattern, and nonsensical confusion will reign. Besides, we question the beauty that can be presented in the closely-shaven components. For this purpose are used Alternantheras of sorts, Echeverias, Sempervivums, Kleinias, variegated Mesembryanthemum, Sweet Alyssum, Solanum, Stevia and Selum; Santolinas, Feverfew, Antenarias, and the like.

In England the Lobelius play an important part in carpet bedding, but they succumb before our summer's sun; therefore, the best reliable blue we have is the Kleinia repens.

SUCCULENT BEDS are more or less patronized in all pretentious gardens, and they are often so compiled by interlacement of Alternantheras, Feverfew, etc., scrolled and panelled, as to aim at a compound purpose—carpet—succulent beds. They are usually banked, terraced, towered and turreted, and contorted beyond any conceivable idea of art or imitation of nature. The amount of Echeverias and Houseleeks alone this idiosyncrasy requires is immense. But "succulents" are admirably adapted for summer gardening, as they grow so thrifty, look so fresh and withstand heat and drought so bravely.

But the most ludicrous notion we ever saw portrayed in a garden we saw in the garden of a wealthy Massachusetts gentleman last year. His "Echeveria garden" was a specialty, and, though quite extensive, contained little else than the commoner Echeverias so arranged as to represent scroll-beds, whose flat-deadness was brilliantized by inter-panels and scrolls of chopped brickbats for red, minced blue glass for blue, and pounded crockery for white! In succulent beds all kinds of Echeverias, Sempervivums, Opuntias, Agaves, Cactuses and similar fleshy and fleshy-leaved plants are used.

MIXED BORDERS are so styled on account of the nature and distribution of their contents, and withal, they are perhaps the most satisfactory. Into them we plant all odds and ends, flowering and foliage plants, and though as autumn advances the inmates may elbow one another for room, a little forethought at planting time may prevent all that. For instance, near rank-growing plants, like Cannas, Castor-beans, Abutilons, Tobaccos and Eucalyptus, we should place such plants as bloom early and are soon past, so that they may be erased as their mighty neighbors advance; and Pelargoniums, Vincas, Lantanas and other continuous bloomers should occupy the central and opener places. This is the place where plants can grow unchecked. Fuchsias can bloom to their uttermost; so can Abutilons, and we can afford to wait for the Crape Myrtle, Lespedisa bicolor, Lemon-scented Verbena, and other subjects we wintered in the cellar. And, too, it is often a permanent border, with a selection of hardy shrubs, as Deutzias, Forsythias, Lilacs, Spireas, Japan Quinces, Bladder-Senna, Tamarix, Fringo Tree, Althæas and Roses, that yield a succession of blossoms all the summer through.

SUBTROPICAL GARDENING is the massing of strong-growing, handsome leaved plants, so as to give a tropical, rather than a painted effect; and where tastefully done in a roomy and sheltered situation, the result is highly pleasing. There is no formality in the way of rigid lines, clipped leaves, or monotonous masses, but the Banana, Bamboo, Egyptian Paper Reed, Palm, India-rubber tree, and similar material are blended happily together, each having room to revel in luxuriance. This exuberance of leaves requires some enlivening brightness, and as Pelargoniums, Verbenas and the like, in their commonness, would be more prejudicial than beneficial, we prefer the introduction of Tritomas of different kinds near the outer edge, and a border of Plumbago Larpentæ, deep blue, studded at intervals of two feet with Vallota purpurea, scarlet-red, or any other conspicuously brilliant blossomed plants, that are somewhat uncommon, may be used. We often see tall Opuntias, Century Plants, Cactuses, and other succulents employed in this kind of gardening, particularly as edgings, and diversified along the margin of the beds, but they are woefully out of place. The idea of a Cactus and a Bamboo growing side by side is like hunting deer in the Atlantic Ocean or catching salmon on the Illinois prairies!

Besides those mentioned, among the plants suitable for subtropical gardening are Cannas, plain-leaved Caladiums, Yuccas, Acalia lophantha, Castor Beans, Abutilons, Dracænas, Eucalyptus, Nicotiana glauca, some of the most ornamental Solanums as robusta and marginale, Acalypha tricolor, Erythrina of sorts, Monstera deliciosa, Arundo, Ferrula in variety, Arilia Japonica and papyrifera, Acanthus latifolius, etc. Many hardy plants are just as serviceable as tender ones—young plants of the Kentucky coffee tree, Spikenard, Hercules' club, Rhus glabra laciniata, Bocconia cordata, Statice latifolia and others. An interesting part of this kind of gardening is the isolation of specimen plants on the lawns, in sheltered nooks, or in groves under the trees. If it be not desirable to turn Bananas, Palms, Cycads, Strelitzias and the like out of their pots, holes may be dug in the grass, deep enough in which to sink the pots out of sight, replacing the turf again, and thus they will appear as in reality they were growing permanently there. In sheltered shady places, Ferns and the shade-living plants may be introduced. Pampas grass, and the variegated and zebra Eulalias we prefer as isolated specimens rather than clumped together with other plants. W. FALCONER.

Botanic Gardens, Cambridge, Mass.

BEES AFLOAT.—The New Orleans *Picayune* has an account of a bee keeper who means to take the *creme de la creme* of the sweets of the spring, summer and autumn flowers:

At the foot of Burdett street, Carrollton, Mr. C. O. Perrine, of Chicago, has fitted up two barges as a floating apiary. Each barge has a capacity and convenience for 1,000 hives of bees. These will be towed up to Kennerville next week. They will start up the river with about 1,000 colonies on the two boats. Mr. Perrine has been in Louisiana eighteen months studying up the bee business and preparing for the grand onward movement for which he will be ready in a few days. His plan is to start with his bee palaces and his 1,000 colonies from Southern Louisiana when the honey flowers are in full bloom, to remain but a day or two at a landing, and move up each time to another landing and a fresh field. He thinks the bees of from 1,000 to 2,000 colonies will take the cream from the country around the landing from one to two miles distant in one or two days. In this manner he expects to move up the Mississippi to St. Paul, a distance of nearly two thousand miles, where he will arrive about the last of July. Returning, he will halt about two months somewhere above St. Louis, and will reach Louisiana with his palaces and bees in October.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

FIXTURES FOR 1878—BENCH SHOWS.

The Westminster Kennel Club (New York) Bench Show, Gilmore's Garden, May 14, 15, 16 and 17. Dr. W. Seward Webb. Secretary.

THE NEW YORK BENCH SHOW.

WESTMINSTER KENNEL CLUB.

The Second Annual Bench Show of Dogs now in progress at Gilmore's Garden, this city, is entirely successful, in many respects superior to that of last year. The entries numbered one thousand and two, nearly all of which were in their places at the opening, Tuesday. The sporting classes, as may be learned from summary of entries, are well represented, and the display of non-sporting dogs is especially fine. Dog-fanciers and non-fanciers may all find something to call forth their admiration, and the thousands of people who are hourly pressing into the Garden attest the very general interest in canine matters. We doubt if even the "Bench Show of Intellect," suggested by the *World*, and in which it is proposed to exhibit all classes of poets and literary people in general, would call forth more interested, aristocratic or cultured throngs than the dog show audiences. As we go to press so early, we shall not attempt to particularize as to the merits and faults of the exhibition. We can only in this very general way congratulate the managers of the Westminster Kennel Club upon the success of their efforts.

Below we present the list of awards so far as adjudged at this time:

AWARDS.

Class 1—F N Owen's Major, 1st; P C Hewitt's Hereward, 2d; C W Norton's Boss, 3d; S P Shaw's Turk, C.

Class 2—F R Appleton's Juno, 1st.

Class 3—Le Roy Z Collins' Barry, 1st; A A Kingsland's Hans, 2d.

Class 4—Le Roy Z Collins' Neva, 1st.

Class 5—Miss Charlotte Pearsall's Fido, 1st; John P Haines' Don, 2d; E S Coe's Monk, 3d.

Class 6—No prize awarded.

Class 7—Frank Harris' Jack, 1st; J Springsteed, Jr.'s, Fleet, 2d; C B DeKlyn's Jip, 3d.

Class 8—J W Jones' Bruce, 1st; E Bolenius' Guido, 2d; Al Watt's Nero, 3d, J P Wessman's Lion, H c.

Class 10—Hall, Blair & Co.'s Guess, 1st; Mr Barber's Prince, 2d; W A Haines, Jr's, Max, 3d; Edmond Randolph's Frolic and Baron von Dalwigh's Lulu, V h c; H W Livingston's Charlie, John Robinson's Hudibras, and W C Gulliver's Flora McFlimsey, H c.

Class 11—Miss Barlow's Maida, 1st; Paul Dana's Loki, 2d.

Class 32—George C Colburn's Trumps, prize.

Class 33—J Weighall's Belle, prize; A E Godeffroy's Beauty, V b c.

Class 34—A C Mudge's Sam, 1st; T F Taylor's Turk, 2d; A F Copeland's Rake, 3d; W A Haines, Jr's, Regent, V h c; J Van Boskerck's Wallace, H c.

Class 35—A F Copeland's Nellie, 1st; L Curlis' Bess, 2d; James R Tilley's Grace, 3d; Fisher & Bickerton's Border Lilly, V h c; N B Martin's Rose, H c.

Class 36—C Wisner's St Laurent, 1st; W J G Bearn's Don, 2d.

Class 37—C Wisner's Island Belle, 1st.

Class 38—Dr S F Speir's Jasper, 1st; Dr S F Speir's Buckingham, 2d.

Class 39—Dr S F Speir's Jaquette, 1st; D G Hartt's Belle, 2d; C Wray's Cosette, H c.

Class 40—St Louis Kennel Club's Berkley, prize; W N Callender's Rory O'More, V h c; B Bacheller's Duke, Jr, and Campbell Steward's Duke, H c.

Class 41—St Louis Kennel Club's Loo II, prize; J Weighall's Breeze, H c.

Class 42—Lincoln & Hellyar's Dash, 1st; W R Hobart's Boss, 2d; H Le Grand Cannon's Guy, 3d; John Fottler, Jr's, Red Hugh, A Bassford's Sanday Lawrence, T A Jerome's Moody, V h c; W C Harding's Barney Williams, H c.

Class 43—Lincoln & Hellyar's Flora, 1st; M Seagear's Mag, 2d; Max Wenzel's Doc, 3d; H De W Smith's Fanny, Fisher & Bickerton's Belle Meade, S N White's Lady II and Everett Smith's Cora II, H c; H Bunecke's Flora, C.

Class 44—C E Ketchum's Red Dick, 1st; Rev W Maginnis' Tara, 2d; C H Smith's Countess of Sligo, V h c.

Class 45—C L Ketchum's Red Gyp, 1st; Fisher & Bickerton's Primrose, 2d; V Miley's Nellie, V b c.

Class 46—E Lohman's Erwin, 1st; M Seagear's Jack, 2d.

Class 47—E Lohman's Quail III, 1st; M Seagear's Beauty, 2d.

Class 49—G G Hammond's Rose, 1st; G G Hammond's Ruby, 2d.

Class 60—G W Landenberger's Fury and Vixen, 1st; M Wooden's Rover and Driver, 2d; G W Landenberger's Rattler and Chimer, 3d; G W Landenberger's Fury and Vixen, I Weighall's Joe and Mate, and Queens County Hunt's Nimrod and Crafty, V h c; Queens County Hunt's Regulate and Governess, G F Kellert's Sport and Lead, and I Weighall's Mack and Mate, H c; L M Wooden's Reno and Mate, C.

Class 61—I Weighall's Sport and Mate 1st; Queens County Hunt's Bouncer and Graceful, 2d.

Class 62—A F de Navarro's Bruno, 2d.

Class 63—W H Goetting's Waldmann, 1st; G W Landenberger's Waldmann, 2d; T B Allen's Duke, 3d.

Class 64—T B Allen's Cora, 1st; W H Geetting's Waldina 2d.

Class 65—A Newbold Morris' Gamester, 1st; Dean Sage's Guy, 2d.

Class 66—C Walton's Trickscy, 1st; C Walton's Young Mettle, 2d; E M Talbot's Beauty, 3d; W S Wood's Beauty, C.

Class 67—J H Elliott's Nibs, 1st; E M Talbot's Flash, 2d; E M Talbot's Don, H c; F Gebhard's Jack, C.

Class 68—J H Elliott's Pix, 1st; F Gebhard's Fannie, 2d.

Class 72—E M Goring's Fannie, 1st; F Pidgeon's Spot, 2d.

Class 73—D P Foster's Ben, 1st; G G Haven's Duke, 2d; W P Douglas' Cobbler, 3d; D P Foster's Jenny, H c.

Class 74—W Fanshawe's Victor, 1st; J G Coster's Lily, 2d; J G Coster's Spider, 3d; C Wolliffe's Prince, V h c; T Salmon's Nellie, H c; C H Hays' Lad, C.

Class 75—Mrs F Neilson's Martha, 1st.

Class 76—R McLellan's Tom, 1st; H Bamber's Tatters, 2d, W A Conklin's Brandy, V h c; Miss Breese's Britton, h c.

Class 77—Lloyd Aspinwall, Jr's, Puffy, 1st; E Brown's Wasp, 2d; T Kaalgher's Topsy, V h c; J Chapman's Rose, H c.

SUMMARY OF ENTRIES.

Pointers exhibited by the Westminster Kennel Club	19
Class 1—Mastiffs, dogs	14
" 2—Mastiffs, bitches	4
" 3—Rough-coated St. Bernard dogs	6
" 4—Rough-coated St. Bernard bitches	2
" 5—Smooth-coated St. Bernard dogs	6
" 6—Smooth-coated St. Bernard bitches	2
" 7—Newfoundland dogs and bitches	23
" 8—Siberian or Ulm, dogs or bitches	11
" 9—Bloodhounds, dogs or bitches	No entries
" 10—Greyhounds, dogs or bitches	23
" 11—Deerhounds, dogs or bitches	4
" 12—Champion pointers over 50 lbs, dogs	5
" 13—Champion pointers over 50 lbs, bitches	2
" 14—Pointers over 50 lbs, dogs	24
" 15—Pointers over 50 lbs, bitches	17
" 16—Champion pointers under 50 lbs, dogs	1
" 17—Champion pointers under 50 lbs, bitches	1
" 18—Pointers under 50 lbs, dogs	8
" 19—Pointers under 50 lbs, bitches	11
" 20—Pointer puppies over 6 and under 12 mos, dogs	11
" 21—Pointer puppies over 6 and under 12 mos, bitches	9
" 22—Pointer puppies under 6 mos, dogs	1
" 23—Pointer puppies under 6 mos, bitches	3
" 24—Champion English setters, dogs	3
" 25—Champion English setters, bitches	3
" 26—English setters, dogs	57
" 27—English setters, bitches	25
" 28—English setter puppies over 6 mos, dogs	7
" 29—English setter puppies over 6 mos, bitches	12
" 30—English setter puppies under 6 mos, dogs	11
" 31—English setter puppies under 6 mos, bitches	5
" 32—Champion black and tan setters, dogs	3
" 33—Champion black and tan setters, bitches	4
" 34—Black and tan setters, dogs	25
" 35—Black and tan setters, bitches	18
" 36—Black and tan setter puppies over 6 mos, dogs	2
" 37—Black and tan setter puppies over 6 mos, bitches	1
" 38—Black and tan setter puppies under 6 mos, dogs	5
" 39—Black and tan setter puppies under 6 mos, bitches	5
" 40—Champion red or red and white setters, dogs	4
" 41—Champion red or red and white setters, bitches	2
" 42—Red or red and white setters, dogs	56
" 43—Red or red and white setters, bitches	30
" 44—Red or red and white setter puppies over 6 mos, dogs	
" 45—Red or red and white setter puppies over 6 mos, bitches	3
" 46—Red or red and white setter puppies under 6 mos, dogs	2
" 47—Red or red and white setter puppies under 6 mos, bitches	2
" 48—Chesapeake Bay dogs	2
" 49—Chesapeake Bay bitches	2
" 50—Irish water spaniels, dogs	2
" 51—Irish water spaniels, bitches	2
" 52—Retrieving spaniels, other than pure Irish, dogs	5
" 53—Retrieving spaniels, other than pure Irish, bitches	4
" 54—Clumber spaniels, dogs or bitches	2
" 55—Cocker spaniels, dogs	5
" 56—Cocker spaniels, bitches	4
" 57—Cocker spaniels, puppies, dogs or bitches	6
" 58—Field spaniels, not otherwise mentioned, dogs	1
" 59—Field spaniels, not otherwise mentioned, bitches	No entries
" 60—Foxhounds, dogs or bitches	53
" 61—Harriers, dogs or bitches	2
" 62—Beagles, dogs or bitches	5
" 63—Dachshunds, dogs	6
" 64—Dachshunds, bitches	5
" 65—Fox terriers, dogs	8
" 66—Fox terriers, bitches	10
" 67—Fox terrier puppies, dogs	13
" 68—Fox terrier puppies, bitches	5
" 69—Collies, dogs	11
" 70—Collies, bitches	5
" 71—Collie puppies, dog or bitch	3
" 72—Dalmatian or coach dogs or bitches	4
" 73—Bull dogs or bitches	10
" 74—Bull terriers, dogs or bitches	20
" 75—Bull terrier puppies, dogs or bitches	9
" 76—Skye terriers, dogs	12
" 77—Skye terriers, bitches	5
" 78—Pugs, dogs	13
" 79—Pugs, bitches	11
" 80—Pug puppies, dogs or bitches	6
" 81—Scotch terriers, dogs or bitches	8
" 82—Black and tan terriers, dogs or bitches	20
" 83—Dandie Dinmont terriers, dogs or bitches	3
" 84—Yorkshire terriers, blue and tan, over 5 lbs, dogs or bitches	18
" 85—Yorkshire terriers, blue and tan, not exceeding 5 lbs, dogs or bitches	20
" 86—Toy terriers, other than Yorkshire, blue and tan terriers, dogs or bitches	12
" 87—Blenheim spaniels, dogs or bitches	1
" 88—King Charles spaniels, dogs or bitches	5
" 89—Japanese spaniels, dogs and bitches	7
" 90—Italian greyhounds, dogs or bitches	14
" 91—Miscellaneous	2
" A—Best pointer dog, any weight	15
" B—Best brace of pointers over 50 lbs	5
" C—Best brace of pointers under 50 lbs	1
" D—Best pointer dog, any weight, to be shown with two of his get	1
" E—Best pointer bitch, any weight, to be shown with two of her progeny	6
" F—Best pointer puppy under 12 mos old, dog or bitch	5
" G—Best setter dog of any strain bred in the United States from native parents	12
" H—Best setter bitch of any strain bred in the United States from native parents	7
" I—Best English setter bred in the United States	18
" J—Best English setter dog, to be shown with two, and only two, of his get	4
" K—Best English setter bitch, to be shown with two, and only two, of her progeny	3
" L—Best red or red and white setter dog, to be shown with two, and only two, of his get	3
" M—Best red or red and white setter bitch, to be shown with two, and only two, of her progeny	4
" N—Best black and tan setter dog, to be shown with two, and only two, of his get	2
" O—Best black and tan setter bitch, to be shown with two, and only two, of her progeny	3
" P—Best display of foxhounds, consisting of not less than three couples	20
" Q—Best mastiff, dog, bitch, or puppy	2
" R—Best St. Bernard, smooth-coated or rough-coated, dog, bitch, or puppy	3
" S—Best cocker spaniel, dog, bitch, or puppy	7
" T—Best fox terrier, dog, bitch, or puppy	15
" U—Best bull terrier, dog, bitch, or puppy	8
" V—Best Yorkshire blue and tan terrier, dog, bitch, or puppy	14
" W—Best pug, dog, bitch or puppy	10
" Y—Best collie dog	6
" X—Best pair of Japanese spaniels	2
" Z—Best Japanese spaniel	4

A HISTORY OF BENJAMIN FRANKLIN.

This is not The Sage, the philosopher who, when wandering through Philadelphia streets with a hunk of bread in his hand, first fascinated the future Mrs. Franklin. Neither did the subject of this memoir *eripuit fulmen*, or do anything of the electrical kind. The Ben Franklin, whose truthful history we give (which story shows evidences of some one having a true love for animals), was only a dog, and a female at that. We trust that the FOREST AND STREAM AND ROD AND GUN will help to preserve the memory of an honest sea-dog, who served her country on the quarter deck, with occasional visits to the galley. Having prescribed for Ben Franklin, and having, perhaps, done something in restoring her to health, be owner was good enough to give us the particular story of a dog, which had visited the four quarters of the habitable globe.

Any European traveler with a love for a mild climate and fine scenery, beautiful drives and walks, a well stocked market and an abundance of what we would call hot-house flowers, obtainable at all seasons of the year for the most trifling sums, in fact a little paradise for all who have leisure to enjoy it, should spend a winter in Nice in the south of France. It is generally the winter resort of the European squadron of the American navy, for the reason that one of the finest and safest harbors in the Mediterranean, that of Ville Franche, lies about three miles distant.

Here commenced the history of a dog, ranking no higher in birth than other curs that roam the streets, and possessing no extraordinary beauty of form or color, yet whose life of ease and comfort, travel and romance may well be envied by all dogs less lucky, whether they walk on two legs or four. Destined to travel to the four continents, to be petted and loved by hundreds of human beings, fed on the choicest diet, and allowed liberties unheard of in the pursuance of the slightest whim, one is tempted to wonder that the recipient of all these favors first met the view of her benefactors as a little, mangy, shivering pup in the pocket of a drunken sailor. Yet such is the fact, though it is evident that even under such disreputable appearances there lurked tokens of a higher destiny. When this unseemly object first appeared upon the neat deck of the flag-ship Franklin, the order was given to throw her overboard, for alas! her appearance almost justified the act; but, with a quick perception of her fate, the puppy rallied her sinking forces, sprang to the feet of one of the officers, and with a comical wag of her stumpy tail and a pathetic glance of her eye, so worked upon his feelings that her life was spared.

And now her palmy days began. She constantly gave evidence of great intelligence and a winning disposition, and, as any amusement is hailed with delight in the monotonous routine of ship life, she daily obtained a firmer hold upon the hearts and time of the inmates of the frigate. Under the doctor's care her loathsome mange disappeared and glossy, brindle-colored hair covered her little body, now grown plump with dainty food. She no longer shivered with the cold nor feared a watery grave, for Benjamin Franklin, as she was named, in honor of the ship, was now the pampered favorite of all, from captain to messenger boy.

No place was too good for Ben, when after her morning bath she desired a warm nook to rest in. Her choice generally fell upon the berths where some of her favorites were sleeping, and to them she would go wet and dripping, always certain that she would be lifted into the bed and covered snugly with a blanket so soon as the occupant felt the tap of her paw and saw her pleading eyes. Nor was she ungrateful for the favors she received. Docile, tractable and affectionate, and gifted with rare amiability of temper, she bore teasing with equanimity, acquired with ease many curious tricks, exhibited for her friends the most ardent attachment, and contrived to interest and amuse the most indifferent.

One young officer, whose name will always be associated with Ben, took her particularly under his care. She slept on his bed, eat from his hand and followed him about so continually that the two were rarely seen apart. Ben's kind friend has made his last voyage long ere this. Far from home and in the midst of strangers he breathed his last. He was a young officer of great promise, and more than usually beloved by his comrades; but he would not have scorned the sorrow of his little favorite had he seen her wandering in an aimless way about the deck, showing her grief so plainly that the Captain took compassion upon her and admitted her within the sacred precincts of the cabin.

To the Captain then, Ben gave the rest of her heart, and from that time she came to be considered as his property, yet she did not forget her former friends. Her visits to them were frequent, and though the inducements held out to her palate may have been the strongest attractions to her constancy (for Ben's capacity for dainties is unsatiable) still she had many winning and almost human ways of exhibiting her gratitude and affection that left no doubt that her heart was in the right place. Her intelligence often caused the greatest surprise. She had learned that every day at half-past three o'clock a portion of the dinner for the crew was brought to the mast to be inspected by the officer of the deck. On this occasion a morsel of food was always tossed to Ben, who never failed at the appointed time to walk gravely to the place, although the bell striking seven (ship time) was the only guide she had to the hour.

She also developed an ear for music. The order to lower the boats of the frigate from the davits to the water preparatory to going on shore, was always given in music. That is, each boat was known by a different tune, and each crew upon listening to the bugler knew without further orders which boat was to be manned. Ben very soon discovered the meaning of these tunes, and not only learned to connect them with the idea of going on shore, but contrived to distinguish one tune from another. She knew the tune played for the wardroom boat and for that of the Captain, for in these two boats she was accustomed to be taken on shore, and she never made a mistake in the matter. Often three or four boats have been called away while every art was used in the hope of deceiving her, but she would lie perfectly quiet until she heard the notes for which she was listening, when she would exhibit the greatest excitement and bark and leap upon her friends in the endeavor to show them her desire for a walk on shore, a pleasure which she greatly enjoyed.

Ben was always fond of play, and even now, although four years old, she is not averse to a romp. In those days ten or twelve sailors would get upon hands and knees upon the deck while Ben, at a given signal, would leap over every man in the line and then return in the same way back to the starting place. She is very fond of being given a handkerchief, a

stick, or better still, a rubber ball, and then having some one chase her about in the endeavor to get it again. She will ask for this game in the most knowing manner by a droll glance of her eye while the object is held in her mouth provokingly near some one, assuming at the same time the attitude of a child who says: "Catch me if you can."

She eats oranges and enjoys them. If an orange be thrown to her she will catch it in her mouth, then with her teeth remove sufficient of the peel to make a large hole from which she will suck the juice, forcing it out at the same time with her fore paws.

Whenever there was an entertainment on board the Franklin Ben was "dressed up," submitting apparently with pleasure to her decorations. Bright ribbons were tied about her body and a white shirt collar and cravat were placed upon her neck which gave her a most ludicrous appearance. She was then presented to the company and told to "sing." Her singing consisted of a singular whining noise ranging through all the notes of the gamut, and executed while she sat upon her hind legs. This performance was always greeted with shouts of laughter from her audience. Her voice is not now so clear as it once was, and she will only sing under protest, although she has not lost the art by any means. Ben's life has not been free from misfortune. She once fell through a hatchway and broke her leg, at another time her foot was terribly crushed, her teeth have been worn off in the effort to carry about huge stones which is one of her favorite pastimes, and she is now suffering from some disease which it was feared was paralysis, but from which she is slowly recovering. She remained for two years on board of the frigate Franklin visiting many lands of classic and historical fame. She has seen strange sights and curious people, and has stood in the presence of emperors and kings. She has even had the privilege of displaying some of her talents before the illustrious Mr. Tweed, of Tammany fame, during his homeward bound voyage from Spain; but in spite of all this greatness Ben is not spoiled, and although sick and well nigh helpless, she is still loved and cared for and still retains the reputation of being one of the most fascinating dogs in the world.

THE LINDSAY KENNEL.

BROOKLYN, May 2, 1878.

EDITOR FOREST AND STREAM:

Last week while in Scranton, Pa., I had the pleasure of calling upon Mr. R. M. Lindsay, of Green Ridge, who is the proprietor of one of the finest kennels of sporting dogs in Northern Pennsylvania. Mr. Lindsay is a true Scotchman, frank and open-handed, and to a sportsman he delights in showing up his stock. Mr. Lindsay apologized for his kennel, but not for his dogs. It was not necessary, for this kennel—while not a large one—embraces some stock not found every day. After opening the gate the first dogs that attracted our attention were a brace of fine lemon and white pointers. Upon further inquiry we found them to be celebrities, no less than Vice Count and Dolly. Vice Count is too well known for me to give a lengthy description here. Certainly he is a beautiful specimen of the pointer dog; strong in limb and very compactly built, with an eye full of intelligence and a chest which denotes ample lung room. Probably the weakest point in this dog is his head, which is too old-fashioned, quite broad and if anything too fat.

"Vice Count," said Mr. Lindsay, "is four years old. He was imported by Arnold Burges, and shows a record of sixteen prizes in England. He is by the celebrated pointer Sultan out of Pride. Vice Count took second prize in the open class, and was very highly commended at St. Louis in 1878." In my estimation the finest animal in the Lindsay kennel is Dolly, a young pointer recently imported to match Vice Count. Dolly, to my notion, is one of the most compact and practically built dogs I ever saw. She is lemon and white, very evenly marked, "clean cut" and well set upon her feet. She has powerful shoulders, a head that is almost faultless, lean and long in the muzzle, ears as soft as silk and set well down, and an eye that seems to almost speak. Said Mr. Lindsay, "Dolly was imported by me in January last, and is now about twenty months old. She is by champion Romp out of Prescott's Juno. She has won four prizes in England, and at St. Louis ('78) received the V. H. C., in the champions, and second prize in the open class." Mr. Lindsay has entered Dolly and Vice Count in the Westminister Kennel Club Show for 1878.

Passing on we come to imported Dash, a red Irish setter, and a great favorite with Mr. Lindsay. Dash is by Hutchings' Bob, out of Fan. In color he is perfect, but in head I think quite imperfect. Dash received the V. H. C. at New York, 1877, and will probably be again exhibited at the coming show. We were next shown Creena, a red Irish bitch imported by Mr. Jarvis, of Clermont, N. H. Creena in stature is, if anything, a little under size, of good disposition and in color fair. She is by champion Basto out of Lill II., and is two years four months old. Close by her is chained a splendid specimen of her get, by name Victor. "This dog Victor," said Mr. Lindsay, "I consider one of the most promising in my kennel. You will notice that in time his color will be superb, and his general make up about right. Victor is but eleven months old, by my imported Dash, out of Creena. He has seen but little of game, but is very knowing for his age. I have just entered him in the coming show at New York." To describe each and every dog in Mr. Lindsay's kennel would be taking up too much of your valuable space, and had better stop here. Before closing, let me say to those who are interested in fine sporting dogs that if ever they should happen to be in the vicinity of Scranton to give Mr. Lindsay a call. He will be glad to see you, and can show you not only dogs, but fancy chickens, pigeons, horses, and, besides, a lovely home. You will be welcomed at his house by the plaintive voices of twenty-two dogs and a general commotion in the chicken family. For this very enjoyable call I am indebted to Mr. Dewer, of Scranton, who is the happy possessor of Scamp, a fine liver-and-white dog, by Raymond's Pride of the Border, out of Dimity. CLINT. WISNER.

MINNESOTA KENNEL CLUB.—This club is decidedly a State institution, and all the prominent sportsmen in the State are interested in the movement. The following are the officers: B. Baupre, Pres.; H. H. Sibley and some eleven other well-known gentlemen of Iowa Vice-Presidents, with W. S. Timberlake, Secretary and Treasurer. The Executive Committee is a most efficient one. The show will take place at St. Pauls, Minn., on the 2d, 3d, 4th, 5th, 6th and 7th of September next, Mr. C. Lincoln acting as superintendent. Between the New York show and the one to be held at St. Pauls, there will be time enough to renew interest in bench shows.

A FAITHFUL DOG.—A Canadian at Pembroke, Ottawa, who broke through the ice last month, remained struggling at the edge of the ice for nearly an hour. After this long delay, and when help was near at hand, the ice gave way. As he sank under the ice, his faithful dog who had been all the time whining piteously at his distressed master, plunged after him and was seen no more till dragged out of the river with the body of the unfortunate man.

NAMES CLAIMED.—*Hornersville, May* 12, 1878.—Mr. J. Otis Fellows claims the name of Queen Ruby for his Irish setter Gyp, red and white. Imported *in utero* from Ballymena, Ireland. Whelped Feb. 16, 1878.

VISITS.—*Philadelphia Pa.*—T. C. Steel's orange and white setter bitch "Zill" visited Major Brown's dog "Grouse" May 8. "Grouse" was a first prize at the Philadelphia Dog Show Nov. last, and is entered at Westminster Kennel Club Bench Show.

WHELPS—*Neversinck Lodge Kennels.*—Mr. A. E. Goddefroy's Beauty, black and tan setter, whelped May 5, by red setter Frank.

DEATH OF DRAKE.—Mr. R. J. Lloyd Price's wonderful pointer dog Drake is dead. Drake's performance's in the field have been celebrated the world over. Admirable himself, his progeny have not been, perhaps, always equal to the sire.

—The pointer Flake has a well-written obituary, which we shall print next week.

Game Bag and Gun.

MAY IS A CLOSE MONTH FOR GAME.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson snipe, per doz., $3.00; plover, $2.50; bay birds, large, $3.00; small, 25; wild pigeons, flights, $1; do., stall fed, $1.75; Philadelphia squabs, $2.50; wild do., 75 cents.

Poultry—Philadelphia and Bucks County dry picked chickens, per pound, 25 cents; do., fowls, 18; do., turkeys, 18; do., ducks, 20; State and Western chickens, 18; do., turkeys, 15; do., fowls, 15; do., ducks, 18; spring chickens, 40.

FOREST AND STREAM AND ROD AND GUN MEDAL.

The above is the gold medal presented by this journal to the person making the best score in the first three matches of the New York State Sportsmen's Association, and is mentioned in another column.

NEW YORK—*Kingston, May* 7.—George Van Voorhis shot a wild cat on Bunticon Point one day last week. Joe Bennet, of Saugerties, shot a black bear near the Overlook Mountain on Wednesday last. It weighed 200 pounds. GUS HARRY.

BROOKLYN GUN CLUB.—This flourishing club, of which Dr. Aten is the efficient president, has just completed its new club rooms, fitted up in the most approved style for the comfort of its members.

SHOOTING AT SHELTER ISLAND.—The spring fowl shooting on the east coast of Long Island is now over, and the birds have taken their flight for their northern breeding places, far away in the Northeast, and this year their migration has taken place much earlier than usual. Vast numbers of coot have remained in these waters throughout the winter months, chiefly in Gardiner and Peconic Bays, and on the eastern shore of Shelter Island. Great numbers of them have been killed by batteries, which is the only effectual mode of taking them, as it is difficult to approach them with sailing boat, and they are too wary to fly past a point of the shore within reach of the ambushed gunner. So numerous have they been on the eastern flats of Shelter Island, within half a mile of my window, that it has been common for a fowler to obtain as many as sixty fowl in a few hours' sport. But all these myriads have departed five weeks since, to be succeeded for a few days by the migratory flocks who have wintered in southern waters. The sheldrakes were the last to leave, but they have not been as numerous as in former years. The spring months have been so mild that those fowl, instead of lingering a few weeks along those shores, have prematurely winged their way Northward, to Labrador and other favorite haunts, there to remain to hatch out and rear their young broods, to return again hither in October. The geese also have been early in their flight, and have not afforded much sport this spring, though Bill Lane and others have had some good sport in Shinnecock Bay. Montauk, once so beloved of fowlers, no longer maintains its reputation, and but few ducks and geese are now found there. The Great Pond there, once the haunt of thousands of geese, has been opened by colers to the salt tides, and the succulent fresh grasses have been thereby killed out, and there is no longer feed for fowl or sport for gunner. Still, there is in some years good sport there with the plover, over the hill slopes and valleys of Montauk. We passed the months of August and September there last season, but the birds were scarce. ISAAC MCLELLAN.

Shelter Island, May 7, 1878.

PENNSYLVANIA—*Pottsville, May* 8.—A bald eagle was shot in this county the other day. It measured 7ft. 9in. from tip to tip of wings. DOM PEDRO.

Philadelphia, May 11.—A detailed trial of Sparks' chilled vs. soft shot is soon to be made in our city. Dr. Daniel Kusner and Mr. Charles S. Westcott will have charge of and superintend the arrangements. A number of prominent resident sportsmen will be invited to participate in the trial. The shells will be loaded under the immediate supervision of Mr. John Siner. Special targets will be used on the occasion, and so arranged as to eliminate as far as practicable all elements of chance. Mr. Thos. W. Sparks, the manufacturer, has recently added to his factory an entirely new set of machinery for sizing shot. It consists of a series of tables, admirably graded and adjusted, and so perfected in their working as to render it impossible for imperfect pellets to pass through the sieves. These improved tables are patented and are equally useful for soft and hard shot, consequently the manufacturer is not interested in the advancement of either, but is simply desirous of having a fair and impartial trial, feeling assured that in either event the general result will make a brilliant showing upon statistical tables for his improved shot. Your correspondent will forward a full report of trial. DOE.

MARYLAND—*Elkton, May* 13.—Many woodcock have been found dead upon the railroad track, presumably killed by flying against the telegraph wires. These birds are more plenty than they have been for years, and the young ones are already three-fourths grown. J. T.

TEXAS—*Denison, April* 4.—The mule ear or jack rabbit affords sport on our prairies. The average greyhound has to hump himself to gather him in. Plover have been plenty this spring, but very lean; a party of four of us drove out a couple of miles, and in three hours bagged an average of forty each: three breech-loaders and one muzzle-loader. The muzzle-loader, used by Dr. W. (of iron-grip cement notoriety), an old fogy of forty summers, knocked down more birds than his average; before that day's trip he was wavering a little in his views as to the merits of the breech-loader as compared to the muzzle-loader, but old broke-stock's performance that day settled the matter in his estimation, and he now hugs broke-stock and his other ancient theories to his bosom tighter than ever, and will never relax in his views until he reaches the "happy hunting grounds," where nothing but improved breech-loaders are used. Two buffalo hunting parties left here last fall for the buffalo regions, 250 miles west, and reliable reports have reached us that they are on their way home with big lots of hides and dried meat, the proceeds of which will pay them handsomely over and above their expenses. Comparatively few quail or chicken were slaughtered about here last winter, possibly owing to the mild weather. Next fall and winter we will make up for it if present indications for a big yield are verified. HENRY BOWRING.

ILLINOIS STATE SHOOT.—In the tournament of the Illinois State Sportsmen's Association at Chicago, June 1, the prizes of which have already been announced in our columns, only one day is taken up exclusively by the Illinois sportsmen. One of the pleasantest features of the meeting is the Strangers' Day, when there is an opportunity for the display of skill by experts from all portions of the country. There is also an occasion for the interchange of courtesies between sportsmen of different sections. Why can we not have something of this kind at the New York State convention? This is a Western wrinkle worth imitating.

AMENITIES TO SPORTSMEN IN THE INDIAN TERRITORY.—Those knights-errant who complain because they cannot overrun grain fields and fenced farms after game without a protest from the owner also bitterly denounce the Indian Nation as a close corporation, because hunting cannot be prosecuted without stint, let or hinderance over their Territory. For our own part we will readily champion the reds. We have hunted over their grounds and have been the recipients of their courtesies, just as we have been, and others may be, of the amenities of farmers who are liberal in bestowing privileges over their posted lands, when the privilege is respectfully asked. Below we give a letter from a near neighbor of the red men of the Nation, and are glad to receive such reliable testimony. We dismiss the complaints of those who denounce the Indians as arbitrary, and stand ready to defend the family of Lo as the best conservators of game in the region of game. The Indians destroy to use and utilize. The

white man is prodigal in his waste and wanton in his destruction:

DENISON, Texas, April 4, 1878.

EDITOR FOREST AND STREAM:

You reach us regularly, and your columns of interest and information are appreciated. This portion of Northern Texas does not rank first-class as a sporting country, although a drive through the country tributary to Denison and Sherman would delight the eyes of a sportsman. Why such a scarcity of game exists in this immediate locality is unaccountable unless it is that the Indian Territory offers superior inducements and the larger proportion prefer the comparative solitude there to the cultivated farms on this side of Red River, which forms the division four miles from here. Denison enjoys a large and lucrative trade from the Indian Territory, and of course a friendly acquaintance is the result between our merchants and the natives and those having rights in the nation. The laws prohibiting hunting by non-residents are stringent, but all lovers of sport in this section have no difficulty in securing a standing invitation from some resident of the Nation, and under those circumstances his rights as a guest are recognized and respected, and every courtesy is extended by all, and especially by the authorities, who if he were hunting on his own hook or without an invitation would be likely to march him off to Fort Smith, Ark., (300 miles), on a charge of violating the laws, a beastly overland trip involving trouble, expense and time. Few want to duplicate it after one trial. A visit to a friendly Indian, who knows the lay of the country and range of game, insures to a good shot at least a wagon load per day of any kind he goes for in season. He can find anything in the game line from a cotton-tail rabbit to a Mexican lion, including deer, panther, turkey, geese, ducks, etc.

NEW YORK STATE ASSOCIATION.

The twentieth annual convention of the New York Association for the Protection of Fish and Game will be held at Buffalo, under the auspices of the Forester Club of that city, May 20. Fifty clubs will participate. Among the more noticeable new prizes are the new Dean Richmond cup, now being manufactured by Theodore B. Starr, of this city, at a cost of

THE PIERCE BADGE.

$1,150; and the Dr. R. V. Pierce Diamond Badge, made by same party at a cost of $850. The total value of the prizes offered will aggregate over $5,000. The programme of events is as follows:

Monday, May 20.—Convention will meet on Monday evening in McArthur's Hall, at 8 o'clock, when the credentials of delegates will be received and the Convention organized. Delegates are respectfully requested to wear their club badges during the Convention.

Tuesday, May 21.—Contest 1.—8:30 A. M. Single trap shoot, ten single birds. Open only to members of clubs belonging to the State Association. Class shooting; entrance fee $5:

First Prize—A breech-loading shot-gun, made by W W Greener, P Smith, Buffalo, value $200; Second—An elegant meerschaum pipe, Julius Kaldenburg, New York, value $75; Third—Twenty-four one-pound cans of Dupont powder, diamond grain, F L Knoeland, agent New York, value $30: Fourth—Bogardus glass ball trap and balls, A H Bogardus, Elkhart, Illinois, value $15; Fifth—Game and cartridge belt, Case & Bedell, Chetopa, Kan, value $10.

Contest 2.—2 P. M. Amateur shoot, ten single birds; open only to members of organized clubs belonging to the State Association, who have never won a prize at any of the Conventions; class shooting; entrance fee $5:

First Prize—An extra fine double-barrelled breech-loading shot-gun, Nichols & Lefever, Syracuse, value $300; Second—A valuable case of game birds, J Booth, Taxidermist, Drummondsville, Ont, value $100; Third—Twenty-four one-pound cans of Electric Powder, Hazard Powder Co, New York, value $30; Fourth—200 pounds chilled shot, assorted sizes, in handsome keg, Colwell Lead Co, New York, value $30; Fifth—Glass ball trap and balls, Huber & Co, value $15.

Wednesday, May 22.—Contest 3.—At 8:30 A M. Single trap shoot for Dr R V Pierce diamond badge; value $850. Fifteen birds each, twenty-one yards rise. Open only to members of clubs belonging to State Association; to be held by winner each year in trust, and to be accounted for to State Association; said winner to receive the entrance fees from the next annual contest; entrance fee, $10.

Contest 4.—At 2 P M. Double bird shoot, ten double rises; open only to members of clubs belonging to State Association; class shooting; entrance fee, $5:

First Prize—Fox patent breech-loading shot-gun, new model, American Arms Co, Boston, value $250; Second—500 pounds of Tatham Bros' chilled shot, assorted sizes, in handsome packages, value $60; Third—Twenty-four one-pound cans diamond grain powder, Oriental Powder Co, Buffalo, value $30; Fourth—A full hunting suit made of waterproof canvas, J J Snellenburg, New Brighton, Pa, value $20; Fifth—Ten pounds "Vanity Fair" smoking tobacco, Wm S Kimball & Co, Rochester, value $15.

Thursday, May 23.—Contest 5.—At 8:30 A M. Single trap shoot, fifteen birds; open only to members of organized clubs belonging to the State Association; class shooting; entrance fee, $5:

First Prize—An extra fine Damascus steel barrel breech-loading shot-gun, Parker Bros, Meriden, Conn, value $300; Second—Tifft House purse, $100 in gold; Third—The "New York Shooting Suit," waterproof velveteen, F L Sheldon, Rahway, N J, value $50; Fourth—200 pounds chilled shot, assorted sizes, in handsome keg, Thomas W Sparks, Philadelphia, value $30; Fifth—An elegant sole leather gun case, Thomson & Sons, New York, value $25;

Contest 6.—At 2 P M. For the Livingston Sportsmen's Association Cup, James W Wadsworth, Esq, Geneseo, N Y. Open to all organized clubs of this State, members of the State Association; to be held by the winning club each year in trust, and to be accounted for to the New York State Association; to be shot for by two members resident of the county in which the club is located—fifteen double rises each, in accordance with the rules of the New York State Association; entrance fee $30; the entrance fees to belong to the club holding the cup.

THE DEAN RICHMOND TROPHY.

Friday, May 24.—Contest 7.—At 8:30 A M. Dean Richmond Trophy. Open to clubs belonging to the State Association; to be held by the winning club each year in trust, to be accounted for to the State Association; to be shot for by three members, residents of the county in which the club is located; twenty single birds, twenty-one yards rise, in accordance with the rules of the New York State Association; entrance $30; entrance money to go the club making the highest score. The club making the next highest score to receive 500 pounds of improved chilled shot, Tatham Bros., New York.

PISTOL SHOOTING—*Wednesday, May* 22.—At 8:30 A M. Deliberate; ten shots, string measure, distance fifteen yards; entrance fee $3:

First Prize—Smith & Wesson revolver, M W Robinson, New York; Second—100 imported cigars, S Levyn, Buffalo.

RIFLE SHOOTING—*Wednesday, May* 22.—At 10 A M. Distance 100 yards, off-hand, string measure; any sights, except telescope, allowed; otherwise, according to the rules of the State Association; entrance fee, $5:

First Prize—A Remington rifle and shot-gun combined, J O Robson, Buffalo, value $100; Second—D B Castle, donation, value $25; Third—A fine opera glass, value $15.

FLY CASTING.—*Wednesday Morning, May* 22.—Single-handed casting. Open to members of clubs belonging to State Association, and governed by State rules:

First Prize—Silver-mounted split bamboo fly rod, Conroy, Bissett & Malteson, New York, value $50; Second—Silver-mounted split bamboo fly rod, H L Leonard, New York, value $50 (the winner of first prize can make his selection); Third—Fly hook and assorted flies, W Holberton & Co, New York, value $30.

SALMON FLY CASTING—*Wednesday Morning, May* 22.—At 12 M. Two-handed rods. Open to all, according to rules of the State Association:

First Prize—Silver-mounted split bamboo salmon rod, Abbey & Imbrie, New York, value $75; Second—Russia leather fly book and one gross assorted flies, Sara J McBride New York, value $30.

For Best Average in Contests 1, 4 *and* 5.—The FOREST AND STREAM AND ROD AND GUN Medal, FOREST AND STREAM Publishing Co, New York, value $150.

For Best Average of Clubs in Contests 1, 4 *and* 5.—1,000 pounds of shot, "Eagle brand," Le Roy Shot and Lead Manufacturing Co, New York.

For Poorest Average in Contests 1, 4 *and* 5.—Two cases of Piper Heidsieck, champagne, James Meyer, Jr., New York, and to be drank in the Forester Club rooms during the Convention, as stipulated by the donor.

The following are the officers of the State Association: Pres—R V Pierce, Buffalo; 1st Vice-Pres—J J Flanagan, Utica; 2d Vice-Pres—John Vandenburg, Clyde; Rec Sec—John B Sago, Buffalo; Cor Sec—John B Greene, Buffalo; Treas—S M Spencer, Rochester. Standing Com—Alfred Wagstaff, Jr, New York; James M Manning, Syracuse; H D Faulkner, Danville; W C Jacue, Buffalo; N M Smith, Watertown.

IOWA STATE ASSOCIATION.—The first annual tournament of the Iowa State Sportsmen's Association will be held at Des Moines, the 28th inst. The contests are open to all amateurs There will be ten contests with thirty-five prizes, ranging in value from $10 to $150. The programme offers something for every degree of skill in bird and glass ball shooting. The arrangements are in the hands of a competent committee, composed of Messrs. Sam. Lowe, Des Moines; J. W. Strohm, Vail; S. L. McKisson, Des Moines.

ENGLAND VS. AMERICA—CONTEST BETWEEN THE SMALL AND LARGE CALIBRES.—Before Captain John M. Taylor left for England, at the request of some leading sportsmen in the United States he was requested to make a match between the two countries, some of our best shots believing that with their heavy guns they could kill more birds than the English gentlemen with their light guns. Captain Taylor, our representative in England, writes as follows:

"I have seen the Secretary of the Gun Club (London) and have entered into the following preliminaries: The match to be called the International Pigeon Match; England and America; Light vs Heavy guns; 25 birds each—4 shooters on each side (making 100 birds); say 30 yards; 80 yards boundary; 1¼ oz. of shot; 5 traps, 5 yards apart; the pulling to be done by a patent automatic process now in vogue. Gun below the elbow, otherwise gun club rules of England to govern. For £1,000 a man, making £4,000 ($20,000 gold). All these items can be altered, that is to say, distance of yards from trap, trap, or number of birds, number of shots, or distance from traps."

If then any gentlemen are desirous of representing the United States abroad at the gun contest we should be glad to arrange the preliminaries.

THE GAME LAWS OF ALL THE STATES AND CANADA FOR 1878, hunting and fishing grounds, etc., in all over 160 large 8vo pages of useful information for sportsmen for 35 cents. Address FUR, FIN, AND FEATHER, New York City.—*Adv.*

PIGEON MATCHES.

HOW TO PREPARE SCORES.—In sending their scores clubs are requested to give the following particulars: Place, date, name of club and of the competition, kind of trap used, distance of rise, boundary and rules governing. To insure insertion in current issues of our paper, scores should be sent so as to reach us on Tuesday, and earlier, if possible.

CANADA—*Strathroy, Ont., April* 30.—Glass balls; Bogardus trap; for badge held by Jno. Paine:

A Johnson	1 1 1 1 0 1 1 0 0 1—7	Jno Paine	0 0 0 0 1 0 0 0 0 0—1
Jno Saut	1 1 1 1 1 1 0 1 0 0—7	Louis Smith	1 1 1 1 0 1 1 0 1 0—8

May 5; 5 pigeons, T trap:

Jno Saut	0 1 1 0 1—3	L H Smith	1 0 1 * 1—3

Ties on three.

Saut	0 0—0	Smith	0 1—1

ONTARIO—*Wingham, May* 4.—The officers of the newly organized Wingham Gun Club are: Pres., W. H. Rockey; Vice-Pres., W. O. Fowler; Sec. and Treas., John Evans. At the initial shooting match the following scores were made; H and T ground traps; 21 yards; 80 yards boundary:

J Weyper	7	M Moore	8
W Fairorn	5	J Glenn	7
A Elliott	8	B Drake	7
W Drake	7	E R Talbot	6
J Evans	0	H Hall	

Moore won first; Elliott, second; J. Glenn, third; Wayper, fourth. At a second match the prizes were won respectively by Talbot, Evans, Wilson, Griffin, Rocky, and Jackson.

WAYNE COUNTY CLUB—*Clyde, N. Y., May* 7.—Eighth monthly competition, champion badge, 15 glass balls, 18 yds. rise:

Bert Hotchkiss	1 0 1 1 1 1 1 1 1 1 1 1 0 1 1—13
J M Curry	1 0 0 1 0 1 1 1 1 1 1 1 1 1 1—12
Ben Catchpole	0 1 1 0 w
Jake Wurts	0 1 1 0 w
A E Casey	1 1 1 1 1 1 1 1 1 1 1 1 0 0 1—13
W M Miller	1 1 1 1 1 1 1 1 1 1 1 0 1 1 1—14
C G Elliott	1 1 1 1 1 1 1 1 1 1 1 0 0 1 1—13
A Palms	1 1 0 1 1 1 1 1 1 1 1 1 1 1 1—14
J M Burghduff	1 1 1 1 1 1 0 1 0 1 0 1 1 1—12
John Hill	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
O M Helmer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
L A Dayton	0 1 0 w
H Meeker	0 0 1 1 1 0 1 0 0 w
Jake See	1 1 1 1 1 1 1 1 0 1 1 1 1 1—14
* T E Duffey	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15

* Shot for balls only.

Hill and Helmer tied again, Helmer finally winning.

Same day—Sweepstakes, double rises:

J M Streeter	8	W M Miller	7
Bert Hotchkiss	8	H Meeker	2
O M Helmer	7	J M Burghduff	7
L A Dayton	6	Jake See	5
Ben Catchpole	7	Jake Wurts	10
C G Elliott	6	John Hill	9

Wurts first money; Hill second money.

Streeter and Hotchkiss tied again, Streeter finally winning.

Same day—For sweepstakes, single rises, 18 yds.:

Ben Catchpole	1 1 1 1 1—5	A Palms	1 1 1 1 1—5
W M Miller	1 1 1 1 1—5	J M Streeter	0 1 0 1 1—3
T E Duffey	1 1 1 1 0—4		

Miller and Catchpole tied again; Miller finally won.

MONROE COUNTY VS. SENECA FALLS.—Single bird pigeon match, 21 yards rise, at Rochester:

Monroe County Sportsmen's Club.

Hooker	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
Beckwith	1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1—18
Hollister	0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—18
Stillson	1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1—18
Andrews	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
Walzer	1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—19
Brown	1 1 1 1 1 1 1 0 0 1 1 1 1 1 0 1 0 0 1 1—15
Crouch	1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—19
Lyon	1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1—17
Brownell	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1—19
Pope	1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1—18
Chaffey	1 1 1 1 1 0 0 1 1 0 1 1 1 1 0 1 1 1 1 1—16
Bowman	1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1—18
Smith	1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 0 0 0 1—16
Babcock	1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—19
Crittenden	1 0 1 1 1 0 1 1 1 0 1 1 0 0 1 1 1 0 1 1—14
Knapp	1 0 0 1 1 1 0 1 1 0 1 1 0 1 1 1 1 0 1 1—14
Moore	0 1 1 0 1 1 0 1 1 1 1 1 1 0 1 1 1 1 0 0 1—14

Total number of birds killed.....312

Seneca Falls Club.

Lawrence	1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0—19
Corey	0 1 0 1 1 0 1 0 0 1 1 1 1 1 1 1 1 1 1 0 1—16
G F Mearpass	1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—18
Stacey	1 0 1 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1 1 1 1—16
Hong	0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—17
Niver	0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—17
Kipp	1 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1—17
Tallman	1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—18
Van Buskirk	0 1 1 0 0 1 1 1 0 1 1 1 1 1 0 1 0 1 1 0—13
Marsh	1 1 1 0 0 1 1 1 0 1 1 0 1 1 1 1 1 0 1 1—15
Sellick	1 1 1 1 0 1 0 0 1 1 1 1 1 0 1 1 0 1 1 1—15
F S Mearpass	1 0 1 0 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 0—14
Parish	0 0 0 1 1 1 0 1 1 1 1 1 0 1 1 1 1 0 1 0—13
Rosecrans	1 1 1 0 1 1 1 1 0 1 1 1 1 0 1 1 1 1 0 1—16
Ten Eyck	1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 0 1—16
Westbrook	0 1 1 0 0 1 1 0 1 1 0 1 0 1 0 1 1 1 1 0—13
Barlow	1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1—18
Silsby	1 0 1 0 1 1 1 1 0 1 1 1 0 1 1 0 1 1 1—15

Total.....284

—In a match, July 22, 1871, between the Monroe County club and the Forester Club, of Rochester, fifteen men to each club, the totals were: Monroe County Sportsmen's Club, 279; Forester Club, 260.

Brooklyn Driving Park, May 10.—Excelsior Club of Brooklyn, E. D.; pigeon shoot, H and T traps, 21 yds. rise:

Watts	0	0	0	1	0	0	0	1	0	1—3
Hedermann	1	1	1	1	1	1	1	0	1	1—9
Altenbrand	1	1	1	1	1	1	1	0	1	1—9
Avery	0	0	1	1	1	1	1	0	1	1—7
McGill	0	0	0	0	0	0	0	0	1	1—2
Kampfmuller	1	1	1	0	0	1	0	1	0	1—6
Berlinger	1	1	1	1	0	0	1	0	1	1—7
Huber	1	0	1	0	1	0	1	1	1	1—7
Heiser	0	1	1	1	1	0	0	1	1	1—7

A side match was shot same day between Messrs. White and Weaver and O'Connor and Howell, H and T traps, 21 yds. rise. Score as follows:

White	0	0	1	1	1	1	0	1	1	1—7
Weaver	0	1	0	0	1	0	1	0	0	1—4—11
O'Connor	1	1	1	1	0	0	1	1	0	0—6
Howell	1	0	1	1	0	1	0	1	0	0—5—11

J. H. B.

Fountain Gun Club.—The first handicap contest for the new medal was shot May 8 at the Brooklyn Driving Park, with the following score, Mr. Eddy, the winner, being handicapped at 25 yds.:

Byrne	1 1 1 0 1 1 0—5	Allen	1 1 1 0 1 1 0—5
Miller	1 1 0 0 1 1 1—5	Lamkin	0 1 1 1 0 1 1—5
Sherlen	1 1 0 0 1 1 1—5	Goodwin	1 0 1 1 1 1 0—5
Slane	1 1 1 0 0 1 1—5	De Frame	1 1 1 0 1 1 1—6
Bohling	1 1 1 1 1 1 0—6	Baldwin	0 1 1 0 1 1 1—5
Carolin	0 1 1 1 1 1 1—6	McMahon	0 1 1 1 1 1 1—6
Madison	1 1 1 0 1 1 1—6	White	1 1 0 1 1 1 1—6
Cleaver	1 0 1 1 1 1 1—6	Bergen	1 1 1 1 1 1 0—6
Hansen	1 1 1 0 0 1 1—5	James	1 1 1 1 1 1 0—6
Eddy	1 1 1 1 1 1 1—7		

The club has sixty members, and recently held its annual meeting and elected Mr. C. Fish as President; Mr. A. Crook, Vice-President; Mr. A. P. Carolin, Secretary; Mr. H. G. Miller, Treasurer; and Messrs. H. Goodwin, W. Cleaver, J. Hanley, J. Randolph and Captain Hanson as Trustees.

Jersey City Heights Gun Club.—Sweepstakes at wild birds, on May 8, at Jersey City, with the following result:

First Match—H and T traps, 18 yards rise, 80 yards boundary, usual rules.

Hughes	0	1	1	1	0	1	1	0	0	1—6
Eaton	1	0	1	1	1	1	1	1	1	1—9
Bird J Cole	1	1	1	1	0	0	0	1	1	0—6
Leverting	0	1	0	0	1	0	1	1	0	0—4
Heritage	0	1	0	0	0	0	1	1	1	0—4
Thomson	1	0	0	1	1	1	1	1	1	0—7
Burdett	0	1	1	0	1	0	0	0	1	0—4
Cummings	1	0	1	1	1	1	0	1	1	1—8
Quimby	0	1	1	0	0	1	0	1	1	1—6
Remmy	0	1	1	1	0	1	0	1	1	0—6

Second Match—Five birds each, sweepstake, $1 entrance, $4 to first, $3 to second, $1 to third.

Remmy	0 1 1 0 1—3	Eaton	0 1 0 1 1—3
Payne	0 1 0 1 0—2	Cole	1 1 0 0 1—3
Burdett	1 1 0 1 1—4	Thomson	1 1 0 1 1—4
Hughes	0 1 0 0 0—1	Crouse	1 0 1 1 1—4
Cummings	1 1 1 1 1—5		

Third Match—Sweepstake, same terms, $5 to first, $4 to second, $2 to third, $1 to fourth.

Eaton	1 1 1 1 1—5	Van Gelder	0 0 1 0 1—2
Remmy	1 1 0 0 0—2	Payne	1 0 1 1 1—4
W Toffey	1 0 0 0 0—1	Cummings	0 0 1 1 1—3
Thomson	1 1 1 1 1—5	Burdett	1 1 1 1 0—4
Quimby	1 1 1 0 1—4	Hughes	0 1 1 1 0—3
Cole	1 1 1 0 1—4	Headden	1 1 1 0 1—4

Eaton and Thomson divided first and second money, and Quimby, Cole, Payne, Burdett and Headden divided third money.

Fourth match; sweepstakes; same terms, $6, $4, $3, $1.

Thomson	1 1 1 1 0—4	Headdan	1 1 0 1 1—4
Eaton	1 1 1 1 1—5	Corbet	1 1 0 1 1—4
Cummings	0 1 0 0 1—2	W Toffey	1 1 0 1 1—4
Remmy	1 1 0 1 0—3	Burdett	1 1 1 1 1—5
Payne	1 0 1 1 0—3	Quimby	1 1 1 1 1—5
Hughes	0 1 1 0 1—3	Cole	1 1 1 1 1—5
Van Gelder	0 0 1 0 1—2	Heritage	1 1 1 1 1—5

Eaton, Burdett, Quimby, Cole and Heritage divided first money. Thomson, Headdan, Corbet and Toffey, second. Other sweepstakes followed. Jacobstaff.

Jersey City Heights Gun Club.—First competition, double ball badge. Grounds at Marion, N. J., May 11:

F M Thompson	18 yds	10 01 10 10 00 01 10 10 00 10— 2
J P M Richards	14 yds	01 01 11 11 10 10 00 01 11 01—18
P W Levering	15 yds	11 00 00 00 w
J B Burdett	18 yds	00 00 10 00 00 10 w
F Cummins	16 yds	00 00 00 11 10 11 11 10 00 01— 9
A Heritage	18 yds	11 10 11 11 10 11 11 11 11 01—17
Wm Hughes	17 yds	10 11 10 11 11 11 11 11 11 10—17
J A Van Gelder	15 yds	10 10 10 00 01 00 10 10 11 00— 8

Match shot from one Bogardus and one Marshall trap, placed 10 yds. apart; both traps sprung at the same time.

Ties shot off at 3 pair balls.

A Heritage, 20 yds.....10 10 11—4 Wm Hughes, 19 yds....11 01 11—4

Newark Gun Club—*Newark, N. J., May* 13.—Twenty-five balls. Hobert, 16 yds., 19; Kay, 20 yds., 16; Leroy, 20 yds., 10; Coster, 16 yds., 12; Van Volkenberg, 10 yds., 9; Decker, 12 yds., 15; Bruntuall, 16 yds., 15; Sanger, 16 yds., 18; Duston, 12 yds., 21. M. R.

Palisade Gun Club.—The formal opening of the Palisade Gun Club (West Hoboken) grounds will be held on Decoration Day. The grounds are situated on the West Hoboken commons, near the monastery; are 250 by 150 feet; the club house is fitted up with all facilities and conveniences. Amateur matches at glass balls will be shot on the day named and a full meeting is looked for. From New York the new grounds may be reached via the Barclay street or Christopher street ferries to Hoboken, thence Palisade avenue cars.

Pennsylvania—*Sharon, May* 2.—Match; 18 yards; Paine's balls, Closson's trap; wind strong:

A E Carter	1 1 0 1 1—4	Jesse Reeves	1 0 0 0 0—1
H Crosthwaite	1 1 0 0 1—3		

Second match:

A E Carter	1 1 1 0 1—4	Jesse Reeves	0 0 1 1 1—3
H Crosthwaite	1 1 0 1 1—4	C E Tribby	1 1 1 1 1—5

Third match:

A E Carter	1 1 1 1 1—5	Jesse Reeves	1 0 1 1 1—4
H Crosthwaite	1 1 1 1 1—5	C E Tribby	1 1 1 1 1—5

Elmer.

Jamestown, Pa., May 0.—The Natives' Shooting Club; second regular shoot, 4th inst., at glass balls; Bogardus rules; first shoot, 18 yards rise:

J Gray	0	1	1	0	1	1	1	1	1	1—8
J N Whiteside	1	1	1	1	0	1	1	1	1	1—9
H J Horner	1	1	0	0	1	1	1	1	1	1—8

Ties on eight.

Gray.....1 1 1 1 1—5 Horner.....1 1 1 —4

Second shoot:

O D Richards	1	1	1	0	1	1	1	1	0	0—7
Dr Whiteside	1	0	1	1	1	1	1	1	1	1—9
J Gray	1	1	1	1	1	1	1	1	0	1—9
J N Whiteside	1	1	1	1	0	1	1	1	1	1—9
H J Horner	1	1	0	1	1	1	1	1	1	1—9
E Throop	1	1	1	1	1	0	0	1	1	1—8

Ties on nine—miss and out.

Dr Whiteside	1 1 1 1—4	Whiteside	1 1 1 0—3
Gray	1 1 1 0—3	Horner	1 1 1 0—3

Third shoot:

Richards	1	0	1	1	1	1	1	1	0	1— 8
Gray	1	0	1	1	1	1	1	1	1	1— 9
Whiteside	1	1	1	1	1	1	1	1	1	1—10
Horner	1	1	1	1	0	1	1	1	1	1— 9
Dr Whiteside	1	0	1	1	1	1	1	1	1	1— 9

J. N. Whiteside, first; Dr. Whiteside, second.

Sweepstake match:

Dr Whiteside	1 1 1 1 1—5	J N Whiteside	1 1 1 1 1—5
Horner	0 1 1 1 1—4	Richards	0 1 1 1 1—4
Gray	1 1 0 1 1—4		

First divided. H. J. H.

Iowa—*Pomeroy, May* 4.—Six single rises; Bogardus rough balls; 18 yards rise:

Alex Lockie	0 0 1 1 0 1—3	James Dixon	1 1 0 1 1 1—5
Ed Troon	0 0 0 0 0 1—1	W Caldwell	1 1 0 1 1—4
C M Billings	0 0 1 0 1 0—2	T Briggs	0 1 1 0 0 0—2
Geo Hughes	1 0 1 1 1 1—5	S Lowrey	0 0 1 0 1 0—3
W T Ivey	0 1 0 0 0 0—1	W Parker	0 1 1 0 0 0—2
R M Wilbur	0 1 0 0 0 0—1	F Fifield	1 0 0 1 1 0—3
J F Parker	1 1 1 0 0 1—4		

Ties on four won by Caldwell; ties on five, Dixon. Several shooters used shot which proved too light.

Ane Dacotah.

St. Joseph Club.—Tri-annual contest for the champion badge of the St. Joseph, Mo., Sportsmen's Club, May 9. Badge held by N. E. Barnes. Ten single birds, 5 traps, 28 yds. rise, 100 yds. boundary:

N E Barnes	1	1	0	1	1	1	1	1	*	1—8
F G Hopkins	1	1	1	1	1	1	1	1	0	1—9
J W Batcheller	1	1	1	1	1	1	1	1	*	—9
W T O Denn	0	0	1	0	1	0	*	1	1	1—5
Paul Franke	*	1	0	1	1	*	1	0	1	0—5
B F Buzzard	1	0	1	0	1	1	1	1	1	1—8
G Knapp	0	0	1	0	1	*	1	0	1	1—5
L Fuesting	1	1	*	1	1	1	*	1	1	1—8

Tie shot off; 28 yds., 100 yds. boundary, 4 single birds:

Hopkins.....1 1 1 1—5 Batcheller.....1 1 1 1 0—4

—Dr. Carver has been giving exhibitions in many Western cities on his way East. At Des Moines, Ia., the other day, he broke, with a Winchester, 13 balls within 24 seconds.

Sea and River Fishing.

FISH IN SEASON IN MAY.

Trout, *Salmo fontinalis.*
Salmon, *Salmo salar.*
Grayling, *Thymmallus tricolor.*
Salmon Trout, *Salmo confinis.*
Shad, *Alosa.*
Land-locked Salmon, *Salmo glaveri.*

FLIES IN SEASON IN MAY.

Black May, No. 10.—Body, black; feet, black; wings, grayish hyaline.

Cow Dung, No. 10 and 11.—Body and feet, brownish yellow; wings, yellow-gray.

Great Dun, No. 9 and 8.—Body, purple brown; feet, gray brown; wings, dark gray hyaline; setæ, dark brown annulated with gray.

Red Spinner, No. 10 and 9.—Body, bright claret, ribbed with gold tinsel; feet, brick color; wings, gray hyal; setæ, palaine brick color.

Yellow May, No 10.—Body and feet, pale yellow; wings, pale yellow, mottled with brown; setæ, yellow.

Coachman.—Body, peacock herl; feet, dark red hackle; wings, white.

King of the Water.—Same as queen of the water, with scarlet body instead of orange.

Gold Spinner.—Body, orange, ribbed with gold tinsel; feet, pale red hackle; wings, bright gray.

Captain.—Body, posterior half, peacock herl, anterior half, gray; white feet; red hackle; wings gray; setæ, scarlet green and wood duck feathers mixed.

Soldier.—Body, crimson; feet, red hackle; wings, gray.

Kingdom.—Body, white, ringed with green; feet, peacock herl, and red hackle; wings, gray, mottled with brown.

Black Palmer, Brown Palmer, Red Palmer and *Gray Palmer* are made respectively of the different colored hackles that distinguish them.

Fish in Market—Retail Prices.—Bass, 20 cents; blue fish, 12; salmon, 75; mackerel, 15; Connecticut River, shad, 50; weakfish, 12; white perch, 15; Spanish mackerel, 75; green turtle, 15; terrapin, per doz., $30; halibut, per lb., 15; haddock, 0; king fish, 15; codfish, 8; black-fish, 10 flounders, 8; porgies, 8; sea bass, 18; eels, 18; lobsters, 8; sheepsheads, 15; turbot, 20; Long Island brook trout, $1; pompano, $1; whitebait, per lb., $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.

Connecticut Salmon.—The receipts have averaged about 8 per diem, making the total number which have been marketed in New York fully 100. Undoubtedly a good many more have been caught of which the count has been lost. The average is about 12 pounds, the heaviest was something over 19 pounds. On Monday a salmon of 10 pounds was caught off Orient, L. I., probably a fish making for the Connecticut River. We trust these fish are but the patterings of the future storm. Bluefish have been caught in very large quantities on the Sound, in the neighborhood of West Hempstead. The fish weighed some 4 pounds, which is extraordinary for the season.

More Salmon.—Professor Baird kindly informs us, under date of May 13, that he has received a splendid salmon from the Susquehanna, caught at Havre de Grace.

Maine—*Machias, May* 1.—As it is quite rare to catch bass as far east as this, I wish to inform you that one was recently taken that weighed thirty pounds. It was a striped bass and a beauty. Also a sea bass that tipped the scales at twenty-five lbs. C. W. H.

New Hampshire—*Dover, May* 13.—The yacht *James Lawson* made her trial trip down our river last week, and after returning she was pronounced a perfect success. She will make her first pleasure trip this week. G. A. W.

Dover, May 13.—Trout fishing is in full blast, and some fishermen have very good luck. The chief hinderance to good sport here is caused by the farmers posting notices forbiding all persons crossing the land where the brooks flow through. Lobster fishing is very brisk along our coast. Such good catches and so early have not been known before for many years. G. A. W.

—A man while fishing recently in Winnipiscogee Lake, New Hampshire, caught a loon, which had dived and seized the hook on which a small fish was dangling at the end of a line forty feet long as bait. The bird was secured alive and will be exhibited at Boston.

Movements of the Fishing Fleet.—The number of fishing arrivals reported at this port the past week has been 36, as follows: 8 from the Banks, with 150,000 lbs. halibut and 150,000 lbs. codfish; 27 from Georges, with 400,000 lbs. codfish, and one from the South with 250 bbls. mackerel.—*Cape Ann Advertiser, May* 10.

New York—*Adirondacks.*—A correspondent writes from the Saranacs, May 6: "Again in the woods. Leaving New York in the evening, the next morning at six you reach Keeseville, and the same evening, with Harper's team, you will reach Martin's on the Lower Saranac Lakes. This is the only feasible route direct through at present. The season here is at least four weeks ahead of past season; leaves on the white birch as at June 1 usually. The lakes have been well patronized during the past winter by invalids, who now are starting out in their boats to take the trout, and they are taking vigorously. Dr. Lundy, last week at Bartlett's and in the Upper Saranac, met with fine success with the fly and trolling. Dr. and Mrs. Romeyn, accompanied by Miss Baber, of Keeseville, had unequalled sport trolling a day or two ago, taking sixty pounds of trout in six hours' work, the trout weighing from five pounds to fifteen pounds. I passed Dr. Trudeau and party to-day on the lake. Col. Hoyt, of New York, G. E. Hart, of Newark, N. J., and others are expected here soon. My advice to sportsmen intending to visit the woods is to come soon, or they will lose the usual fine spring fishing. The houses are all in capital order. The season bids to be a good one, Mr. Martin informing me that applications exceed those of the past two years. S. B.

Number Four.—Fishing is reported by Syracuse anglers to be fair this spring, though not equal to that of former years. The sport on Beaver River is good.

—"Resident" writes from Brushton, Franklin County, that in the East Branch of the St. Regis River, and in the Middle Branch, at the sixteen-mile level, is reported good. The frequent large strings brought into town corroborate the report.

Kingston, May 5.—The catch of shad has never been better in this section than just at present, despite the howling of a few fanatics over Seth Green's rebel shad. J. T. Lowe caught a striped bass in the Hudson, near Esopus, on Friday, 3d, that weighed thirty five pounds. Trout fishing in Ulster County has been rather dull this season on account of the number of persons who have been prosecuted for trespass. A party of three from this place caught eighty pounds of bass and perch on Thursday night in the Hudson, off Kingston Light. Our Harry.

Glen's Falls, May 10.—Just home from Lake George; self and friend took 65 pounds lake trout, trolling. They have just got to the surface. C.

Greenwood Lake, May 10.—Elias Zindle showed me a very nice mess of trout he had caught in a brook near Brown's Hotel, at the lower end of the lake, and he said he had caught the day before a mess of nineteen better ones. Elias is an old hand at both rod and gun, and rarely comes home empty handed. The indications of a good bass season are very promising, and there are more quail than has been known in five years. Mr. Wright, the owner of the steam-yacht Florence, is putting new machinery in her, and will run her for excursion parties this summer.

Fishing at Shelter Island.—*Shelter Island, May* 7.—A good branch of industry on the east part of Long Island is the bunker-fishing, which gives employ to thousands of men in vessels and fish factories. Of the latter there are many sprinkled along the shores as far as Napeague Bay on Montauk. The chief of these are the Wells, Cartwright, Green, Horton and Fithian factories, each of which employ many men and boats in the business. These fish have reached these waters this year much earlier than common, and they are very abundant and in fat condition, and it is hoped that this will be a most prosperous season. There are a large number of sailing vessels engaged in the business, and several steamers, that are beginning to take the place of the sailing craft. The steamers are far more successful, as they can steam out far to sea and fill up several hundred thousand fish and return the same day to their factories; but the sailing vessels, dependent on wind and tide, have not that advantage, and so their cargoes often spoil before they can be delivered at the factories. One of these steamers, the Morse, Capt. Harkins, caught lately 354,000 fish in one day, a catch never before equalled. These fish made between four and five gallons of oil to the thousand. On week before last, Capt. Downs caught 485,000, and Capt. Wilcox 345,000, and two other steamers, the Price and Lawrence, caught about 750,000 each during the week. One steamer, the Floyd, caught 182,000 at one set. So you see, the fishermen are doing first-rate, and are in high glee, looking forward to plenty of silver for support of wife and child; and fish oil and fish scraps for manure will be most abundant. I have built a "bower," some fifty feet above the bay, on a high cliff overlooking many leagues of water, where I pass much time enjoying the view and solacing myself with book and paper, and pipe and spyglass, with daily rifle and revolver practice. A few days since while there I was treated to a fine piscatorial exhibition. A large school of porpoises came in within forty rods of my retreat, in pursuit of a school of big blue fish; the latter springing a foot or two clear of the water in escaping from their relentless foes. The bluefish are here much earlier than usual, and a number are caught daily. To-day we had a present from Capt. Hawkins of three fine bluefish, averaging 4 pounds each; all very fat and nice. The advent of the fish, and the blossoming of the fruit trees, and the growth of the wheat and oats are in advance of their usual appearance some two or three weeks, and the farmers and fishers are joyful.

Truly yours, Isaac McLellan,

NEW JERSEY.—*Kinsey's Ashley House, May* 10.—Bluefish very plenty, and parties making good catches. They run from 5 to 10 pounds. Last week the blue fish drove the mess-bunkers ashore in large schools. B.

PENNSYLVANIA.—White perch are now biting in the Delaware.

Christiana, May 10.—Fites Eddy, on the Susquehanna, is one of the best bass fishing places on that river, both for striped and black bass. Mr. Clarkson Bostie keeps the hotel, and the Columbia and Port Deposit railroad passes his door. A party of Lancaster gentlemen have bought an Island in front of his hotel and are going to build a club house and have a place for Summer resort.

SOUTH CAROLINA—*Charleston, May* 13.—Harbor fishing has been excellent for the past two weeks, and several splendid catches have been reported. A party of five were out last Wednesday and brought home 573 fish—whiting, sheepshead and blackfish—in a few hours. YENOTS.

MISSOURI—*St. Louis, May* 8.—The King's Lake Fishing Club have made extensive repairs and additions to their club-house. Bass and crappie fishing reported good there this spring.

CANADA—*Watertown, Ont., April* 8.—The trout fishing (*Salmo fontinalis*) commenced on the 1st inst., but owing to recent heavy rains sport has been indifferent. The best catch I have yet heard of was made by a clergyman on Saturday last—150 in an afternoon's fishing, some of them weighing to a pound, but the average being about five to eight ounces. ST. G.

BIG WALL-EYED PIKE.—Our Montreal correspondent says that the pike perch, or wall-eyed pike, of Quebec Province, Canada, grow to a weight of fifteen pounds, and that ten or twelve pounds weight is not uncommon. The pike perch is identical with the "salmon" of the Western rivers, where they grow very large. Dr. D. C. Estes, of Lake City, Minnesota, has the jaw of one which weighed forty pounds.

MUSCALLUNGE.—In an official Minnesota pamphlet we find the name of this fish spelled *musquealonge*! This is the latest orthography. It is altogether an innovation upon the old-time spelling of muscalonge, maskenonge, masquelonge, muskallunge, *et al*, and cannot be regarded as an improvement.

—The Alexander House is a first-class summer resort for anglers, located at Grosse Isle, Michigan.

OUR NATIVE SILK-WORMS.

EDITOR FOREST AND STREAM:

In my last I gave a brief description of one of our four native silk-worms, the *Attacus prometheus*. I now give a description of two others—first, the *Attacus polyphemus*, named after one of the Cyclops, like the last one described. The larva of this moth is large and spins a large cocoon of strong silk, but, owing to its scarcity, I do not think, with our present knowledge of its habits, it can be made available for silk gut. The moth is a splendid fellow, wide spread of wings, and beautifully marked. Among the markings are perfect pictures of the human eye. I have never seen the larva of this moth, and am not certain on what it feeds, but think it feeds on the Osage orange for one thing, as I have found its cocoons on the Osage orange hedges in this neighborhood. But it is a careless insect about spinning its cocoons, frequently spinning them on the ground, among little twigs.

With this brief account we will dismiss him, and take up the *Attacus luna*, a beautiful moth, of a pale green color, with a few markings on its wings, one of which in shape resembles the moon in its first quarter. The larva and moth are both large. The larva feeds on the leaves of the butternut, and also on the leaves of the hickory tree, and always spins its cocoons on the leaves of the trees on which it feeds, folding over the edges of the leaves, but does not, like the *A. prometheus*, fasten the leaf to the twig on which the leaf grows; consequently the cocoons fall to the ground with the leaf, and a great majority of them perish during the winter, which accounts for their scarcity. The cocoon is large and composed of beautiful, strong white silk, which can be reeled from the cocoon in the same manner as the Italian silk. Its scarcity renders it unavailable for silk gut. The *Attacus cynthia*, mentioned by Prof. J. H. Richardson, of Toronto, which feeds on the *Ailanthus*, is a foreign silk-worm, from Japan. The larva and moth are very large, as is the cocoon. This silk-worm could be made available for silk gut, which could be drawn out from five to six feet long, and of sufficient strength for salmon fishing.

This finishes up all that I have to say about our native silk-worms, with the hope that some one will experiment with them as I have. The two first ones described are the ones to be used, as both can easily be procured in great numbers, the *A. cecropia* preferable to all others.

Very truly yours, T. GARLICK.
Bedford, O., May 7, 1878.

AMATEUR WHALING.—An oyster knife is a good enough tool in its way, but for killing a whale give us something else. That was what George Pope, a Raritan Bay fisherman, thought last week. Wednesday, after he had been plunging his oyster knife without effect into a big whale on the Port Comfort shoals. So he went back and sought out a companion, and, armed with an ax, the two returned to the charge. They chopped away at his head until he began to flounder and roll, and finally getting off the shoal, he started for Sandy Hook. The fishermen followed and tried to catch the fish by throwing their anchor into its blow-hole. Finally, with the aid of a rapidly recruited fleet of whalers, the whale was driven ashore and killed with a farmer's scythe. When stranded the captors found their trophy to be a cow whale thirty-five feet long, nine feet in diameter, and yielding about thirty-two barrels of sperm oil.

BLACK BASS TACKLE.

CYNTHIANA, Ky., May 4, 1878.

EDITOR FOREST AND STREAM:

As the season for black bass fishing is so near at hand—already begun, in fact, in some localities—I am induced to offer the following observations on the proper tackle to be employed in order to lend a helping hand to any one seeking such information or instruction.

LINES.

The perfect line for black bass bait fishing is yet in the future. The best manufactured at present is the hard braided silk line, not waterproof; it is mottled in color, and keeps its tints quite well. The smallest size should be selected, and it should be carefully dried after use or it will soon become rotten; and, in fact, with the best care, is reliable only for one season. Loosely braided lines should be avoided, as they absorb water too freely, and thus develop an annoying habit of clinging to the rod. The smallest size braided linen is a good line, but hardly small enough for long casts; it is stronger than the silk line, and is preferrable when the bass run large, averaging three pounds. Twisted or cable laid, linen or cotton lines, should never be used for reel lines in black bass fishing where much casting is practiced; their tendency to kink and snarl can never be reformed, and if by the most approved means this "kinking quality" seems to have been remedied, a few subsequent casts will demonstrate that the kinks are still there, and no amount of manipulation will remove them effectually. The twisted grass line is open to the same objection, though in less degree, and were it not for this it would take precedence of all other lines. The smallest size is the best line made for casting a natural bait; it absorbs less water, clings less to the rod, and leaves the reel more freely than any other line, and, notwithstanding its kinking, is the favorite line in Kentucky, Tennessee and other Southern States. A small-sized, tinted, closely braided grass line, were such a line manufactured, would be the line *par excellence* for black bass, and would rank in bait fishing as the tapered waterproof silk line does in fly fishing.

About fifty yards is the right length for reel lines, which should be always well dried after fishing and before putting away. Beware of waterproof lines for bait fishing, they will not answer. Use small-sized lines, they are strong enough with a pliant rod. A line that will hold up two pounds, dead weight, will land the largest black bass that swims, when used with a proper rod. Indeed, I have often used a line which, toward the end of the season, when tested, would scarcely hold a pound dead weight, but which would safely land the largest bass or even pickerel of fifteen pounds or more.

HOOKS AND SNELLS.

The Sproat bend, the round-bend Carlisle, and the round-bend Aberdeen, medium sizes, are the best hooks for black bass; hooks with the Kirby or side-bend should never be used when either of the others mentioned can be procured. The Sproat hook, having the most even temper, the most scientific and practical bend, and the most approved form of barb, is justly considered the best in use. Hooks should be small rather than large, except when the Oswego or large mouth variety of black bass—*micropterus pallidus* (Raf.) Gill & Jordan—and pickerel predominate, in which case larger hooks can be used; they should be tied on strong single gut snells always, except in waters where pickerel or pike-perch are very numerous, when gimp snells may be substituted. Hooks should be kept sharp by means of a small file; the Sproat hook, having a short barb, keeps its point better than any other hook, and should be used in preference.

FLOATS, SWIVELS AND SINKERS.

The float should never be used when it can be dispensed with, as it is detrimental to good casting, and is always in the way. It becomes necessary, however, in rapid, shallow streams, where the bottom is covered with snags, roots and other obstacles, but when used it should be as small as possible, consistent with the weight of the sinker required, and should be employed for the sole purpose of keeping the hook away from the bottom, and not as an object of intense and constant observation to indicate a bite. A small swivel should always be used—the line tied to one end and the snell looped in the other; brass swivels are best, as they do not rust. In lakes, ponds and quiet streams, no additional sinker will be required, unless very large and strong minnows are used, when the smallest-sized ringed sinker should be added to keep the bait below the surface. In swift streams a sinker will be necessary, large or small, according to the strength of the current. Ringed sinkers are preferable, as they can be attached, taken off, or changed by looping, and without removing the swivel or hook.

LANDING NETS.

The landing net should be of good depth, with a brass hoop or ring from ten to twelve inches in diameter. It should have a long, light handle; bamboo is best. Those made with a folding ring, and jointed handle are very portable and convenient. For fly fishing a short-handled trout net is to be preferred.

FOR FLY FISHING.

The enameled waterproof, braided and tapered silk line has superseded all others for fly fishing for black bass, speckled trout, etc. It is of a good color, strong and serviceable; is largest in the centre, and tapers toward each end, and is made in lengths of from twenty-five to fifty yards. This line must not be confounded with the oiled silk line, which is a sticky abomination until the oil wears off. The old silk and hair line answers pretty well. Leaders should be nine feet long, of strong, single silk worm gut, tapered, and if not tinted should be stained with strong green tea. Bass flies should always be tied on sproat hooks. Most of the flies manufactured are quite large and gaudy; they answer very well, but I have been more successful with large trout flies of a more sombre hue, as the large husby hackles, etc. Whitisa or grayish flies, as the "millers," are best for evening fishing. It is well, however, to stock the fly-book with a good variety, as bass are as dainty and fastidious in regard to flies as brook trout, if not more so. The old rule of bright colors for cloudy days or turbid water, and sober colors for bright days and clear water, is a safe one to follow. A rather heavy trout fly rod, weighing from eight to ten ounces, is the proper rod for fly fishing for black bass; its length should be from ten and a half to eleven and a half feet. Split bamboo is best, but ash and lancewood is good enough, and will last longer, beside being one-third less in price. A click reel should, of course, be used, and the Orvis reel answers as well as any. There are quite a variety of click reels manufactured, made of German silver, brass, vulcanized rubber or celluloid—"You pays your money and you takes your choice."

J. A. HENSHALL, M. D.

—Mr. James S. Wibirt, of the Astor House coach firm of Wibirt & Mumford, has just opened the newly furnished and refitted Mansion House, Mauch Chunk, Pa., which is celebrated for its romantic and picturesque situation.

National Pastimes.

WALKING CHAMPIONSHIPS.—The series of walks at the Rink, this city, last week, were contested by a large number of amateur and professional pedestrians, and the work accomplished was very creditable. The entries for the professional 36 hours' walk were: John Ennis, of Chicago, Ill; Charles A. Harriman, Haverhill, Mass.; George Guyon, Chicago, Ill; Frank Clark, Philadelphia; W. S. O'Brien, New York; George Coyle, New York; E. Wigzell, Ravenswood, L. I; John Haydock, New York; James L. Downey, New York; J. C. Moore, New York; Peter Rice, Vermont; Ben Curran, New York; Peter Van Ness, New York, and R. Campbell, New York. The course was 8 laps to the mile for professionals, and 9 laps for amateurs. The start was made at 11 o'clock Friday morning, and the first 25 miles were finished: Wigzell, 4h. 26m. 25s.; Van Ness, 4h. 32m. 41s.; Ennis, 4h. 33m. 28s.; Harriman, 4h. 35m. 43s.; Guyon, 4h. 36m. 30s.; Rice, 4h. 39m. 21s.; Downey, 4h. 45m. 36s.; O'Brien, 5h. 0m. 05s.; Moore, 5h. 04m. 43s.; Coyle, 5h. 08m. 38s.; Curran, 5h. 09m. 35s.; Campbell, 5h. 45m. 17s.; Clark, 5h. 45m. 45s. Haydock gave up on the fourth lap of his eighteenth mile. Fifty miles were credited to Harriman in 9h. 28m. 35s.; Ennis, 9h. 33m.; Guyon, 9h. 37m. 20.; Rice, 9h. 42m. 30s.; Wigzell, 9h. 55m. 20s; Van Ness, 10h. 26m. 30s.; O'Brien, 10h. 34m. 15s.; Coyle, 11h. 16m.; Curran, 11h. 50m. 32s. Clark stopped at the end of 28 miles, 6 laps; Downey, 55 miles; Campbell, 59 miles; Van Ness, 63 miles; Ennis, 61 miles, 5 laps; Wigzell, 67 miles; Rice, 68 miles; Coyle, 92 miles; Curran 106 miles, 2 laps. There were then left Harriman, Guyon, and O'Brien, Harriman showing himself the best of the lot. He took the lead at the 50th mile, and maintained it thereafter. The 100 miles were made in 19h. 36m. 52s.; 125 miles in 25h, 18m. 7s.; total distance, 136½ miles, in 34 hours and 29 minutes, and in this time he only rested 17 minutes, this being at the end of his one hundreth mile. What little food he took was eaten on the track. Only a perfectly healthy organism could stand such a severe strain without fatal injury. He won the first prize, $200, and the championship belt. Guyon made 151 miles and 5 laps in 23h. 48m. and took $100, second money, while O'Brien, with 132 miles in 34h. 7m. 53s., received the third prize of $50. At 11 P. M. the following amateurs entered the lists: T. H. Armstrong, H. A. C.; E. C. Holske, H. A. C.; J. W. Goodwin, A. A. C.; J. B. Gillie, S. A. A. C.; J. Stern, A. A. C.; R. H. Pelton, G. A. C.; J. V. Woolcott, M. A. C.; H. Weise, Western Union Telegraph Company; G. Cook, Brooklyn; J. Dugan, New York; J. Byrnes, Babylon, L. I.; J. P. Mackey, A. A. C.; H. Foster, New York; J. Schmidt, Brooklyn; F. L. Edwards, S. A. A. C.; Charles Conner, S. A. A. C.; W. Wilson, New York; J. Holzman, New York; M. J. Ennis, H. A. C.; W. A. Clark, New York. Woolcott led for 13 miles, making them in 2h. 10m. 26s. Holske then led to the end of the 25th mile, completing this in 4h. 16m. 49s., after which Armstrong went ahead for a mile, finishing 26 miles in 5h. 30s. Then Brynes went to the front and kept his place to the finish. His time was: 20 miles, 3h. 51m. 55s.; 50 miles, 10h. 47m.; 60 miles, 11h. 48m. 53s.; 70 miles, 15h. 57m. 40s.; 90 miles, 19h. 48m.; 100 miles, 21h. 42s.; 105 miles, 22h. 11m. 10s.; total distance, 108 5-9 miles, 23h. 4m. He received the well earned first prize, and is now to be known as the amateur champion of America. M. J. Ennis, H. A. C., received the second prize, a gold medal, having made at 10h. 10m. 101 miles in 23h. 08m. 49s., and was still walking, with the prospect of still adding a mile or two to his score. J. Schmidt received the third prize, a silver medal, having completed nearly one hundred miles. J. V. Woolcott, M. A. C., retired after walking thirteen miles; E. C. Holske, H. A. C., when his twenty-fifth had been scored; J. P. Mackay, A. A. C.; F. L. Edwards, S. A. A. C.; W. Wilson, New York; W. A. Clark, New York; G. Cook, Brooklyn, and J. Stern, A. A. C., at the end of fifty; T. H. Armstrong, Jr., H. A. C., and J. Dugan, New York, at fifty-five; J. Holzman, New York, at fifty-nine; H. Wiese, Western Union Telegraph Company, at sixty-six; J. W. Goodwin, A. A. C., at sixty-eight, and H. Foster, New York, at seventy-five. Gillie rested only twice—twenty minutes at the end of his fiftieth mile and half an hour at the end of seventy-fifth mile.

COACHING CLUB.—The spring parade of the Coaching Club takes place May 25th. The drags meet as usual on the west side of Madison Avenue facing Twenty-third street, at 4:15 P. M.

WESTCHESTER POLO CLUB.—The formal opening of the Westchester Polo Club grounds at Jerome Park, next Saturday, offers an interesting programme. Among the features of the day's sport will be an introductory game of polo by the members, among the players being Messrs. Herrman Oelrichs, Harry Oelrichs, F. Gray Griswold, August Belmont, Jr., S. H. Robbins, George R. Fearing, Pierre Lorillard, Jr., and others. A game of foot-ball between the rival teams of Yale and Princeton will, no doubt, be a hard fought contest, and excellent playing may be looked for. A match between the New York and Ravenswood Lacrosse clubs will be contested for an elegant cup, presented by the Polo Club. The concluding event will be a polo game between New York and Newport players.

N. Y. A. C. GAMES.—In the games of May 30 the club will give a special prize to the competitor making the fastest time in the handicap one-mile walking race. This is in addition to the other prizes already announced.

CRICKET NOTES.

—The Staten Island Club has refused to join the "Cricketers Association of the United States," recently organized at Philadelphia. The Manhattan being the only club in this vicinity which belongs to the association, some difficulty in arranging matches may be experienced.

—The St. Georges will probably visit Syracuse this summer.

—The St. Georges opened their season yesterday with a club match on their grounds at Hoboken.

—The Belmont Club have ratified the action of the Philadelphia Convention, as also the Young America, Merion and Chestnut Hill clubs.

HENDERSON THE CIRCUMAMBULATOR.—James D. Henderson, the Canadian walker, who started May 1 on his pedestrian trip of 25,000 miles, a distance equal to the circumference of the world, is twenty-eight years of age, stands six feet in his stockings, and is in excellent physical condition. The development of his loins, thighs and forelegs is described as magnificent and upon a scale of physical grandeur. He is a Scotchman by birth, but has lived in Canada since he was six years of age. When walking at the rate of four and one-half miles an hour, his stride is forty-six inches; and he covers forty miles in eight hours without showing any fatigue. To accomplish his task in the prescribed time of two years, he must walk forty miles per day for 813 working days.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

J. R., Sag Harbor.—Take your broken reel to some ingenious dentist.

J. G. S., Oswego.—See advertisement of wild pigeons in our issue of to-day.

R. S. M., Burlington, Kans.—You will find it very difficult to get Gallagher carbine shells.

MAJOR.—Your dog has lice, probably. Smear him with lard for 24 hours, or use kerosene oil.

J. W. C., Willimantic, Conn.—For fancy rabbits address Chas. Reiche & Bro., Chatham st., New York.

MONROE, S. C.—Aim slightly in advance of swiftly flying birds. The powder measure is really arbitrary.

DUCK HUNTER.—To rid your dog of wood-ticks use a little kerosene and pick out ticks half an hour afterwards.

SEA GULL.—See answer to W. B. S. Forty miles a day is a fair average, but it depends largely upon circumstances.

T. M., Washington, N. J.—We have already given our advice not to buy those $6 rifles. They are old Government arms.

K., New Brunswick.—The habit of rubbing themselves in filth is a peculiar and unconquerable habit on the part of all dogs.

DR. OLNEY.—We have failed to learn anything of this lecturer. Lecture and literary bureaus in this city know nothing of him.

W. H. C., Beloit.—For duck, goose and swan shooting go to the lakes in Northwestern Iowa, described in our Sea and River column next week.

S. B. W., Sandy Spring.—You can get express bullets at Squires, No. 1 Courtland st., N. Y. We have never seen the gun you speak of.

C. R. T., Painsville.—We think the recoil pad would remedy the difficulty. You would appreciate no difference as to lengthening of stock.

E. C. B.—Want a small watch dog, slow to make friends with strangers. Ans. A rough-coated terrier, Scotch or Irish, is the dog you want.

NAVY, Key West, Fla.—The glass balls ordinarily break when hit by 1¼ oz. No. 8 shot, 3¼ drs. powder. Of course there are exceptions to the rule.

R. M. W., Pomeroy, Ia.—Bogardus trap springs are about two feet long. Send to Hart & Sloan, Newark, N. J. The pitch balls are no longer made.

WILL LAKE.—The best bait for bass is minnow or dobson. Use a hook a half inch between the shank and point. We know nothing of the Agency mentioned.

WIDGEON, Cairo, Ill.—In making your challenges for glass ball shooting name all the conditions in the challenge. There will then be nothing to quibble over.

Cocker, Hayville, Canada.—Your suggestion of having some one in Canada to represent American goods is excellent and we will at once see if something cannot be done.

C. L. P., Wellsville, N. Y.—A recoil pad is a pad of rubber, which fits into the butt of the gun, and by its elasticity breaks the shock of the recoil. You can use it in the field.

POINTERS' EARS.—The absolute length of ear depends much on the size of the dog. A good pointer of 60 lbs. weight may have an ear nearly 6 in. long if otherwise well formed.

C. C. T., Malden, Mass.—Where can I procure a list of Frank Forrester's writings, with prices? Ans. Orange Judd & Co., 245 Broadway, New York. The prices average about $2.50

J. S. C., Jr., Savannah.—The planking of the "Skip-Jack" boat is run fore-and-aft, not athwart ships. The garboards having most rise or twist are consequently the most difficult to fit.

B., Columbus, Wis.—We do not think that rifle equal to the Winchester, model of 1876. Experiments published in our issues of Nov. 1 and 8, 1877, perfectly demonstrated the safety of the latter.

RACQUET CLUB, City.—For brook trout fishing go to the streams about Milford, and the neighboring towns. The route is via Port Jervis, on the Erie Railroad. See also editorial columns this week.

A. P. N., New York.—What is the scientific name of a shore bird called a "creaker" on Long Island and in N. J.? Ans. We do not know the bird by that name, perhaps *Totanus melanoleucus*.

KEEL, New York.—A yacht 26ft. load line will cost about $600; price depends on finish. You can use overhanging stern to advantage in design published in issue for April 11. Send address to this office.

H. HUNTER.—Improve your arithmetic. You are not the first one who has blundered over that cat and rat puzzle. Any schoolboy ought to work it out without difficulty. Will stake our reputation on that answer.

N. W. A.—To measure the "drop of stock" of a gun, lay a straight-edge on the rib of the barrels, and measure the distance between the extreme butt of the gun and the straight-edge. The usual drop is 2⅞ in.; 3½ in. is rather crooked.

DENNIS, Greenville, Ala.—The Cedron nut or seed (*Simaba cedron*) grows in Central America and is said to be a true antidote to the bite of snakes. See Pharm. Jour. and Transactions X, 344, and XII, 63; U. S. Dispens. p 1659; London Jour. Bot. V. 566.

S. L., Belleville, Ont.—You can find good trout fishing in the Eastern Townships at Michilicaton Island, reached via the Collingwood steamers, in the Nepigon River; all through the Muskaka District, especially in the south branch of the river. Joseph Scott, Gravenhurst, will furnish all desirable information.

W. R. H., Albion.—You will find the "lines" of a 16ft. sail and row-boat in our issue for Nov. 1, 1877. If you want to sail chiefly give the plans about 8 inches more beam and strike in curves for sections similar to those shown in print. To get you up a special set of curves would take more time than we can spare.

J. D. B.—My pointer mashes birds in retrieving. Ans. There are special instructions for breaking a dog of this habit in works on training the dog. A very good plan is to make him retrieve birds that have needles run through them at various points. If you look at our advertising columns you will find answer to other question.

W. L. W., Jr., Council Bluffs.—What make and kind of rifle, and size of cartridge was used in your gallery in shooting for the Blydenburgh Badge? If different kinds were used, what do you generally use? Ans. Ballard rifle, .22 cal.; weight, 9¾ lbs. Cartridge—Union Metallic Co., short .22. Schoverling & Daly, New York, will sell you the rifle.

CARRIA, Dedham, Mass.—Being in the habit of swimming daily through the summer, I am much troubled in diving with bubbles in my ears. Can you inform me of any way to prevent them or make them burst? Ans. The old plan to break them is to jump heavily on the foot on that side where the bubble is. You can prevent them by stopping the ears.

EKE, Troy, N. Y.—Will you please inform me through your paper how far from St. Paul, Minn., I would have to go to get good duck shooting, and also the best month to be there in the fall? Ans. Excellent duck shooting in Rice Lake in November, about twenty miles from St. Paul, and in many other localities about as near. The latter part of October is good for mallard and teal.

T. J. L., Inspruck, Tyrol.—How do you shoot for the running deer at your rifle range at Creedmoor? Ans. Distance is 100 yards. Deer is run by a signal. Any rifle used, but sights to be over the centre of the barrel. Highest score wins. Fines are charged on those making entries if the deer is hit on the haunch, or when out of bounds. The mechanism is quite simple. The deer of sheet iron is run on a railroad.

W. B., Sangatuck.—I have the habit of flinching or shutting both eyes when firing. Do you think the use of a hammerless B. L. shot-gun, advertised by W. W. Greener, would remedy the fault? Ans. We really believe a hammerless gun would suit you. We have been informed of the case of a gentleman, who, having been hurt in one of his eyes by an exploding cap, could not shoot with the ordinary gun, but who uses, without flinching, the hammerless.

LIEUT. M. A. S., Louisville.—I have a —— gun, 30 in. barrel, breech-loader, 8½ lbs., 10 gauge, modified choke. At a trial, shooting under the supervision of two of my friends, shooting with 4½ drs. powder, 1¼ oz. No. 10 shot, 40 yds., 30 in. circle, gives a pattern of 484, good penetration. Is the above a good average? Ans. Only a fair pattern, you ought to have fully 600. We would advise diminishing powder. Try 3½ drs. See the question put to us by G. W. H.

A. H.—How can I take the lead out of the inside of the barrels of fine breech-loader without injuring the barrels? Have a gun that has been worn bright in places along the barrels by much handling, and the figure, shown by the barrels in their brown state, has disappeared, so that the worn places represent nothing but plain, bright steel. Ans. 1. Nothing better than a fine wire brush with plenty of oil. 2. Re-brown the barrels, and the figure will appear again.

J. B. H., Selma, Ala.—Give me your opinion of the safety, advantages and disadvantages of the hammerless breech-loader, and also, whether in your opinion, it is safe to use chilled shot in a full choked breech-loader? Ans. Could not discuss it under a column. We have a great belief in the hammerless—of course, people must get used to it. Expect to see a long discussion on it before long in the F. and S. There is no possible danger in using chilled shot.

J. H. S., Philadelphia.—Go to Julius & Anderson, shipchandlers, Delaware ave. and Lombard st., who will gladly give you all the information required concerning provisioning for your intended cruise. Being always near shore you should have no difficulty getting plenty of fresh grub from day to day. Your steward or cook will be able to look to that. Take along some stewed prunes and canned fruit to aid digestion. Ought not to cost you over $1 a day *per capita*.

H. M. H., Augusta, Me.—My St. Bernard is four months old. Lately his eyes have been sick looking; the flanks seem drawn in; breathing is labored with taking least exercise; bowels are in good condition; appetite changeable; is continually biting his sides. Twice worms, six inches long, with white, tough, transparent bodies, have passed him in bunches knotted together. Is he old enough to take areca nut? If castor oil is given, too, how much should he take? Ans Give a few doses of areca nut, and follow with a tablespoonful of castor oil.

C. G. J., Howell, Mich.—A, B and C tie on highest scores in glass ball match. Should they shoot off for first prize only, or first, second and third prizes? D scores one less in the match; is he entitled to shoot in the shoot-off for second prize after first has been won? Ans. If classified, shoot off; if not classified, the highest scores take the highest prizes, and can average and divide equally, or shoot off, at option. If classified, D would take second prize; if not, he is not entitled to shoot off.

DOM PEDRO, Pottsville, Pa.—Mr. Morgan, of Minersville, a neighboring town, shot in that place a few days since a singular looking bird which stands a little over two feet high and its neck measures eighteen inches and his bill (which is almost as sharp as a needle) is six inches in length. The wounded bird is yet alive and is of a very aggressive nature, and all who have seen the bird are unable with what species to classify it. Ans. The bird belongs to the crane family *Alectoridæ* and is perhaps a sandhill crane. If you will tell us the color we can form a better judgment.

C. W. B., Cambridge.—Is there any guide to the Canada woods and hunting country, or any book which will give me information upon the subject, especially the Ottawa River region? Ans. Osgood & Co., Boston, publish a complete handbook of the Maritime Provinces. Lowell's "Gazetteer of the British Provinces" contains a valuable table of routes. Adams, Stevenson & Co., Toronto. The only complete information printed respecting the Ottawa District is found in the earlier volumes of FOREST AND STREAM. Hallock's "Gazetteer" gives fullest routes to all parts of Canada.

W. H. A., Goshen, Ind.—To make birdlime: Boil linseed oil of the best quality until it becomes thick and glutinous. Should be boiled in an earthen pot in the open air for two or three hours. If boiled in an iron vessel it takes fire, and is useless for this purpose. The pot must also have a tight fitting cover. Then set away the oil thus prepared in a tin box or cup, with a tight fitting cover. To use it, select dry sticks eight inches long, and as thick as a straw. Drive a stake into the ground, and fasten these small sticks into it by inserting them into cuts in the side. Then place a "call bird" to attract the other birds.

C. W. H., Machias, Maine.—Please inform me the difference between a sea bass and striped bass? Ans. All the difference imaginable. One belongs to the family Serranidæ and the other to the family Labracidæ. The sea bass is blue-black, with very long pectoral fins, chunky in shape, and huge mouth. An in shore fish feeding on reefs and mussel beds, and caught on the bottom. The striped bass is a chunky fish, with belly dull white, and is marked with seven or eight longitudinal stripes on the sides which are a coppery brown in salt water and dull black in fresh. It is taken chiefly by trolling on the surface. Its shape is more graceful than the other's.

W. B. S., New Haven, Conn.; C. F. W., Jr., and W. H. C.—You can get any kind of a canoe built by James Emerson, 485 First st., Brooklyn E. D., L. I. His Nautilus style will cost you from $85 up, according to finish; sails, $15 extra; the Shadow style from $115 up. These prices include best of workmanship, copper fastening throughout, brass fittings, watertight compartments, paddle and hatches, etc. The Herald canoe will cost about $50, but requires extra outlay to fit it up like regular Shadow model. Canvas canoes are lighter and cheaper, but have not the same finish at lower figures. For up-river hunting the Herald is excellent, but for yachting we prefer Shadow model.

R. H. D., Canandaigua, N. Y.—What is the comparative speed of canoe and paddle with boat and sculls? In cruising can you work against a strong head wind (in a day's work) as easy with former as with latter? Is not the boat the safest and dryest in rough water? Ans. An expert can make better headway in open water with canoe and paddle, but he must trim his canoe just right, and operate by a system of tacks. If the paddler sit in the stern, the bow will be thrown high out of the water, and taking the wind on the quarter act as a sail, while the paddler working on the lee side keeps her head up and thus makes headway. A canoe is the safest craft imaginable for one who understands it, and the crankiest for a tyro. It will stand roughest water than a skiff.

G. W. H., Goshen.—1. Do you advise using the charges usually given for 10 and 12 bore guns for all guns of that calibre? 2. Does an overcharge of powder cause shot to scatter more than would a proper charge? I have an English, also a Lefever, both No. 12, also a new Lefever No. 10; neither will make better penetration or one-half as good target, using the usual amount of powder—4 to 5 drs. powder for 10, 3 to 4 for 12—as by using from ¾ to ⅚ the amount. I use American Powder Co's FG, "Dead shot," 1 to 1⅛ oz. Should I use more powder and more shot? Ans. 1. Yes. 2. Makes shot scatter, and your conclusions are correct. To overcharge is a common error.

G. E. M., New York.—How can I get from New York to Lake Sandford, Hamilton Co., N. Y.? Is there any good fishing in the vicinity, river fishing preferred? Is there any hotel there, and what are the charges per day or week? Would you advise going to any other part of Hamilton Co. for fly fishing in rivers during first half of July? If so, where? Ans. Adirondack R. R. from Saratoga to North Creek; stage to Lower Iron Works 29 miles, and thence wagon or boat up the East river to the Lake, about 4 miles farther. The region is a noted trout resort, and we cannot recommend a better. We believe there is no hotel at Lake Sandford. Why don't you buy Wallace's "Adirondack Guide" with complete map? For sale at this office, price $1.60.

P. A. M., St. Joe Lead Mines, Francois Co., Mo.—About two months ago I brought a fine pointer to the "Mines" and several of my friends informed me that I could not keep him here, for all dogs (unless raised here) would have mine sickness, or spasms and die from the effects. Yesterday he had a spasm. His appetite is good. Does not eat much meat; sleeps in the store. When taken with a spasm he runs until exhausted. Bowels not regular; inclined to be bound. Falling off in weight very fast. Ans. Dogs and cats are very susceptible of lead poisoning. The best treatment is probably small doses of nux. vomica (1-16th to 1-8th gr.) three times a day and about 5 to 10 grs. of the iodide of potassium dissolved in a little water and given after each meal. The bowels should be opened by castor oil and laudanum every few days.

PREX, Louisville, Ky.—1. In a match at birds, class shooting, A and B tied for first money. C, D, E and F each killed four birds. The match was at five birds. G and H killed only two birds each. I who was last to shoot had killed three out of four rather than kill his last bird; he palpably shot to miss and took third money. Did he do right? 2. If he had killed the fourth bird and gone in with the second class would G and H be entitled to the third money? 3. Nine shoot. Three kill two birds each, four kill four birds each and two miss all their birds. The judge decides the ones missing all their birds are not entitled to any of the money and divides the third prize with the other two pro rata. Was he right? Ans. 1. I won his money at the expense of his score. In fame vs. cash fame goes to the wall. We have seen men miss all their birds for the sake of third or fourth money. 2. Yes. 3. The men who missed all their birds should claim third money; they made third score, though it was poor.

W. A. M'C., Milwaukee.—1. Can you supply me with the pictures of the British team that were published with the number of October 4, 1877? If so, at what price? 2. I have half a dozen shells, taken from the stomach of a flounder, one of them, a periwinkle, containing a young hermit crab, and another about an inch and one-eighth in length, corresponding to the picture of a wentletrap. Is the latter ever found outside of Chinese waters? 3. What is meant by shot chambering in the barrel? 4. Can buckshot be used in a 11 gauge, 7½ lb., muzzle-loading gun? If not, what is the largest shot that can? 5. Which has the longer range, the .32 or a long .22 cartridge? 6. Would it be safe to have a —— pocket rifle, 10 in. barrel, taking a short .32 cartridge, chambered to receive a long .32? Ans. 1. Yes, we could; cost of number, 10 cents. 2. We cannot make out what you call a *Wentletrap*. Can you not get the naturalist's name for it? We should like to know what it is ourselves. Repeat the question—or, better, send it on to us, when we will examine and return to you. 3. By chambering shot is meant the number of single pellets which will exactly fill a certain space. 4. We are not advocates for the use of buckshot in 14 guns. Try BB. 5. The .32. 6. Yes.

SMALL BOAT, Truro, Nova Scotia.—1. Which target do you consider the best for all uses of a country club where both are obtainable, iron or canvas? We have used both, but this year there is a difference of opinion; some say that canvas requires too much care, while others claim the iron target unsafe on account of "spatters." 2. Would you not publish some suggestions for the building of a safe butt and the care of targets for long-range clubs, at an early date? Ans. 1. Open still to a great deal of discussion. Our leading authority, to whom we have put this question, replies: "Canvas targets are inferior to iron ones; the inconvenience arising from the splash is more than counterbalanced by the superior accuracy of the marking. As to the expense, the iron target costs more in the beginning. They probably cost no more to operate. (See discussion on this matter in Report of Range Committee, Annual Report of N. R. A., 1876.) The form of butt is covered by pages 12 and 13, Wingate's 'Manual,' giving all the information that is likely to be needed." Another very well known rifleman, who is now about constructing a range in an adjacent State, is in favor of paper targets—that is, pasted on canvas. "They are," he says, "easily procured, in proportion to cost are lasting, and there is no splash." We send you the last facts as issued by Col. Wingate. 2. We shall be very glad to do so, and thank you for your suggestion.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MAY 16, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, May 17.—New York Bench Show. Base ball: Buffalo vs. New Bedford, at New Bedford; Tecumseh va Live Oak, at Lynn; Allegheny vs Star, at Syracuse. Trotting: Coldwater, Mich.; Meadville, Pa. Running meetings at Lexington, Ky., and Washington, D. C.

Saturday, May 18.—Quincy (Mass.) Yacht Club Opening Regatta. Inter-Collegiate Annual Games at Mott Haven. Cricket: Young America vs Germantown, at Turnpike Bridge; Belmont vs Philadelphia, at West Philadelphia; Dorian va Merion, at Haverford. Base ball: Star vs Utica, at Utica; Buffalo vs Springfield, at Springfield; Rochester vs Hornell, at Hornellsville; Allegheny vs Cricket, at Binghamton; Tecumseh vs New Bedford, at New Bedford; Harvard vs Yale, at New Haven; Amherst va Trinity, at Hartford. Trotting at Meadville, Pa.

Monday, May 20.—New York State Sportsmen's Association at Buffalo. Base ball: Tecumseh vs New Bedford, at New Bedford; Allegheny vs Cricket, at Binghamton; Buffalo va Utica, at Utica; Racine vs Chicago University, at Chicago. Trotting at Beacon Park, Boston.

Tuesday, May 21.—Worcester Dog Show. Base ball: Tecumseh vs Springfield, at Springfield; Buffalo vs Rochester, at Rochester; Allegheny vs Hornell, at Hornellsville. Trotting: Belmont Park, Philadelphia; Beacon Park, Boston; Butler, Pa. Running meetings at Baltimore, Md., and at Louisville, Ky. New York State Sportsmen's Association at Buffalo.

Wednesday, May 22.—Worcester Dog Show. Base ball: Allegheny vs. Hornell, at Hornellsville; Star vs Cricket, at Binghamton; Tecumseh vs Utica, at Utica; Rochester vs Buffalo, at Buffalo; Harvard Fresh. vs Brown Fresh., at Providence. Trotting at Belmont Park, Philadelphia; Beacon Park, Boston; Butler, Pa.; Hillsdale, Mich. Running meetings at Baltimore, Md.; Louisville, Ky. New York State Sportsmen's Association at Buffalo.

Thursday, May 23.—Worcester Dog Show. Base ball: Utica vs Springfield, at Springfield; Allegheny vs Rochester, at Rochester. Trotting as above. Running meeting as above. Creedmoor: Leech Cup Match, at 10 A. M.; Frazier Match at 1 P. M.; Soldiers' Match at 1 P. M.; Skirmishers' Badge Match at 4 P. M.

COMPLIMENTARY.—The increased demands of this journal having necessitated the removal of its business manager from his old home in Wallingford, Conn., to Brooklyn, L. I., that gentlemen is in receipt of an elegant silver *tabatiere* from the well-known firm of Simpson, Hall, Miller & Co., and presented as a token of esteem and good wishes on the part of former townsmen. May it never be empty.

SUMMER JAUNTS.

WITH the lapse of spring, preparations come for summer pastimes, and already many of the popular hotels are ready for guests; the rest will be open by the first of June. Steamboats have been put on the interior lakes and seaside routes; railroads are presenting their respective attractions in seductive illustrated pamphlets; and the general activity among the trunk makers betokens the approach and flight from town of the summer tourist. Last week the festivities of Coney Island were resumed for the summer, Rockaway Beach is completing extensive arrangements, and soon all the popular resorts in the immediate vicinity of New York will be in full feather and thronging with visitors.

Greenwood Lake is the most attractive resort within forty miles of this city. Frank Forrester wrote dispassionately in its praise, and the sportsmen of the present day are represented by two clubs, which will have houses on the border of the lake. There are half a dozen or more hotels, of varying size and pretention, three of which now advertise in our paper, and the rest will follow soon. (Parenthetically, the hotels of Greenwood Lake show their sagacity in advertising in FOREST AND STREAM, and if hotels elsewhere would follow their example they would make more money.) Many improvements and renovations have been made since last season, and we have no doubt that Greenwood Lake, having been adopted as a regatta course, will be unusually popular and well patronized in the months to follow. It is reached by the Montclair Railroad.

The Erie Railroad claims precedence in the issue of its annual illustrated guide-book, entitled, "Where to Spend the Summer," from which the tourist can readily make his election.

The Pennsylvania Railroad gives access to the finest mountain scenery and the best angling resorts. So also the Bound Brook Road presents a great number of choice localities for rural rest and pastime. With the admirably arranged schedules of fares and time-tables to various points, we can arrange a jaunt of a few days or weeks to a minute and a dime.

The Chesapeake and Ohio Railroad opens up one of the most romantic sections of America. As many of our anglers will, doubtlesss, wish to avail themselves of the facilities thereby afforded, we will do them a favor, no doubt, by indicating some of the best fishing places on the route, namely:

"Clifton Forge."—Bass fishing in headwaters of James River immediately at station.

"Jackson River."—Fine trout in Craig's and Dunlap's Creeks. Hotel accommodation at Covington, ten miles distant. Trains leave Covington after breakfast and return in time for supper.

"Covington."—Trout fishing in neighboring creeks.

"Paw Paw."—Trout in abundance in Laurel Creek, just across New River from Station. Hotel accommodation at Quinnimort, five miles below, near which there are several other trout streams.

"Sewell."—Good trout fishing in Mann's Creek, one-fourth of a mile below station.

"Kanawha Falls."—Bass and salmon or pickerel in the Kanawha River, and up the Gauley, some ten or fifteen miles—finest trout fishing in the State of Virginia. Good hotel at "Falls."

"St. Albans" (at the mouth of Coal River).—Fine bass fishing up Coal River.

Besides places merely charming to the angler, the Chesapeake and Ohio Railroad gives easy access to the finest mountain scenery of Virginia and the famous Virginia Springs, whose ancient prestige, as the most fashionable of American watering places, is fast returning. By taking the Old Dominion Steamship line to Richmond, and the railroad there, the journey can be most agreeably varied and enjoyed by all who are not subject to sea-sickness; and in June, July and August there is little rough weather.

In addition to the older routes to the Adirondacks, the Adirondack R. R. opens a new and attractive way via North Creek to many of the most virgin haunts of the great Wilderness. The People's Line of steamers to Albany make close connection, and also offer the most agreeable route to Montreal and other parts of Canada. For Nova Scotia and the eastern provinces, as well as Maine, the Stonington and Fall River steamers afford a delightful voyage. The fares on these steamboat lines are surprisingly low.

The Grand Rapids and Indiana R. R., favorably known among anglers as the "Fishing Line," reaches the innumerable trout, bass and muscallonge region of Michigan, whose charms were so agreeably set forth last year in a series of letters by the editor of FOREST AND STREAM, that the railroad company has embodied them in a pamphlet as affording the best means of bringing these delightful resorts into notice.

The Chicago and Northwestern Railroad, with its 2,800 miles of line and branches, covers the whole northwest like an extended palm and fingers; the Chicago and Alton road leads also through a great game country; so does the St. Louis, Minneapolis and St. Paul Line; and all these will be extensively patronized from August 1 to January by sportsmen who shoot. Meanwhile, if the tourist wishes to be astonished at the amazing growth of the West, which he can never otherwise comprehend, let him take a summer jaunt over this bucolic land and see the thousand-acre grain fields and count the cattle on a thousand hills.

The Wisconsin Central Railroad traverses a most picturesque country, abounding in dense forests full of game, and lakes and streams whose waters contain rare fish worthy of the most skillful angler's attention. Many of the particular points for sport on this road were recently noticed in this journal in the series of "Editorial Rambles," contributed by the Editor-in-Chief, and embodying the favorable impressions made by a personal visit. Menasha and Neena, Green Bay, Butternut Lake, Silver Creek, White River, Ashland, and a dozen other places famous for their piscatorial attractions, have all been noted in these columns. This road—as do most of the others—publishes and distributes gratis an illustrated guide, which they supplement by personally replying to all queries of inquiring sportsmen, and excellent care is taken of man and dog.

With all this array the pleasure seeker is inexcusable if he finds nothing to his taste; he is, perhaps, to be treated with indulgence, if in the multiplicity of good things he is at a loss which to select.

THE DEATH OF GEN. T. S. DAKIN.

GENERAL Thomas S. Dakin died on Monday, May 13. Through the length and breadth of the country, both here and abroad, General Dakin was well known as a rifleman of the most distinguished skill. To great personal proficiency with the rifle General Dakin united administrative power of rare merit, and was more than once captain of teams. As early as 1872 General Dakin became interested in rifle shooting, and with untiring zeal ever since that time devoted his leisure hours to rifle practice. It was in 1873-74 that his skill became fully developed. In the first International contest held at Creedmoor, when the American team first won distinguished position against the Irish riflemen, Gen. Dakin's score was among the best. In the Dollymount contest, the return match, Gen. Dakin also distinguished himself. The last contest between the American and English teams was the crowning triumph in Gen. Dakin's rifle annals, our lamented friend commanding the American riflemen, with Sir Henry Halford leading the Englishmen. It may be said that Gen. Dakin's love for rifle shooting amounted almost to a passion. It was but the other day, it seems to us, that we met Gen. Dakin well and hearty on the occasion of the presentation of the FOREST AND STREAM AND ROD AND GUN medal to our German riflemen. In this contest Gen. Dakin had taken a warm interest. He was to have assumed a leading position in the coming German Schutzen Fest in June next. But now, alas! his handsome face, his stalwart form are to be seen no more!

It was not alone as a rifleman that Gen. Dakin leaves a brilliant record. As an officer, as a gentleman, as a good friend, as an honest man his memory will long be remembered.

Attacked on Sunday evening last, after attending church, he expired very suddenly on Monday morning, struck as if by paralysis. We, with many others, mourn his loss and desire to express here the sincere respect we felt for the man whom God has taken away from us in the prime of his life.

PROFESSOR JOSEPH HENRY.

The whole scientific world has met with a loss in the death of Professor Henry, so long known in connection with the Smithsonian Institution, of which he was the governing officer. Born in 1797, Professor Henry had completed his eightieth year. Educated in the Albany common school, his entry into life was as a watch maker, but showing a great love for the sciences, his first position was that of a Professor in the school he had graduated in. This was in 1826, and only one year later he commenced that brilliant series of investigations in electricity which made him so celebrated. In 1832 he was appointed Professor of Natural History in the College of New Jersey. In 1846 he was placed in charge of the Smithsonian Institution. Here his true intellectual life had its fullest scope, and the prominent position this admirable institution has taken in America as the fountain head from whence the study of nature history ebbs and flows, is due in great part to the wonderful zeal and administrative power of the first of our scientific men, whose death we now notice. Full of honors, sure to be cited in future days as the real father of scientific research in the history of our country, Joseph Henry departs from this world with an unblemished history and a lasting record.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

A SPORTSMAN'S DINNER.

When Wordsworth sang:

"A creature not too bright or good
For human nature's daily food,"

could the poet have meant trout? Wordsworth was a Laker, and Cumberland did in his time abound in trout. Though no commentator (and commentators are so neglectful) has ever mentioned it—as no man is a poet who is not fond of his stomach—it must have been that Wordsworth lingered by a brawling stream and saw a crimson spotted trout flashing through the water and thought how really good it was to eat. When, then, at Miss Corson's cooking school one evening last week, a most appreciative assemblage of gentlemen and ladies saw placed on the table superb trout, wonderfully cooked, the gastronomic delights of the Adirondacks were renewed. Hypatia discoursed in the Alexandrine Academy the past symbolic lore of the Greeks, as Miss Corson teaches in New York to day the practical good lessons of the present. Now, to see a fair lady, knife in hand, in charming costume, lay down the law and teach how to broil, roast, to stew, to flavor, to garnish, is indeed the true poetry of the *cuisine*. One mission this lady has is to show people, the ignorant ones, how many good things the Lord provides us with, and how to dress them. Now there is the flounder, the much despised dab or sand fish. You can buy flounders for a song, because almost everybody turns up their noses at them. Now do you, lady reader of this journal, just follow Miss Corson's method. Lay your fish *flat* on a board. Take a sharp knife and make a straight cut down in the middle of the fish from where his gills start to his tail. Then put your knife parallel to the fish, and passing along the bones, detatch the two *fillets*. Turn him over and proceed the same way with the back of the fish. Now you have four fillets. Take off the skin, by pulling the fillet with the skin side flat downward, and placing the knife flat on the table, taking an end of the skin and pulling it towards you, and the tough epiderm will be detatched. Trim off the edges and cut the fillets bias. Then have some yolk of egg, pour your fillets into it and roll them in cracker powder, and, having a pan with hot boiling sweet oil in it, fry your fillets a light brown and eat it with sauce Tartare. If then your husband does not applaud your dish he is defficient in all gastronomic sense.

Here is the bill of fare which was partaken of, all cooked before the party by Miss Corson:

Puree of Salmon.
Fillet of Fish, with Tartare Sauce.
Lyonnaise Potatoes.
Broiled Trout with Dutch Sauce.
Matzoes, with Auchovy Butter. Lobster Salad.
Sardine Sandwiches.
Pretzels. Olives.
Game Saute, a la Marengo.
Petits pois au Naturel. Corried Rice. Broiled Birds, with Mattre d'Hotel Butter. Watercresses, with French Salad Dressing.
Omelette Celestine.
Assorted Fruit. Sweet Biscuit.
Roquefort and Cream Cheese. Coffee.

Now there is really nothing impossible in this bill of fare, and such extraordinary things as are not found in the woods, as sweet oil, sardines or anchovies, though they may be brought to camp in cans, might be dispensed with. If good bacon fat can be used as a substitute under proper precautions in lieu of sweet oil, which is perfectly possible, the whole cuisine is rendered possible. Around a camp-fire, though appetites are keen, the bad cook comes in for no small amount of deserved abuse. Cooking may be, according to Brillat Savarin, an inspiration, but a little thought given to baking-pans, gridirons and skillets accomplishes wonders.

Among the invited guests were His Honor Mayor Ely, the Honorable R. B. Roosevelt and Mr. E. G. Blackford. As President of the Fisheultural Association, in addition to his ichthyological lore, no one has a more thorough acquaintance with the *rafinerie* of the hunter's cuisine than Mr. Roosevelt, as his books on fishing show. If, then, Mr. Roosevelt has a mission, it is also to convince people how much excellent good food is lost through their stupid prejudice. This economic problem, it is quite possible, Mr. Roosevelt will solve some day by having a dinner composed of the fish "which people do not eat." The nutricious squid, the succulent dog-fish will certainly figure on this occasion.

Miss Corson's dinner was admirable in every way, and her perfect *cuisine*, her skill, her thorough knowledge of the whole subject, her deftness in handling a cook's knife or a *casserole*, were only equalled by her pleasing grace as a hostess. If Miss Corson would write some small book adapted to the requirements of sportsmen we are quite certain that it would be fully appreciated. We see now in our mind's eye men seated of nights in the wild woods, by the light of smouldering fires, conning over this coming volume, and at the very next breakfast putting into practice all Miss Corsin secrets. The only trouble might be that a man in coming back, a thorough graduate in the better school of camp cookery, would be dissatified with the tamer fare provided by his wife.

KILL THE FISH YOU CATCH.

A Cincinnati correspondent sends the following considerate letter:

EDITOR FOREST AND STREAM:

Nobody would like to eat beef taken from a drowned animal, but when we take fish alive out of the water we string them, and, when satisfied with the sport, we sling them over our shoulder and wander toward the kitchen, without thinking of killing them. That is a general rule. Is it not very cruel to deal with the poor fellows in such a manner? I think it ought to be the rule among true sportsmen to have a little more humanity, and to kill a fish in a quick way instead of suffocating them. But not only for humanity's sake should we kill our table fish. The killed fish is a better flavored dish. A dead fish which has been killed will have his mouth shut; but, if he has died by being taken from his element and allowed to slowly suffocate, his mouth will be wide open. In some countries a dead fish with open mouth is considered unmarketable. If you think this question important enough, I am sure to see something about it in your very valuable paper.

Respectfully, CHAS. ROEDEL.

We are indebted to our correspondent for bringing this subject so opportunely and pertinently to the attention of anglers and eaters of fish. Its scope is wider than would casually appear at first sight. The whole matter should engage the attention of our marketmen, fishermen, physicians, and makers of sanitary laws and regulations. Two years ago or more, we introduced these suggestions into our columns with reformatory purpose, but our effort was suffocated or nullified by the careless idiocy of the printers, who, being men of letters, and having the whole English language at their fingers' ends, are prone to make nonsense of written utterances which thinking men are compelled to place at their mercy. We stated as a postulate, that "fish will KEEP twice as long by being killed by a blow on the head directly after being caught, than if left to die a natural death." Now, what does the artless reader who has so often complained to the editor about the mutilation of *his* manuscript and the perversion of his meaning, suppose the intelligent printer made us say? Why—he told the public (in our behalf, as our spokesman, of course,) that "fish would LIVE twice as long if killed by a blow on the head when caught, as when left to die a natural death!" Fortunately the public were content to consider the solecism an intentional perpetration, and newspapers so quoted it; but the editor has carried the clipping in his pocket ever since as a successful Hibernicism as well as a sample of the kind of weapons which Faust employs upon occasions in his tilt with the Devil.

Howsoever, our statement as originally made contains a physiological fact which is worth considering from several points of view. Economically, it doubles the profits of fishmongers, adds quantity to the larder, extends the beneficence of fish food to interior localities doubly distant from the sources of supply, and may even save from starvation by giving a man respite; for if the fish keep twice as long in condition for food, the man's lease of life is by so much extended, supposing the fish to be his only sustenance during the time being With regard to the improved flavor of a killed fish, there can be no question; while the *appearance* of a fish decently composed and laid out on the market slabs, with his mouth closed, is seemly and conspicuous in contrast with one whose mouth is gaping and distorted. The same is true of any corpse of man or beast. Being more attractive to the purchaser, the fish would certainly bring a better price. Its texture is firmer and its flesh harder. On the ground of humanity, let the appeal be strong. As boys, we were taught that fish had no feeling, and we believed that what might be cruelty to a dog was harmless pastime as respects fish. But autopsy and science have proved our belief an error, and we discover that contortions and gaspings are evidences of pain and distress, though we assume that their nervous system is comparatively of a low order. That fishes have intelligence and can be taught; that they have memory; that they have discrimination and discernment; that they possess the five senses, each to a great or small degree; that they are to a limited extent sentient and reasoning creatures—all these have become evident. If it is a law of nature *that all creatures shall pursue and prey upon each other, either for pleasure or profit*, let us ameliorate the suffering of the pursuit. Let it not be wanton and merciless. The beasts are not wanton. The cat toys with the tremulous mouse; but the mouse, not positive that death is certain, and conscious that while there is life there is hope and possibility of escape, perchance enjoys the prolonged period of apprehension and the play of its own artifices to circumvent and extricate itself, just as gladiators in combat, or men at arms, are exhilarated by the dangers and desperation of the conflict, and are happy to carry off wounds and mutilations as trophies of prowess and evidences of great straits! If it is ordained to us that we are to derive sport from the prolonged apprehensions of the fish while hooked (not from his bodily pain, for the mere prick of the hook gives little, and often none at all), then let us handle him mercifully after his torment begins, and it begins after he is withdrawn from his native element. If he is small, take him around the body and considerately rap the top of his head upon a stone or the thwart of the boat; if large, rap his head with a heavy stick; or, what is more genteel and to the point, pierce the cervical column at the base of the brain with a sharp knife. This produces paralysis and almost immediate death. It leaves the corpse in a shapely and seemly condition. Admiration of its unbattered beauty is added to the pleasure of capture, and your fish remains a proper subject for the market or the studio. Brother anglers! learn to be humane.

ZOOLOGICAL SOCIETIES.

THE recent report of the Zoological Society of Philadelphia, as furnished by John Samuel, Esq., their Secretary, is quite interesting at the present moment in view of the efforts now being made to start similar societies both in New York and Brooklyn. The report shows quite conclusively that although a zoological society may have its years of large attendance, there may yet come seasons when the public, from stringent times, do not patronize such places of resort with the same liberality as in prior years. Of course from all this question of attendance some mean can be arrived at which would represent the probable attendance in a series of say ten years. The upshot of all this is that for the proper maintenance of any zoological society, whether in New York, Philadelphia or Cincinnati, such an institution must be perfectly independent of possible revenues to be derived from public attendance. We are quite of the opinion of the Secretary of the Philadelphia society, that to remove the fortunes of a zoological collection from the somewhat precarious condition which must always attend a support based entirely on receipts from admissions, a permanent fund should be established, which, when securely invested, would derive such interest as could be applied to the maintenance of the society. Mr. Samuel cites the case of the London Zoological Garden, which derives a major part of its means from the interest on bequests and legacies. The general idea of the founders of a zoological society has been so far, that from public patronage it could be made to be self-supporting. Quite the contrary is apparently the fact. These data are derived not only from the experiences at home (which are somewhat limited it is true), but certainly from foreign sources.

Why should, then, zoological societies be started differing in the least from public libraries? The information from books and the study of animals both tend to public culture, and gifts for the maintenance of libraries ought to be equally given to zoological collections. Before, then, any zoological garden should be started in New York, ample funds must be on hand, not only for the purchase of the animals, the laying out of the grounds, but for maintenance. City appropriations are but precarious things. Political disturbances play sad havoc with private organizations. Such a society ought to be certainly removed from party thralldom. Of course, as in Philadelphia, the city authorities should be looked to for the ground of a zoological exhibition, and some small fund for maintenance might be expected, but we should be opposed to the receiving of a fee for admittance. The policy of our Park Commissioners has always been conceived in the widest spirit, and they have always held that the ground of the park belongs to every citizen in New York, and that there is not a square inch of it over which a man had not a right to place his foot without the payment of a cent. The *quid pro quo* for a certain portion of ground given by the city is returned by an association who furnishes the buildings and the animals, and attends to keeping grounds, houses and the animals in good order. Such independence would prevent the city authorities from imposing on the society any officers, such as of a superintendent who might be ignorant of the business confided to his care, for politics and zoology do not go together. We believe that if a society, as indicated by us, started squarely with the idea of having money enough to maintain their enterprise, such zoological gardens, either in New York or Brooklyn, would add immensely to the attractiveness of the parks, and in an educational point of view would be of untold benefit to the people.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

New York State Association for the Protection of Fish and Game, Buffalo, May—; Secty., John B. Sage, Buffalo.
Connecticut State Sportsmen's Association, Hartford, May 15.
Iowa State Sportsmen's Association, Des Moines, May 28.
Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.
National Sportsmen's Association, Wilkesbarre, Pa., June 11
Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.
The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dawance.
Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.
Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y, Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President
Missouri State Sportsmen's Association.

NEW YORK ASSOCIATION.—The New York Association for the Protection of Game held its closing meeting for the season last evening. Complaints were made of the presence of pound nets at Babylon, Long Island, in violation of the law, and of the erection of nets and stakes in Great South Bay, Long Island. The legal counsel of the association was directed to take immediate action in the matter. After the transaction of considerable routine business the members were entertained at supper by Mr. Clinton Gilbert, at whose residence, No. 20 West Tenth street, the meeting was held.

PROTECTION FOR FISH IN SOUTH CAROLINA.—After thirteen years' endeavor to straighten out the politics of the State, time and opportunity have at last been found to look after its ichthyic interests. The following fish law has been enacted, and was approved March 1, 1878:

An Act to Prevent Fishing with Nets in the Fresh Water Streams of this State at Certain Seasons of the Year.

SEC. 1. *Be it enacted* by the Senate and House of Representatives of the State of South Carolina, now met and sitting in General Assembly, and by the authority of the same, that it shall not be lawful for any person in the Counties of Marion, Horry, Darlington, Clarendon, Georgetown and Williamsburg to fish with nets and gigs or set traps in any of the fresh water rivers, creeks or lakes in said counties between the 15th day of April and the 1st day of September in any year hereafter.

SEC. 2. That any person violating the provisions of the foregoing section shall be deemed guilty of a misdemeanor, and upon conviction thereof by a court of competent jurisdiction shall be fined in a sum of twenty dollars or imprisoned in the county jail for a period of thirty days.

SEC. 3. This act shall take effect from and after its passage.

Now, although the whole commonwealth does not come within the provisions of the act, what has been done is important. It is a proof that the people of South Carolina are at last realizing that the supplies of fish in their rivers and streams are not exhaustless, and although it is late in taking a

step which should have been taken years ago, it is to be hoped that a strict observance of the law will soon bring up the supply to what it was in ante-bellum days. Encouraged by the protection thus afforded, and influenced by Senator Butler, Prof. Baird has determined to send several thousand shad for the streams in South Carolina. The fish will likely be planted in the Savannah, Broad and Catawba rivers, and the streams tributary to these in South Carolina.

PROTECTION NEEDED IN GEORGIA.—There is urgent need of a general State game and fish protective law in Georgia. In some counties the local laws are doing much good, but in many localities the shooting of game at all seasons, trapping of quail, indiscriminate use of strychnine, and other practices equally reprehensible, are effecting an unwarranted diminution of game. The readers of this journal in that State should now have an intelligent conception of the need of legislative action, and we urge upon them the desirability of moving in the matter at once.

THE SWEDISH GRAY PARTRIDGE.—A correspondent is desirous of importing some of the gray partridges from Stockholm. Parties wishing to co-operate with this gentleman will please address us.

The Rifle.

NEW HAMPSHIRE—*Dover.*—Capt. John S. Dame made a target of twelve shots at twenty rods (110 yards), with an average of ¾ and 1-16in., and this with a rifle made by a gunsmith of our place—Eugene Smart—common open sight.

WALNUT HILL, *May* 8.—Spring meeting; scores; match No. 2, at 200 yards.

O M Jewell	4 5 5 5 5 4 5—33	J F Brown	4 3 5 4 4 4 4—28
S E Ring	5 5 5 4 4 5 4—32	C U Meiggs	5 4 3 4 4 4 4—28
W P Poland	4 5 5 4 4 5 4—31	F Hollis	3 5 4 5 2 4 5—28
S C Noyes	4 4 5 5 5 4 4—31	E L Winship	4 3 5 4 4 3 5—28
J L Stevenson	4 4 4 4 5 4 5—30	B J Angell	5 3 5 4 4 3 5—28
W H Jackson	4 4 4 4 5 4 5—30	W Arthur	3 4 4 5 5 3 4—28
L W Farrar	4 4 4 5 4 4 5—30	J B Osborn	4 4 5 4 3 5 3—28
N W Arnold	4 4 4 4 5 5 4—30	H H D Cushing	3 4 4 4 4 4 4—27
C Henry	5 4 4 4 5 4 4—30	J N Frye	4 4 3 4 4 4 4—27
J Borden	4 4 5 5 4 4 4—30	W Gerrish	4 4 3 4 4 4 4—27
W E Guerrier	4 5 4 5 4 4 4—30	A H Hebbard	3 4 4 4 5 4 3—27
F J Rabbeth	5 4 5 4 4 4 4—30	H T Rockwell	5 4 4 4 4 3 3—27
J S Sumner	4 5 4 4 4 4—29	E Bennett	4 4 3 4 3 4 4—26
E B Souther	4 3 5 3 4 4 4—29	W A Swan	3 4 5 4 3 3 3—25
E L Freeman	4 3 4 4 5 4 5—29	J H Eames	4 3 4 4 0 4 5—24
L L Hubbard	5 5 4 4 4 4 3—29	J B Parker	3 3 3 4 2 4 5—23
C H Johnr	5 5 4 3 5 3 4—29	Jos R Teele	3 3 2 4 3 5 2—23
H J Harris	4 4 4 4 4 4 4—28	J P Gragg	3 3 4 4 0 3 4—21
J E Shepard	4 4 3 5 4 4 4—28	Hy Whittington	2 3 0 4 5 4 3—21
D E Hunt	5 4 4 3 4 4 4—28		

Director's match, No. 3, 200 yards.

E B Souther	4 4 5 4 5—22	Wm Poland	5 4 3 4 4—2
J N Frye	4 4 5 4 5—22	W H Jackson	3 4 3 4 4—1
L L Hubbard	4 4 5 4 5—22	W Gerrish	3 4 4 4 3—1
H J Rockwell	4 4 4 4 5—21	J L Stevenson	4 4 4 3 0—15

The curious incident then presented itself of three making the identical same shots. Mr. Souther, however, on shooting off ties won.

All-comers' match, 200 yards.

C H Johr	4 4 5 4 5 5 5—32	J Borden	4 3 4 4 5 4 4—28
L L Hubbard	5 4 4 5 4 4 5—31	S E Ring	4 4 3 4 5 3 4—27
W H Jackson	5 5 4 4 4 4 5—31	J W Frye	4 4 2 3 4 5 4—26
N W Arnold	5 4 4 5 4 4 4—30	C M Meiggs	5 4 5 3 4 4 3—26
F J Rabbeth	4 4 4 4 4 4 4—28	C Henry	5 4 0 4 4 4 4—25
J L Stevenson	4 4 4 4 4 3 5—28	W Poland	4 4 3 5 4 w

Contest at 500 yards.

E B Souther	3 5 4 5 4—21	C Henry	4 0 5 0 5—14
N W Arnold	2 4 5 4 4—19	F J Rabbeth	2 4 3 3 2—14
C H Joahr	4 3 3 4 4—18	H T Rockwell	4 3 2 0 4—13
J L Stevenson	3 3 3 5 4—17	L L Hubbard	2 2 0 4 4—12
J N Frye	3 3 4 4 3—17	J A Mortimer	2 2 2 3 2—11
F W Stevens	2 3 4 4 3—16		

The 800-yard match was decided as follows:

A H Hebbard	5 5 5 5 5 5 5 5 5 5—50
W Poland	5 5 5 5 5 5 5 5 5 5—50
W H Jackson	5 5 5 5 5 5 4 5 5 5—49
W Gerish	5 5 4 5 5 4 5 5 5 5—48
J S Sumner	5 5 5 3 5 5 5 5 5 5—48
C F Crawford	5 5 4 4 5 5 5 5 4 5—47
C G Hebbard	5 5 4 5 5 5 5 4 4 5—47
B J Angell	5 5 4 5 5 5 5 5 3 5—47
F J Rabbeth	5 5 5 5 5 4 5 4 3 5—46
F J Rabbeth	5 5 5 5 5 4 5 4 3 5—46
O M Jewell	4 5 5 4 4 4 5 5 5 4—45
E L Freeman	5 4 4 5 5 5 5 4 3 5—45
L L Hubbard	5 4 4 5 5 3 5 5 5 4—45
G L Winship	5 5 5 5 5 3 5 2 5 5—45
J B Osborn	4 3 5 5 5 4 5 4 5 4—44
A Hebbard	3 5 5 5 4 4 5 3 5 5—44
J F Browne	5 3 4 5 4 5 4 5 3 5—43
J Rabbeth	5 5 4 5 4 4 5 5 0 5—42
S Wilder	4 5 4 5 5 5 5 4 5 0—42
Thomas Howe	3 4 4 5 3 3 5 5 5 4—41
D F Hunt	4 4 5 5 5 5 0 5 3 3—39
W M Ward	3 5 5 2 5 5 3 5 3 3—39
L Saunders	3 4 5 3 4 5 2 0 3 3—32

Boston *Herald* Cup, at 600 yards.

J E Shepard	6 5 6 6 6 6 5—40
C C Hebbard	5 6 4 4 6 6 6—37
O M Jewell	4 5 5 4 6 5 6—37
J S Sumner	4 5 6 6 6 4 6—37
W Arthur	3 6 5 4 5 5 6—36
J B Osborn	4 4 5 4 6 6 6—35
G D Winship	4 6 6 3 6 6 4—35
H T Rockwell	5 4 6 5 4 4 5—34
E L Freeman	6 4 4 5 6 4 5—34
William Gerrish	3 4 6 5 5 6 4—34
J F Brown	5 4 4 4 0 5 5—33
B J Angell	5 5 6 4 5 0 2—33
C F Crawford	5 3 5 3 5 5 6—32
Thomas Howe	4 6 4 6 3 4 4—31
S Wilder	5 4 3 3 4 3 5—27
J N Frye	2 5 4 3 4 3 4—25

CLOSING OF THE MASSACHUSETTS SPRING MEETING.—*May* 9.—Walnut Hill was fairly crowded on the occasion of the close of the rifle contest. First regular match was the conclusion of competition No. 2. Seven shots at 200 yards for the silver cup, presented by the United States Cartridge Company of Lowell, with other prizes. The following are the scores:

H T Rockwell	5 5 5 4 4 5 5—33	J Borden	4 4 4 5 4 4—29
B J Angell	4 4 4 4 5 5 5—31	C H Johr	4 5 4 4 4 4—29
E B Souther	4 4 5 5 4 5 4—31	J E Shepard	4 4 4 4 3 5—28
J B Osborn	5 4 4 5 5 4 4—31	J N Frye	4 3 4 5 4 3 4—27
J S Sumner	5 4 4 4 4 5 4—30	E L Freeman	4 3 4 4 5 4 3—27
L L Hubbard	4 4 5 4 5 4 4—30		

For competition No. 4, five shots at 500 yards—completion of match—the following are the scores:

W Poland	5 4 4 4 5—22	L L Hubbard	3 5 4 4 4—20

Competition No. 5, for the Boston *Herald* Cup was renewed, with these results:

L L Hubbard	6 5 5 4 5 6—38	C F Crawford	5 4 6 4 0 5 6—36
W Gerrish	6 5 5 6 4 5—38	S Wilder	3 5 6 5 6 5 5—35
A J Angell	6 6 6 6 0 4 4—37	J F Brown	4 4 6 5 5 5 6—34
B W Howland	5 6 6 5 6 5 4—37	W H Jackson	5 4 4 6 6 4 4—33
J S Sumner	6 5 6 6 6 4 4—37	D F Hunt	5 5 4 4 5 5 3—32
E L Freeman	5 5 5 4 6 6 5—36	Thomas Howe	4 6 4 6 4 5 3—32
A H Hebbard	6 5 5 5 4 6 5—36		

For the 800-yard match the following are the scores:

William Gerrish	5 5 5 5 5 5 5 5 5 5—50
L L Hubbard	5 5 5 5 5 5 5 5 5 5—50
E W Law	5 5 5 5 5 5 5 5 5 5—50
W H Jackson	5 5 4 5 5 5 5 5 5 5—49
A W Howland	5 5 5 5 4 5 5 5 5 5—49
E L Freeman	5 5 5 5 4 5 5 5 5 5—49
W Poland	4 5 5 4 5 5 5 5 5 5—48
J S Sumner	5 4 5 5 5 5 5 5 5 5—48
J E Shepard	5 5 5 5 5 5 5 5 5 4—48
J F Brown	5 5 4 5 5 4 5 5 5 5—47
S Wilder	5 4 5 4 4 5 5 3 5 5—45
G L Winship	4 3 5 5 5 5 5 5 5 3—45
F J Rabbeth	5 5 5 5 5 3 5 5 5 0—43
D F Hunt	3 5 5 5 5 4 4 5 3 3—42
T Howe	3 4 3 5 3 5 4 3 4 5—39

At 1,000 yards.

William Poland	5 5 5 5 5 5 4 5 4 4—48
W H Jackson	5 5 5 3 5 5 5 5 5 5—48
C F Crawford	3 5 5 5 4 4 5 5 5 5—46
L L Hubbard	5 5 5 5 5 4 4 5 5 3—46
E L Freeman	5 5 3 5 5 3 5 5 5 3—44
S Wilder	3 4 5 5 4 3 5 4 5 3—43
E W Law	4 4 3 5 5 5 4 5 4 0—39
J N Griswold	4 3 5 5 0 4 5 5 3 5—39
J F Brown	3 0 5 5 5 4 3 5 3 5—39

At a convention held at the conclusion of the match, in which delegates from various rifle clubs in the State were present, a committee formed of the following gentlemen—Messrs. Stevenson, Rockwell and Hubbard—were appointed to consider general matters tending to the interests of riflemen in Connecticut.

NEW HAVEN, *May* 8.—Contest between First and Second Regiments for the trophies won at Creedmoor in 1875. Conditions: Teams of twelve, ten shots each, at 200 and 500 yards. The following are the scores:

First Regiment.

J L Osgood	200	4 4 3 4 5 5 5 3 4 5—42
	500	5 5 4 4 4 4 2 2 5—39—81
P W Hudson	200	4 4 4 5 3 5 3 4 4 5—41
	500	2 4 4 0 2 0 2 5 2 2—23—64
W N Clark	200	5 4 4 4 4 4 5 4 3 4—41
	500	2 3 5 4 5 4 2 4 4 5—34—70
B F Welles	200	5 3 4 4 4 4 4 5 3 4—40
	500	0 0 5 4 4 3 4 3 5 0—28—68
Henry Simons	200	4 3 4 4 5 4 4 3 4 4—39
	500	2 5 3 5 4 5 4 3 2 2—38—77
A W Green	200	4 4 4 4 3 5 3 4 4 4—39
	500	2 4 4 2 2 4 0 2 2 4—26—65
Capt J L Woodbridge	200	4 4 4 4 4 4 4 4 3 4—39
	500	2 4 4 1 4 4 4 2 2 4—30—75
F E Watkins	200	3 4 3 5 3 4 3 4 5 4—38
	500	0 3 4 5 4 3 5 3 4 5—30—74
F V Chapin	200	4 3 4 4 3 4 4 3 4 5—38
	500	5 4 4 4 5 4 4 2 4 2—38—76
C Faughnan	200	4 3 5 4 3 2 4 3 4 4—36
	500	3 3 3 5 5 3 4 5 2 4—35—71
R Hakewessel	200	3 3 4 3 2 4 4 4 3 4—34
	500	4 4 4 5 5 4 4 4 5 4—43—77
B S Woodward	200	0 3 4 2 2 3 4 3 2 3—26
	500	4 4 4 3 5 2 2 3 5 4—37—63
Grand total		870

Second Regiment.

G R Nichols	200	4 5 4 5 4 5 4 4 4 4—43
	500	3 5 3 4 5 5 2 3 4 4—38—81
J Tinkey	200	4 4 5 4 4 4 5 4 4 4—42
	500	3 5 3 5 3 4 4 4 4 5—40—82
Captain Kennedy	200	5 4 4 5 4 5 5 1 4 4—42
	500	3 5 5 4 5 4 4 4 4 2—40—82
John Mix	200	5 5 4 5 3 4 4 3 4 3—40
	500	5 3 5 4 2 3 4 2 3 3—34—74
E W Whitlock	200	4 4 4 4 4 4 4 4 4 4—40
	500	5 5 4 3 0 5 3 2 5 5—38—78
C S Crampton	200	4 2 4 4 4 4 4 4 5 4—39
	500	5 0 3 5 4 4 5 2 5 5—38—77
George La Barnes	200	5 4 3 4 4 4 4 3 4 4—39
	500	3 5 2 4 5 2 4 4 5 5—39—78
E A Folsom	200	5 3 4 4 4 3 5 4 3 4—39
	500	3 3 0 5 2 3 5 5 3 4—31—70
J N Lane	200	4 4 3 5 3 4 4 4 3 3—37
	500	3 5 3 5 4 5 4 3 5 3—40—77
J T Jorey	200	4 4 5 5 2 4 2 4 3 3—36
	500	5 2 4 5 5 4 4 4 2 4—39—75
C A Smith	200	4 4 2 4 3 5 3 3 3 2—34
	500	0 2 2 5 5 3 4 3 4—33—67
R M Walker	200	4 4 2 4 3 5 3 3 3 2—33
	500	3 4 5 4 3 3 5 4 0 5—36—69
Grand total		910

RECAPITULATION.

Second Regiment	910
First Regiment	870
	40

In the officers match, the Second Regiment also won with a total of 795 against 789.

Officers' Match—First Regiment.

Lieut Clark	200	4 4 4 4 5 4 5 4 4 4—42
	500	3 5 4 5 4 3 3 4 5 4—40—82
Lieut Osgood	200	4 3 4 3 5 4 4 3 4 4—38
	500	5 3 5 2 5 5 5 2 4 4—43—81
Capt Woodbridge	200	0 4 5 5 3 4 4 5 4 4—37
	500	4 5 5 4 0 5 2 4 5 4—38—75
Col Tyler	200	4 4 3 4 4 3 5 3 5 3—38
	500	2 0 4 5 5 3 4 2 3 5—33—71
Capt Wells	200	4 5 3 4 3 4 3 4 4 4—38
	500	3 4 2 4 3 3 2 3 5 3—32—70
Lieut Faughnan	200	3 4 2 3 4 3 4 4 4 2—33
	500	4 4 3 2 3 3 4 3 4 4—34—67
Lieut Cornell	200	0 3 3 3 3 2 5 3 3 3—29
	500	3 5 2 2 5 5 5 5 3 2—35—64
Lieut-Col Barbour	200	3 4 3 4 4 4 3 3 2 5—35
	500	3 2 0 5 0 4 2 4 4 5—29—64
Lieut Noran	200	3 3 4 3 4 3 4 3 4 4—35
	500	2 5 2 4 3 4 0 3 0 2—25—60
Lieut Talcott	200	3 4 2 3 2 2 3 3 5 4—31
	500	2 2 2 0 4 2 4 4 5 3—28—59
Lieut Kerney	200	0 3 2 2 4 2 0 3 2 3—21
	500	2 3 4 2 2 5 2 2 4 2—28—49
Capt Erickson	200	4 3 2 0 3 4 3 4 4 0—27
	500	2 2 5 2 2 0 3 0 0 4—20—47

Second Regiment.

Capt Kennedy	200	4 4 4 4 4 5 4 3 3 4—39
	500	2 5 4 4 5 4 4 5 5 2—40—79
Capt Camp	200	3 3 5 4 5 4 4 4 4 3—30
	500	5 3 5 5 3 3 4 4 3 2—28—77
Lieut Granniss	200	5 5 4 4 3 3 2 4 3 4—37
	500	4 5 4 5 4 4 2 4 2 5—39—76
Major Graham	200	3 4 3 4 3 4 4 4 4 3—36
	500	2 5 4 2 2 4 4 4 5 5—37—73
Capt Phillips	200	4 5 5 4 4 4 4 4 3 4—41
	500	4 2 4 5 3 0 4 3 2 5—32—73
Lieut Smith	200	0 4 4 4 3 4 3 4 4 4—34
	500	3 4 4 5 5 5 3 0 5 2—36—10
Capt Spencer	200	3 4 2 5 4 5 3 5 4 3—38
	500	5 0 2 2 4 5 3 4 3 3—31—69
Lieut Lane	200	4 4 5 4 4 4 4 4 3 4—40
	500	3 5 3 2 3 2 4 3 2 2—29—60
Lieut Bacon	200	3 3 3 4 2 0 5 2 3 3—27
	500	4 3 5 4 4 2 3 4 4 5—38—65
Lieut White	200	3 4 3 3 0 4 3 0 4 4—28
	500	0 4 2 0 3 4 5 3 2 5—28—50
Col Smith	200	0 2 2 4 0 3 0 3 2 0—16
	500	3 4 2 4 3 0 3 5 3 2—29—45
Capt Wood	200	3 3 3 4 3 4 0 0 2 2—24
	500	0 3 0 4 0 0 2 2 4 4—19—43
Totals		795

In the team match between Co. C of First Regiment and Co. K of Second Regiment, the Second again won with 593 against 543. In the military, in a possible 35, J. Tinkey won with 31, Nichols second. In the 200-yard all-comers, Mr. W. E. Story won with 32 in a possible 35, Major Hassan second. In the 500-yard military match, F. J. Colvin won with 30. In the 500-yard all-comers, Mr. W. E. Story led with 31.

SCHUTZEN VEREIN IN BOSTON.—The Schutzen Verein No. 1 held a practice shoot at Schutzen Park, using a ring target. The following are the best scores made out of a possible 72: A. Hagenunger, 66; A. Matthies, 63; A. Schreck, 63; Wm. Schlein, 58; Geo. C. Reif, 55; J. Widman, 50; Geo. J. Faulhaber, 49; F. Maurer, 47; E. Traeger, 44; F. Brinkmann, 42; E. Rashe, 41; E. Buxbaum, 40; J. Korber, 35.

—Stafford Guards had a match last week, with the following results: Best average shot, No. 15, Private James Harrison, 3 shots, 3½in.; second, No. 34, Private John P. Hughes, 3 shots, 6½in. Best single shot, No. 1, Orderly Sergeant John Sherry, 3½in. After this exercise the Honorary members took the field, and the following was the result: Best average shot, No. 32, John S. Dame, 3 shots, 3in.; best shot, No. 31, Chas. E. Smith, 3½in. Arm, Springfield rifle. This was the fifty-fifth anniversary of the Stafford Guards.

CREEDMOOR—*Wednesday, May* 8.—Seventh competition for the Ballard prize. Condition—Open to all comers; 15 shots at 200 yards. The following is the record:

F H Holton	5 4 4 5 3 4 5 4 5 5 5 5 4 5 4—67
C E Blydenburgh	5 4 4 5 4 4 4 5 4 5 5 5 4 4 4—66
C G Zettler	3 4 4 4 4 4 5 4 4 4 5 5 4 4 5—63
W R Livermore	4 5 4 4 4 4 4 5 4 4 4 4 4 4 4—62
E E Lewis	5 4 4 4 4 4 3 4 4 5 4 4 5 4 4—62
Fred Alder	4 4 4 4 5 5 4 4 3 4 5 4 3 4 4—61
J S Coulter	4 4 4 5 5 3 4 4 5 4 4 4 4 4 4—62
S T G Dudley	4 5 4 5 4 4 4 4 4 3 4 5 3 4—61
M M Maltby	3 4 4 4 4 5 4 4 4 4 4 4 4 4 4—60
A Anderson	4 3 5 4 3 4 5 4 4 4 5 4 4 4 5—60
N O'Donnell	4 4 5 5 4 3 4 4 3 4 4 3 4 5 4—60
N D Ward	3 4 4 4 3 4 4 3 3 5 5 5 4 4 5—60
I L Allen	4 4 4 4 4 4 4 4 4 5 5 2 4 4—60

J M Crane	59	A H Howlett	54
H Fisher	59	W W Dodge	54
J W Mangam	59	L Stuart	53
A H Wickham	59	J F Dockworth	53
J R Grohman	58	G H Creed	52
V Daly	58	R M Riddle	52
P McMorrow	57	Lewis Cass	52
J Finlanson	57	W H Dunlap	50
J E Irwin	57	E W Whilton	48
D F Davids	57	E Geilfuss	30
F W Leavitt	56	J Ward	w
H D Blydenburgh	56	P Hirshkind	w
J W Todd	55		

Mr. Holton, by winning in this match, becomes the final winner of a gold badge presented to the New York Rifle Club by their captain, Mr. C. E. Blydenburgh. Mr. F. H. Holton was also winner of the Schoverling & Daly badge. The match was of seven shots each, at 300 and 500 yards; winning score, 54. The Stock Exchange Rifle Club medal was won by R. W. Dimock, with 42 out of a possible 50, at 200 yards. For the Douglass cup, a leading contest of the Eighth Regiment Rifle Club, Mr. J. C. Clark was winner, with a score of 89 out of a possible 100, at 200 and 500 yards. This club uses the military rifle.

May 11.—Second competition for the Waters' long-range prize, $50 gold. Conditions, thirty shots at 1,000 yards. The following are the scores:

N Washburn	113	B G Doughly	98
H Fisher	108	T Lamb	98
I L Allen	107	N D Ward	75
R Rathbone	105		

Weather the worst possible; wind, with heavy showers.

Running Deer Match—This amusing match has certain restrictions. There is a fine of ten cents for firing when the deer is out of bounds, and ten cents for striking deer on haunch. The following are the best scores out of a possible sixteen:

Capt W R Livermore	11	T Fitz	3
Corp J Kavanagh	9	E W Hudson	3
J W Gray	7	J H Teackle	3
A W Dimock	5	R W Dolz	2

The Seventh Regiment Rifle Club shot the second competition for their "trophy." Mr. J. H. Teackle was the winner on a score of 24 out of a possible 35 points. The match consisted of seven shots off-hand at the 200-yards range.

YORKVILLE RIFLE CLUB.—The prize shooting at J. R. Grohman's gallery, 1,581 Third avenue, for a Wesson rifle and two gold badges, was concluded on Wednesday, May 8. Conditions—Distance, 100 feet; Creedmoor target reduced; 5 shots, possible 25. The following are the best scores made:

J F Brown	5 5 5 5 5—25	R Spitz	5 4 5 5 5—24
M F Rattey	5 5 5 5 5—25	H A Diesal	4 5 5 5 5—24
E Geilfuss	5 5 5 5 5—25	J O Hanft	5 5 5 5 4—24
O Ketz	5 4 5 5 5—24	W A Hanft	5 5 5 4 5—24

In shooting off ties, M. F. Rattey won first, E Geilfuss second, J. F. Brown third.

Also J. R. Grohman's gold challenge badge: First competition, April 21, won by M. F. Rattey; second, April 28, M. F. Rattey; third, May 8, E. Geilfuss; fourth, May 11, W. A. Hanft.

SARATOGA.—In regard to the difference existing between the Saratoga and Milwaukee teams in their recent telegraphic match, the secretary of the Saratoga Club writes us as follows:

"The whole club to shoot at both ranges and take the four highest at each range as a total. The match to be shot strictly under Creedmoor rules, with Creedmoor Regulation Rifles. Conditions under which the challenge was accepted were that we were to shoot not to exceed eight men at each range, and in order so to do we were obliged to use guns which another had shot, as we only had four Creedmoor rifles in the club. These conditions were accepted by them, provided we shot the guns that two men shot once in the A. M. match and once in the P. M. match, which was carried out to the very letter. Our reasons for shooting eight men at each range instead of the whole club is that we did not have over eight or ten members who would shoot any way.

"WM. H. BENSON, Sec'y S. R. C."

SYRACUSE.—At the meeting of the Board of Directors of Sixth Division Rifle Association, in the programme presented, there will be eight matches, representing $400 worth of prizes, one half in cash. Spring meeting will take place on June 5 and 6. Messrs. Nichols & Lefever present a rifle worth $125.

A NEW RIFLE RANGE.—The Erie Railway Company offered the New Jersey Rifle Association a site for a rifle range at the west end of the Bergen Tunnel for a nominal rental. The range can be reached in twenty minutes from New York, and

by seven lines of railroad and two of horse cars. The New Jersey Rifle Association finally decided in favor of the range at Elizabethport, but the great advantages of the range at Bergen have induced several fine shots, including Maj. Henry Fulton, to organize an association under the general law authorizing rifle associations, passed at the last session of the New Jersey Legislature, for the purpose of securing the Bergen range. It is understood that the Erie Company will offer the new association the same terms as were offered to the New Jersey Rifle Association, and it now looks as though Creedmoor will have a formidable rival within easy access of New York, and officered by some of the best shots in the country. The range is 5,000 feet long, and long-range rifle shooting will be the principal feature.

FEST KALENDER.—Festefal halender and guido to the third meeting of the German Sharp Shooters' Association of the United States, to commence June 17, 1878. Edited by A. Appel, Manager of the Jersey Sharp Shooters' Club, published by Cushing, Bardua & Co., New York. In a neat and comprehensive book form Mr. Appel has issued a very thorough programme of the numerous matches to be held by our German friends. Mr. Appel's book contains full information as to targets, the cost of entries, with the rules governing German target shooting, have been translated into English. The proceedings of each day have been carefully detailed and all points fully explained. Unexceptionable as to typographical neatness and general interest, Mr. Appel's book will serve as a guide, and will be kept as a memento of this leading event in the rifle annals of the United States.

SIMULTANEOUS TELEGRAPHIC MATCH.—May 8, by the Geo. H. Thomas Post, G. A. R. Rifle Club, of Chicago, and the Warren, Ill., Rifle Club. Teams of six men each, each to have two sighting and ten scoring shots, off-hand, twenty-five yards range, at a reduced Creedmoor target:

CHICAGO TEAM.

Capt J C Borcherdt	5	5	5	5	5	4	4	4	4	4	—45
Capt F W Borcherdt	5	5	4	4	4	4	4	4	5	4	—43
W H Chenoweth	5	5	4	5	4	4	4	4	4	4	—43
S M Tyrrell	4	4	5	5	5	5	4	4	3	4	—43
B J Gleason	5	5	2	5	4	5	4	4	5	4	—43
Col L H Drury	3	4	4	4	4	4	5	4	4	5	—41
Total											258

WARREN TEAM.

F S Spafard	44
N B Post	44
H W Foss	42
J C Woodworth	41
A H Tatten	40
F H Cole	37
Total	248

COLORADO—*Denver, May* 2.—Telegraphic match between the Denver Rifle Club and the Avoca. Teams of four men, ten shots each at 800, 900 and 1,000 yards. The Denver men won with a score of 513, against 480 made by the Avoca men. We give the Denver score:

C Gove	800	5	5	5	5	4	5	4	5	5	—47
	900	5	5	4	4	5	4	5	3	4	5—44
	1,000	0	5	5	5	4	4	5	5	5	—43
											134
Wm Bemrose	800	4	4	5	5	5	3	4	5	3	4—42
	900	5	5	5	4	3	4	4	5	5	5—45
	1,000	4	3	4	4	4	5	0	5	3	4—36
											123
M Spangler	800	4	4	5	5	5	5	5	5	4	5—47
	900	5	5	3	5	5	3	0	5	5	4—40
	1,000	5	3	5	3	4	4	3	5	4	5—41
											128
F Church	800	5	4	5	5	4	5	5	4	5	—47
	900	6	5	5	5	0	4	3	4	4	5—40
	1,000	5	4	4	5	5	0	4	5	4	5—41
											128—513

THE SPORTING RIFLE.—No. 3.

I suggested at the conclusion of my last communication that the trajectory of the bullet of a sporting rifle might be determined with sufficient accuracy for practical purposes by its power of penetration, which, of course, must represent the ratio of velocity and weight. I neglected to state in the illustration which I gave, however, that the bullet was of soft lead, which is an essential point, as the penetration is very greatly increased by using hardened bullets. With the same gun and charge there described, I have shot a bullet having a hardened end, through seventeen inches of green cedar.

With increase of calibre, and such changes of ammunition as are incident thereto, the conditions are different, and must, of course, be gauged by a different standard.

The question of calibre is one of greater importance in the choice of a rifle for shooting game than most people attach to it. The larger the calibre the greater must be the size and weight of every cartridge, and in the aggregate of a full supply of ammunition the difference is by no means trifling.

With increase of calibre, the charge of powder must be increased, in order to overcome the greater atmospheric resistance and secure an equal initial velocity. But the increased charge and greater atmospheric resistance also cause a more severe recoil, and if we attempt with a large bore to increase the range by using a long bullet, the recoil is speedily increased beyond endurance.

It is obviously desirable, therefore, that the calibre should be no larger than is absolutely essential to the work to be done. But, on the other hand, there are necessities connected with that question which cannot safely be ignored. The difference in stunning and fatal effect of a bullet of large diameter presenting a broad striking surface, as compared with one of smaller calibre, or of a conical shape, is such as no person could conceive of who had not witnessed it. A small bullet, or a pointed bullet, inflicts a wound like the thrust of a sword, which even, if ultimately fatal, may serve only at first to infuriate the recipient, leaving him enough vital power to be very mischievous, or to make his escape, while a large bullet, with spherical or flattened end, inflicts a blow like a hammer, which deprives the beast of power or will to do ought but lie down and die.

If I were going expressly in pursuit of very large, and possibly dangerous game, and especially in dense forest, where there would be little chance of getting a long shot (as for instance, for moose, caribou or bear in the woods of Maine), I would prefer as large a calibre as half an inch, but for any ordinary service, even with a probability of an occasional encounter with the larger animals, I would carry nothing larger than a 4-10 or 44-100 calibre, which is a much pleasanter size to use, and is more reliable for anything beyond fifty or seventy-five yards. I should always use cylindrical rather than conical bullets, however, with spherical or flattened end, and would always be provided with cartridges loaded with hard-headed bullets for emergencies. Of the effect of these bullets I shall have more to say hereafter in connection with the subject of explosive bullets.

The opinion is still widely prevalent that a long barrel is essential to effective service, and the majority even of experienced sportsmen would probably select a barrel of not less than 28 or 30 inches for indiscriminate service.

I began my rifle practice in 1835, with a rifle made by Dickson, of Louisville, Ky., whose reputation at that day was certainly second to that of no maker in the West. The gun I selected with his aid and advice weighed 14½ lbs. The barrel was 35 inches in length, and the calibre 50 round bullets to the pound, and that gun I owned and used for many years on the prairies of the West, the forests of Indiana, the mountains of Pennsylvania, and the pine woods of Northern Maine. I have carried it many thousand miles on horseback, on foot, and on snow-shoes, and had such evidence of its efficiency on more than one occasion, when I could almost say that my life depended on its powers, that my confidence in its value made me indifferent to the labor its transportation involved.

I now use a rifle weighing but little more than 6 pounds, with a barrel only 20 inches in length. In appearance it is like a mere toy in comparison with the ponderous weapon which for so many years was my constant companion, yet for any possible service for which a rifle might be wanted, it is so far superior to it that I should feel comparatively helpless if forced to return to my former weapon.

It is fully equal to the standard of accuracy and force which I have shown to be sufficient for the requirements of sporting service. I have repeatedly placed ten shots in succession inside of a six-inch ring at 200 yards, and have shot a soft lead bullet through eight inches of pine at 30 yards. I have only occasionally tested it at very long ranges, but have found no difficulty in making an average of 40 out of a possible 50 at 500 yards, or in making a bull's-eye at least once out of every three shots at 800 yards. I mean, of course, shooting with a rest, simply to test the gun.

In actual game shooting, I have made my full share of those extraordinary shots with which every experienced rifleman is familiar, which surprise the shooter quite as much as anybody else.

Thus, I once cut the neck of a bittern at 150 yards, when I could see only the head and an inch or two of the neck above the swamp grass in which he stood. I shot a wild goose at 400 yards, and I picked off the leader of a flock of six wild ducks, flying at least 100 feet above the ground, and at considerable distance from me. I have known many instances of deer shot with rifles of the same pattern and size, the bullet passing clean through them and breaking bones in its passage; of the back-bone of a buffalo being cut in two, and the animal instantly killed; and of the brain of an alligator being pierced, though the bullet struck at such an angle as to cut a long gash in the skin before passing through the skull.

These evidences of accuracy and force, the truth of which I have proved to my own satisfaction, and can easily demonstrate to any doubter, leave no room for question that a barrel of 20 inches is quite sufficient for sporting service, and indeed is equal in every respect to any gun of the same calibre, using the same weight of powder and lead. And this being the case, its obvious advantages in ease of transportation and manipulation over a longer and heavier weapon require no comment. With the barrel removed from the stock, which may be done in a moment, the whole may be packed in a valise. A shot barrel or a spare rifle barrel of different calibre may be carried, slung by one's side, and can be instantly substituted if occasion requires, and thus the sportsman may be armed for any possible service without carrying more weight than that of the ordinary single rifle.

To people accustomed to greater length, however, the objection to so short a weapon is the difficulty of getting a steady sight. The common remark is that it seems too much like a pistol, and they cannot feel confidence in the efficiency of a weapon which to all appearance is so insignificant. I know by experience that a very little practice will overcome this feeling, but it is so prevalent, and so firmly established in the minds of sportsmen, that I rarely venture to advise a stranger to procure a rifle with a shorter barrel than 26 inches, which makes the total length about three and a half feet. Even this seems to most men a rather insignificant weapon, but they may rest assured that nothing is to be gained in a sporting rifle of that calibre by any additional length or weight. If they think the saving of a pound or two in the weight of their equipments is not a matter that is worthy of their consideration, I can only say that my experience has led me to a different conclusion. No lesson has been more strongly impressed upon me in the course of an education of many years of rough service, under greatly varying circumstances, than the importance of limiting one's outfit to the simplest possible forms that are available for effective work, and especially with regard to the gun and its necessary equipments, which must be carried on the person, ready for instant use, and subject to all the exposure and rough handling which are of necessity incident to such service. Whatever may be the physical strength, activity and endurance of the hunter, it behooves him to economize the load he has to carry, by omitting everything that is not essential, and reducing its weight and size to the last ounce and inch. If anyone is inclined to think lightly of my words, I will only ask him to call them to mind about the time he draws near camp after a day's mooso hunting on snow shoes. H. W. S. C.

SHARP SHOOTING.—Capt. Bogardus and Dr. Carver have been exhibiting their skill together at Chicago. Dr. Carver, to show the rapidity with which he could fire, shot toward some piles in the lake, about four hundred yards away, and so quickly did the shots follow each other that the second ball had left the gun before the first struck, as could be seen by the plash of the bullet in the water. Capt. Bogardus also did some very fine shooting with his shot-gun, and thoroughly astonished himself and every one else by making one of the most difficult shots made during the day with a rifle. A ball was thrown swiftly away from him, and he broke it with a bullet at probably sixty yards.

MODERN OBSERVATIONS ON RIFLE SHOOTING.—We beg to acknowledge from Mr. Edwin A. Perry his improved system of score-book, with the silicate slates for use on the range. We shall be glad to give this most useful score-book a more extended notice in a subsequent issue. Orders may be sent either to the publisher in New York, or to Mr. E. H. Madison, 564 Fulton street, Brooklyn.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
May 17	M		8	27	7	59
May 18	0	27	9	19	8	50
May 19	1	19	10	16	9	37
May 20	2	10	11	11	10	28
May 21	2	59	M		11	17
May 22	3	49	0	26	M	
May 23	4	41	1	14	0	28

YACHTING NEWS.

HARLEM YACHTING MATTERS.—The Empire club-house has recently come into new hands, and in conjunction with the efforts of the officers of the club we are assured that times will be lively in the aquatic circles, which make this place their headquarters. On the Harlem River there will be, apart from the regular regatta, an additional race for a challenge cup offered by the Empire's for competition, open to all boats under 21 ft., belonging to their own or any other club. Nearly all the craft of the club are overhauling for the spring, many being already afloat. The *Emma D.* belonging to Messrs. Dowling & Ruth, is in the hands of her captain undergoing preparations for an active racing season. She has been hurut off and will have her bottom smoothed in order to meet *Cora D.* in the match for the silver cup. The *Emma* was 21 ft. 6 in. long, but has had her length over all reduced to 19 ft. 11¾ in. so as to bring her into the special class for lengths under 20 ft. as stipulated in the club's by-laws. She has always been considered about the fastest boat of her inches in her waters, and it remains to be seen to what extent the alterations will affect her going qualities this season. No doubt much of her former success was due to the thorough manner in which she was "tooled" by her captain, Mr. Ed. D. McManus and his regular crew. He has sailed the craft so long that she seems to come natural to him, and if there is any more speed to be got out of her at any time he is sure to make the most of it with half a spoke more helm or an inch or two of sheet. The sloop *Inspector*, S. Gordon owner, has had more mushin given her, and now sports a mainsail of about 30 ft. hoist and a veritable California "big tree" to hang it on to. She was built to beat the *Pluck and Luck*, but the latter having taken wings and departed for a warmer clime, Mr. Gordon will have to console himself with showing his wake to other smart ones that are still left, among them the new 25 ft flyer Mr. John Farrell has in hand at 86th street. As she is to hoist the Empire's pennant, there will be lots yet to do for Mr. Gordon. In the match on June 18 there will be many notable craft whose colors will be hoisted at the peak when crossing the line. There will be the *O'Brien*, *Rosnia*, *Plug Ugly* (euphonious name!), *Fleming* and others from Williamsburg; *Taugh* from Jersey City; the *Varian, Jr.*, and *Skip Jack*, Mr. Brassington owner, of the Manhattan Club; the *Mollie Bawn* and another crack from Flushing, and two new flyers from the shops of Decker and Kyle on the Harlem. Besides these many others from abroad have promised to put in an appearance, and these in addition to the usual quota of the club proper will form as big a fleet as ever hoisted canvas under the auspices of the Empires. "Old Proh." should give them a fine day and a spanking breeze, so that the match may result in a manner worthy of the energy and enterprise displayed in its organization by those in charge. The cabin sloops *Belle Bean* and *Thos. Elsmore* will come together in the first-class for cabin boats, and there is also some talk of matching *Mollie Bawn* of Flushing, against the Harlem pet, *Emma D.* It is also proposed to send some clippers up the Hudson to give the Newburg natives a warming on July the 4th. To this end a member of the Empire Club has proffered his steam launch as a towboat for the occasion, and the *Sophia Emma* and *Emma D.* have accepted the kind tender, while others will join them in time. In this connection we may refer both to the sailing committees of the Newburg and New York Bay Regattas, a point which the Empire's claim rather works against their interests, and diminishes the number of boats they otherwise would send to the start in both those events. We refer to the classification adopted by the committees in question. In the Bay Regatta only mainsails are allowed in the class under 20 ft., while the Empire's can muster as smart a fleet of jib and mainsails under that length as one would care to see. Naturally enough, as exceedingly active devotees of the sport, they do not care to remain at their moorings and see the cats have all the fun and glory to themselves, so they raise their voice in supplication for a change in the classification adopted. It remains, of course, with the sailing committees to consider whether the Empire's wish to enter jib and mainsails under 20 ft. can be complied with, or whether such permission would tend to introduce too many subdivisions. But no doubt the matter will receive full consideration on the part of the committee, regardless of what their final conclusion may be. Concerning the Newburg classification they complain that craft of their size have been so far left out in the cold, or must sail in a class so much larger as to be manifestly to their disadvantage. Thus the lines have been drawn at everything over 30 ft., then from 30 to 25 ft., from 25 to 23 ft., and 23 to 21 ft. Anything under that must presumably enter in the last-mentioned class or haul down their racing colors. We understand that the owner of the famous *Brown*, of Newburg, looks with favor upon the formation of an additional class, and so there seems some chance of the smaller jib-and-mainsails sailing by themselves for a cup in their own division.

The Empire Club is fortunate in the location of its club-house. On the New York side, opposite Ward's Island, the cove below affords a sheltering harbor and anchorage clear of all steamboat travel, while the view from the pier leaves nothing to be desired. The fresh green of the islands brought out against the bluish-gray tints of the sky to the northward, and the Big and Little Mill Rocks on to the Southward, with Hallet's Point to the eastward, inclosing a stretch of water, form as pretty and charming a picture as one can wish for. But not only in beauty, but also in usefulness, does the locality excel. It is a splendid place to start sailing and fishing parties from for a trip up the Sound. There is College Point, Fort Schuyler, Sand's Point, Pelhamville, of coaching fame, and many other spots of interest to the suburban tourist, at which he will find shade and refreshment, and the bass and bluefish running thick. Boats, lines and bait are to be had at the club-house, and a few minutes' chat with such veteran

fishermen and Hell Gate pilots as Mr. Philip Jonas, familiarly known as "Uncle Phil," or Nathaniel Lockwood, the President of the club, or Wm. McManus, and others, will give you an amount of valuable information concerning good "holes" and still water to drop your bait in that could not be gleaned elsewhere. Uncle Phil, who, by the way, is truly an illustration of civil service reform—for over thirty years an officer of the Supreme Court of N. Y.—has done some fall fishing in the "Gate" all his life, and, what is more, in the spirit of the true sportsman only. For fifty years has he pulled his boat and dropped his line or trolled for bass with squid caught at night time around his scap net, and he is at the present day as ready as ever to go on a hunt for the finny denizens of the deep. Mr. Jonas keeps a weather-eye on the infringers of the game laws of the State, and in connection with the Rod and Reel Club of Harlem, of whose counsel committee he is the chairman, is ever ready to prosecute all who break the laws by the use of fykes or nets for capturing bass within five miles of the Gate and its estuaries. Many years ago this gentleman commenced and won an action against the gas companies, compelling them to desist from their practice of poisoning the water with refuse coal tar from their works. For this and many other steps in their interests the salt water fishermen of the Gate have to thank the sporting spirit of Mr. Jonas and his confreres. Correll Finch, an old Harlem puller, whose hands no longer blister when he takes to the paddles for an hour or two, is in charge of the club-house, keeps the boats in order, and is always on hand to give a helping hand to anyone requiring it.

YACHTING NOTES.

THE INTREPID.—On Tuesday, May 7, this schooner was got under weigh and headed for the Hook. She had on board her owner, Mr. Lloyd Phœnix, and Mr. A. Cary Smith, her designer. Below Governor's Island the tug's hauser was cast off and the big schooner left to shift for herself. Belmont, her captain, then put his craft through a series of manœuvres to test her qualities. She was tacked and wore round, sailed close hauled and with a free sheet and in smooth and loppy water. Under all circumstances she proved a thorough success and fully came up to the most sanguine expectations. This much was to be expected from a carefully prepared scientific design as well as from the well known ability of Mr. A. Cary Smith, the St. Clare Birne of America. Some few would-be critics, who saw all kinds of sharp angles and centres out of balance, peculiarly novel principles of mechanics, etc., in her while on the stocks, will now probably wish they had not rushed into print quite so readily as they did. Their crude guesses and smatterings of knowledge called down upon them the ire of several, who, in their desire to set matters right, forgot that naval science requires no defence, but can stand by itself upon its merits. The man who throws science to the dogs and falls back on jack-knife art, is simply an ignoramus, and his lucubrations call for no remarks. The *Intrepid* had only one chance of testing her speed on her trial trip, and the ready manner in which she made way with the pilot-boat *Fish* will be unwelcome news to the holders of challenge cups for ocean matches. The success of the *Intrepid* will do much to advance the art and develop a taste for able sea-going yachts.

THE KNICKERBOCKER REGATTA.—The match of this Harlem Club has been postponed from the 15th to the 30th inst.

THE FEVER SPREADING.—When staid old conservative Britons take to such newfangled concerns as catamarans there is a future for such craft indeed. Herreshoff, of Bristol, is building a 30-foot one for parties in England.

PETROLEUM FUEL.—Mr. J. B. Smith, of East Providence, has launched a yacht, 30ft. 6in. long, 7½ tons burden, which will be driven by the combustion of petroleum and air, without developing steam or the use of a boiler. We hope to give further details of the experiment shortly.

ESTELLE-GRACIE MATCH.—This schooner and sloop will try their speeds over the N. Y. Y. C. course for $500 a side, some time in June. Capt. Briggs will command the *Estelle*.

PROVIDENCE YACHT CLUB.—Our Providence correspondent sends us the following items concerning yachting matters on Narragansett Bay: The club will hold its annual review and dinner at Bullock Point, May 30. The race for the Harvey J. Flint cup will be sailed in June, besides which there will be two other races during the season. The commodore also proposes giving a cup, while the catamarans will have a special brush on the waters where they first originated. Yachting affairs in and about Providence are lively.

JERSEY CITY YACHT CLUB.—The twentieth annual regatta of this flourishing club takes place June 11. Course, for first three classes, from stakeboat off club-house to buoy 8½ and return; fourth and fifth class sail to buoy off Robbins Reef and return, twice over. There are already twenty-four entries.

BAY OF QUINTE YACHT CLUB.—Under its auspices a match will be held at Guanaqua, on the St. Lawrence.

NAHASSET YACHT CLUB.—Our advices point to an exceedingly spirited season among the members of this club. They are all active working amateurs. The rule compelling members to steer during matches has been abolished.

SAN FRANCISCO LEADS.—The yawl rig has been adopted on several yachts at the Golden Gate. Must Eastern yachtsmen travel all the way to the Pacific for an improved cruising rig? The yacht club will open the season with a sail to Vallejo on the 27th inst.

Kingston, N. Y., May 7.—Dwight Knapp, of Rondout, has been overhauling his yacht *Annie*. He has added nine feet to the topsail and twelve feet to the jib, and has been setting the mast back three feet and been putting in a new bowsprit. OUR HARRY.

YACHTING DRIFT.

San Francisco yachting is lively and the sport rapidly gaining fresh members. The yawl rig gives satisfaction out there.....Dr. Scudder will sail the *Only Daughter* with a Christian spirit this season.....Long Island Yacht Club has thirty yachts enrolled.....*Nereid* comes out with three hulls this summer. If this many barrelled schooner more anon..... *Palmer* will not fit out.....*Regina* is the prettiest of her class, inside and out. Geo. Cooley will tool her.....Catamarans are being black-leaded. Competition between them runs high .....Sloop *Gracie* is having 6ft. added to her spar. This will make her a formidable rival to the other first class sloops..... Schooner *Ambassadress* will probably not race, though she could not be speedy, from the looks of her.....Jacob Smith will be skipper of the *John Gilpin*.

THE OAR AND PADDLE.

ST. LOUIS BOATING.—The four-oared race for the St. John Cup, now held by the St. Louis Club, will take place June 30. Four clubs will compete—the Modocs, Westerns, St. Louis and Mississippi. The match will be pulled under the auspices of the Mississippi Valley Rowing Association. Course from Pittsburg dyke to North Market Street and return to Chouteau avenue. The Mississippi Valley Amateur Rowing Association also met at Peoria and laid out the course for their regatta at that place. It will be a straightway mile and a half, starting from upper end of the lake and ending at boat-house of the Peoria Club.

HANLON-PLAISTED RACE.—The last deposit of $1,000 in this race has been placed in the hands of the stake-holder, the Mayor of Toronto. The race comes off on the 15th inst; both men are in good condition. Betting in favor of Hanlon.

WATKINS REGATTA.—The date for closing entries has been deferred until May 18. The event promises to be one of the most brilliant ever held in this country.

PACIFIC AMATEUR ROWING ASSOCIATION.—The knights of the oar in San Francisco and neighborhood have organized under the above title and have adopted the rules of N. A. of A. O. with the exception of substituting the date of Jan. 1, 1878, for Aug. 19, 1872 in the clause concerning amateurs. President, Chas. G. Yale; Secretary, Will Brooks; Treasurer, Val. McClatchy.

CHARLESTON, S. C., *May* 4.—As the time for our annual regatta draws nigh, the interest in boats and boating is rapidly increasing, and it is to be hoped that by the 30th we will have as large and enthusiastic a crowd with us as every annual regatta heretofore has brought together. The "Palmettos" have made up their first crew as follows: H. Nott Parker, stroke; Wm. M. S. Lesesne, No. 3; H. B. Ball, No. 2; H. C. Cheves, bow. Messrs. Parker, Ball and Lesesne are three of the original crew of the Palmettos and have won the largest number of races, perhaps, of any amateur crew in the South. Mr. Cheves is a splendid oarsman, and is the gentleman who won the single scull race in New Orleans in such beautiful style about two years ago. Besides the Palmettos, the Carolinas, Electrics, and we hear the Queen Cities will enter crews for the four-oared shell race and "English Challenge Cup." It is with regret that we hear that there will be no crews from Savannah this year, but there are to be two or three of their best yachts over on the 30th, and, if reports are true, they will no doubt give our yachtsmen a sharp fight for first and second prizes. YENOTS.

CANOEING.—Mr. Chas. Chase started on his trip up the Hudson, May 7, in his canoe *Bubble*. She is of the *Shadow* model, was built by Everson and is 14ft. 4in. long; beam at sheer stroke, 28in.; at bottom, 31in.; depth, 10½in.; weight 65 lbs. Her rig consists of mainsail, jib and dandy. Mr Chase will proceed up the Hudson through Lake Champlain down the Sorel River, thence via the St. Lawrence and canal to Kingston, Ont. From that city to Quebec, passing the Thousand Islands on his way, up the Chaudiere to Lake Megantic, and by portage to headwaters and down the Connecticut River, through Long Island Sound back to New York. This will afford a fine test of Mr. Alden's *Shadow* model.

ROWING RIPPLES.

Ariel Club of San Francisco and Undines of Sacramento are alive and flourishing.....Waters, of Troy, is building a paper eight for the Yale University crew.....Hanlon will pull a shell by Elliott of Greenpoint in his race with Plaisted. Odds 100 to 70 against the latter.

New Publications.

A KENTUCKIAN'S OPINION OF THE "SPORTSMAN'S GAZETTEER."—We copy the following letter, dated

LOUISVILLE, Ky., Feb. 27, 1878.

Dear Sir—I wish I had time that I might, as far as words go, pay off a part of the debt of gratitude I, in common with all sportsmen, owe you for your "Gazetteer."

I suppose I know as much about sporting matters as the generality of men of my years and opportunities. I have never been without a double gun these thirty years; my dogs have a good local reputation; my fishing tackle is referred to as the best; I have shot and fished from Canada to the Gulf; I have camped out in all styles, from on the bare ground to the luxurious shooting box, and got along somehow—comfortably or otherwise; but, now that I have your book, after reading it I see so many things opened up to me, so much information, so many things, small in themselves, but which go so far to make up a sportsman's life and comfort, I wonder how I did get along. If not so, your book deserves to be in the hands of all true sportsmen. It is practical, it is really the only practical work of the kind I have ever seen. I have had many "Shooting and Fishing Books" in my time, but they have never suited the wants of the general sportsman of the present day. Somehow or other they never "consist." I will not be invidious, nor will I name or classify these books—you know them as well as I do; but nine out of ten of them might as well be written in Choctaw for all the good they do, and are of no use whatever to a sportsman. For invalids and those who do all their shooting and fishing in their "mind's eye, Horatio," they may serve the purpose to give them something to talk about and appear learned to the unlearned. Now, in your book there is a breezy, outdoor, "been there" style that is particularly charming to one who has been there himself and knows that you know what you are talking about, and sees that you talk it in a terse, vigorous, concise, though comprehensive, manner.

Fraternally yours, J. V. C.

The writer of the foregoing adds:

In regard to our club, we have a first-class one, numbering nearly one hundred members. There are many extra shots among us. We are doing our best to preserve our game and have now before our Legislation Solons the draft of what I consider a good law, with every indication it will pass.

CANOEING IN KANUCKIA, by the Commodore (C. L. Norton) and the Cook (John Habberton). Illustrated. G. P. Putnam's Sons. New York.

In this book, which, by the way, appears very seasonable with the first break of real summer, the public is let into the heretofore unfathomed mysteries, dangers, adventures and delights of a sport comparatively in its infancy yet in America, but destined ere long to count among its devotees many thousands of the most conservative stay-at-homes of the day. The title has been chosen in accord with the subject matter, though had there been added to it some such explanatory hint as "a homœopathic device how to cure dispepsia and the blues" it would have been additionally elucidating to the average individual who shuns the water as he would poison of the most virulent kind. Since two heads are universally presumed to be better than one it is natural to expect in this little volume a sketch of events and transactions of an interesting kind, and in this the public will not be disappointed, especially when we add that among the enterprising party of adventures no less than wo wielded besides the paddle a mighty pencil. The latter was extensively called into play and every eventful incident has been handed down to posterity in the sketches liberally intermingled with the type. To be sure, once in a while the pencil falls behind the pen; for example, where an angelic form, probably some country governess, appears within the horizon of the gallant four; but the finiter caused in manly bosoms by this maiden, fancy-free—for such she was to the best of the author's knowledge—or else the hasty manner of her disappearance may be taken in extenuation of the not over-complimentary likeness. The cruise was undertaken by four members of the New York Canoe Club in search of health and recreation, and is both interesting and instructive in its results to others proposing to go and do likewise; while to the novice the perusal of this volume will open up a new field, perhaps unthought of, in which he can, at very moderate cost and an amount of time to suit his convenience, enjoy fresh air and nature to his heart's content and return to the tedious grind of the daily mill in the city with renewed vigor and hope. The cruise extended from the headwaters of a tributary of the St. Lawrence across the boundary line into the primitive regions of Acadia, thence down to the "Great Lone River of the North," where the canoes were finally stowed and sent home by rail, while the tourists took steamer to Montreal. Of especial value to the lovers of the sport are the pages of the appendix which contain full information about canoes, where to get them, how to rig and supply them and how to take care of them. We doubt not this pleasantly written volume, replete as it is with the many "haps and mishaps of the statesman, editor, scribbler and artist," will be read with pleasure and profit by the public in general and will conduce materially to the widening of the circle of canoeists throughout the land.

VOYAGE OF THE PAPER CANOE, by Nathaniel H. Bishop. Lee & Shepherd, Boston.

To the public at large Mr. Bishop's name is already familiar through his travels in South America, and the book describing his thousand miles walk across the Andes and Pampas. In his new work, the second on travel he has sent forth, we are given a very graphic and instructive account of a remarkable voyage 2,500 miles from Quebec to the Gulf of Mexico in a paper boat. Having left Quebec, Mr. Bishop proceeded down the Richelieu River, often called the Sorel, though erroneously so according to the author, thence through Lake Champlain, the canal and Hudson to Troy. There his old wooden boat, weighing some 300 lbs., was discarded for a paper canoe of only 85lbs. weight. The latter was built by Waters & Sons, of Troy, and was found after the long voyage, concerning which the public has been informed in detail in the columns of the FOREST AND STREAM, to have fully gone through the most severe and prolonged trial with gratifying success. Mr. Bishop speaks highly of paper as the material of construction for boats, and his varied experiences on his journey certainly entitle him to claim authority on this point. In connection herewith the reader of this volume is let into the secret of discovery of paper boat-building. Young Mr. Waters desiring a mask for an evening's entertainment, but finding the price too high borrowed one and took a cast of it in paper. This set him to thinking, and ere long his genius and efforts were rewarded by the production of a shell boat, which has been the forerunner to the large fleet of this class of craft now to be met with on all our rivers. Mr. Bishop sailed down the Hudson in his new boat fourteen feet long, thence through the canals to the Delaware and Chesapeake Bay. In his book, besides an interesting account of his own personal adventures, his readers receive the history of all places passed and important events or the turning points in the industries or customs of town and country are brought out in relief. Thus while in metropolitan waters the old story of the first steamer's trip to Albany is reverted to and the reader of the present day can pause and reflect upon the wonderful progress made in the last century in the means of travel. While in Delaware that peculiar and ancient institution, the whipping post at Newcastle, comes in for a rebuke from the author in the shape of a letter from a resident. About this method of punishment people are apt to stray off into theory and sentimentalism too much. It is the most effective, cheap and just method of punishment in practice. Nothing is here intended to be said about the advisability of making a public show of the execution of the laws and, so far as the prison yard is opened to the curious on days when the majesty of the law asserts itself the exhibition can only be demoralizing. But Delaware does not find herself retrograde under this "barbarous," *i. e.* effective, method of punishing for crime, and so has the temerity to maintain in the face of the "civilized" world the result of her experience. In the lower part of Delaware Bay Mr. Bishop met with a capsize, and his accounts of how invaluable he found a flask of brandy upon that occasion will furnish food for reflection for overzealous Knights of the Blue Ribbon. Concerning his reception in the South Mr. Bishop has but one opinion. It was open-hearted, generous to a degree, and thoroughly honest. It, in fact, operated so favorably upon him as to almost change his views as a Northern man. If the testimony he bears to the good will and intentions of the southern half of the Union serves to draw tighter the bonds of friendship and respect among our people, his book will not have been written in vain. The mechanical portion of the volume leaves nothing to be desired, the paper is excellent, the type clear, and the illustrations finely executed.

THE DOG, With Simple Directions for his Treatment, and Notice of the Best Dogs of the Day and their Breeders or Exhibitors, by Idstone. Twelve engravings; fourth edition. Cassell, Petter & Galpin, New York.

With the current dog show in New York, the issue of a book of Idstone's requires no comment. There are two names in canine literature which are most conspicuous, Stonehenge and that of the author of the book under review, and their opinions are considered as positive. The book consists of some forty-two chapters (there are about forty distinct breeds of dogs known in England), so that every dog has a chapter of the most exhaustive character devoted to his description. Suppose, as a sample of the book, we give somewhat in detail, the foxhound as Idstone treats him: Firstly, the system of hunting the dog is fully discussed, which leads to the history of the dog himself, traced back from the sixteenth century; next, the authorities on the form of the dog are given, with descriptions of standard animals of present and former times, with exact measurements. The utmost care and judgment are conspicuous in the treatment of every subject, and though Idstone is quite positive as to some of his opinions, they are always advanced with a host of strong arguments. In the introductory chapter, which treats of breaking, the advice given is of the most useful and practical character. "It is not every man who understands even the common everyday handling of a young dog. It is partly a gift, a good deal the result of love for the dog, and an appreciation of his character, and partly, it is the result of patience. * * * In reality, the handling of a dog is a very simple business—a union of firmness and kindness, and a thorough control of temper under trying circumstances. When a dog has a blow let him feel it, but don't flick and 'worret' him all day. Let the whip be used after all other means have failed. Let it be the word *first*, and the whip last." In this same introductory chapter, how a dog should be kenneled and bedded is given, with excellent advice on the feeding and rearing of puppies, with a general method of treatment for canine diseases. It is quite unnecessary for any reviewer to expatiate on the merits of Idstone, whose name is familiar to every one owning a dog. As he is authority in England so is Idstone accepted in the United States. If our recommendation in such a case is worth anything, should a gentleman's library be without Idstone, we advise the purchase of the book.

FEEDING FOR EGGS.—For the production of eggs the food should contain an ample supply of those ingredients that make up the egg. An average egg weighs about 1,000 grains, divided as follows: Shell, 107; white, 604; of yolk, 289. The shell is composed 97 per centum carbonate of lime, one per centum phosphate of lime and magnesia, and and two per centum albumen; the yolk of 54 per centum water, 2.86 per centum yellow oil, and 1.74 per centum albumen; and the white, 85 per centum water, 2.7 per centum mucus, 0.3 per centum salts and 12 per centum albumen. Therefore a food containing albuminoids and fats should be employed. The natual food of the fowl consists of insects, seeds, vegetable matter, etc. Therefore there should be a variety of grains, animal matter in the form of scraps of meat, etc., or pressed scraps, chopped cabbage, apples, etc., or, as has been practiced, finely cut and steamed clover hay. There should be variety at all times, and Indian meal scalded and well seasoned with pepper, or chopped horse-radish will be very effective. A recent writer prescribed scalded Indian meal made into a mush, which was cooked an hour or two and then fed hot, with horse-radish. It was recommended to cook food of all kinds, and feed hot. This might be well as a stimulent, but corn meal must be combined with animal food to produce eggs. A supply of powered shells or bone should be provided, not only to aid digestion, but furnish egg shell material. A correspondent of the Plymouth *Chronicle* mixed hog's lard with the dough he gave his hens, and asserts that a piece as large as a hickory nut will set a hen to laying immediately after she is broken up from sitting; and that by feeding a little occassonly hens may be made to lay all winter.—*Live Stock Journal.*

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EDITOR FOREST AND STREAM:

Dear Sir—I distincly repeat what I said in my *advertisement* of May 2: That Mr. Hilberton has no *flies of my manufacture for sale*, neither has he any *authority* to use *my name* in his *advertisement to convey such an impression*. I do not know what he denies by his "absolute denial of the same." Will he kindly explain? S. J. McBRIDE,

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Hazard's "Electric Powder."

Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of 1 lb. *only*.

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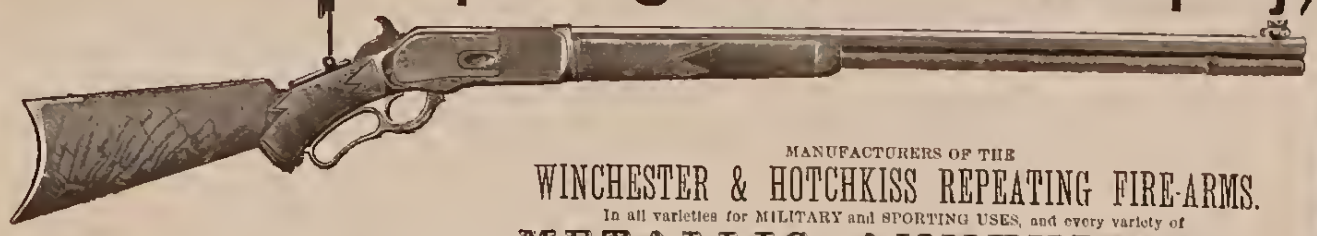

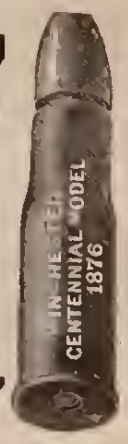

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SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot-Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44 as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

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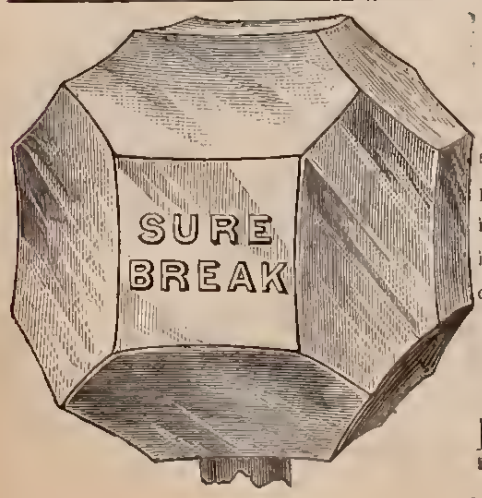

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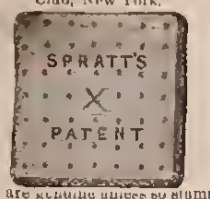

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This Powder is guaranteed to kill fleas on dogs or any other animals, or money returned. It is put up in patent boxes with sliding pepper box top, which greatly facilitates its use. Simple and efficacious.

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I keep only cockers of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruffed grouse and woodcock shooting and retrieving. j10 tf

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Grand National

DOG SHOW!

Given under the auspices of several gentlemen of WORCESTER,

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The entry books are now open at the office of Mechanics' Hall, where circulars containing Rules, Regulations and Schedule of Prizes can be had by addressing CHARLES HARTWELL, Secretary.

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may2 9t

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Liver color, weighs about 57 lbs.; is a first-class field dog both on coveys and single birds; has great speed and endurance, and is not afraid of briars. Was shown at Baltimore in the same class as Sensation, and was highly commended.

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Lemon and white, weighs about 60 lbs.; litter brother to Till, who took first premium for Native Pointers at New York, May, 1877.

Fee for Either Dog, $20.

As regards performances of dogs in the field, would refer to Messrs. Clark & Sneider, Baltimore; Hon. J. E. Reyburn, 1,822 Spring Garden street, Philadelphia.

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apr26 3m

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The Kennel.

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SPIKE COLLARS.—Spike Collars, by means of which dogs of ANY AGE OR BREED, no matter how long hunted, or what the disposition, can be taught to fetch and carry, and to retrieve game in a most perfect manner, with no play about it. Dogs broken of gun shyness and whip-shyness, made steady before and behind, and "to heel" steadily; prevents jingling on the chain, besides a much more extended sphere of usefulness. Price, with directions for using, $3. Kennel collars, which no dog can get over his head, price $1. Address M. VON CULIN, Delaware City, Del. feb7 tf

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BY CAPT. BOGARDUS.

New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Mike Johnson. For sale at this office. Price $2.

Live Wild Pigeons for Sale

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Trout and Bass Flies tied to any pattern. Scarlet Ibis, Ferguson, Grizzley King, and all leading Bass Flies for casting and trolling. Trout Flies selected for any locality. Buell's, Mann's, and other makes of Trolling Bait from 25 cents to $1 each.

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No. 1. Three-piece Trout Fly Rod, lancewood tip, brass click reel, twenty-five yards braided oiled silk, one dozen hooks on gut, one dozen flies and fly case, $5.

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No. 4. Extra fine finished, hand-made, three-piece, brass, full mounted black bass rod (suitable for fly or bait fishing), lancewood middle-joint and two tips, wound hand piece, fine multiplying click reel (new pattern), thirty yards best enamelled waterproof line, one dozen hooks on double gut, half oz. bass flies, two double gut leaders, fly spoon, $20. Above outfit, with German silver mounted rod and German silver reel, $25.

A club taking six outfits, one outfit furnished at half price; taking ten outfits, one outfit free. Goods sent by express on receipt of price, or C. O. D. if funds sufficient to defray express charge accompany order. All goods, from the **cheapest to the finest quality**, furnished as low as they can be sold. We shall be pleased to quote prices on any different styles of outfits or single articles that parties may desire.

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These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2⅝ to 3½ inches.

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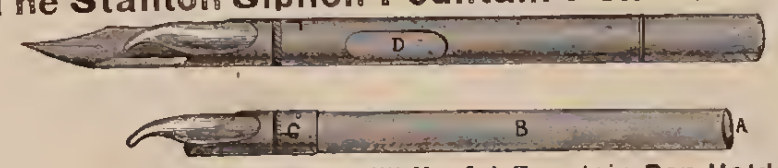

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The only Fountain Pen-holder with a FLEXIBLE SIPHON, so that any size or make of Pen can be used. The only Fountain Pen-holder in which the INK does not come in contact with oxidizable metal, and therefore cannot decompose or coagulate. No spilling of ink can occur in filling, as the tube is filled by suction from any vessel containing writing fluid.

No Inkstand or Special Ink Required.

ALWAYS READY FOR USE.

Is a very handsome and convenient pocket article; is made of strong metal, heavily nickel-plated and polished. Contains sufficient ink to closely write *twenty pages of foolscap;* will feed to the point of the pen until the last drop of ink is exhausted, and being air-tight the ink can neither evaporate nor mould. Is easily replenished, *always perfectly clean* and any steel or gold pen can be substituted for the handsome *Esterbrook Indestructible Golden Pen* furnished with each holder.

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Will carry sufficient ink for TEN DAYS' ordinary use. Especially adapted to the use of Doctors, Lawyers, Commercial Travelers, Collectors, Government Officers, Railway Officials, Tourists, and all who can appreciate the immense comfort in always having their own pen and ink with them.

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IMPROVED CHILLED SHOT.

American Standard Diameters.

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Our chilled shot will be found **free from shrinkage, more spherical, more uniform in size, harder, heavier** and of **brighter** and **cleaner** finish than any other. SEND FOR CIRCULAR.

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First act of Il Trovatore.....Italian.
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Mlle. Annetti Rasalli, prima donna; Mlle. Emma Mellier, mezzo soprano; Herr Jacob Graff, tenor; Signor Julian Francisca, baritone; Felix Preusser, basso.

Leader of orchestra, Ed. Hasser.

Admission to aquarium and performances, 50 cents; reserved seats, 25 cents extra.

To Chimpanzees and ourang outang, 25 cents extra.

Sportsmen's Resorts.

Chesapeake & Ohio RR.

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Allegheny Mountains Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

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Gen. Passenger and Ticket Agent,
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The Route of the Tourist,

Sportsman and Pleasure Seeker.

TAKE THE

People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, except Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

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S. E. MAYO, Gen'l Passenger Agent.

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

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The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

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BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING NOVEMBER 26, 1877.

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept18 1y H. P. BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

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TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

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also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

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Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
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FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St. at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

PROVIDENCE LINE.

Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

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From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 23, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

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For all particulars, illustrated guide, &c., apply to

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Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

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The first-class steamer ELM CITY leaves Pier 25, East River, daily (Sundays excepted) at 5 P. M. Passengers to North and East at 12 P. M.

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RICHARD PECK, General Agent.

Sportsmen's Routes.

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—FOR—

BOSTON.

And all Points East, via Newport and Fall River. Mammoth Palace Steamers, BRISTOL and PROVIDENCE, leave New York daily from foot of Murray street.

5 P. M. {SUNDAY TRIPS, June 23 to Sept. 8, inclusive.} FROM PIER 28, N. R.

Leave Brooklyn via "Annex" boat at 4:30 P. M. Tickets and State Rooms secured at all principal hotels and ticket offices, at the pier and on steamers.

BORDEN & LOVELL, Agents. GEO. L. CONNOR, General Pass. Agent.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

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ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

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QUICKEST, CHEAPEST AND BEST!

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FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

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Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,
VIA THE

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(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

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will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

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The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

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The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

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BLUE MOUNTAIN LAKE,
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Daily Stage to House.

Quickest and Cheapest Route to the Adirondacks.
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Ashland House,

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Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

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By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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Terms $1 per day till June 20th. Favorable rates for the season. Boats and bait furnished. P. O. Address, Greenwood Lake, Orange Co., N. Y.
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TROUT FISHING good this month.
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GOLD Any worker can make $12 a day at home. Costly Outfit free. Address True & Co., Augusta, Maine.

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For Guns, Cutlery and Surgical Instruments. Safe to handle, WILL NOT GUM, and will keep in any climate. Sportsmen everywhere in the United States pronounce it the best gun oil in the market. Judge Holmes, of Bay City, Mich., writes: "It is the best preparation I have found in thirty-five years of active and frequent use of guns."

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WHITE RIBBON,
Blue Ribbon
AND
SILVER MEDAL

Were awarded to Messrs. G. W. SIMMONS & SON, of Boston, Mass., Through their agents and exhibitors Messrs. Brown & Hilder, of St. Louis, Mo., at the Exhibition of the "St. Louis Bench Show and Sportsmen's Association," for an unusually fine display of Duck, Moleskin and Leather

HUNTING SUITS,

which attracted great attention and were much admired by all Sportsmen.

THE BOSTON
SHOOTING SUIT.

Manufactured only by

G. W. SIMMONS & SON,
BOSTON, MASS.

NEW YORK AGENTS:

Fowler & Fulton,
300 BROADWAY,
The Best in Use.

ONLY ONE QUALITY MADE, AND THAT IS THE VERY BEST.

Flexible Waterproof, Tan-Color Duck.

Each article—coat, trousers, vest and hat cap—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

We make no discount except to the trade. The price of the suit complete is $13.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are copper-riveted, and nothing is neglected to make the whole suit complete in every way.

This is what one of our best sportsmen says of it, writing from camp: "Although I had been nearly eight hours under incessant rain, laboring and striving along under adverse circumstances, yet I found myself comparatively dry, and my clothes without a tear. For the benefit of our brother sportsmen, let me advise one of Messrs Simmons' (of Boston, Mass.) Waterproof Suits. Oh! what a relief it was to find one's tobacco was dry, and that one could light a pipe; that you could laugh at your miserable friend, who stood shivering and shaking as if he had the palsy; and then, next morning, oh! what fun it was to see him mending his clothes, while I had not a tear to complain of! Ventilation, that great bugbear of waterproof suits, is legislated for in the most ingenious manner. No sportsman should fail to supply himself with a suit which is at once cheap, practical, and will last an almost indefinite time."

Our Flexible Tan-Colored Water-Proof Leather Coats, Breeches, Vest, Leggings and Caps are considered the finest things ever made.

PRICE LIST.

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Made Only by G. W. SIMMONS & SON,
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WATERPROOF DUCK.

Suits, $13	Coat	$6 50
	Pants	3 50
	Vest	2 00
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CORDUROY, Black or Brown.

Suits, $22	Coat	$12 00
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Suits, $25	Coat	$14 00
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Suits, $60	Coat	$32 00
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An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

OUR HUNTER'S TENTS made of tan-colored duck; light; easily transported. Size, 7 ft. x 7 ft. Price, $10, complete. Made on the umbrella principle, folding into a neat roll, 4 ft. long.

OUR PATENT DECOYS have entirely superseded the old-fashioned, cumbersome, wooden decoys. The birds are hollow, and six of them occupy about the space of one wooden decoy.

Address,

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GOOD'S OIL TANNED MOCCASINS.

The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

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PRICE 20 cents each, or SIX for $1.

Irish Red Setter, Rover; A Staunch Pointer; A Well-bred Setter; The Champions of the Field; Grouse Shooting; Rail Shooting; Quail Shooting; Snipe Shooting; Partridge Shooting; Woodcock Shooting; Deer Shooting; Shooting on the Prairies; Hunting on the Plains; Wild Turkey Shooting; English Snipe; Quail; Woodcock; Prairie Hens; Ruffed Grouse; Canvas-back Ducks; Wood Duck; Shooting on the Beach; Squirrel Hunting; Duck Shooting; Finishing a Woodcock; Dead Game—Quail; Dead Game—Woodcock; Setter and Woodcock; Brook Trout Fishing; Salmon Fishing; Pickerel Fishing Through the Ice; Blue Fishing; Bass Fishing; Just Caught (a string of Trout); Tempted; Booked; Group of Trout; Pickerel; Striped Bass; The Trout Pool; Hunting in the Northern Woods; Going Out; Camping Out; Returning to Camp.

Size of paper, 13½x17¼. Price, 20 cents each; six for $1. Sent per mail, post-paid, on receipt of price.

Address CURRIER & IVES,
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Ronan's Metal Shell Cleaner.

Cleans fifty shells in ten minutes. No water used. Knives elastic, self-adjusting, prevent the slipping of wads. Is unequaled as a breech wiper by covering with an oiled cloth. For sale by all gundealers, or sample sent free by mail on receipt of price, $1.50; 10 and 12-bore. J. F. RONAN, 788 Shawmut avenue, Boston, Mass. Liberal discount to the trade.

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25 to 1000 yds. range.

Target Pasters and Score Cards.

ALSO,

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For testing the pattern and penetration of Shot-Guns

Sold by Dealers in Sporting Goods.

On receipt of **Ten Cents a 100 yd. Target** will be sent by mail, with Circular, containing *Major Henry Fulton's* RULES FOR PRIVATE PRACTICE, by

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LOST
BECAUSE HE HAD NO
COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union take pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 1 P. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

J. H. BEHRENS, Cor. Sec., 37 Bowery, New York.

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LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and in use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

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Send for Illustrated Catalogue.

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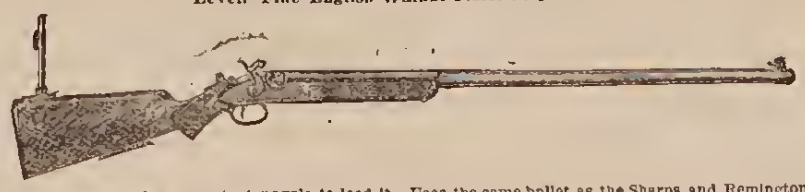
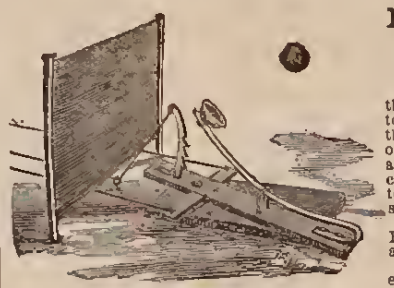
Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.



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These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. **Price $8. Old Style, $6.**

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

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Second and enlarged edition of "Field, Cover and Trap Shooting," by A. H. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill.
Dec6 tf

IRA A. PAINE'S
FEATHER FILLED GLASS BALL.
PATENTED OCTOBER 23, 1877.
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The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

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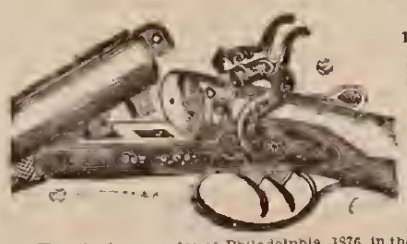

At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £105, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Pordey, the gunmaker.

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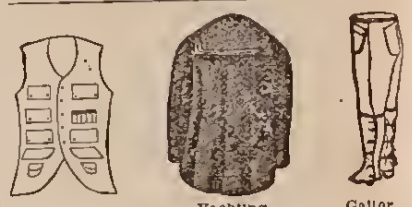

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MAY 23, 1878.

Volume 10.—No. 16. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

HUNTING THE ROCKY MOUNTAIN GOAT (Capra montana).

ON Rocky Mountain cliff and ridge,
Along the shelving Western slopes,
Or in deep valleys at their base,
Where range the slender antelopes,
The Rocky Mountain prong-horned goat
Feedeth and gallops o'er the hills—
Browsing on juicy grass and shrub,
And sipping the pellucid rills—
So wild, so shy, so fleet are they,
Surpassing speed of horse or hound,
That scarce the Indian's shaft may slay,
Or frontier rifle check their bound.
Where the Columbia River turns
Its North Fork, near its water's head,
Their bleating numbers love to feed,
Cropping the pastures there outspread;
And here the skulking Indian's spear
Drips blood, to feast the starving year.
But seldom do white hunters come,
Or skin-clad trappers urge the sport,
Save when from out-post garrison
Comes wandering soldier from the fort.
And then for days the cliffs resound
With gun report and echoing call,
With full mouth'd baying of the hound,
With gallop down the mountain wall;
Far then o'er granite peak and ledge,
O'er gorge and gulch and canyon rude,
The hunters clamber, climb and cling,
Alarming all the solitude;
And at each day-close, worn with toil,
Return with wealth of shaggy spoil.

ISAAC MCLELLAN.

For Forest and Stream and Rod and Gun.

An American Sportsman in Caledonia.

LATE in the month of August, 18—, I was whirled out of London by the fast-mail train on the North British Railway, at the rate of forty-five miles an hour, which soon carried me where I rested my eyes, as I had not for many weeks, by gazing upon a broad expanse of fields that afforded an agreeable contrast to the dirty pavements and solid, begrimed buildings of the city. The constant succession of highly cultivated fields and well-kept hedges did not become monotonous to me, and the occasional sight of a covey of partridges, a cock pheasant, or sportsmen in the fields with their dogs, was of especial interest. There are few routes in America that will carry the traveler through such an extent of country made beautiful by high cultivation, although the country between New York and Philadelphia, for instance, is very beautiful in this respect. Yet the American custom of indicating the division lines by fences, which occurs so frequently, renders the landscape less pleasing than it would be were hedges substituted for the fences, even where the latter are kept in good repair and neatly painted. But we are now on the North British Railway, the occupants of the car being English, Scotch, American, Welsh and German. We go on rapidly and pleasantly, with but one halt ere reaching York, about half way from London to Edinburgh. Here we take advantage of the fifteen minutes' halt for lunch, and then are whirled on again, stopping only at Newcastle-on-Tyne and Berwick-on-Tweed, ere arriving at Edinburgh, just nine and a half hours after leaving London. Thirty minutes of this time were used in making the four halts *en route*, so that the running time was but nine hours for a distance of 400 miles. If we could travel at this rate of speed, which is nearly double the average of American passenger trains, how much nearer would San Francisco seem to be to the Atlantic coast! The high rate of speed, fine condition of the railway, relief at getting out of London, pleasant traveling companions and anticipation of the pleasure to be obtained in the near future, all contributed to make the journey seem a short one; and after dining we were sufficiently rested to enjoy witnessing the opera *bouffe* of "The Princess of Trebizonde," quite a lively play for staid old Edinburgh. While remaining here enjoyable visits were made to the Castle, Holyrood Palace, the Royal Infirmary, Greyfriar's Churchyard, and other places of interest, strolls to the top of Calton Hill, or drives around the Salisbury Craigs, and a visit to the rifle range on the "Hunter's Bog." Climbing up to "Arthur's Seat" one may get a fine view of Edinburgh, Leith and the Firth of Forth, and gather a handful of the blue bells of Scotland on his return. Although frequently eating the national "parritch," we did not try the cockles and snails that were exposed for sale in huge baskets on some of the streets, and are eaten by the poorer people.

It was in Edinburgh that John James Audubon commenced the publication of his great and unequaled work on ornithol-

THE BLACK COCK.

[*We are indebted to the "Scientific American" for this beautiful cut.—Ed. F. and S.*]

ogy nearly fifty years ago. Of his many notes of interest written while in Edinburgh, he refers to the lower class of women ("fish-wives") as resembling the squaws of the West: "Their rolling gait, in-turned toes, and manner of carrying burdens on their backs, is exactly that of the Shawme women. Their complexions are either fair, purple, or brown as a mulatto."

Although there is much poverty in Scotland, the school system, combining, as it does, charity with instruction, renders the people very generally educated. It is a curious fact that the amount of compensation received by school teachers for their services depends somewhat upon the price of oatmeal. The motto, "*Tenui Musam meditamur avena*," proposed for the Edinburgh *Review*, was translated by Sidney Smith—"We cultivate literature on a little oatmeal." Excepting London, Edinburgh with its literary and historical associations, its many points of interest in and about the city, and picturesque location, is the most interesting city in Great Britain. But as there were friends awaiting at Inverness, we bid farewell to "Dun-edine" and started on our tortuous route toward the north.

> "Ask where's the north? At York 'tis on the Tweed;
> In Scotland at the Orcades; and there,
> At Greenland, Zembla, or the Lord knows where!"

We make a long pause at Stirling, which is an interesting city on the river Forth, a salmon stream. The old castle here, supposed to have been built by the Romans, is a conspicuous object on the rocky height; and near the city is a monument erected to the memory of William Wallace, that may be seen from the railway. A halt at Perth gives one time to get a drink of *Tay* if he wishes it, the river being close alongside. Leaving Perthshire and the Lowlands we cross the Grampian Hills into the Highlands, where there is much desolate country, but the scenery is interesting from its novelty. Along the route were seen many pewit, or lapwing plovers, and pigeons in the grain fields, and among the hills grouse were frequently flushed by the train. One old black cock rose from almost under the train and flew straight and swiftly away a half mile ere alighting. At Inverness I join my friends, and we enjoy some pleasant drives about the surrounding country ere proceeding farther toward our final destination. Inverness, the capital of the Highlands, is on the river Ness, a fine salmon stream, upon a portion of which the fishing is free at stated times. I saw several gentlemen whipping the stream for the river gods, as I may call them, since they have so many devotees. On a level plain near Inverness is a singular high oval mound, from which a fine view of the surrounding country may be had. The regular symmetrical form of this mound gives it the appearance of an artificial formation. There is a pretty little cemetery on the summit, and a few centuries hence this mound may be the subject of as much speculation as the mounds of Florida or the Western plains. From Inverness there is water communication from the North Sea to the Atlantic Ocean by the Caledonian Canal and the lakes which it connects. This is a favorite route for tourists who go so far north. The largest of this chain of lakes is Lake Ness, over twenty miles in length, and of great depth.

Leaving fair Ness Bank we go on through Ross-shire, in the midst of which we come upon a hunting lodge, beautifully situated on a gentle slope near a small lake; and in one of the yards of the well-arranged kennel a fine Scotch deer-hound was basking in the sun. I was much amused at the appellation "deer forests," used to designate a tract of country abounding with deer, but upon which perhaps not a tree is to be seen. There is now no such wonderful abundance of deer as in the days of Percy, Earl of Northumberland, when

> "The gallant greyhounds swiftly ran
> To chase the fallow deer.
> On Monday they began to hunt
> When daylight did appear,
>
> And long before high noon they had
> An hundred fat bucks slain;
> Then having dined, the drovers went
> To rouse them up again."

And in the present day there would be less likelihood of a deer hunt terminating, as on the occasion described, in a slaughter of the huntsmen. We eventually arrive at Strome Ferry, which is at the western terminus of the Highland R. R., and here we embark on a small steamer, finding as a fellow passenger a live doe, intended for my future host as an addition to his depleted stock. On board the boat we are enlivened by the national music of "the pipes," which were alternately played by several persons, and being courteously tendered from one to another, the instrument seemed to serve as a "pipe of peace."

Steaming down the picturesque Loch Carron, inclosed by the bold, bleak hills of Ross-shire, upon many of which even the heather refuses to grow, we soon have a more extended view over a wide expanse of blue water, and are joined by some gulls which follow us for miles in numbers constantly increasing, they being so bold as to fly over the vessel but a few yards above the deck. As the law prohibits the discharge of firearms from a vessel, I was unable to gratify my desire of obtaining some specimens, although I could have easily shot many that would have fallen upon the deck.

Reaching the Isle of Skye, we follow along its northerly shore, admiring the wild beauty of its hills, purple with heather in blossom, and the fine effects of light and shade. Soon we reach the Isle of Raasay,

> "A happy island in a sea of green,
> Smiling, it lies beneath the azure heaven,
> Well pleased, and conscious that each wave and wind
> Is tempered kindly, or with blessings rich."

Approaching its southern point, we were greeted by a scene that was indeed "perfectly charming" as the ladies exclaimed, its effect being heightened by the contrast with the wild scenery upon which we had been so long gazing. The steamer moved slowly into a deep cove, at the head of which was a miniature fortification, with mounted guns and a flagstaff with waving ensign to herald our arrival. From the shore there was a gradual ascent of well-kept lawn to the light colored mansion, with its background of dark green firs, beyond which rose the heather-covered hills. The whole scene, lighted by the rays of the setting sun, was very beautiful. A gem of civilization in a rough setting of bold hills and rocks. A small boat now shoots out from the pier to take us ashore, and we leave the steamer to proceed on her voyage to Portree.

As the sun drops below our limited horizon, we stroll up across the lawn, frightening rabbits and pheasants to their retreats. Pausing a moment to look back at the dark hills of Skye, and the intervening water that now appears black and cold, we turn to the cordial greetings that await us. After dining, and a pleasant evening of conversation and music, I retire to dream of coming pleasures, not the least of which would be the shooting. And in the land of Nod I found legions of game, of many unknown varieties. The following day, bright and beautiful, was spent in making a tour of the island. Along the two avenues that led from the grounds were hedges of fuchsia *upward of eight feet in height*, laden with the beautiful purple blossoms so rich in color and graceful in form. These hedges surpassed in beauty any that I had ever seen in nature or imagination, and one might truly remark they would be worth many thousands of pounds in London could they be made to flourish there. The soil and climate of Raasay must be extremely favorable to this shrub to produce such an exuberant and extraordinary growth. These were not pot-plants, but remained where growing, in the native soil, throughout the entire year. The ground is bare during the winter, such snow as falls rarely remaining more than twenty-four hours, although the neighboring hills of Skye are frequently white with snow for a long time. Raasay is about thirteen miles long by two or three miles in width, its highest summit being several hundred feet above the sea. Near the northern extremity are the remains of a ruined castle, but I learned little of its history, there seeming to be a lack of the usual legends concerning so many similar sites in Scotland. Had I been able to converse in the Gaelic language, I might have received much information of the legendary sort.

We halted near the centre of the island, at a spot where the road crossed a small stream, which tumbled down through a gorge until it reached a little beach, where it emptied into the sea. There was a path the entire length of the gorge, and midway between the road and the sea a clearing had been made for the site of a shooting-box. This spot was a favorite resort of the woodcock and black game, while close by there was a little loch abounding with trout. At the mouth of this stream sea trout were to be caught in the season, and it was a fine spot for bathing. Returning homeward by another route, we drove through the more cultivated portion of the island, and I had an opportunity to form a conception of the extraordinary numbers of rabbits on the island. Rounding a turn of the road, just at the time of day that "light thickens, and the crow makes wing to the rocky wood," we came to a field of a few acres in extent, bounded on the side opposite the road by woods.

This field was fairly alive with rabbits of various colors, light brown being the prevailing hue, but many were brown and white, some gray, and a few entirely black. As the first sound of the wheels reached their ears nearly all of them sat erect on their haunches, and the next moment scampered in a swarm to the woods, whence, however, in a few minutes after our departure, they would return to continue their evening repast. As curried rabbit and pot-pie were favorite dishes at the table, on several occasions I took an hour's stroll for rabbits, accompanied by the keeper, with his large game-bag, one of the small housedogs for a starter, and a retriever from the kennels. A favorite place for shooting rabbits was on a straight bit of road that ran through a growth of small birches. It was here that I shot my first rabbit. Reaching our ground, the starter was sent into the cover, the retriever being kept at heel.

"Look sharp now, sir!" cries the keeper, as the dog in cover gives voice; and immediately a rabbit leaps out from one side of the road to be stopped dead on the other side. "Fetch!" and the retriever hounds forward and brings in the game, to be bagged by the keeper who remarks, "A young one, but well grown. We do not kill the young ones, sir!" The road was barely wide enough for two carriages to pass each other, and as the rabbits were fleeing from the dog at the height of their speed, it required a quick shot to knock them over. I was well enough pleased at my first shot being a clean one, until the keeper's remark showed me the mistake I had made. But this was my first rabbit, and it was owing to my inexperience that I failed to distinguish while on the jump a three-quarters grown one from an adult. However, I did not again make such a blunder, and soon the keeper had a backload of rabbits. At the first sound of the gun a dozen rabbits appeared in the road at different distances, out of range, looking about with curiosity and astonishment, but after a few shots they became so shy from fright that none were seen except those driven out by the dog. During my hour's stroll, I saw no less than two hundred rabbits, and by spending the same time at sunset in visiting their favorite feeding places in the fields and openings in the woods, I could see very many more. I had on many occasions shot hares, and we occasionally saw them here; but this was my first experience at rabbit-shooting, which, from its novelty, afforded good sport for the nonce, yet I should never sacrifice to this purpose any time from other field sports.

Besides the rabbits, which should be placed last on the list, the game of Raasay consists of black grouse, designated according to sex as black-cocks and gray-hens; the more abundant red grouse, called moor-cocks and moor-hens; pheasants, which are polygamus, and only the cock birds are shot; snipe, woodcock (in winter), hares and deer, the latter being preserved for propagation. In addition to the game there were many birds of ornithological interest to me.

There were two varieties of pigeons, the field pigeons and the rock pigeon "blue rocks," curlews and other shore birds, guillemots, the scarth or Cormorant, and other seafowl. It is said that the capercailzie, *Tetrao urogallus*, had been known on the island. Before going into the field with the dogs let us make a visit to the kennel. And here let me mention the fact that in Great Britain sporting dogs are generally exceedingly well cared for, no matter in whose possession or care they may be. I remember once alighting from a train, the better to admire a fine brace of setters and the excellent accommodation for their comfort and safety while traveling by rail. There was a compartment under the luggage-van wherein the dogs were locked, safe from the danger of being smothered, crushed by luggage, abused by a brutal railway employee, or of being stolen. And they were made comfortable by an abundance of clean straw and a supply of water. To sportsmen in America who travel long distances with their dogs, the lack of accommodation and the exorbitant charges for the transportation of their pets, are sources of much vexation. With the increasing frequency of trips to the West by Eastern sportsmen, and the growing interest in bench shows, there will come, no doubt, better facilities for traveling with dogs. At least this must be the case on such railroad lines as have competition—gentlemen would prefer to patronize the railroad company whose rates and accommodations for their dogs best pleased them.

In a grove of trees beyond the stables we find the kennels where the useful dogs are kept. The pampered house pets are allowed to frequent the hall of their master's mansion. Among the trees near the kennels an odd assortment of vermin was hanging. The extermination of vermin, as all predaceous birds and animals are here termed, forms an important part of the gamekeeper's duties; and there were to be seen the remains of owls, hawks, ravens, hooded crows, weasels, etc., that the keeper had killed and hung in a conspicuous place to meet the eye of his master, to show that his duties were not neglected. On looking at the dogs I did not find a pointer among them. The subject of the comparative merits of pointers and setters is much discussed among sportsmen, but to my mind there is no question as to setters being the better adapted to a northern climate, and particularly for work on the moors.

In America I should prefer the setter for shooting in Canada, New England or any of the Northern States. But in the West or South my preference would depend upon the locality. For shooting partridges from horseback in the cottonfields, the pointer is preferable. As a rule, in a hot climate with a scarcity of water the setter would succumb sooner than the pointer. For shooting pinnated grouse or "chickens," many prefer the pointer, especially early in the season. But those who reside in the Western States and shoot grouse in August, usually require the same dogs not only for grouse, but later in the autumn for snipe, and the incidental duties of retrieving waterfowl, as also again in the cold wet spring when the best snipe shooting is usually obtained. A high-spirited pointer will do all this, but not being so well adapted by nature as is the setter to cold wet work, will suffer more, and thus materially detract from the pleasure of a humane master who regards his dog not alone as a slave to do his bidding, but as a companion and friend. As we are to make an early start for the moors to-morrow, we examine the feet of the dogs that are to be shot over, and give them a little run. Visiting the gun room we find everything in order and plenty of ammunition prepared, and on retiring are filled with anticipations of the morrow's sport. A clear sky the next morning betokens a fine day, and donning knickerbockers we are soon off for the hills accompanied by the keeper with the setters, Bob and Ranger, whose departure from the kennel was the signal for a chorus of howls from the dogs compelled to remain behind. Alas for the fickleness of Scotch weather. We were well dampened by rain within an hour and the morning proved cloudy and wet. Occasionally the clouds would break away and give us a few moments of sunshine to be followed by rain or fog, but when the shooting commenced we forgot about the weather.

As we reached the vicinity of our initial point, and were crossing a low wet spot to ascend the hills, the young dog Ranger suddenly stopped to game, which he "set;" crouching low with the body barely clear of the ground. Bob came in and backed, but, instead of standing, imitated Ranger and crouched in like manner. The keeper walked up a brood of young pheasants from under the dogs' noses, but we allowed the birds to go off unharmed, it still being close season for pheasants (Aug. 30). The dogs still remained, but thinking it to be the fresh scent that kept them, they were called to heel. The call was in vain, however, for they refused to stir, and as the keeper beat the ground before them a snipe was flushed and brought to bag. The dogs were then made to quarter the ground systematically, ranging wide and going at a galop. Beautifully they worked; now beating out, at the signal they turn in and pass each other, to be again turned when two hundred yards apart, and beating in are again turned by a signal when at full speed within a few feet of each other.

Thus we go on, and, not soon finding game, allow the dogs to range wider to cover more ground. As we follow up one side of a ravine the dog Bob is sent across to beat the other side. Soon he stands game, and we rush down into the ravine, through a clump of bushes and briars, and up the other side, where we arrive in season to see Bob, a hundred yards away, draw on and flush a cock pheasant. Out comes the whip and master Bob receives his merited punishment, the keeper remarking that this is Bob's only fault, and a bad one. Bob had a fine nose and would not run up birds, but if allowed to stand for any length of time would get impatient, draw on and flush the game. "I whip him from habit, but know that he'll do it again," remarked his breaker.

Remaining on that side of the ravine we push on again up the hill, and soon Bob again finds game. Through lack of confidence in Ranger, he had been called to heel on the previous occasion, but now he comes over the crest of the hill and backs Bob in fine style. Both drop to wing and remain motionless while the birds are retrieved, three of the five being bagged. These are the first grouse we have yet found, but now the hall is opened and the sport is continuous. There is no wind, and the air is so laden with moisture that often the smoke remaining before the gun prevents the use of the second barrel. Later on, when high up on the hills, a breeze comes out of the West, there is no more fog, and we have fine sport. This was Ranger's first season with the gun, but he behaved so well as to give no occasion for correction during the whole day. This was a pleasant surprise to his breaker, who said that Ranger acted so badly when in the field a few days previous, that, although the dog was thoroughly yard broken, he feared it would never be good for much in the field. I remarked that I would choose Ranger in preference to old Bob. "And so would I to-day," he replied. Once when Ranger was on a point Bob crossed immediately before his nose, then turned and backed him. Upon taking the scent Bob began to draw on the birds, and, passing within six feet of Ranger, left him staunch and immovable as a statue a dozen yards in the rear, ere settling down to a point himself. I was warm in my praise of the young dog Ranger behaving so well under such trying circumstances. The birds were well in advance of Bob, scattering as they all rose together, but we were prepared for them and each got in both barrels.

"Well done, gentlemen!" cried the keeper, as he stepped forward and picked up two birds on the right, and one on the left. "Look further to the left for another!" I cried to him. Turning as I directed he found the fourth dead bird, which he had not seen fall on account of the smoke, and the reports of our guns having been simultaneous he did not know how many shots were fired. We shot very well throughout the day, with one exception. I think it was just after the double shot just referred to, that we walked up a single bird which rose from nearly under our feet and flew straight away. We blazed away at it with four barrels, but apparently all four of the shots were clean misses. Bob showed his weakness once more during the day. We were proceeding along a ridge, when Ranger found game on one side half way down to the bottom of the ravine on our left, and down we went for a shot. I was on the left, and when the birds rose, one flew on my side and I stopped him. Two of the birds wheeled around behind us, and coming back on the left I dropped them both with my second barrel, and they reached the ground at the bottom of the ravine. Ranger was still lying where he had dropped at the first shot, but Bob had not put in an appearance. Telling the keeper to look sharp for the last two birds, which I feared were not dead, I ran back to the top of the ridge to look for Bob. There he was, standing game on the other side of the ridge. But he had stood his time, and I arrived in sight just in time to see him draw cautiously upon the birds and flush them.

Once the dogs pointed while at the top of a slope so steep as to be almost a precipice. No birds could be found, and

yet the dogs refused to budge. We threw handfuls of stones down without any result, and finally the keeper descended by clinging to the tufts of grass and heather. Soon we saw him attentively examine a tuft of grass, and then stooping, literally boost a bird out with his hand. A quick shot at short range made that a very tender bird. Although some black game was found we brought but one bird to bag. They are very sly, and even when lying well to the dogs are apt to rise out of range. When a half mile away from a birch covert on a side hill, we saw an old black cock fly out and alight upon a grassy spot, where we could plainly see him strutting about, but we made no attempt to approach him, knowing it to be useless on account of the well known wariness of the old cocks and the entire absence of any covert where he had alighted. Having occasion to cross a wooded ravine, we flushed a woodcock, and it was the subject of some speculation as to whether this bird had bred on the island or was an unusually early arrival from Scandinavia, it being generally supposed that woodcock do not breed in Great Britain. A few days later, while on a special trip for black game, several woodcock were obtained, whose appearance seemed to indicate that they had bred on the island.

Our day's sport terminated in an unfortunate accident. As we were descending a hill Mr. S—— caught his foot in the heather in such a way as to be unable to disengage it. His leg was so twisted that as he fell it was broken, the tibia snapping short off about four inches above the ankle joint. We were then four miles from home, but fortunately within a quarter of a mile of a road. I immediately dispatched the keeper for assistance, and placed my friend in as comfortable a position as possible under the circumstances. Not a tree or bush was to be seen within a mile; but running down the brae to the burn, I there found a stunted birch bush, from which, with my pocket knife, I fashioned some splints, and, having set the broken limb, awaited the return of the keeper with the cart, mattresses, etc. Upon his arrival my impatient patient was carried down to the road and conveyed slowly home to the care of loving hearts and tender hands. As surgery is not my profession, I am pleased to relate that my patient lived to report a speedy and perfect recovery.

A brief description of some of the game birds of Scotland, familiar by name to American sportsmen, may be of interest. As I write I have before me a beautiful mounted specimen of the black cock, standing in a natural erect position fourteen inches high. The purple-black plumage, the peculiar form of its black tail, of which the three outer feathers (rectrices) each side curl outward at the ends, the end of the outermost rectrix being two inches at right angles from its shaft, and the very gamy appearance of the bird, render it a striking object. The wings are very long for a grouse, being in the specimen before me ten and a half inches from the flexure to the tip. The black grouse is a very hardy northern species, and I have no doubt could be successfully introduced into the United States, and it would be a desirable addition to our game birds. In form it resembles the capercailzie, and I have seen a most perfect specimen of a cross between the two species. In fact, this cross has occurred so frequently as to be described as distinct species, *Tetrao hibridus*, Linn.

The capercailzie, largest of the grouse family, weighs about twelve pounds. The adult black cock weighs four pounds or less, the "gray hen" or female of this species being considerably smaller. The red grouse are smaller than the American ruffed grouse, and by the natives of the region in which they abound are called "moor-cocks" and hens. The "moor-hen" resembles in size and plumage the female Canada grouse "Spruce partridge" or "heath-hen." The red grouse is classified with the ptarmigans, and there is little difference in the plumage of the sexes. The gray hen or female of the black grouse is however, much unlike the male, being of noticeably smaller size, is of a dusky brown color, and has a straight tail. Like the capercailzies, the black grouse frequent wooded districts and perch on trees, but they also frequent the open side hills and feed in the heather. The pheasant is so familiar to Americans as a domesticated bird as to need no description in this connection. The European wood cock (*Scolopax rusticola*) is, however, a bird not known in America. Some authorities state that there are a few authentic instances of stragglers having been taken in North America. Several reported instances have come to my own knowledge, but in each case the bird in question proved to be merely a very large American woodcock (*Philohela minor*).

The *Scolopax rusticola* is a larger bird, but cannot be identified by its weight, which is from twelve to sixteen ounces, for the *Philohela minor* sometimes attains a weight of twelve ounces, although the average weight of the latter will not exceed seven or eight ounces. The European bird never acquires the clear red color of the underparts of its American cousin, the feathers of the sides and belly being of a dirty white, barred with brown. The markings of the heads, backs and rectrices or tail feathers of the two birds are very similar. One should not depend upon size or color of plumage for identification, but an examination of the wings will at once determine the species.

The whistling that betrays the flight of the American woodcock, and which is so clear on October days when the bird is in prime strength and condition, is owing to the three outer feathers of the rapidly-moving wings being very narrow and stiff. These three feathers, which would be ornithologically described as "first three primaries attenuate," are each less than a quarter of an inch in width, while the remaining wing feathers are broad. None of the wing feathers of the European woodcock are thus attenuate, and its flight is not marked by the loud clear whistle peculiar to the American woodcock. In addition to this marked difference, by which the birds can be most readily distinguished upon careful examination, the measurement from the tip to the flexure or "bend" of the wing of the American woodcock is about five and a quarter inches, but fully two inches greater with the European bird. The home of the *Scolopax rusticola* is northern Europe, and notably Scandinavia, from whence, however, it is obliged to migrate in winter to seek a subsistence not then afforded by its native land. I have alluded to the abundance of rabbits in the Isle of Raasay. Owing to their presence it was found necessary to surround the flower garden with a network of wire several feet high and extending below the surface of the earth, yet, notwithstanding this precaution, bunny would sometimes manage to obtain entrance, and in a single night commit great havoc among the rare plants therein. Many of the flower beds were inclosed by a novel border of fossil shells, and the basin of a fountain was paved with similar fossils, which abound upon a portion of the shore of Raasay. After a day's sport on the moors, how pleasant to sit and watch the lights and shadows on the purple hills of Skye, and the bright waves beneath; and when the sun is setting, the rabbits and pheasants timidly come forth upon the bright green lawn from the groves on either side.

Thus I spend my last eve at Raasay, surrounded by kind friends, whom I must leave ere the sun rises again and wend my way southward alone. So now I bid farewell!—a word that hath been and must be a sound to make us linger. At the "crack o' day" I board the steamer Clysdale, *en route* from Portree to Oban. After an interesting day on a picturesque coast, I arrive at the latter port, and learn that this day is the occasion of the annual "gathering of the clans" of Argylshire. In the harbor are no less than sixteen fine yachts. Highland games have prevailed throughout the day, followed by a ball in the evening, which is rendered particularly attractive by the number of highland costumes to be seen. Fireworks and music from the yachts, as well as on the shore, furnished entertainment for the multitude not fortunate enough to gain admittance to the ball.

The following day I proceeded by steamer to Crinan, thence through the Crinan Canal to Ardrishaig, and there boarded the steamer for Glasgow. Learning that the steamer "Camel" would leave Glasgow for Belfast the evening of the same day, I resolved to stop at Greenock and intercept it *en route*. This I did, and after spending several hours pleasantly in Greenock, bid farewell to the "land o' cakes and ale" and was off for the Emerald Isle. The interesting sail up the Clyde ere reaching Greenock, about which so much has been written, I will not attempt to describe—

> "But all around us, beauty infinite,
> And history and old tradition vied
> Which should be minister of most delight,
> And preached from side to side;
>
> "Till Greenock's noisy piers lay on our beam,
> And luggage dragged us back to common earth,
> And finger-pointing porters broke our dream
> Of sailing up the Firth."

EVERETT SMITH.

Fish Culture.

THE CARP FISHERIES IN THE PEITZ LAKES.*

THAT "carp in beer" is a favorite dish in Berlin is sufficiently proved by the fact that about 500,000 pounds of this fish are annually consumed in this city. It will therefore not be out of place to give a brief account of the famous Peitz Lakes in Lower Lusatia, which mainly supply Berlin with carp, and which were well known even in the time of Frederick the Great.

The Ural-Baltic plateau, which includes a portion of Lusatia, contains a very large number of lakes and ponds. Of these the Peitz Lakes are the most important. These lakes, seventy-six in number, and forming a water area of almost 5,000 acres, are a Royal domain, and are at present rented to Mr. Th. Berger. They produce a very large number of carp, and the annual fishing days in October, especially that of the Devil's Lake, having an area of about 900 acres, form important and interesting events, genuine popular holidays, not only for the inhabitants of Peitz and the surrounding country and the people of the neighboring city of Cottbus, but, because easy of access, likewise to many inhabitants of the capital. It must, however, be borne in mind that these great fisheries and each one of the sixty or seventy thousand carp caught during this season have a previous history extending over a period of about four years; for those well-fed, golden-scaled government fish, resembling each other in size and shape as much as eggs, have not sprung into existence suddenly like the armed men who rose from the dragon seed sowed by Cadmus, but it required great work and care and trouble to develop them so far; and in order to understand all this we shall have to become acquainted with the details of this industry and gain some entirely new ideas with regard to the carp and its life. We here see not a fish rapidly parting the waves with its fins, and in undisturbed liberty now diving into the deep, now rising to the surface, always timid and flying from the terrible fish of prey, but a well-cared for domestic animal, constantly guarded by and accustomed to human beings; a very peaceful, phlegmatic animal, with a predilection for muddy bottoms and slow flowing water, growing more comfortable and gentle in its ways by its "education," which has been going on for generations, all this tending to make the fish fat and comfortable looking and giving to its flesh a most delicious flavor. The life of the carp, which really may be termed a "jolly sort of imprisonment," commences in the hatching-ponds, varying in size from one to ten acres, in which as many as twenty pair of well-developed milters and spawners are placed in spring there to spawn under the genial rays of the sun. It is characteristic of the slow nature of the carp not to do this spawning business at once like other fish, and so far all attempts at artificial impregnation have failed. But if the water during the spawning season has been kept at an even height, and the frogs do not devour too many eggs, young carp are produced in great numbers, as they are very prolific, one pair alone producing several hundred thousand eggs, from which, even under the most unfavorable circumstances, about 25,000 young fish may be counted on. During their earliest infancy these fish live on infusoria, as their little mouths will not allow any other food to pass. The summer goes by, the new year comes in, and in spring the little one-year-old carp—which at this age are very suitable for the parlor aquarium—are placed in larger ponds (generally covering an area of 30 acres each) at the rate of 360 to 600 fish per acre. After they have stayed in these ponds a year, the fish (now two years old) are placed in still larger ponds (generally covering an area of 400 acres each) at the rate of 180 to 360 per acre. After another year has passed, the fish (now three years old) are placed in the large ponds (generally about 900 acres each) in which they stay another year and reach an average weight of 2½ to 3½ pounds and thus attain their maturity.

Loneliness produces melancholy, and in order that the carp may not lead a too idyllic sort of dream life after leaving those ponds where they spent their first two summers, and which are absolutely free from fish of prey, quite a large number of other considerably smaller fish, such as tench, cancians, pike, and even perch—which have been specially raised for this purpose in separate ponds—are during the third year placed in the same ponds with them. These fish give the carp some idea of life in the great world, and by their constant attacks, which, however, are generally harmless, bring a little life into the quiet society of philosophers, and, to some extent, act the part of shepherd dogs. But there are other enemies of the carp which tend to make the carp livelier, reminding us of those persons in "Gulliver's Travels" who had constantly to use rattles to rouse the Liliputians from their day dreams; and these are otters, herons, wild ducks and geese, fish-hawks, and human beings—poachers, who rob the ponds during the night.

Thus the day of harvest comes at last. Three weeks beforehand they begin to let the water flow off, and the carps gradually gather in the deep ruts or holes of the bottom. On the morning of the great fishing day they are driven into a basin about the size of an acre and about one metre deep. This is done by the fishermen, who, armed with purse-nets, wade, often with half their bodies in the muddy water, and, shouting and yelling, drive the fish before them. Slowly the great mass of fish comes rolling on, making the water of a dark, muddy color, and throwing great quantities of mud-like clouds in the air. No one could tell that there are carp, for the dark, round backs, which in innumerable places become visible among the seething mud and water, rather resemble eels or similar fish. The whole spectacle, which is quiet in the beginning, reminding of the driving of a flock of geese or a drove of sheep, gradually becomes quite exciting, especially toward the end, where from 60,000 to 70,000 pounds of carp are crowded together in a narrow space scarcely twenty paces square. Two simple nets are nevertheless sufficient to close up the two channels leading into the basin, which now resembles a caldron full of boiling mud and water. In this turmoil the pikes fare worst, for some of the carp, which, like tame steers, seem in the last moment to remember that after all they possess considerable strength of muscle, are continually dealing powerful blows with their tails, which the sensitive and cowardly pikes cannot stand very well, so they endeavor as much as possible to crowd into a distant corner. Now, the fishing itself commences, and a number of men with two drag-nets, each holding about 5,000 pounds of fish, slowly haul that quantity on shore. Here everything is activity and bustle. Under an open shed we see a large pair of scales with a 100lbs. weight. The carp are uninterruptedly brought up from the pond in immense buckets, each carried by two stout men, and thrown on boards by the side of the scales. With lightning-like rapidity, one fish after another is seized by men standing there for the purpose, counting, "One, two, three, four * * *" until the scales are evenly balanced. Thirty-one to thirty-three fish generally make the hundred pounds. The full scale is then immediately seized by two men, whilst an empty one is being filled, and the fish are placed in large casks on one of the many wagons which hold at a short distance. As soon as the three casks, which every wagon holds, are filled, the wagon is rapidly driven along the turnpike, near which the whole transaction takes place, to the Hammer canal, distant about one kilometre (3,280.709 feet), where the fish are immediately placed in the holds of boats, which contain water. Each of these boats carries 2,500 pounds of fish.

Thus the carps are within a few minutes transferred five times, without having suffered in the least. Near the scales stands in his rubber overcoat, a gate-hook in his hand, Mr. Fritsche, from Frankfort-on-the-Oder, a well known fish dealer, called the "carp king," and with Mr. Berger's agent calmly notes down the number of fish to every hundred pounds, whilst Mr. Berger himself is busy arranging things, giving orders, and satisfying the many private buyers, male and female, young and old, farmers and town-people, who have came with bags, sacks and baskets to buy single fish or small quantities up to 200 pounds. Mr. Berger also attends to the picking out of other fish such as tench, pike, perch, etc., which have been caught in the net. A large quantity of still smaller fish, so-called "spoonfish," because they have to be eaten with a spoon, are likewise brought up in the nets, many of them almost mashed by the heavy weight of the carp, and dead a few minutes after they have left the water. These are thrown in large baskets and are viewed with eager and longing glances by the many poor people standing round, who here, for a few cents, might procure more than one good meal, and net Mr. Berger perhaps $24 extra. But woe be unto him if he should dare to sell these fish; the inexorable police officers would at once refer him to a paragraph of the fishery law, according to which these fish dare not be sold, as not having the required size.

Meanwhile the hour of noon comes, and the ardently longed-for lunch time, doubly welcome on account of the pouring rain and the cold, is fast approaching, and Mr. Berger invites his guests to his house near by; among them we see, besides some landed proprietors from the neighborhood, men of inexhaustible good humor and unlimited capacity of stomach, the well known Lusatian anthropologist and reporter of the *Gartenlaube*, Dr. Veckenstadt. In the hospitable mansion we are regaled with the products of the chase, snipe, ortolans, ducks, partridges, etc., and one of the Epicureans present makes the remark, which may be taken to heart by all good housewives, that the flesh of the pike becomes infinitely more delicious if it has lain in brine for twenty-four hours. The fishermen and drivers are meanwhile taking their lunch in the sheds near the ponds, and after a short pause the work begins anew until late at night, when about 60,000 pounds of carp have passed through the hands of the weighers. As regards the further transportation of the carp, which are the property of Mr. Fritsche the moment they leave the scales, they first go to the Schwieloch Lake, reaching it in five to fourteen days, going through the Hammer Canals, the Spree and the Spreewald. The difficulties of their route are considerable, for the water is often so low that the boats have to be placed on rollers and conveyed for short distances in this manner. Arrived at the Schwieloch Lake, the fish are transferred to larger boats, each holding about 10,000 pounds, and, placed in the care of reliable persons, they go down the Spree to Berlin, which place they generally reach after eight days, or they go still further to Hamburg, where they arrive after a journey of four to five weeks, and other places. The total annual rent of the domain is $12,870; the expenses for salaries, wages, wagons, etc., amount to about $7,150, so that Mr. Berger must make at least $20,000 just to meet his expenses. But it is said that he makes a little more.

* Die Karpfen fischerei in den Peitzer Teichen. From a Berlin daily paper. Translated by H. Jacobson.

CORRESPONDENCE

Between the Department of State, British Foreign Office, and the Government of New Zealand, in Reference to the Transmission of the Eggs of the California Salmon to the Latter Country by the United States.

DEPARTMENT OF STATE, Washington, D. C., April 20, 1878.

Sir—I inclose herewith for your information, copy of a note of the 18th instant, from the British Minister at this Capital and of its enclosures, relating to the manner of the shipment, under your direction, of salmon ova to New Zealand.

I am, sir, your obedient servant, WM. M. EVARTS.

SPENCER F. BAIRD, Esq.,
Commissioner, etc., etc., etc.,

Enclosure—Sir Edw. Thornton to Mr. Evarts, April 18, 1878, with accompaniments:

WASHINGTON, April 18, 1878.

Sir—In compliance with an instruction received from the Earl of Derby, I have the honor to inform you that the Governor of New Zealand, at the instance of his ministers, has requested that the thanks of the Colony may be conveyed to the Government of the United States for the very handsome and effective manner in which the salmon ova have been shipped to New Zealand by the Fishery Commissioner of the United States under the direction of the Chief Commissioner, the Honorable Spencer F. Baird.

I have the honor to transmit herewith copy of the despatch, and of its enclosure upon this subject from the Governor of New Zealand to the Secretary of State for the Colonies.

I have, etc., etc., EDWD THORNTON.

THE MARQUIS OF NORMANBY TO THE EARL OF CARNARVON.

WELLINGTON, Feb. 1, 1878.

My Lord—I have the honor to enclose a memorandum which I have received from my Government, by which you will see that they are anxious to convey the thanks of this Colony to the Government of the United States for the very handsome and effective manner in which salmon ova has been shipped to this Colony by the Fishery Commission of the United States under the direction of the Chief Commissioner, the Honorable Spencer F. Baird.

I venture also to express a hope on my own part that your Lordship will see no objection to adopt the course proposed by my Government, as I think that the action of the American Government has evinced such a feeling of friendship and generosity towards New Zealand in a matter in which deep interest is taken, as to demand a special mark of acknowledgment and thanks on the part of this Colony.

I have, etc., etc., [Signed] NORMANBY.

MEMORANDUM FOR HIS EXCELLENCY.

Ministers desire respectfully to inform His Excellency, the Governor, that the half-million salmon ova, which arrived by the mail steamer from San Francisco in November last, have been successfully hatched and distributed to the various rivers in the Colony, and that by information which has reached the Government from various directions, it has been demonstrated that, owing to the extreme care with which the ova was packed in America, the very satisfactory result of about 95 per cent. of live fish has been obtained.

In addition to the half-million sent at the request of the Government an equal quantity has been sent to the various acclimatization societies in the Colony, and this handsome gift of salmon ova has been made to the Colony without charge, except cost of packing and transit, by the Fish Commission of the United States under the direction of the Honorable Spencer F. Baird as Chief Commissioner.

Ministers venture to think that so generous an action on the part of a foreign nation is worthy of being acknowledged in a special manner. They would therefore respectfully ask His Excellency to bring the matter under the notice of Her Majesty's Government through the Secretary of State for the Colonies, in the hope that Her Majesty's Government will permit a communication to be made to the Government of the United States of the thanks of the Colony of New Zealand for the generous and valuable gift of a million salmon ova to the Colony.

[Signed] G. S. WHITMORE,
Wellington, February 1, 1878. (In the absence of the Premier).

SALMON IN THE DELAWARE.—Benj. W. Richards, Esq., of Philadelphia, writes us that a salmon, weighing 21½ pounds, was caught in the Delaware River, off Cooper's Point, on the 18th of May. It was purchased by the Aldine Hotel for the dinner of the Piscicultural Society of Cincinnati, on the 23d inst. Mr. Richards, who is President of the N. J. Game and Fish Protective Association, has kindly sent us the following statement of the catch of salmon in the Delaware:

EDITOR FOREST AND STREAM:

The following is a statement of the salmon that I have been able to learn of as caught so far in the Delaware:

April 6.—One at White Island, two miles above Trenton, weighing 23½lbs., taken by Jacob Boge.

April 24.—Two near Salem Cove, N. J., one weighing 22 lbs. and the other 13lbs., taken by John Perrine.

About May 1.—Two at Billingsport, Gloucester County, N. J., one taken by Jos. Devault, Jr., weighing 13lbs., the other taken by Daniel T. Davis, and weighing 21lbs.

About May 1.—One taken near Petty's Island, weighing 10lbs.

May 7.—One taken three miles below Trenton; weight, 21 lbs.

May 10.—One at Iven's Fishery, at Penn's Manor, weighing 17lbs.

May 11.—One at Pennsgrove, but no weight given.

May 18.—One, of 21½lbs., at Cooper's Point.

Others have been taken, but I have not been able to learn the particulars in regard to them. Some were sent to Professor Baird, and he states that "all the salmon that have come to me from the Delaware River are of the Eastern or Atlantic species, and I think it not unlikely that the big ones, especially the 23¼-pounder, belong to the stock that Thaddeus Norris had charge of."

Any others I learn of it will afford me pleasure to inform you of. Yours truly, BENJ. W. RICHARDS.

Philadelphia, May 19, 1878.

SALMON IN THE CHESAPEAKE.—Here is another bit of gratifying news for the fish-culturalists. Under date of May 14th, Professor Spencer F. Baird writes to us from Washington:

"I am happy to inform you that a salmon was received yesterday at the Smithsonian Institution, caught by Messrs Sparr and Hamby in a drift-net on the east side of Spesutia Island, in Cheaspeake Bay, near the mouth of the Elk River. The fish is of the eastern variety, *Salmo salar*, in magnificent condition and weighing about 20 pounds. It was obtained from the fishermen by Mr. Milner, who is at present engaged in hatching shad in behalf of the United States in that vicinity."

ARKANSAS SHAD.—*Hot Springs, Ark., May* 14.—When the Marooner Club, of Vicksburg, began their efforts, which have since proved successful, to have the Sunflower and other tributaries of the Yazoo stocked with shad, some of the members wrote you on the subject. Just before leaving Vicksburg, a week ago, I saw a printed letter, written by Dr. Lawrence, of this place, dated in 1872, and published in a public document, issued, I think, from the Smithsonian Institution, in which it was stated shad were caught in the Ouachita, some five miles from here, one of which had measured 20¾ inches in length. On coming here I called upon the Doctor, and he assured me this was perfectly correct, and that the supply had been increasing annually. The very next day I had the pleasure of seeing one in the hands of its captor, which I judged would weigh near four pounds. This leads me to feel much encouraged over our efforts at Vicksburg, as this point is farther from the sea than the points at which our little fellows were deposited about two weeks ago. I cannot learn when or how shad got into the Ouachita, but will endeavor yet to do so. Very respectfully, B. H. POLK.

[For *Alosa sapidissima*, see "Hallock's Gazetteer," page 380. The run of shad in the Washita River is usually from April 5 to May 12. In China shad are known to ascend the Yang-tse-Kiang, more than 4,000 miles.—ED.]

WISCONSIN.—*Madison, May* 14.—*Editor Forest and Stream:* H. W. Welcher, State Superintendent of Hatcheries, reports that the Fishery Commission have just placed 50,000 lake trout in Boss Lake, St. Croix County, and in Clam Lake, Burnett County. This week will close the season for distribution. Large numbers of trout are to be placed in lakes along the upper Wisconsin Central Railway within a few days. First and Third Lakes at Madison will be abundantly supplied with large yearling salmon trout. ROVER.

Natural History.

BREEDING OF THE OPOSSUM.

From a very considerable mass of material which has accumulated on our table since our correspondent "Tonic" first brought up this question, we have selected several communications which present diverse views on this topic, two of them the result of observations, the other setting forth a doctrine which seems to us quite worthy of the dark ages.

Our friend Mr. J. G. Shute, of Jamaica Plains, Boston, with commendable brevity, sends us an extract from the proceedings of the Essex Institute, vol. III., p. 288, from which we quote:

Meeting held Monday, October 26, 1863. Mr. F. W. Putnam read the following communication from Mr. James G. Shute, of Woburn, on the manner of birth in the opossum, observed by him while in Beaufort, N C. "The date of birth was March 16, 1863. During the delivery of the young the parent lay on the right side with the body curved in such a manner as to bring the sexual orifice opposite that of the pouch; the mouth of the pouch was open or drawn down by contraction of the muscles, so as to receive the young when delivered. The young were seven in number. The time occupied in delivery was about four hours. The parent remained in the same position about thirty-six hours and refused all sustenance.

"Immediately after the transfer of the young to the pouch I removed one by detatching it from the teat, in order to ascertain if the movement of the fetus was instinctive. I found that it was at least partly voluntary, as it made an effort to regain its place in the pouch, and the same movement was made by the parent as at first to receive it. I did not notice any use of the limbs or lips of the parent during the transfer of the young."

We would also refer our readers to Waterhouse's work on the Marsupiala, pp. 4 to 7, where the birth of other marsupial mammals is discussed, to Audubon and Bachman's Quadrupeds of America, article Virginian Opossum, Vol. II., p. 107, and to the *Popular Science Monthly*, No. XLIV., p. 149, and XLV., p. 893. This topic, which is an interesting one, and which we should be glad to discuss at length did space permit, is quite fully treated in the works above cited, and, supplemented by Mr. Shute's observations, will give our readers a pretty complete history of what is known on the subject.

The second communication of those selected is a remarkable one and contains some (to us) novel ideas. Without wishing to ridicule the honest beliefs of any one, we would suggest to our correspondent that the days when swallows and rails were supposed to hybernate in the mud at the bottom of ponds, and when wild geese were believed to be formed from barnacles, is long past, and we advise him to give up his present ideas on the generation of the opossum and to believe what the late Prof. Agassiz told him. Further comment is needless. Let our correspondent speak for himself. He believes:

"First, that the female has neither vagina nor womb; that her nose is the medium of coition with the male; that *by an act of her own* the semen is transferred to her teats, situated in the pouch or cavity in the abdomen, and impregnated [What is impregnated? the semen, or the teats, or both?—ED.]; that the fetus is formed on these, is attached to them, and continues to grow on them until maturity, when they drop off like ripened fruit from the branch, the teat, during the process, serving as the umbilical cord, growing to the mouth of the young."

Let our correspondent just quoted read the following note, and, reading, believe:

WESTCHESTER, Pa., April 15, 1878.

EDITOR FOREST AND STREAM:

Having seen in your paper an article in regard to the opossum, I will give you my experience and opinion as to the mystery of their having young. I have examined three female opossums lately. Some had young hanging to the teat no larger than a small bean, others were as big as a young mouse. On dissecting the animal I found a double uterus, with all the appendages connected, as in any other womb. The male opossum has a bifurcated genital organ, which is adapted to the organs of the female. The opossum has no afterbirth, and it is therefore necessary, as soon as life is developed in the womb, that the young should have sustenance. They are therefore expelled from the womb, and attached to the teats by the mouth of the mother, where they remain until able to move about in the false belly, which is the bread-basket of the young opossum. Yours very truly, J. R. E.

PRAIRIE CHICKENS IN CALIFORNIA AND COLORADO.

The following slip is taken from the columns of the Sacramento *Union*. We are decidedly of the opinion that the views expressed by our correspondents, Mr. Henshaw and Amigo, are substantially correct. The point at issue is a very simple one and may easily be decided. Every one who has traveled much in the West knows that the term "prairie chicken" is applied indiscriminately to both the pinnated and sharp-tailed grouse, and that from this loose use of language much confusion necessarily ensues. If any of our friends about Humboldt will send us by mail a single skin of one of the "prairie chickens" we will be very glad to settle the matter finally. It should be remarked that the light color and short ruff spoken of below, point strongly toward the sharp-tail (*Pediœcetes columbianus phasianellus*) as the bird in question. The *Union* says:

"A statement made some time ago regarding the migration of the prairie chicken westward along the line of the overland railroad into this State has created considerable speculation and comment both on this coast and in the Eastern States. A correspondent of FOREST AND STREAM, writing from this city recently, attempted to throw some doubt on the statement. But the fact remains as stated before in this column, and the evidence in favor of it is accumulating. The foreman of the grading work now being conducted on the line of the railroad in Humboldt County, Nevada, was instructed by some of the railroad officials in this city to take note of the presence or absence of the birds on the line of the work. Within the past week he has made a report from Golconda station, a few miles east of Winnemucca. He says that the birds are there in great numbers, and residents report that they have been there for two or three years past. From this point the birds have been traced, following the latitude due westward through northwestern Nevada, southeastern Oregon and into California. They are reported numerous in Butte Valley and all the other small valleys of northeastern California extending north and east from Mount Shasta. About the identity of the birds, it is claimed by sportsmen who have shot them that there can be no question. But there are slight differences noted between this bird and that of the prairies of the Great West, supposed to be due to climatic influences. The feathers of the ruff of our bird are somewhat shorter, and the color is lighter than those of the prairie chicken in the States east of us."

Much more definite and reliable is the following note, which can speak for itself. We should like to ask if any specimens were preserved:

GRAND RAPIDS, Mich., April 14, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

In your issue of April 11 there appears an article entitled, "Prairie Chickens in Nevada," by H. W. Henshaw, in which the author states: "Cones, writing as late as 1874, says: 'I have found no record of the prairie chicken (*Cupidonia cupido*) reaching, as yet, either Colorado or Wyoming.' Without doubt he was correct in thus limiting the westward range of the bird, and a similar statement of its non-occurrence so far west as Colorado will, I think, hold good to-day." I beg leave to correct the above statement. In August, 1874, while on an antelope hunt, we camped on the Kiowa, a "dry creek" about forty miles east of Denver, Colorado. Our tent was pitched in a small woods situated along the creek bottom; in this timber we found large numbers of prairie chicken (*Cupidonia cupido*, Baird). While encamped here I shot some thirty specimens, and they were identical with those shot in Iowa and Southern Michigan. I observed none on the open prairie during the day, but noticed them just after sunrise flying down to the timber. The majority of the birds obtained were young birds of that season, and were evidently bred there. Three gentlemen, two of this city and one of Denver, who accompanied me on this trip, will bear me out in the above statement. CHAS. W. GUNN, *Ed. Naturalist and Fancier.*

THE GRAY PARTRIDGE.

ST. PAUL, Minn., May 7, 1878.

EDITOR FOREST AND STREAM:

In your introductory remarks to my article in your issue of the 2d inst., entitled "The Gray Partridge," you make it appear as if I had been saying somewhere that the European quail was introduced into England some eighty years ago. This is a mistake. In a letter to you, accompanying the above contribution, I mentioned that the red partridge (*Perdix rubra*) was introduced into England about the time above stated, which is an historical fact. It was done by the enterprise of an English nobleman, whose name I have heard, but forgotten. The red partridges were imported from France, and are at present quite common in some counties of England, but not much in favor with the sportsmen on account of their propensity to run and skulk when the dogs come on their track, a propensity in which the European quail, to a great extent, is their equal.

As regards the European quail (*Coturnix communis*); being a migratory bird, and the British Islands within the boundaries of its geographical extension, it is more than probable that it introduced itself there regularly every spring since before the time of Julius Cæsar. I remember distinctly to have read somewhere in some old English rhymed legend, how the ladies at the court of William the Conqueror or William Rufus, among other pastimes,

"Made their merlins strike the game
On the green field of the new forest."

This, Mr. Editor, is a very small matter, and hardly worth calling your attention to, were it not that it looks to me a little "greenish" to stand before the tens of thousands of keen and enlightened sportsmen who every week with avidity scan the columns of the FOREST AND STREAM, as responsible for the assertion that the European quail was introduced into England eighty years ago. As well might I have said that the woodcock or skylark were so introduced. If anybody should say anything about it, you will please remember these lines put in as a disclaimer. Very truly yours, JOHN SWAINSON.

MORE ALBINOS.—*Salem, April* 4, 1878.—I recently sent to the secretary of the Nuttall Club a wing of a bittern with one clear white primary; rest of bird as usual. Mr. Deane informs me of the capture of a large hawk in Tyngsburg, partial albino. I have a purple grakle in perfect normal plumage, except two white feathers back of neck just below base of skull. The freaks of nature are quite droll. R. L. N.

A MERITED COMPLIMENT—THE LUTJANUS BLACKFORDII.—The following letter from Prof. G. Brown Goode, of the Smithsonian Institution, will be read with pleasure by the many friends of the Treasurer of the American Fisbcultural Association. The compliment paid Mr. E. G. Blackford is fully deserved:

WASHINGTON, May 19, 1878.

My Dear Mr. Blackford.—You will be surprised to hear that the red snapper has never been scientifically described. I have suspected it for some time, and a thorough examination by Dr. Bean and myself confirms it. We have been looking for a namesake for you and if you consent to be godfather the beautiful fish shall be *Lutjanus Blackfordii*, Goode and Bean. I am glad to have a share in such a memorial of your services to Ichthyology. Yours sincerely,

G. BROWN GOODE.

A NOTE FROM FLORIDA.—Our valued friend, Mrs. Mary Treat, whose interesting researches in botany and general natural history are familiar to all our readers, is about to turn her face northward once more. Writing from Green Cove Spring, Florida, under date of April 22, she says:

"For the last few months I have devoted almost my entire time to ants, both North and here. My observations on the slave-making ants of the north will appear in *Harper's Magazine*. A species that I have found here has created quite an interest among the naturalists of Europe.

AMONG THE PIGEONS—*Woodstock, Ohio, April* 17, 1878.—After a short stay among the pigeons, near Marionville, Forest County, Pa., I am prepared to make a statement concerning those birds which I am quite sure will be contradicted by many disciples of the trigger. When I first went to their nesting place they had not done building. That was on the 20th day of March, and on Saturday, April 6, they had all hatched out, and squabs were plenty large enough to take from the nest, as the old birds had filled them up with beech nuts preparatory to leaving the little fellows to look after themselves. Now for my statement: On Tuesday, April 9, these same birds, which had just left their young, began building nests again, and within a short half mile of their former nesting place. Now, this seems to me to be a very remarkable feature in the wild or passenger pigeon. I have often known of their nesting a second time within a very few miles of their first nesting, but never before have I heard of their building their nests on what might be called the squabs' feeding ground. I do not, by any means, make the assertion that they have not done such a thing; but it is new to me, and I would like to ask of older heads, through "our paper," if they have any knowledge of such a feature? If so, in what year and what locality? The oldest catchers, from Sheffield to the nesting, all agree on one verdict—"Never heard of the like before."

Very truly yours, T. M. OWEN.

MASSACHUSETTS NOTES—*Adams, Mass., April* 15, 1878.—*Editor Forest and Stream:* The past winter has been so moderate that the ground squirrels (chipmunks) were to be seen in warm woods nearly every day. On January 27, this year, saw several red linnets, and a very large flock of goldfinches on Jan. 13; the latter were feeding on the ground under hemlock trees. The above two species of birds visit us occasionally every winter, and owing to the mildness of the weather and small amount of snow which fell the past season, they have remained with us nearly all winter. Common robins arrived here on March 8; song sparrows, snow birds, and a single wood pee-wee on March 10. On this date I noticed *Vanessa antiopa* and *V. milberti* (butterflies). The spring migration of small birds is twenty days earlier this year than in 1876 and 1877. Colt's-foot (*Tussilago farfara*) flowers are a week in advance of last spring. This plant is the first to gladden the heart and please the eye of the botanist in this locality.

Respectfully, YOUNG NATURALIST.

WHAT A TROUT EATS.—The Massachusetts *Plowman* gives the following inventory of what Dr. Davis, of Plymouth, N. H., found in a trout caught near that town. Of course if a six-inch trout presented such an interesting collection, a fish fifty feet long must be proportionately rich in hidden treasures. What a pity, then, that Jonah did not make a note of what he found in the whale:

"The trout measured but six inches in length, but was of such unusual thickness as to cause a post-mortem examination, when the following was found inside his stomach: Two small snakes, one lizzard, fifteen crickets, six small beetles. The heads of the snakes were digested, but from what remained they were judged to have originally been six inches long—or the entire length of the fish. Two of the crickets were alive, and are now in possession of a correspondent."

THE HAYDEN SURVEY.—Professor James Eccles, of England, attached to the Haden survey, has arrived in Denver, where he will start upon a geological reconnoisance through Colorado to occupy two months. About the first of July he will join the Hayden expedition for a tour of the Yellowstone country, and late in the fall go with Major Powell to the canyons of the Colorado.

DO FISH SLEEP?—The "wily" trout sleeps at night, when he gets a chance. I have often entered my fish house at night in summer time, whilst smoking the postprandial cigar or pipe, and seen all the fish lying on their stomachs on the slate bottoms of my tanks, and have watched them for some time. The respiration is slow and regular, and the movements of the fins are of the same character, evidently indicating a diminished action of the heart and a state of rest exactly analogous to the regular breathing, slow pulse, and complete unconsciousness of the human being in a like state of deep sleep. Strike a light and the fish are immediately scared, fly about like maniacs and evince every sign of terror, exactly as a man may do some extrordinary act when suddenly roused out of a profound slumber. This, of course, only applies to fishes in a purely artificial state, or when in still water and well fed. The trout I refer to would start up at the sight of me, and when the covers of the tanks were taken off would rise to the hand and take food from it, permitting me to stroke them, or even take them out of the water—but then they knew me, would congregate at the end of the tank next the door when they heard my footfall, and evince many other signs of recognition. Now, as to the wild fish in running rapid streams, we have no direct evidence like the above. We see fish wagging their fins and tails, apparently as wide awake from week's end to week's end as any of us in our most wakeful moments; but it must be recollected that man himself in his deepest sleep has a heart continually beating, and his lungs must respire oxygen, although perfectly unknown to his inner consciousness. So, firmly I believe, it is with a fish heading against the stream. The motion of operenla, or gill covers and gills, fins, tails, are as perfectly "reflex," as physiologists term it—that is to say independent of direct volition—as that of a sleeping man's heart or lungs, and do not therefore indicate the entire absence of repose; I therefore think that we may safely come to the conclusion that repose of the brain, more or less complete, does exists in the piscine world, and certainty the higher the organization of the animal the more necessity is there for some such provision. I feel sure that the higher we ascend in the physiological scale the more need we shall find for some system of rest or reparation of the nervous system. I therefore unhesitatingly assert that fishes do take repose to a greater or less extent, according to their development. Temperature, as is well known, has a very remarkable effect on the activity of some species of fishes. Eels, for instance, will be very active in hot weather; but when winter sets in they become torpid and find refuge in mud, whereas in hot weather they are sporting about in the most active manner, darting hither and thither as if electrified. I believe that fishes sleep or repose their brains just as men do who walk in their sleep. They are capable of moving their fins and other appendages according to the force of stream, etc. but all this wants careful observation in order to bring proofs to a crucial test. Some beings sleep very heavily and must be positively shaken to be awakened; others, though apparently fast bound in a profound slumber, are disturbed by the lightest footfall. May not the same difference in sensibility to outer circumstances exist among fishes? I think, but cannot as yet prove, that it does.—*Fishing Gazette.*

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING MAY 18, 1878.—One monkey, *Cebus capercenus*, presented by Master J. Randolph Smythe, Astoria; one camel, *Camelus dromedarius*, born in the menagerie; four prairie wolves, *Canis latrans*, born in the menagerie; two red-headed pochards, *Fulegula ferina*, received in exchange; three American swans, *Cygnus buccinator*, received in exchange; two passerine parrakeets, *Psittacula passerina*, presented by Mrs. H. L. Robertson, N. Y. City; one flying squirrel, *Pteromys volucella*, presented by Mr. C. H. Eagle, N. Y. City; two Cardinal birds, *Cardinales virginianus*, captured in park; two black swans, *Cygnus atratus*.

W. A. CONKLIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING TUESDAY, MAY 14, INCLUSIVE,—One raccoon, *P. lotor*, presented; one garter snake, *Eutania sirtalis*, presented; one woodchuck, *A. monax*, presented; one corn snake, *Coluber guttatus*, presented; one mountain black snake, *Coluber obsoletus*, presented.

ARTHUR E. BROWN.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, gns of suffering, etc.

SECOND ANNUAL NEW YORK BENCH SHOW.

WE think there are too many Bench Shows. This opinion is not alone our own, but is pretty generally expressed by the public. We believe that during the year there should be held only two great shows in the country and no more. We are satisfied that if one were held in the East, say in Boston, New York or Philadelphia (New York having the advantage of a larger audience and more extensive place of exhibition) and the other in Chicago or St. Louis, two such Bench Shows would be amply sufficient. Of course the dog must be, and really is, the foundation of all field sports, but we have had too many exhibitions of him. The sportsman proper, and we use it in its highest sense, does not appreciate fully public sentiment in regard to such matters. An oversurfeit of shows has pulled upon the general sight-seer. The press may work all it can to call attention to such exhibitions, but we foretell that in future years, if the example of the last few months be repeated, that public interest will be diminished instead of increased. It comes down now to a simple question of expenses. Receipts will not balance expenditures. It may all be very fine for gentlemen constituting kennel clubs to show an immense amount of energy in arranging exhibitions, but with the heavy outlays consequent on such shows, if receipts from audiences are not forthcoming, in a time, longer or shorter, there must be an end to such things.

Though it may have been stated that the attendance at Gilmore's was large, which it was—the great excellence of the show attracting twenty times larger audiences than in Boston, Philadelphia and Baltimore altogether—in point of numbers it was not equal to the exhibition of 1877. Prior shows had taken off the cream of the New York one. We by no means wish it to be inferred that the show was not a most successful one. Quite to the contrary; it was a very fine exhibition and many thousands of persons attended it, but there was not the rush, the excitement as shown last season. All that excellent management could do was lavished by the gentlemen attached to the Westminster Kennel Club to render the show one of the leading events in the canine annals of the country; and their success so far as the *eclat* of the matter goes, was immense; but we doubt whether, financially, their expectations were realized. Of course we must insist that it is not money which the Westminster Club are looking for, but the expenses of the maintenance of a kennel such as New York requires, and disbursements necessary to carry on such an exhibition are so great that if a good balance is not placed to the treasurer's account, when the great risk is taken into consideration, it may make the most sanguine of *entrepreneurs* of such exhibitions rightly timorous. It is impossible to give an exhibition in the metropolis on a minor scale. Anything small or puny would not do. The *mesquin* in New York kills anything at once. In this dilemma what is to be done? Can gentlemen hire a dingy hall at small expense and show their animals in restricted quarters? This is impossible. We believe the remedy would be to have less shows and then the public would be forthcoming. Why could not the various kennel clubs meet then in convention and arrange a double programme as to places for the next year or so? We honestly believe that such a show would not only be immensely more successful, but that by this method of fixing the places by means of a convention a great deal of the very stupid bickerings which exist between kennel clubs in various portions of the country, would be done away with.

As to disposition, arrangement of the dogs, and general business of the show, managers and directors are to be complimented. The disagreeable dust which suffocated people last year was no longer annoying, and during the whole time of the show the absence of bad odors, due to the free use of the Gironden disinfectant, rendered Gilmore's Garden as sweet smelling as a lady's parlor. We have yet to hear of any complaints on account of the men to whom the dogs were intrusted, Mr. Charles Lincoln's method of administering to the numerous wants of that most complicated and difficult of all things, a dog show, was absolutely perfect.

As to the dogs themselves, we do not think that in the sporting classes generally, the show was as perfect as last year. The absence of many notable animals was evident. In the non-sporting classes, the exhibition was a superb one. In pet dogs there never has been yet such a fine display. Very wrongfully the management have been blamed for rather fostering the exhibition of non-sporting classes, at the expense of the sporting classes. This imputation is very unjust. A large city like New York has fancies which are mixed as to dogs, and it is but proper that all tastes should be catered to. There are thousands of people in New York who would not pay a cent to see the finest pointer or setter that ever luxuriated in glossy coat, or wavy feather, but who would walk miles and pay their money to see a fine bull terrier, an Ulm dog, or a pug.

We now come to the more delicate portion of our task. There never was a dog show, there never will be one on this earth probably, where thorough satisfaction will be given. On the present occasion, and we are bound to express public opinion, complaints are numerous. We are the recipients of such a number of letters regarding judging, that did we give place to them, we should present to our readers the FOREST AND STREAM AND ROD AND GUN with nothing more in it than a series of complaints. The judgment of Mr. Lort has not been generally approved of. Certain standards which our breeders have considered as typical of excellence in form have been overthrown. The great point of dissension arises as to Mr. Lort's judgment in regard to the Llewellyn and Laverack setters. There having been some years ago a quite acrimonious correspondence between Mr. Lort and Mr. Llewellyn, Mr. Lort inclining toward the Laveracks in opposition to the Llewellyn dogs, it is asserted that Mr. Lort has been prejudiced in his decisions.

There are two camps in the United States, just as there are in England, one flying the Llewellyn banner, the other the Laverack colors; but we must state that judgments in the United States have been so far given quite equally in favor of both breeds of dogs. It does not behove us to take part with the friends of either side, and we are by no means to be understood as passing any opinion on Mr. Lort's judgment, but that many are opposed to his ideas seems quite manifest to us, and it is our duty as publicists to state the fact. It is not alone in the setter classes that Mr. Lort has been found fault with. In his judgment on pointers many disagree with him. Any imputation thrown out to the Westminster Kennel Club in regard to the appointment of Mr. Lort, as favoring their kennel, is absurd, as numerous animals belonging to both Laverocks and Llewellyn strains are owned by members. If as patrons of the show their dogs were not entered for competition, animals bred from stock belonging to them owned by outside parties were represented in quantity in the numerous stalls. In selecting, then, Mr. Lort, no personal motives could have possibly actuated the members of the Westminster Club. We are quite sure that if in the judgment of the club any English gentleman would have been supposed by them to have had a knowledge of animals superior to that possessed by Mr. Lort he would have been sent for.

As for ourselves, we find no fault with the judgments. It is better not to run too much in a rut, either as to horses or dogs. If some pretty well asserted points as to the specific physical traits of dogs, which we very candidly confess we had thought were the best, have been somewhat reversed, we are by no means inclined to cavil with Mr. Lort's judgment. Whether Mr. Davidson's opinions coincide with Mr. Lort's we are not prepared to state. All we can say of Mr. Davidson, who has so often filled the important position of judge, is that even granting that he had a predilection for a certain breed of dogs, his prejudices have never had the better of his decisions. As to his honesty, the fair record he has will only be sustaine

in the judgments he has just made. Dr. Twaddell's onerous task was carried out with his usual skill and impartiality.

GENERAL REMARKS.

The general expectancy that numerous English dogs would be present at the show was disappointed, the Paris exhibition probably claiming a great many of them. In the mastiffs Mr. Owen's Major was the best choice. If persons may have disagreed with Mr. Lort in his judgment of the sporting classes, in the non-sporting classes we may be taught many lessons. Major has no fishiness, nor false folds of flesh about him, and he was many points above Hereward, Boss and Turk. Again we agree, in opposition to many, in regard to the Barry, which Mr. Lort, we think, rightly placed first. In black and tans (Gordons) we must confess ourselves only fairly satisfied. As a class they were not as good as last year. In class 34 we did not think Sam the best. Among the pointers Bow excited the most attention. We openly confess a preference for the Sensation stock. There is a heaviness of head in the representative of the St. Louis Kennel Club, which is by no means attractive. In class 15 Mr. Hammond's Psyche was a good winner, though run close by many in her class. All Mr. Orgill's pointers were good, and came in for numerous prizes, as did Mr. Charles H. Raymond's fine Laverack stock. As our space is but limited, and the list of winning dogs large, with our introductory remarks we must conclude for the present, trusting in future issues to be able to go more fully into some of the particular details of individual dogs.

SUPPLEMENTARY LIST OF AWARDS.

Class 12—Sleaford, St Louis Kennel Club.
Class 13—Romp, Edmund Orgill, Brooklyn.
Class 14—Bow, St Louis Kennel Club; 2, Rake II, Joseph W Coffin, Providence; 3, Rapp, W R Hobart, Newark. V h c, Mac, George W Bell, Vineland, N J; Button, Joseph J Snellenburg, New Brighton, Pa; Don, same owner. H c, Visconnt, R M Lindsay, Scranton, Pa; Patch, Arthur L Sewell, N Y; Jocko, C Z Miley, Lancaster, Pa; and Don, Isaac Weighel, Rochester. C, Reuben, F H Stowe; Ike, Charles Else, Newark.
Class 15—Psyche, S T Hammond, Springfield, Mass; 2, Grace, Luke W White, Bridgeport, Conn; 3, Juno, Charles M Schieffelen, Mount Vernon, N Y. C, Juno, Charles Pinckney, Madison, N J.
Class 17—Rose, Edmund Orgill, Brooklyn.
Class 18—Dick, Albert M Wright, Scarborough-on-Hudson, N Y; 2, Bob, W E Doane, Stockbridge, Mass; 3, Rapp, Robert Emmet, No 52 Wall street. V h c, Racket, George S Floyd-Jones, South Oyster Bay, Long Island. H c, Ranger, Henry E Janes, No 118 East Eighteenth street, and Major, Dr William Baxter, Wappinger's Falls, N Y. C, Bill, Dennis Breen, Glen Cove, L I.
Class 19—Queen, A E Godeffroy, Guymard, N Y; 2, Belle, George C Colburn; 3, Topsy, Joseph J Snellenburg, New Brighton, Pa. H c, Nellie, W H Ely, Beverly, N J, and Belle, Edmund Orgill, Brooklyn. C, Belle, A Russell Straohan, N Y.
Class 20—Jerry, George O Colburn, N Y; 2, Sam, Milo Seagear, Bloomingburg, N Y. V h c, Rake, W J Emmett, Pelham, Westchester County, N Y. C, Toby, Joseph J Snellenburg, New Brighton, Pa; Johnnie, Albert Phillips, West Springfield, Mass; and Snooks, A E Godeffroy, Guymard, N Y.
Class 21—Nell, W J Emmett, Pelham, N Y; 2, Elf, R Lamb, N Y. V h c, Flirt, Rev R G Hamilton, Hart's Falls, N Y. H c, Nell, A E Godeffroy, Guymard, N Y. C, Gwendolen, F Campbell Moller, N Y; Kitty, A E Godeffroy, Guymard, N Y.
Class 22—Edmund Orgill.
Class 23—Bella; 2, Judy, Milo Seagear, Bloomingburg, N Y.
Class 24—Lark, P H Morris.
Class 25—Fairy, Charles H Raymond, Morris Plains, N J. V h c, Magnet, George W Landenberger, Fort Washington, Pa.
Class 26—Roderick Dhu, Charles H Raymond; 2, Ranger II, O W Donner, Brooklyn; 3, Jersey Duke, Von Lengerke Brothers, New York; 3 (special medal), St Elmo, S Fleet Spier, Brooklyn. V h c, Procyon, Charles H Raymond; Brough, same owner; Bruce, same owner; Sir Lancelot, W E Leavitt, Flushing, L I; and Blue Blood, L J Gaines, West Meriden, Conn. H c, Sam, W H Howell, N Y; Joseph, Mary D Wagstaff, Babylon, L I; Kingfisher, Arthur J Moulton, Sparkill, N Y; Zip, George F Hecker; Dash, Dr F O Beach; Thunder, Joseph J Snellenburg, New Brighton, Pa; St Patrick, Washington A Coster, Flatbush, L I; and Czar, P H Morris, N Y. C, Young Laverack, Charles H Raymond, Morris Plains, N J; Promise, C de Ronge and H Inman, Milburn, N J; Dash, G F Gildersleeve, Brooklyn; Gronse, Major James M Brown, Philadelphia; One-eyed Sancho, T Forman Taylor, Colt's Neck, N Y; William, Isaac Ferguson, West Meriden, Conn; and Duke, Charles S Keller, Washington, D C.
Class 27—Rhoda, Ashcroft Kennel Club, Bridgeport, Conn; 2, Abbie, E C and P La Montagne, N Y; 3, Pet, E F Mercilliott, N Y. V h c, Kate, A R Warner; Tip, James R Tilley, Locust Valley, L I; and Starl, Samuel Scranton, Providence. H c, Nellie, George R Abbott; Puff, W R Simonds; Glen, C De Ronge and H Inman, Milburn, N J; Sultana, P H Morris, N Y; Nell, T Forman Taylor, Cott's Neck, N J.
Class 28—Will, E F Mercilliott, N Y; 2, Cruickston, E L Wilke, Racquet Club.
Class 29—Anibel, Charles K Harrison, Pikesville, Md; 2, Bonnie Bess, Gouverneur M Smith, M D, N Y. V h c, Peg, W Lawrence. H c, Ida F, P H Morris, N Y.
Class 30—Faust, C Novel; 2, Breeze, same owner. V h c, Cheadle, Ashcroft Kennel Club, Bridgeport, Conn. C, Jerry, George F Hecker, N Y; Staunch, Howard & Benham, Glen Cove, L I; Breeze, E Francis, Newark, and Gale, same owner.
Class 31—Nelly II, John E J Grainger, N Y; 2, Clamorous, E C and P La Montague, N Y. V h c, Rhoda III, Ashcroft Kennel Club, Bridgeport, Conn. H c, Dream, C De Ronge and H Inman, Milburn, N J; and L J Gaines' (West Meriden, Conn) pup, by Blue Blood, out of Bess.
Class 50—Mac, Thomas Finn, Bridgeport, Conn; 3, Wallace, Thomas Cosgrove, Newark.
Class 51—2, Jessie, Thomas Cosgrove, Newark; 3, Fanny, E Eisman, Newark.
Class 52—Mallard, T M Aldrich, Providence; 2, Valjean, C T Pierce, Brooklyn. V h c, Carlo, P C Hewitt, N Y.
Class 53—Judy, Thomas Finn, Bridgeport, Conn; 2, Topsy, A E Godeffroy, Guymard, N Y.
Class 54—Trimbush, S B Thorne, N Y; 2, Duchess, V O Thorne.
Class 55—Shot, George Watson, Jr, N Y; 2, Witch, Frederick H Hoe, Tarrytown, N Y; 3, Brutus, D S Leon. V h c, Fred, R B Hall, Brooklyn. H c, Alexis, Miss Lynch, Flushing, L I.
Class 56—Feather, Frank C Hollins, N Y; 2, Madge, Frederick H Hoe, Tarrytown, N Y; 3, Clem, D P Bosworth.
Class 57—Prince, C M Britton, N Y; 2, Blanche, Charles W Barker, N Y. V h c, Blanche, Theodore T Nixon, N Y; and Duck, W Landenberger, Fort Washington, Pa. H c, Drake, same owner.
Class 58—Frank, Archibald Watt, N Y.
Class 69—Duncan, John Hobart Warren, Troy, N Y; 2, Tam O'Shanter, T W Lawson, Boston; 3, Colin, John Hobart Warren, Troy, N Y. V h c, Tam Ridley, Frederick Bronson, N Y. H c, Rab, H M Jones, N Y.
Class 70—Jessie, Gardiner G Hammond, New London, Conn; 2, Friday, Frederick Brooson, N Y; 3, Flora II, same owner.
Class 71—Shep, W Lindsey, Jersey City; 2, Kooran, Dr J W Downey, Newmarket, Frederick County, Md.
Class 78—Rowdy, F H Stow, N Y; 2, Pickles, Miss Salsbury, N Y; 3 Toodles, Mrs. John P Haines, N Y. V h c, Punch, F Senn, N Y. H c, Sambo, Mary D Wagstaff, Babylon, L. I. C, Freak, Theodore Haight, West Chester, N Y; Puck, H Thomas Adey, N Y, and Punch, Miss Helen M. Iselin, N Y.
Class 79—Lena, Ferres S Thompson, N Y; 2, Judy, W S Hoyt, N Y; 3, Pet, W H Beadle, N Y. C, Katy, Henry Kisteman, N Y; Nellie, Theodore F W Talor, N Y; Nell, F Senn, N Y, and Peggie Dear, Mrs H Alexander, N Y.
Class 80—Little Nell, W H Beadle, N Y; 2, Smutt, Jr, F Senn, N Y.
Class 81—Beauty, A W Lucy, N Y; 2, Jerry, George P Benjamin, Newark.
Class 82—Jessie, F Senn, N Y; 2, Adele, Charles W Barker, N Y. V h c, Sport, L N Meyer, N Y. H c, Tommy, Mrs H B Millard, N Y; Scrub, Mrs Louis S I Brewster, N Y; Dick, R A Greacon, N Y; Jack, S Van Dyk, Brooklyn; Nelly, same owner; Tom, H Kisterman, N Y. C, Charley, Henry Haggerty, N Y, and Flash, H A Kisteman, N Y.
Class 83—Whiskey, Douglas Robinson, N Y.
Class 84—Yorkshire Charley, Thomas Kaslagher, N Y; 2, Jack, John Marriott, N Y; 3, Bijou, J W Brown, N Y. V h c, Bright, Mrs W A Haines, Jr, N Y. H c, Dandie, Theodore F Baldwin, Newark, and Beauty, Mrs W A Haines, Jr.
Class 85—Snap, W A Haines, Jr; 2, Lucy, Henry Kisteman, N Y; 3, Scraps, W A Haines, Jr. V h c, Trip, same owner. H c, Jessie, Thomas Kaslagher, N Y; Prince, Henry Kisteman, and Terry, same owner. C, Young Bright, Thomas Kaslagher; Lucy, same owner, and Lucy, Grenville Kane.
Class 86—Minnie, Chauncy Edwards, N Y; 2, Dickie, John McGibney, N Y. V h c, Dandy, Henry Kisteman, N Y. H c, Joe, L N Meyer, N H. C, Dandy Jim, Phenix Remsen, Babylon, L I; Victoria, Henry Kisteman; Rabbe, W Collins, N Y, and Gypsey, same owner.
Class 87—Lady Rosamond, Mrs A V Ely-Goddard, N Y.
Class 88—Saukey, L N Meyer, N Y; 2, Trickeey, Miss Clara Long, N Y. H c, Moody, L N Meyer, and Spider, same owner.
Class 89—Prinnie, Mrs Charles E Pratt, N Y; 2, Kobe, Mrs I W Steward, N Y; Extra 2, Punch, Theodore F W Taylor, N Y. V h c, Judy, same owner. C, Minnie, L N Meyer, N Y, and Koko, Mrs I W Steward.
Class 90—Bijou, W F Morgan, N Y; 2, Toetsey, Henry Knubel, N Y. V h c, Fairy, Arthur C James, N Y. H c, Flora, L N Meyer and Fanny, George W Hunt, Brooklyn. C, Fay, C W Carpenter, Newark.
Miscellaneous—Fred Wood, N Y, Chinese edible dog Fanny, and Grenville Kane, N Y, Russian dog Count Kioski, each a silver medal.
Class A—Bow, St Louis Kennel Club.
Class B—Bow and Sleaford, St Louis Kennel Club.
Class C—Belle and Rose, Edmund Orgill.
Class D—Button, Joseph J Snellenburg, New Brighton, Pa.
Class E—Psyche, S T Hammond, Springfield, Mass.
Class F—Sam, Milo Seagear, Bloomingburg, N Y.
Class G—Jersey Duke, Von Lengerke Brothers, N Y.
Class H—Start, Samuel Scranton, Providence, R I.
Class I—Rhoderic Dhu, Charles H Raymond, Morris Plains.
Class J—Young Laverack, Charles H Raymond.
Class K—Fairy, Charles H Raymond, Morris Plains, N J.
Class L—Duke, C Steward, N Y.
Class M—Loo II, St Louis Kennel Club.
Class N—Dash, George C Colburn, N Y.
Class O—Nellie, A F Copeland, Boston.
Class P—George W Landenberger, Fort Washington, Penn, with Rattler, Chimer, Hunter, Cyclone, Fury and Vixen.
Class Q—Boss, Charles W Norton, Boston.
Class R—Barry, Le Roy Z Collins, Lancaster, Mass.
Class S—Feather, Frank C Hollins, N Y.
Class T—Gamester, A Newbold Morris, Bartow, N Y.
Class U—Victor, W Fansham, N Y.
Class V—Soap, W A Haines, Jr, N Y.
Class W—Lena, Ferres S Thompson, N Y.
Class Y—Tam O'Shanter, T W Lawson, Boston.
Class Z—Prinnie, Mrs C E Pratt, N Y.

MR. LORT AS A JUDGE of English Setters and Pointers at the Westminster Kennel Bench Show.

EDITOR FOREST AND STREAM:

A couple of weeks since there appeared in the Chicago *Field*, underneath the signature of "Free Lance," a letter denouncing the action of the Westminster Kennel Club in having secured Mr. Lort, of England, as judge of setters and pointers at their bench show. A couple of gentlemen, members of the club, spoke to me concerning the attack, and I agreed with them that it was premature and unfair, and promised, if a copy of the paper was sent to me, to write a reply, complimenting the club on their energy and enterprise in securing a man so well known in England as a judge of dogs, etc., etc. The paper did not come in time for my reply, and the show is now a thing of the past. I do not know who "Free Lance" is, but perhaps he may allow me to pay him the compliment of now saying that he knew well whereof he wrote, and that his prophetic soul should take comfort in the more than ample justification of the charges brought against Mr. Lort, disqualifying him for the onerous and important office of judge of English setters. "Free Lance" said in his letter: "Mr. Lort is a member of the English Kennel Club and is paid to do their judging. The jealousy of the clique in that club to Mr. Llewellin and their violent opposition to anything connected with Mr. Llewellin, have made them notorious in England. There is money for them in abusing and injuring Mr. Llewellin. Mr. Lort is one of the crowd; Mr. Macdona is another. After the disgusting experience of last year at New York, when the club sent to England for Macdona, and had him act as judge and award prizes to his own and his friends' dogs, the Westminster Kennel Club should have learned wisdom, etc." "The natural result must follow. Any owner of a Llewellin setter who values his dog's reputation holds aloof from the show. L. H. Smith, of Stratbroy, and Arnold Burges, of Hillsdale, owners of the most celebrated Llewellin setters in the country, could not be induced to exhibit at the 'Lort Show,' etc." "Free Lance," I must say that I admire you. I have been a student of human nature for many years, but you have beaten me this time, and Mr. Smith and Mr. Burges are to be congratulated that they were far-seeing enough to save their dogs from the indignity of an unjust judgment!

Mr. Lort forgot the Latin motto, "*Index non solum quid possit, sed etiam quid deceat ponderare debet*," his prejudices were too strong for him and led him to do what he could, irrespective of what he ought. As a gentleman in the ring remarked to me, "If he would only have the tact to cover them up decently it would not be so bad, but 'his offence is rank and smells to heaven!'" I am sorry to say that he expresses only what I felt. It became a foregone conclusion that if a Llewellin setter entered the ring in competition it was but to be defeated. I am conscientiously impelled to say this, although I am pained at doing it. I do so in the interest of the truth, and of those who have at heart the interest of the finest strains of setters. Let not those be discouraged or misled by the perverse or bad judgment of Mr. Lort. Truth is mighty, and will prevail in spite of such adversaries. It is a misfortune that no man commits error for himself alone, his folly is scattered amongst all around him, but he must ultimately become the greatest sufferer, for his is the responsibility. It may take time to remedy the evils which Mr. Lort has worked, but time will do it, and as the best and most practical judge of setters in the show—so generally acknowledged—remarked to me when the judgments were announced: "I'm sorry for that—I'm verra sorry! But he has hurt himself more than any one else." So I think it will be. The Llewellin setter is good enough to take care of itself. Mr. Lort may not fare as well in the long run. As I stood at the ring and saw with what complacent coolness he turned over every dog having the well marked Llewellin stamp upon him to the "diminutive bow-wows," I gradually came to take the facetious side of the question, and was even led to perpetrate jokes, when, as if to add insult to injury, he halted a moment with finger on chin to simulate a grave consideration over some unfortunate canine with a Llewellin cerebral development, only to make certainty more sure of a final condemnation. In Lady Leicester's case I taxed Mr. Lort with his marked and great injustice, which was so apparent that one well known gentleman remarked that he "did not see how a man dared to so glaringly commit himself," and I challenged him to give his reasons for rejecting her without even a commendation. He replied that he had intended to give her an H. C., but Dr. Webb, who stood beside us, told him very plainly that he had not done so. He then fell back on a criticism of her stern, which he said was too long and sickle shaped, but unfortunately for his case some practical sportsmen present measured the sterns of both the first and second prize winners, and found them longer than Lady Leicester's. Mr. Lort was evidently very much irritated, and with the exclamation of "Rubbish, rubbish," left the scene. Dr. Speir, of Brooklyn, who was present, and who is a well known expert, told me that without knowing the dog he had picked her out as the finest in the whole show. I had taken several gentlemen to see her, as certain of the first prize, and not less than a dozen practical sportsmen, and some of them well known experts, came and spoke to me in terms nearly as laudatory. One gentleman, who was beaten last year by Mr. Smith's dogs, said to me, with his well known frankness, "Although beaten by Smith last year, I must say that Lady Leicester is a beauty, and it is disgraceful that Mr. Lort should have placed her, through prejudice, where he has." It is not necessary at present to give names, although I have no doubt many of these gentlemen would be quite willing.

There were only first and second prizes given in this class, the others, including Lady Leicester, were not thought worthy of a third, or even commendation. I refrain from criticisms upon some of the prize winners, as it is not my object to criticize the dogs, but to show up to deserved reprobation the animus which influenced the man. It cannot be justly claimed against me that I am writing as a disappointed exhibitor. I did not exhibit any of my own stock; I did not expect to be in the country at the time of the show, and had arranged for the exhibition of Lady Leicester out of compliment to Mr. Smith of Strathroy, who bred her, and from whom I obtained her, proud as I would have been to have bred such a beautiful animal, had she been of my own stock. I would now have been silent, but as it is I feel what to me is the very secondary interest, that of ownership, and I feel quite at liberty to denounce Mr. Lort for his abuse of Mr. Llewellin's kennel, from which so many fine dogs have been imported to this country, and assert that, from his awards, sentiments and expressions, he has simply acted the part of an advertisement to other English kennels that are his favorites and that it is to his pecuniary interest to advocate. And in this connection let me say that for just such reason we do not want such men as Macdona and Lort to judge our dogs; we have enough of skillful and practical men in this country far better judges of sporting dogs than either of them, and who, if they give way unduly to prejudice and commit grave errors, can be held to account and summarily dealt with by their fellow sportsmen. It is much to be hoped that bench shows in this country may not be seriously impaired by the action of Mr. Lort and that we have had the last of this class of imported judges. I am personally convinced also that we have plenty in our midst who are really better qualified by their critical knowledge of pointers and setters to act as judges then is Mr. Lort, for from close observation of his methods of examination and from the nature of his remarks upon various points I am strongly of the opinion that, irrespective of his prejudices, he is far from being a thoroughly well qualified man, and his judgment of pointers was in many instances extremely faulty, and was so pronounced by many of our best men who were in a position to view the matter with a dispassionate eye. In one instance he awarded an H. C. to a most inferior looking animal, entirely overlooking several very fair dogs. My astonishment was so great that I expressed it somewhat strongly, when to my surprise a short time after a gentleman came to me and gave me the most indubitable evidence that the dog was a "dropper," his father being a mongrel setter. The joke is too good a one to keep. I would not have my fellow sportsmen imagine that I think that the Llewellin setter is the only good strain; I believe it to be one of the best, and that we owe a debt of gratitude to Mr. Llewellin for having done very much to raise the standard of the setter in very many ways, and that his strain is not what Mr. Lort characterized it in a letter which he recently wrote, mere "trash!" Before I close I must take the opportunity of saying that, so far as the details and general conduct of the show are concerned, I think the W. K. Club are deserving of all praise, and sincerely trust that they may meet with every encouragement to continue their efforts to give us an annual show. I also cannot help saying that I think Mr. Lincoln, the Supt., deserves the thanks and kind wishes of every exhibitor; his urbane and considerate conduct and earnest efforts to satisfy all were very manifest. In conclusion, Mr. Editor, permit me to say that I desire to hold myself entirely accountable for all that I have written, and beg to subscribe myself in full,

Very truly yours, A. RUSSELL STRAOHAN,
May 17, 1878. 51 E. Twenty-third st., New York.

HORSEHEATH FIELD TRIALS.

WE publish a most interesting letter from our well known correspondent, Captain John M. Taylor, who was present at the recent field trials in England. Captain Taylor, who certainly has a very thorough knowledge of field trials, gives clearly his ideas as to the necessary precautions to be used in future trials in the United States. One very particular fact which our correspondent brings into evidence is the superiority of English pointers over our own. Of this we have long been aware. We feel very sure that Captain Taylor's letters from abroad will be well received, and we are

equally certain that the visits he intends paying to the numerous English kennels will convey to us on this side many facts of vital interest to American dog breeders.

On our part, our thanks are due to our numerous friends abroad for the courtesy shown by them to our representative. Captain Taylor will return in time to be present at the coming field trials to be held under the auspices of the Baltimore Kennel Club:

LION HOTEL, CAMBRIDGE, England.

The Kennel Club Field Trial Spring Meeting took place at Horseheath, near Linton, Cambridgeshire, on Tuesday, April 30, and on Wednesday, May 1, on the estate of G. Brewis, Esq., and on Thursday at Debden Manor, near Newport, Essex, the estate of Percy Brewis, Esq. These lands comprise in all about 4,000 acres, the fields averaging from 70 to 150 acres. It is not my intention to give, nor would your readers care to know all the points of nose, hacking, pace and style, etc., of each individual dog, as that would take up too much of your valuable space; but, as I have traveled close on 4,000 miles to see these dog field trials, I propose to compare them without any distinction with the rules, merits and working of dogs in America. The ground over which the dogs ran is an open country. The animals are worked in clover, wheat and growing fodder grasses, each of which was high enough to hide a hare. Of course, at this time of the year there is no shooting of birds, the gun being merely used to test dropping to shot, and to see whether the young dogs are gun shy. The latter will only apply to the puppies, as the rest of the dogs have already made their *debut*.

The Field Trial Derby, or Puppy Stakes, was for pointers and setters bred in 1877. There were 108 subscribers and twenty one entries or starters, a number being the direct descendants of Ranger. The puppies are, on an average, from four to five months younger than the age of the puppies in field trials in America; but it must be remembered that the ground or fields are entirely divested of any bush, shrub or tree—in fact, it is one lovely, highly cultivated garden for miles and miles. Therefore, in my opinion, the scent is much better in England than in the United States. It is true the English dogs are younger, but then, to equalize them, the scent is superior. I will now show how the dogs are handled. The system of working all the dogs at these field trials is the best test—that is to say, the names of all the entries or starters are put into a hat and drawn two by two, and the two drawn together are worked together, provided that if there are two dogs entered by one gentleman, they must not be drawn against each other, or, in other words, they ought to be guarded as much as possible. Setters are worked against setters and pointers against pointers until there are no more setters and pointers to work against each other, then pointers and setters run with each other. This seems to me to be quite fair and advisable to be copied with advantage by the managers of American Field Trials. After all the dogs have been tried once and the winners selected the winners are tried against one another and so on until the final and true winner is arrived at; but not so with the second dog, as he is not of necessity the second best dog in the stake. This plan has been advocated by me in FOREST AND STREAM from the first, but now I think it does not work well, as it comes very hard on very young puppies who have to be down so frequently, so in all probability it will be given up. In my opinion the only way to judge dogs at field trials is to have two judges and a referee—gentlemen beyond dispute; judge them by points if you like, but do not have or allow any algebraical calculations to be mixed up with sport, but the judges to say which is the best, second and third dog in the stake, leaving this entirely to the judges, they not to be hampered in any way.

I am aware again, there are many minor objections to this and shall have a good deal to say of this system in another letter, as, after seeing the working of field trials both here and in the United States, I have again come to the conclusion that the great majority of "points" cannot be decided by mathematical calculations, but must of necessity be greatly left to the discretion and discernment of the judges.

In order to let the owners of entries and spectators know which animal has won his heat the dogs when worked together have each a red or white collar made of broad worsted web, which corresponds with the red and white flag carried by an assistant, and the instant a dog wins his course, or heat, the man holds a white or red flag, as the case may be. This is another little hint which may be used in the U. S.

The trial commenced with two puppies, and these dogs are invariably given the benefit of the wind. That is to say, they run with the wind on their noses all the time. (This is not the case in America, as we generally work the dogs across wind, so this is again another advantage for the English dog over the American dog at field trials.) These puppies are brought opposite the judges generally at "drop," the word "go" is given, and off they start, in most instances at a good rattling pace. After ranging about a good deal one comes to a point, the other probably backing, when the handler or worker of the dog quietly walks up to the puppy that is pointing, pats him on the head and otherwise encourages him. The puppy then begins to road, or work up to the game, and again makes a final point; the keeper flushes the birds, the gun is fired and the puppies both drop to wing and shot, or they don't. This is all very well, but as it appeared to me in this stake the men worked the birds instead of the dogs, as in several instances the keepers absolutely took the puppy by the collar and led him on to the birds. At the same time, as I was informed, it must be borne in mind that not one of the puppies had ever had a bird shot over them, the fields being full of hares, and a puppy to chase a hare would in all probability put him out of the stake. Again, a good many of the birds were French men, or red-legged partridge, which run like a greyhound and will not lie to a dog except in rare instances where the animal is a fast ranger, and comes boldly on the bird and stands like a rock, which cannot be expected of puppies at twelve to fourteen months old.

On Tuesday we began at a quarter to ten with the field trial Derby for pointer and setter puppies bred in 1877; 108 subs:

Major Fernley's bk w d Ranger Rock, by Ranger II.—Bess, 14 mos. (setter)	beat	J Platt's lem w d Struggle, by Rhyl—Minch, 14 mos. (setter.)
R Lloyd Price's liv w d Monk, by G Moore's Brag—his Moll, 12 mos. (pointer.)	"	G Brewis' liv w b Dart, by Roy—Mab, 12 mos. (pointer.)
Major Platt's bk w t d Darkie, by Rhyl—Dolly, 10 mos. (setter)	"	R Purcell Llewellin's lem w d Lolty, by Prince—Leda, 14 mos. (setter.)
R Lloyd Price's lem w d Dandy Drake, by Drake—Nimble Ninepence, 13 mos. (pointer.)	"	Barclay Field's liv w b Pride, by Riot—Romp, 10 mos. (pointer).
Major C Ross' lem w o Ranger Reel, by Ranger II.—Bess, 11 mos. (setter.)	"	G Brewis' lem w d Strathie, by Ranger—Troll (setter).
Sir T B Lennard's liv w d Scamp, by Y Bang—Teal, 12 mos. (pointer.)	"	R Lloyd Price's liv w b Placida, by Drake—Nimble Ninepence, 12 mos. (pointer.)
Major Platt's bk w b Dip, by Rhyl—Dolly, 10 mos. (setter.)	"	W D Duncan's w bk t d Royal IV., by Rollick—Flame, 14 mos. (setter.)
Sir T B Lennard's liv w d Priam, by Y. Bang—Teal, 12 mos. (pointer.)	"	R Lloyd Price's lem w d The Irrepressible Drake, by Drake—Nimble Ninepence, 13 mos. (p.) (pointer.)
A P Heywood Lonsdale, w bk d Barnet, by Brackley—Rhoda, 12 mos. (pointer)	"	E Bishop ns Barclay Field's Collin, by Frolic—Dumpsey, 12 mos. (setter.)
G T Bartram's bk w d Duncan, by Rollick—Bride, 12 mos. (setter.)	"	Lord Downe'n liv w d Sam, by Dash III.—Silk (setter).

G de Landre Macdona's lem w d Ranger III., by Ranger II.—Cora, 13 mos. (setter) (a bye).

I.

Ranger III. (a bye) beat Ranger Rock. | Darkie beat Ranger Reel.
Scamp beat Monk. | Priam beat Dandie Drake.
Barnet beat Dip.

II.

Scamp beat Darkie. | Duncan beat Ranger III. (a bye.)
Priam beat Barnet.

III.

Scamp beat Duncan and divided first and second with Priam. Priam, however, was declared by the judges the best of the two. Duncan took third, and Darkie and Ranger III. divided the fourth prize.

The working of the puppies, with the exception of what I have previously mentioned, being the same in England as in America, I will escape becoming monotonous by giving further details. Suffice it to say, that the best puppies, as far as ranging, pace and style—and, I may say, nose—were the pointers Scamp and Priam, owned by Sir Thomas Lennard. Of the setter puppies, Lolty, owned by Purcell Llewellin; Ranger III., owned by Major Fernley, and Darkie, by Maj. Platt, bids fair to make grand dogs, and will be heard from in their day.

On Wednesday the event was the Horseheath Stakes, a sweepstakes of £6 6s. each, and a cup, value £20, added, for all-aged dogs or bitches setters or pointers:

G Pilkington's liv w d Garnet, by Toby—Jessie (pointer)	beat	R Lloyd Price's lem w d Dandy Drake, by Drake—Nimble Ninepence, 13 mos. (pointer.)
Major Platt's bk w b Die, by Dash—Delly, 2 years (setter).	"	J Platt ns (R Purcell Llewellin's) Sam, by Sargeant—Kate, aged (setter).
Duke of Westminster ns (A P Heywood Lonsdale's) liv w d Might, by Mike—Watt's Moll, 8 years (pointer)	"	R Lloyd Price's liv w d Dismal Jimmy, late Lucky Sixpence, by Drake—Nimble Ninepence, 3 years (pointer).
Lord Downe's bk w t d Dan, by Sam—Flash, 3 yrs. 2 mos. (setter.)	"	W Lort ns (G de Landre Macdona's) Ranger III. by Ranger II.—Cora, 14 months (setter).
J H Whitehouse's liv w d Rapid, by Chang—Romp, 5 years (pointer)	"	Edward Armstrong ns (Lord Downe's) liv w b Jane, 3 years (pointer).
J Cunningham ns (R Purcell Llewellin's) bk w b Novel, by Dan—Nellie, 2yrs 6mos (setter).	"	Mr Bowers ns (Lord Downe's) bk w d Duke, by Sam—Flash, 3 years 2 months (setter).
E Bishop ns (R Lloyd Price's) liv w b Bow Bells, by Bang—Belle, 2 yrs (pointer)	"	G Thorpe Bartram's Stella, by Sancho—Bess (pointer).
G Brewis's lem w b Danger, by Dan—Lady, 2 yrs and 8 mos (setter)	"	J Armstrong ns (Mr S Medley's) r d Rory, by Rover (setter)
S E Shirley ns (Mr Barclay Field's) bk t b Nora, by Mango—Romp 1 yr and 7 mos (pointer)	"	Arkwright's lem w d Tramp, by General Prim—Mink, 4 yrs (pointer).
R Purcell Llewellin's bk w t b Nora, by Dan—Nellie, 3 yrs (setter)	"	T E Medley's r a b Bella, by Rover (setter).
Barclay Field's liv w d Drake, by Riot—Queen, 1 yr and 8 mos (pointer)	"	A P Heywood Lonsdale's liv w b Min, by Mike—Watt's Moll 3 yrs (pointer).
G Brewis' bk w t d Dash II., by Blue Prince—Kate, 4 yrs (setter)	"	G de Landre Macdona's bk w t d Ranger, by Quince II.—Judy, 6 yrs (setter).

I.

Garnet beat Might. | Novel beat Danger.
Dan beat Di. | Drake beat Nora (drawn).
Bow Bells beat Rapid | Dash II. beat Nora.

II.

Garnet beat Bow Bells. | Garnet beat Drake (a bye).
Novel beat Dan. | Dash II. beat Novel.

The prizes were awarded as follows: Garnet first in pointers and cup as best dog, Dash II. first in setters, Novel third prize, Dan fourth prize, Bow Bells and Drake divided the fifth and sixth prizes, and Nicholson (Garnet's breaker) took the breaker's prize.

The working of the pointer Garnet in this trial was truly magnificent. No such work have I ever seen on the other side of the Atlantic. The pace and style of this dog is wonderful, and his power of stopping and wheeling round and pointing instanter is truly startling, his action on his point is the beau ideal of the handsomest sporting dog in the world. The Pointer—For mathematical ranging and pace, Purcell Llewellin's Nora undoubtedly took the palm in this stake, who, by the way, is a maiden bitch, three and a half years old, a fact I never heard of before, that so grand a bitch should arrive at maturity without ever been allowed to receive a dog. I suppose the answer is, "We have plenty at present, she must wait until her turn comes." I think that Dash II., now owned by Mr. Brewis, was the best all-round dog in this stake. Lloyd Prince's Bow Bells is a clipping little pointer bitch, and Dan, owned by Lord Downe, and worked by Edward Armstrong, the prince of breakers, who trained Garth's Drake (dead), and bred the wonderful setter bitch "Kate," certainly deserves a record.

The award for extra cup for best pointer or setter was then decided between Dash and Garnet. Dash flushed and dropped to a quick brace which he was making out. Garnet pointed and dropped; Dash had to be ordered down. Then he pointed a brace, then a bird, and Garnet refused to back. Then Dash pointed a brace, and was well backed. Finally, both false pointed, then both dogs pointed twice, and Garnet won.

The club challenge cup, value £90, for all age pointers or setters; the cup to be won three times by one member (not necessarily in successive years, or by the same dog), before becoming his absolute property; open to members of the Kennel Club only. All dogs or bitches competing must be the *bona fide* property of the member who enters them. Limited to one dog each:

G de Landre Macdona's Ranger	beat	Arkwright's Tramp.
G Pilkington's Garnet	"	J H Whitehouse's Rapid.
G Brewis' Dash II.	"	P Brewis' Danger (dr.)
D. Lloyd Price's Dismal Jimmy	"	Barclay Field's Pride.

I.

Ranger beat Garnet. | Dash II. beat Dismal Jimmy.

II.

Ranger beat Dash II. and won the Challenge Cup; Dash took a cup for the best of the opposite breed to the winner.

The dogs were handled in the same way as in America, the worker did not go up to the dogs as a rule to pat and encourage them. In this trial, as in all others, my remarks are confined to the oracks. Mr. Pilkington's Garnet was decidedly the best of the pointers in this stake, but his style of going, although very stylish, was not equal to his previous form, as Macdona's Ranger beat him easily. The great trial of the day was between Macdona's Ranger and Brewis' Dash II. The ranging, pointing, backing of these two setters was, with very few exceptions, a very fine sport, as each dog seemed to vie with one another and really to know that it was a question which one was the best, as perhaps there are only two or three dogs in all England that can come anywhere near them, and after a long trial the flag went up for Ranger. Dash II. is the handsomer of the two dogs, but the pictures we have all seen of Ranger in America would lead one to suppose he was like a spaniel, but I was much surprised to see a bold-looking setter head, with good loins, and immense propelling powers behind. He is remarkably fast; for that matter so is Dash II., and there is very little choice between the two. A writer in *Bell's Life* says:

"There is an old saying, that there is no such test as when others see us, and this year Capt. Taylor, who has resided in America for twenty-two years, and has inaugurated field trials in that country, came over specially to be present at the Horseheath trials. Capt. Taylor can recollect the old pointers and setters of some years back, and he has seen all the imported and recently bred ones in America, and, therefore, he was exceedingly well qualified to form an opinion. This, he informed me after two days' close observation, was greatly in favor of our English pointers of the present day, as he considered them vastly superior to anything he had ever seen before, both in range and style, and as yet nothing in America can touch them. The setters he thought were much more closely matched with those he has recently seen on the other side of the Atlantic in appearance and also in work, and this is probably a very correct estimate, as our American friends have dipped pretty deeply into our best setter blood of late, and, like the breeders of shorthorns, we shall probably be obliged to send to America for a cross back of some of the Laverack strains."

Most of the largest and best of the pointer and setter breeders of England or their representatives were present at these trials. The pointer men were Sir Thomas Lennard, Mr. Barclay Field, Mr. Lloyd Price, Mr. Whitehouse and Mr. George Pilkington. The setter breeders were Mr. Teasdell Buckle, Lord Downe, Mr. Macdona, Mr. Purcell Llewellin, Mr. W. Lort, who is now in New York judging at the Westminster Kennel Club show.

As to purchasing setters and pointers here, winners of a great stake at field trials, it is next to an impossibility. Every one is willing to part with the uncles and aunts, nephews and nieces, nieces and sisters and brothers of the winners, but to sell *the dog*, they will not do it. I offered £300 or $1,500 for Dash II, but could not get him, Mr. Buckle going £50 or $150 better, so I threw up the sponge in disgust. Why should these gentlemen sell the very best animals? They do not want money, and it might take a lifetime to breed, rear, train and handle another great winner. It is true, some of the blood of these dogs is in the United States, but to say that at present there is any dog in America to compare with Dash II, Ranger, Nora, Novel Dan, Garnet, would be simply leading your readers astray.

The judging was well and satisfactorily accomplished by Mr. Shirley, M. P., and Mr. Salter. The latter I am in correspondence with as to a new and lasting code of laws to govern field trials. My thanks are due to Mr. George Brewis, Mr. Friend and Mr. Lowe, Secretary of the Kennel Club of England, for courtesies extended to me personally.

Having received invitations from Mr. George Moore, of Appleby Hall, Leicestershire, whose father bred the stout pointers of the Cage of Shelby strain; Mr. Teasdell Buckle, of Great Grimsby Hall, who is well known in the United States; Mr. Lloyd Price, of Bala, Wales, and Mr. Macdona, of Chendle Rectory, I shall from time to time, as circumstances permit, give your readers an account of the kennels of these celebrated sportsmen.

It was suggested by some gentlemen present at the field trials, that a grand picture of the portraits and a few dogs of the field trialers of the world should be painted by subscription, the artist to be selected by a committee of gentlemen, the price to be paid for the picture 500 guineas. The amount subscribed for on the ground was about 200 guineas in less than an hour. Should any American field trialer feel inclined to subscribe to this beautiful and lasting work of art, as lithographs will be sent to the subscribers, they will please send the money with their best photograph to Edward Armstrong, Danby Lodge, Yarou, Yorkshire, England, who is the manager *pro tem.*

JNO. M. TAYLOR,
Hon. Member K. C. of England.

CEREBRO SPINAL MENINGITIS IN THE DOG.

WE give full space to a most thorough and careful diagnosis of this disease in a dog. Our correspondent is to be complimented for the care which he has taken with this case, which we consider as a model of canine pathology:

WASHINGTON, D. C., May 14, 1878.

The following case presents so many points of interest to those who love the dog and have sympathy with him in his sufferings, as well as in his pleasures, that I send it to you as worthy of a place in the Kennel Department of your much valued journal: Black Prince was a beautifully formed, very intelligent black and tan setter, one year old, out of Florence, by Col. Rives' Duke, who is out of Ruby by Dandy; Florence is out of Fly, of the Fairfax stock, native setters, by Trap, an imported dog owned by Gen. Beale, late minister to Austria.

March 6, 1878.—First noticed positive symptoms of illness today, although Prince has not seemed well and bright for ten days. Has had a nervous cough, which is brought on and increased by any excitement, and is attended with choking, as though of something in the throat, and with occasional vomiting. Has seemed less ambitious than usual. Eyes red and lids inflamed, discharging mucus. Three days ago noticed that in "sitting up" to order, he lost his balance and fell over backwards, which happened the second time when the order was repeated; also, that he failed to spring into the window when called, as was his custom, but had to be lifted in. To-day (March 6) took him with me in the buggy, and as he did not seem well as usual. He lay down, stretched out on his side, breathing spasmodically, not noticing things around nor wanting to get out. Put him out in Le Droit Park for a run, but he had no spirit, and seemed to move unnaturally in his hind legs, moving stiffly and drawing his legs up under him more than proper. When ordered into the buggy put up his fore-feet and tried to climb in, instead of springing in as usual, and fell out on his back. When again called in, hung back in a dispirited way, but order being insisted on sprang in awkwardly. Is not sullen, has good appetite, no thirst, and apparently no fever. In the afternoon weakness of hind extremities markedly increased, accompanied by spasmodic twitching of the (platysma) skin of the back, especially on the left side. Examined carefully for injury, but could find none. Up to this time has not been restless. In the evening called him into the house to examine him. Told him to get on a chair, which he did with difficulty, climbing up instead of springing. When directed to shut the door, instead of jumping against it as usual he closed it with one paw. Cannot sit up on his haunches without giving way. I mention these symptoms at length as giving evidence of incipient paralysis. He is not sullen nor ugly, but droopy; very restless, frequently turning around as though wishing to lie down; but does not. When ordered to lie down obeys with reluctance and with evident distress. Noticed long string of glairy mucus hanging down from mouth, but no froth. Weakness of hind parts and spasm of skin more marked; latter almost constant. Shut him up, fearing rabies.

March 20, 1878.—Is now just two weeks since Prince was shut up in his yard. Since that time his symptoms have been progressively worse, except appetite, which has never been wanting; on the contrary, he has eaten as much oatmeal porridge and bread and milk as would be sufficient in health. Neither has he at any time been delirious nor out of temper. The loss of power in the hind extremities became more and more marked until March 14, when he was no longer able to drag himself out of his house, and was in consequence put in the stable on a pile of hay. Has become generally weaker. Spasm of muscles of back, sides of abdomen and neck more severe and almost constant, evidently causing distress. Carries his head on one side, the left eye being lower than the right. Motion in hind legs not entirely lost, but only very faint. Sensibility to prick of a pin very slight in the thigh, and absent in the lower part of the leg. Conjunctiva strongly congested, both in veins of conjunctiva as well as those of the sclerotic, the former appearing as tortuous velas of a brick-red color, while the latter appear on close inspection beneath the former as fine radiating straight lines of a uniform pink color.

On the 16th of March, in the evening, noticed a wild ap-

pearance of the eyes, with widely dilated pupils, which was followed by champing of the jaws and convulsions, bending backward of the spine, neck and head (*Opisthotonos*), and convulsive movements of all four extremities. Expected to find him dead the next morning (March 16), but was aroused at 6 A. M. by his pitiful cries, and on going out to see if I could render any assistance, found that he had in some manner got himself out of the stable on to the brick pavement in the yard, apparently to defecate (for he had relieved his bowels) and had not been able to get back again.

It had rained shortly before day, and he was soaking wet. The wetting seemed to have put a stop to the convulsions, for they had ceased. I lifted him back on to the hay, and his cries ceased. From this time he passed his urine and fæces as he lay, but the hay being on concrete pavement, he was easily kept clean, the urine draining off, and the hay being frequently replaced by a fresh supply. The dog was, of course, more or less besmeared, but not so much as one would expect, and not at any time very offensive to the olfactories. Urine very free, and bowels moved naturally each day. Left side more affected than right; tongue moist and but slightly coated. In protruding, showed no sign of paralysis; coming out on either side in licking his chops, equally well. (When the tongue is paralyzed on one side it is protruded *toward* the side of the paralyzed muscles.) Has apparently no fever—in fact, instead of being thirsty, has not taken a drop of water since being placed under observation (March 6).

Up to March 17, is still able to raise himself on his elbows to eat or take notice. Intelligence unimpaired; will raise his paw to "shake hands" when told, and is grateful for attentions shown him. Has grown perceptibly weaker; lies habitually on the side, with almost constant twitching of the muscles and jerking of limbs (*chorea*). No diarrhœa. On the contrary, there was constipation at the commencement of the attack.

On the 18th of March, can no longer raise himself on his elbows without assistance; has to be held up while eating. Up to this time has suffered but little actual pain, but on the 17th had several paroxysms of pain, as also on the 18th, and on the night of the 18th, had violent attack of tetanic spasms, with opisthotonos and stiffening of the limbs at a right angle with the body, accompanied with great suffering and sudden snapping of the jaws. On the following day was stronger; could raise his head to feed. Tetanic rigidity of muscles disappeared, but twitching remained. A new symptom appeared in diffuse parenchymatous inflammation of the cornea or left eye, the clear portion of the eye becoming, at first cloudy, and then rapidly entirely opaque, milky white; conjunctiva inflamed, giving out purulent discharge. Discharge of thick pus has been noticed from the urethra (*penis*) for several days, and a protrusion of the head of the penis so swollen that it cannot be retracted is a source of much pain and distress. A small pustular eruption shows on the abdomen, evidently due to the constant soaking of the part in urine.

March 20, general condition better. Twitching continues; appetite good; eye worse; white spot appears at centre of cornea, as though ulceration were commencing; conjunctiva very angry, but not oedematous (*chemosis*). No vascularity of the cornea. Lower ribs appear more prominent than natural, but careful examination discovers no lung disease. No shortness in breathing. Is suffering great pain at times, which he gives expression to by short, plaintive barks, generally three together, as "ow-ow-ow," "ow-ow-ow."

March 21, passed a bad night. Cry very distressing. Has changed to an "owp-owp-owp," still three together, and is kept up almost without intermission. Went to him at 6 A. M. and found him suffering agony, evidently from the inflamed eye, the globe of which is swollen and somewhat protruded. Punctured the cornea (*paracentesis*) with a fine needle, and instilled into it a solution of atropia, four grains to the ounce of water. Also gave one-half of the following recipe:

Rx.—Morphiæ sul., gr. ¼; chloral hydrat, gr. xx; syr. aurantij, oz. ij; aquæ, oz. vj. Take ½ at one dose.

Great relief followed, and he slept the rest of the day. Toward night, very weak and prostrate. Eye appears better, but feet and legs cold. Noticed for first time, very strong, unpleasant odor as of stale, ammoniacal urine, but not of that alone—a smell also as of commencing decomposition.

March 22.—Not dead as I expected to find, but rather better. Good appetite; uses forelegs better. Eyeball not so much swelled; appearance of cornea about the same. Strong smell still present, but not so offensive.

March 23.—Bad odor disappeared; spasmodic twitchings still continue; end of penis exposed and swollen (*Paraphymosis*). Fœces blackened by iron in pills.

From this time forward to the end of the chapter the condition remained just about the same, except that all symptoms of acute disease gradually subsided, leaving a condition of chronic paralysis and chorea behind it. The white of the eyes resumed their normal condition, the opacity of cornea in left eye partially cleared away, but emaciation increased instead of disappearing, which was worthy of remark when we remember that the most nourishing food was taken abundantly.

Paralysis of the left hind leg was complete with extreme wasting of the muscles, and nearly complete in the right hind leg. Muscular twitching constant in hind legs and in neck, more on left side. I watched carefully for three weeks after acute symptoms had subsided for signs of improvement, but the debility, emaciation and paralysis progressively increasing instead, I was forced, greatly against my will, to the conclusion that recovery was impossible, and that mercy directed that his sufferings should be ended.

Treatment—Nothing was given up to the time that Prince was shut up (March 6) for he was not looked upon as a sick dog until that time. March 7, being constipated, the following aperient was ordered:

Rx.—Leptandrin, gr. ij; Podophyllin, gr. ss.; Aloes, gr. ij.; Saponis, gr. ij.; make into one powder.

This was administered in a piece of meat, and operated twice during the night, producing free, consistent discharges.

March 9.—Having watched him carefully for two days, and found the paralysis increasing, ordered the following as a tonic to stomach and nervous system:

Rx.—Ext. Nucis Vomicæ, gr. vj.; Quinia Sul., gr. xviij.; Ext. Gentianæ, gr. xxiv.; make in xij. pills, s. one three times a day.

These pills were taken until the 17th, when they were discontinued, and citrate of quinine and iron, gr. v., was ordered three times a day instead.

On the night of the 17th March the convulsions were so violent that I administered chloroform, being fully aware of the danger to life in the dog from the use of this agent, but the case was desperate. The suffering was so great that it was evident, unless relieved, that the poor dog must quickly die.

Chloroform was administered by drawing a cotton bag over the head, and pouring about a tesspoonful over his muzzle. The struggle was violent for a few seconds, but soon ceased, and he became quiet with stertorous breathing.

In half an hour the spasms returned with loud barking. Repeated the chloroform, giving a larger dose, bringing him more completely under its influence; respiration easy and regular; eyes staring wide open. Left him for the night, expecting he would be dead in the morning. He was, however, next morning, not only alive but better and stronger. Convulsions had ceased.

Diet consisted from the first of oatmeal porridge and milk, and bread and milk, which he took freely during his whole illness, not missing a meal.

A very remarkable circumstance is the fact that for five weeks from the time Prince was taken sick (March 6) he drank not one drop of water. When acute symptoms had subsided he took water sparingly. Then also beef soup was added to his diet.

The affection of the eye was treated by dropping into it a solution or sulphate of atropia (gr. iv, to oz. i.) three times a day, and when the eyeball became distended and threatened rupture, by paracentesis of the cornea (puncturing the eye with a needle and letting out the aqueous humor). The eye appeared to the unpracticed eye hopelessly lost, but was improving, and I have no doubt would have been fully restored had the dog lived.

On April 28, after consultation with a number of friends who unanimously pronounced the case hopeless, Prince took his last pill, one grain of strychnia, and his sufferings were quickly ended.

I have called the disease here depicted with perhaps tedious minuteness, *cerebro spinal meningitis*, because an analysis of the more prominent symptoms points most clearly to that disease. The paralysis of the hind extremities (*paraplegia*) the spasmodic twitchings of the muscles, convulsions, the left side being more affected than the right, the holding of the head one sided, the congestion of the conjunctivæ, all indicate unmistakably disease of the *cerebro spinal axis*. So also does the fact that recovery from the paralysis, etc., did not take place on the subsidence of the acute symptoms, proving that the inflammation of the membranes of the spinal cord had left behind it serious lesions within the spinal canal. Negatively the absence of fever, as shown by the moist tongue, good appetite and freedom from thirst, point in the same direction by excluding from the diagnosis any zymotic blood disease like *typhus fever*.

Mr. Mayhew in his article on distemper ("Dogs and Their Management," Edward Mayhew, 2d Am. Ed., p. 120 *et seq.*) gives a vivid description of all the symptoms which occurred in this case, and in addition enumerates many which did not develop, such symptoms as indicate pneumonia, diarrhœa and dysentery. He considers the disease (distemper) to be parallel with *continued fever* in the human subject, and *continued fever* in man means either *typhus* or *typhoid fever*. Stonehenge, 2d Ed., London, p. 368 *et seq.*, calls distemper *typhus fever*, and is more explicit in his description of the disease, confining himself evidently to *typhus* and *typhoid fevers* proper, referring to intercurrent diseases as complications. An American authority (Hallock's Sportsman's Gazetteer, p. 499) says that "true canine distemper is of extremely rare occurrence, if, indeed, it ever makes its appearance in the U.S. or Canadas. As laid down by that eminent pathologist, Kolliger, it is a disease attended by a catarrh, *consisting essentially of an irritation of the brain and spinal marrow, and characterized by frequent convulsions tetanic in character.*" Lower down on the same page is the heading, "*Distemper, Pleuro Pneumonia, Lung Fever.*"

Thus we have, according to the best authority in such matters, at least four different diseases classed under the common name *distemper*, viz.: *Pleuro pneumonia, typhus fever, typhoid fever* and *cerebro spinal meningitis*. The same confusion in nomenclature exists with regard to horses and cattle. With the laity—those who possess no special knowledge of disease in the dog, as well as many who *pretend to great knowledge* and *know* less—every sick dog has distemper, and is to be dosed accordingly with whatever quack nostrum happens to find favor with the individual.

Truly in the present instance is a "little knowledge a dangerous thing," as many a valued "friend of man" could testify were the ghosts of departed canines permitted to reappear upon this mundane sphere. Such confusion of terms is not creditable to intelligent observers, and is to be greatly deplored as entirely subversive to intelligent treatment.

On closing this report I have a word of caution as to the treatment of our sick four-footed friends: Sick dogs like sick men are frequently injured by over-medication, and are the more likely to be so injured because they cannot command language to express their ailments, nor protest against meddlesome interference. Be not in too great haste to give Dr. Shight-Polk's "Dead Shot for Distemper," pills, or what not, but place the patient under most favorable hygienic conditions. Diet him and watch him. Then doctor his symptoms intelligently, giving no medicine without knowing why you are giving it, and being sure of the right dose. The proper dose for a dog has the same ratio to that for a human being, that the weight of the former bears to the latter. R. F. B.

DEATH OF FLAKE.

EDITOR FOREST AND STREAM:

It has just been brought to my notice that "*Memento Mori*" has to be written of the pointer Flake, and I cannot resist the impulse to put on record my opinion of him. Flake was bred by me and was a grandson of my pointer George, facts I think not generally known, and for some reason less often acknowledged in the past than I could have wished, seeing that I have always formed so high an estimate of him as a representative small pointer. He is dead and gone now, poor fellow, and I only wish that I might write of him, "*Pars tui melior immortalis est.*" Perhaps I might not err in doing so—at any rate I trust it may be so practically through a long line of descendants. I write this little notice of the dog, because I think Flake was the best bench show small pointer I ever saw. I think I speak free from prejudice, for, although he was bred by me, he passed entirely out of my ownership when he was three or four months old, and on the few occasions that I afterward saw him I think I examined him as critically as I would any other dog. It was a matter of sincere regret to me that he was not awarded the champion prize over Snapshot at the Westminster Club's show last year, for so far as I am able to judge he was a much superior dog. I do not claim to be a special expert, but I do claim some considerable knowledge of the points which go to make up a good pointer or setter, and the failure on the part of the gentleman who acted as judge on that occasion to point out to me any really weak points in Flake when challenged by me to do so, only served to confirm me in the opinion that he was well deserving of the prize. Speaking as an anatomist, Flake was about the best put together dog of any kind I ever saw, there was no waste material from the tip of his nose to the end of his tail; in this respect he was very like his progenitor, George, only cast in a smaller mould. He had the same delicate and beautiful lines of form and the same grand development of muscle. There are those who thought his head too small, but the outlines were, to my eyes, very fine, and the balance of brain good. Who has not known a hooby with a big head! It is not size so much as good proportions which tell. It affords me great satisfaction that I had the good fortune to find his mate in Mr. Orgill's Lill. It was at the Minneola show some years ago that I first saw him and at once remarked him as the type of dog likely to match well with Flake. I urged her owner to communicate with Mr. Steele, the owner of Flake, and I think the results have proved the correctness of my judgment. The owners of Daisy, Rose and others will at least admit it. It is not often nowadays, Mr. Editor, that I find time to write on dog matters, but I could not allow the death of one I admired so much to pass without notice; it will be long, I fear, before we see his superior on the show bench, and I am looking forward with the greatest pleasure to an examination of his progeny, which I trust will be well represented at the coming show in this city.

Believe me, sincerely yours, A. RUSSELL STRAGHAN.

DOG POISONING—A SHAMEFUL ACT.—*Editor Forest and Stream:* My Newfoundland dog Hayes, winner of first prizes at Boston and Baltimore this year, was poisoned last week at my farm at Campville, Tioga County, N. Y., and died on the night of Friday, May 10. The act was committed by some person or persons unknown, and without discoverable cause. The poison used was that commonly known in that locality as a "dog-button," a lozenge made and sold for the especial purpose of killing dogs, and, as I am informed, easily procurable at any of the village drug stores. I have offered in the local papers a reward of fifty dollars for such information as will lead to the arrest and conviction of the person or persons who committed this villainous act, and shall use every effort to bring the party to justice, not only to insure my own safety in the future, but to aid in putting an end to such shameful practices in other parts of the country.

Yours, respectfully, HENRY W. LIVINGSTON.

154 *W. Fourteenth street, New York, May* 14, 1878.

It seems quite positive to us that when an apothecary or chemist sells any substance which is noxious or hurtful either to human beings or to animals, he should be held strictly accountable for such sale. We would be very glad to learn of the conviction of any apothecary selling the so-called "dog-button," unless fully satisfied as to the respectability of the person purchasing such poison. We believe that an action at law would hold in such a case. We regret exceedingly to hear of Mr. Livingston's loss, and only hope that the poisoners and all those implicated in it will come to grief.

CHESAPEAKE BAY DOG.—In view of the increasing interest in this peculiar and useful breed of dogs, all the information we can gather concerning them is valuable, hence we invite extended correspondence on the subject. One writer says:

"I have read the letter of 'Observer,' in which he states that he would 'doubt the pedigree of any Chesapeake Bay dog which weighed over seventy pounds.' As I have shot ducks for many years, and am thoroughly acquainted with this breed, or rather these breeds, of dogs, I must respectfully differ from him. The only advantage of a small dog is that he is easy of transportation. In calm water he is probably equal to the beaver dog, but in the heavy seas which prevail in the fall of the year in the Chesapeake Bay, I much prefer the beaver dog at this time. I own a dog which has a pedigree of at least forty years. He weighs nearly one hundred pounds, and in heavy seas is the fastest dog I ever saw. He will wind a duck over one hundred yards off, and I have seen him catch a crippled canvas-back after a chase of nearly an hour. He is liver colored, with close curly hair, and has all the sagacity and winning ways of a regularly trained poodle. There are three strains of these dogs, the one the short curly hair, and a dog which is highly spoken of—the red Winchester. The last dog I am not familiar with. ST. JOHN."

WHELPS—*Detroit, May* 19.—L. F. Whitman's Blue Belton Mell, whelped six dogs and seven bitches, eight black and white and five black, tan and white. They are by Burges' Druid, winner of first premium with Queen Mab in the brace stakes at the late St. Louis Dog Show. DRUID.

NAMES CLAIMED.—Jas. P. Crossley, of Titusville, Pa., claims the name of Rap for his liver and white cocker spaniel pup, by M. P. McKoon's Captain out of McKoon's Bess.

CARLOW.—W. E. Shedd, of Waltham, Mass., claims the name of Carlow for his liver and white cocker spaniel dog pup, purchased of Mr. M. P. McKoon and bred by him with full pedigree.

LOHMAN—FLORENCE M.—E. R. Turnbull, Esq., of Lawrenceville, Pa., claims the names of Lohman and Florence M. for dog and bitch puppies of Redgauntlet out of Quail II.

LOUISIANA.—*New Orleans, May* 16.—The bench show fever has struck us, and the only remedy appears to be to let it work out its natural course. We are talking of a bench show here in June or July. There is abundant material hereabouts, our sporting dogs aggregating something like 400, and the other breeds in equally good supply. ADOMENTIDIMUS.

NEW YORK DOGS.—The dog catchers begin their operations June 1. Owners of valuable dogs should remember that eternal vigilance is the price of dog-flesh.

FERGUSON'S SPORTSMAN'S LANTERN.—Mr. A. Ferguson, a well-known sportsman of Brooklyn, has invented a new sportsman's lantern, for which he claims material advantages over the old style. Its superiority is in its lightness, the ease with which it can be used, and the variety of uses to which it can be put. By an ingenious arrangement of leather straps the lamp may be securely attached to the hat, and by the use of the loop attachment the lamp may be used to light the tent or for a variety of other purposes. The staff attachment further adds to the usefulness of this very convenient and important part of a sportman's outfit.

Sea and River Fishing.

FISH IN SEASON IN MAY.

Trout, *Salmo fontinalis*.
Salmon, *Salmo salar*.
Grayling, *Thymmallus tricolor*.
Salmon Trout, *Salmo confluis*.
Shad, *Alosa*.
Land-locked Salmon, *Salmo gloveri*.

FLIES IN SEASON IN MAY.

BLACK MAY, No. 10.—Body, black; feet, black; wings, grayish hyaline.

GOW DUNG, No. 10 AND 11.—Body and feet, brownish yellow; wings, yellow-gray.

GREAT DUN, No. 9 AND 8.—Body, purple brown; feet, gray brown; wings, dark gray hyaline; setæ, dark brown annulated with gray.

RED SPINNER, No. 10 AND 9.—Body, bright claret, ribbed with gold tinsel; feet, brick color; wings, gray hyal; setæ, paleine brick color,

YELLOW MAY, No 10.—Body and feet, pale yellow; wings, pale yellow, mottled with brown; setæ, yellow.

COACHMAN.—Body, peacockock herl; feet, dark red hackle; wings, white.

KING OF THE WATER.—Same as queen of the water, with scarlet body instead of orange.

GOLD SPINNER.—Body, orange, ribbed with gold tinsel; feet, pale red hackle; wings, bright gray.

CAPTAIN.—Body, posterior half, peacock herl, anterior half, gray; white feet; red hackle; wings gray; setæ, scarlet green and wood duck feathers mixed.

SOLDIER.—Body, crimson; feet, red hackle; winge, gray.

KINGDOM.—Body, white, ringed with green; feet, peacock herl, and red hackle; wings, gray, mottled with brown.

Black Palmer, *Brown Palmer*, *Red Palmer* and *Gray Palmer* are made respectively of the different colored hackles that distinguish them.

FISH IN MARKET—RETAIL PRICES.—Bass, 20 cents; blue fish, 15; salmon, 50 to 75; mackerel, 18; shad, 45; weakfish, 12½; white perch, 15; Spanish mackerel, 75; green turtle, 15; halibut, 15; king fish, 15; codfish, 8; black fish, 10; flounders, 8; porgies 8; sea bass, 18; eels, 18; lobsters, 8; sheepshead, 12½; turbot, 20; Long Island brook trout, $1; red snapper, 18; pompano, 65; white bait, per pound, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.50.

The salmon from the Connecticut during the last week received in New York have been 53; average, 14 pounds. Total so far received, 137; whole catch possibly twice this number. Pompano coming from the Chesapeake with Spanish mackerel. The first lot of red snapper (*Lutjanus Blackfordii*) ever brought to this market arrived on Monday in the fishing smack Isabel from Pensacola. King fish very plenty. Two salmon from the Restigouche River arrived last Saturday, and in the course of a week or ten days we may expect an abundant supply of this, the choicest of all salmon.

MAINE—*Monson, May* 13.—Messrs. H. N. Brooks and W. G. Jones have just returned from one day's brook fishing with 250 trout. Streams unusually full of trout this season. Several have been taken from our ponds weighing three and three and a half pounds. E. R. H.

Princeton, May 16.—Not many sportsmen have got along yet. The trout, however, are plenty and waiting. Over one hundred salmon trout were taken on the 14th at Grand Lake Stream. The fishing never has opened better. The trout are plenty, large, and as gamy as ever. W. P. P.

VERMONT.—Trout captures of note are reported from North Dorset, Factory Point, and Greensboro Pond, near Montpelier. Lunge, shad, pickerel, perch and pouts are taken at Newport, Lake Memphremagog.

Richmond, Vt., May 17.—A party of sixteen persons, composed of clergymen, physicians, lawyers, merchants and the upper tens in Montreal, returned to-day from their annual fishing excursion to Pottom, Quebec, being out several days and enjoying regular camp life. This party has been accustomed to visit this place annually for fourteen years, and during this time only one person has died from their numbers.

MASSACHUSETTS—*New Bedford, May* 14.—The trout brooks have yielded plentifully the past week. Mr. A. E. Lucas was high hook, catching twenty-three fish weighing thirteen and one-half pounds. The largest single fish so far weighed one and a half pounds. The traps in this vicinity have been well filled, and our market abounds with sea bass, bluefish, scup, tautog and some fine striped bass. Of this latter fish you will soon hear reports as the fishing clubs are gathering their forces at the islands. The bass are now entering the river. CONCHA.

This information of our correspondent conveys a great deal of meaning to the angler who is *au fait* in fishing for striped bass. When this delicious fish first enters the fresh waters of the Eastern rivers he is like a June-run salmon, lithe, clean, shapely, and as steel bright as a cuirass. In the salt water he acquires a coppery complexion and becomes comparatively logy. The flavor is somewhat impaired also. Between an early salmon and an early striped bass there is little to choose for game qualities. There are many expert shore-fishermen, like our friend Concha, of New Bedford, who perhaps have never been hung to a salmon, who would doubtless prove as skillful as the most experienced in handling a salmon. There is a great difference however in the kind of tackle and lines used, and in the methods of offering it to these two kinds of fish, a difference which enhances the pleasure of angling in the one case or the other alike. Concha has sent us one of these twelve-pound striped bass packed on ice, and a more delicious fish was never served on the table. May joy go with him and "success to his fishing!"

May 20.—I hear of some fine catches in the rivers at the head of the bay around Pocasset, etc., running from 12 to 10 pound each. The school of sea bass will reach the Islands about June 1 to 10. They are of different appearance, the back of the head irridescent with blue and green like the neck of the wood duck. CONCHA.

—The Magdalen Islands fishery is reported to be a failure.

CONNECTICUT.—We notice in the *Windermere Forum* that a black bass, three and one quarter pounds, was caught last week in Pestepaugh Pond, Wallingford, Conn. This pond was stocked with black bass in 1871 by Mr. T. C. Banks, the business manager of this journal. Those skeptical spirits who have so long scouted the idea that the bass plant would ever amount to anything may now swallow that bass.

NEW YORK—*Canton, May* 13.—Trout fishing not first-class yet. Water too high. J. H. R.

Wyoming, May 17.—Elegant pickerel and bass fishing at Silver Lake. Quite a number of very heavy strings have been taken. Clem A. and Mark S. are champions thus far. Splendid trout fishing at the Weathersfield pond and brooks. One string of 80 and one of 120 fine speckled beauties were taken last week. ATTICUS.

GREENWOOD LAKE.—*May* 20.—A large number of anglers present to-day to open the bass season. The hotels are all in excellent condition and afford comfortable accommodations. This season, with the accommodations and facilities afforded by the St. George—the new hotel—at Cooper, the present termination of the railroad, parties can leave New York at 4:30 P. M, arrive at the St. George at 6:45, have from that time till 7:33 A. M the following morning, and be back in New York by 9:30 A. M. By telegraphing to the St. George a few hours in advance of arrival, boats, bait and guide can be secured and in waiting, thus avoiding delay and loss of time.

LATER.—The day's catch has scored fifty for private parties, one reported to weigh 3¾lbs. Messrs. A. Chamberlain and H. C. Cook, of the Greenwood Lake Sportsmen's Association, took seventy-three black bass. Of the Wa-wa yanda Club, W. S. Knapp and H. D. Felter took twenty black bass and five pickerel; Mr. J. Smith, four Otsego bass, one perch, seven sunfish; W. C. Conner and J. A. Slack, twelve black bass and six pickerel; M. B. Brown and J. J. Kelso, forty-one black bass, two pickerel and eight sunfish; N. Tappan and D. Jackson, nine bass and five pickerel; H. Felton and J. Smith, fourteen bass; S. Knapp, three bass. GREENWOOD.

WILLOWEMOC TROUT CLUB.—At the annual meeting on Tuesday, 14th inst., at the office of Mr. George W. Van Siclen, 99 Nassau street, New York, C. Van Brunt was re-elected President; Mr. Chas. A. Macy, Jr., Vice-President; I. S. Coffin, Secretary and Treasurer; and Frank Macy, Esq., on the Executive Committee. G. W. V. S.

NEW JERSEY—*Kinsey's, May* 18.—Easterly storms of the 14th and 15th have affected our bluefishing for the past few days. Blackfish and sea bass are biting freely, and good catches reported. Two small boys caught several, running from 3 to 4 lbs. B.

PENNSYLVANIA—*Erie, May* 18.—Muscalonge, pike and bass fishing very fine here. The law allows fishing with hook and line in the bay at any season. SNIPE.

Erie, May 20.—The sport here is first rate with bass and muskalonge, and has been much improved by the removal of the nets, which were recently set so near the mouth of the bay.

—Pine Creek, Potter County, is said to afford good trout fishing.

MARYLAND—*Baltimore, May* 10.—Messrs. Leonard Levell, Leonardus Levering and Frank W. Thomas have just returned from Cobb's Island, which is one of the best sportsman's resorts on the Maryland coast. They left Baltimore about ten days ago, going to Norfolk, thence to Cherrystone, Va., where vehicles were procured, and the party drove to Cobb's Landing, where they embarked and crossed the sound to the island. The accommodations were found first class. Good weather prevailed, but the sport was rather tame. A few days' shooting laid three hundred snipe, which was the principal game abounding. The fishing was very good, some fine sea trout and mullett being caught, while from forty to fifty drum-fish were hooked, ranging all the way from thirty to one hundred pounds. The angling for them was conducted by casting long lines out beyond the surf, and rather troublesome and tiresome it was too. Robin breasts had not put in an appearance. Some few sharks were being caught, but no real fun in the sport, it being too tame yet. The shooting is very fine on the island from the 20th July until the 1st August. TRAYMORE.

ON THE ROCK CASTLE.—Those of our angling friends who followed the fortunes of the writer of the following on his "Trip to the Middle Fork of the Rock Castle," as set forth in our issue of October 25, 1877, will be glad to hear of his further exploits on the same stream:

"Col. Tom Wallerson and Maj. Duncan were my companions on my spring trip to Rock Castle this year. Two more whole-souled, industrious and accomplished anglers one could not find in a month's march. We made directly for Judge Faubus', on the Middle Fork, fished there three days, and devoted Thursday and Friday to running the twenty miles from the Judge's to Livingston, the railroad terminus. Lav. Hale, a Cimmerian representation of the 'colored brother,' who knows better how to propel a canoe with pole and paddle, and where to round to for a black bass or goggle-eye bite than any individual on the Castle, was our factotum; and Lav. made things lovely, supplying fine minnows and serving feasts upon the river bank. We found the bass and goggle-eye in greater abundance, and running heavier than any previous year. Captured all that we could consume with aid of the residents with whom we stopped, and killed many very large ones. Maj. Duncan landed the only pike. We took a score of salmon, ten inches long, which the natives unanimously pronounced California, but, as we had never seen a specimen of that variety except in fry state, and have never taken one of same year's plant from any of our neighboring streams, we were incredulous, and neglected sending one to to Mr. Wm. Griffith, the President of Kentucky State Fish Commission. They are gamy fellows, and were as much alike as so many black-eyed peas. Lav. found a trap in full operation as he went up with canoe load of traps and provisions, and effected its immediate destruction. Having heard of three others upon another branch of the river, he gave out that he would soon take a party up that stream, and their temporary removal at least is assured. We need but a rigid enforcement of our fish law to bring our waters rapidly up to to the old standard which will render it superfluous for Kentucky sportsmen to seek felicity out of their own State.

Stanford, Ky., May 8, 1878. KENTUCKIAN.

ARKANSAS—*Hot Springs, May* 14.—I see some magnificent bass, four and five pounders, coming in here from the Ouachita and intend to try my hand on them before leaving B. H. P.

MISSISSIPPI—*Corinth, May* 11.—Some good strings of bass and perch are taken by our fishermen in the adjacent streams. The water has been too high until within the past week to fish much. GUYON.

MICHIGAN—*Grand Rapids, May* 12.—Hess Lake, twenty-eight miles N. of Grand Rapids, is celebrated for its perch fishing. There is a prejudice among some anglers against this fish, but to me they afforded some fine sport, being in my estimation nearly equal to trout. Good biters, and with light tackle, a perch of one-half to one pound, quite common here, will show himself gamy enough to suit almost any person. In a visit to the lake the other day, in three hours my friend and myself caught over two hundred, and they would average thirteen inches in length. Michigan is famous for the number of small lakes within her borders, and they all contain the perch. I have fished many of them, but for the size and beauty of the fish I never saw any to compare with those of Hess Lake. Black bass also abound in goodly weight and are taken freely with minnow or spoon and give fine sport. VALLEY CITY.

MISSOURI—*St. Louis*.—The report of the King's Lake Fishing Club for April, shows this total of recorded game and fish: snipe, 425; ducks, 157; cripples, 360; bass, 118. Fishing is good and game prospects excellent.

SOME RARE FISHING IN IOWA.—Col. J. L. D. Morrison, of St. Louis, well-known to many of our Western readers, has been on a tour of exploration to Northwestern Iowa. Although we have before referred to much of the ground here described, we second the laudable ambition of our correspondent to make known to brother craftsmen the good things to to be had here. We give a brief abstract of an article contributed to the St. Louis *Republican*:

Riding North from Algona, which is on the Chicago, Milwaukee and St. Paul Railroad, you enter upon an elevated prairie plateau, which runs westwardly to the Sioux River, embracing numerous beautiful lakes, well stocked with every variety of fish known to this latitude. The pickerel, wall-eyed pike, muskalonge and black and green bass, and crappy dominating. Ten miles from the Iowa line in Minnesota is Fairmont, on the Southern Minnesota Railroad. Fairmont, 475 miles from St. Louis, presents a most inviting field for hunting and fishing. It is upon the centre chain lakes; East Chain, Centre Chain and West Chain form the main group of lakes here, with fourteen additional ones within a radius of twelve miles from Fairmont. Commencing five miles east of Fairmont the East Chain, running from north to south is composed of thirteen lakes, the most southerly one of the group approaching near the Iowa line being a deep, clear lake about four and a half miles long by one and a half in width, and the other lakes extending northward varying in size from one to three miles in length. The East Chain has seventeen lakes extending twenty-four miles upon a direct line from north to south, their borders covered with fine oak, walnut, sugar maple and other timber trees, in the season covered with water fowl and filled with the finest fish, within thirty hours of St. Louis by rail.

Prairie chickens in season are here by the million, while it is the great hatching field of the geese, swan, brant, duck and crane, which visit us in the fall upon their flight to the South. Many of these lakes the hook of the angler has never disturbed while myriads of the finest fresh water fish sport in their limpid waters. A colony of English farmers, some of them, I learned, graduates of Oxford, hospitable and refined, have located around Fairmont and appear to enjoy all the luxuries of rural life. They have brought with them the English taste for field sports, have a kennel of 24 hounds, some fine imported English hunters, and are always ready for a fox or wolf hunt, frequently chasing the wolves 20 miles before they are captured. They are a jolly set and are very kindly spoken of by all the farmers in the vicinity.

Nine miles west of Fairmont is the West Chain, which contains ten lakes, the largest, "Okamanapadee," seven miles long and very deep; the southerly half of the lakes flowing into the Des Moines and northerly ones into St. Peter's River. Outside of these chains are fourteen other lakes equally as attractive.

From Tenhassen, on this chain, we drove westward on the same grand and fertile prairie plateau, passing endless beautiful lakes, and now and then a homestead settler, for 40 miles, when we reached Spirit Lake, in Dickinson County, Iowa. This and the East and West "Okaligi" lakes, all connected by outlets, are growing to be quite a resort for sportsmen and anglers from the East, Boston and New York furnishing their annual quota. They are large, clear, beautiful lakes, and filled with fish of every variety. I tried my hand at fishing, although the wind was blowing a northwest gale. I caught 32 fine fish from the bridge between Okaligi and Spirit lake, aggregating over 100 pounds in weight, embracing pickerel, wall-eyed pike, muskalonge and green bass, the three last offering fine sport, as they came to the shore with great reluctance. It is no unusual thing in the season to see a ton of fish taken with the hook upon this bridge. The Scandinavian farmers, who compose a majority of the settlers, salt and dry them for summer use. Indeed, if one did not tire of such food, fish and wild game, with little labor in taking them, could be made to supply the table all the year round.

To the sportsman and angler I say by all means visit the Chain lakes this fall, and to every one in search of invigorating, pure, bracing air and consequent health, no better resort can be found in the United States, the only drawback being suitable accommodation for families. For fishing and hunting parties everything is ready, and the game laws allow chicken shooting after August 15. Every farmer in the three counties I have visited will welcome you as a brother, and no danger of the Chain lake fracas being repeated among these hospitable frontiersmen, most of whom were eight years ago homesteaders. J. L. D. M.

UTAH—*Salt Lake City, May* 8.—Better sport for the angler can be found nowhere. Trout are both plenty and large. Have one fish breeding establishment here and several gun clubs. C. S. H.

MOVEMENTS OF SPORTSMEN.—Hon. Allan Gilmore, of Ottawa, Canada, leaves in a few days in his steam yacht for the

River Godbout, of which he is the lessee or owner. The Godbout is a famous salmon river, emptying into the Lower St. Lawrence far below Quebec.

Gee. Dawson, Esq., of the Albany *Journal*, who has become a devotee to the two-handed rod within the past year, departs on Thursday next for the River St. Marguerite, on the Saguenay, to fish for salmon.

Col. F. G. Skinner left yesterday for the Paris Exposition and the rest of Europe.

L. Dock, Esq., of Philadelphia, is fitting out for the Rocky Mountains.

—The season for salmon angling is unusually early this year, and the old veterans are already departing for the rivers. The fish are said to be abundant, but will not average over fifteen pounds.

Fly Time.—Messrs. Abbey & Imbrie, 48 Maiden lane, have reminded us that fly-fishing is now in order, by the presentation of a handsome fly book, bound in morocco. It has the "Hyde Clip" for attaching the files and holding them in place, and is sewed throughout. It has two very serviceable felt leaves, also, for needles, etc. These leaves are very convenient for securing spare flies, which have been removed from the casting line in making changes while engaged in fishing, and which the impatience of the angler may prevent him from placing in the clips. We shall hope to be always the happy possessor of one of these hooks. Price, $6.

Angling an Exponent of Character.—Mr. George Dawson, editor of the Albany *Evening Journal*, and, aside from his journalistic reputation, well known to scores of angling friends in this country and the Canadas, contributes to his paper a "Familiar Talk" on fish and fishing. This is what he has to say of the people he has met in the woods:

"I have often on angling waters been brought into close association with men of whom I had previously known but little, and I had frequently found myself amusing myself in conjecturing the business and home character and life of those around me. For instance, A would cheerfully at any time forego the capture of a fish to ensure, by his personal supervision, a tidy camp or an appetizing dinner. Such an one I would look up to as a uniformly good provider and the possessor of an orderly home. B, like some of our patriotic electors, would fish 'early and often,' and was never hilarious unless he had brought into camp the greatest number and the heaviest weight. I had no doubt that at home B was esteemed for his energy, but closely watched because of his excessive love of accumulation. C would be in the seventh heaven during his two or three hours of successful angling, but he reached a story higher through the other hours of the day while lounging beneath the shadows of the woods or hunting up some cosy dell or pretty mountain rivulet. I had no hesitation in voting him a born poet with the tastes of an artist, though he might have earned his extra dollars to cover his summer vacation behind a bank counter or amid the dust and *debris* of sugar casks or molasses hogsheads. D would linger over his trout and venison as if he deemed eating, and not his spiritual obligations, 'the chief end of man.' He took pleasure in catching trout and salmon, but he seemed to find far greater delight in magnifying their gastronomic virtues. I hazarded nothing in deciding that D was a good liver, whose dinners were memorable events in the lives of those who were privileged to partake of them. E loved the sport intensely, but he was happiest when he discovered a good pool and could induce a friend to share it with him. This, you know, is a virtue which few have the requisite grace to practice, for it is the highest manifestation of that rarest of all virtues, self-sacrifice. What else could such a man be at home than a model of amiability, kindliness and charity? F admired the woods, the rivers, the mountains and all that therein is. But he loved them in detail, and like the busy bee he would 'improve each shining hour' by rapidly passing from one bit of beauty to another, and so, by his unceasing desire to 'move on,' keep himself and every one about him in a state of perpetual unrest. Oh what a nuisance such a one is in a camp of good fellows who desire to fish and be happy in a quiet and leisurely way! What could be be at home but a perpetual torment to family and friends? I have had more than one summer vacation spoiled by these jumping-jacks, who have no more appreciation of what constitutes real comfort in camp than they have of the quiet and gentle elements which enter into the character of a true angler."

The German Way to Cook a Shad.—The following recipe is contributed to the Hartford Weekly Times:

"Buy a shad as fresh as possible; never have it dressed right off, but take it home, there scale it, then wash it clean several times, put it on a clean board, cut open the fish and take carefully out the inside of it, separate the gall from the liver (be careful not to open the gall or even a vein of it, as the least particle of it will spoil the fish), and save it with the spawn, which are delicacies. Cut the fish now in pieces, but do *not wash* it again and so spill the blood of the fish. Take a bowl, put at the bottom two sliced onions, one lemon in slices, two gingersnaps, two bay-leaves, six to eight cloves, rub the fish with salt, but not so much as to make the gravy too salt, and lay it on top of the spices, also the liver and spawn between, pour half a bottle of light red wine (or beer, if it is not bitter) over it, and let it stand in a cool place two hours before cooking. Then take a good glazed cooking-pot, one that will not cook blue, put in the fish with the spices, wine, a little sugar according to your taste, and a spoonful of good butter, and stew it slowly. Thicken the gravy with a little flour, if you like it, and serve it hot or cold in its own sauce. Add a cup of water when you have not gravy enough to stew your fish in, but don't make too long or thin, tasteless sauce.

—Mr. T. F. Craige, of 95 Maiden lane, claims to make fly hooks a specialty, we believe, and has them at prices varying from $3.75 to $7.—[*See advertisement.*

The Little Giant.—This is the not most unfitting name given by the French Manufacturing Co., of Brockton, Mass., to their camp-stool and walking-stick combined. A chair for the lawn or croquet ground, and which you can fold up into the compass of an ordinary "banger," and gracefully swing on the promenade, is just what will fill the wants of Young, Old and Middle-aged America.

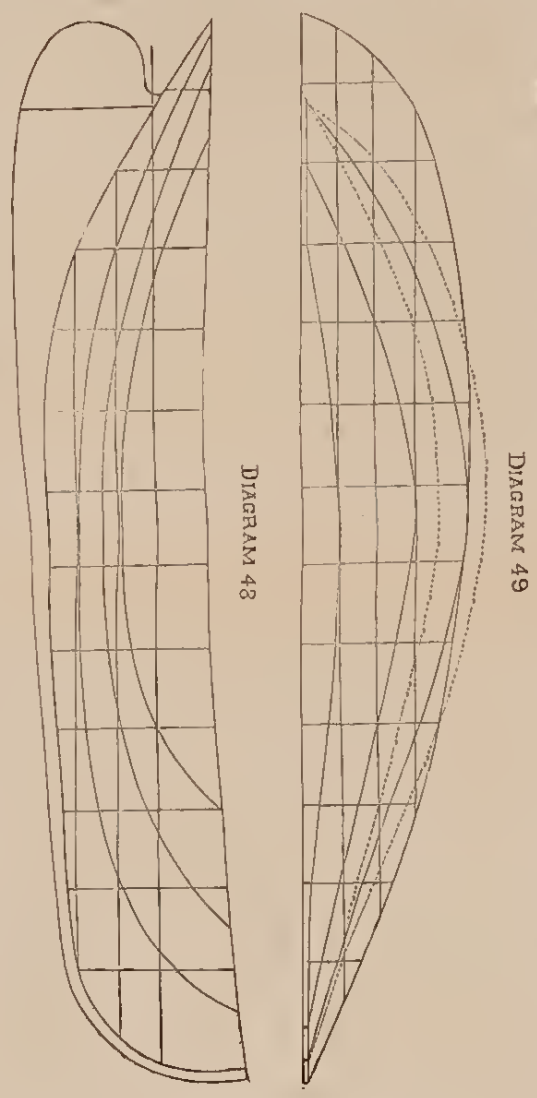
Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
May 24	5	33	1	59	1	16
May 25	6	25	2	47	2	06
May 26	7	17	3	38	2	54
May 27	8	07	4	30	3	43
May 28	8	54	5	19	4	31
May 29	9	39	6	05	5	18
May 30	10	22	6	46	6	04

BOAT AND YACHT BUILDING.—NO. 14.

Diagrams Nos. 47, 48 and 49 give a model with a midship section similar to the celebrated yacht Sappho's. Special attention is called to the inclined water line of this model, also to the inclined water line of the model given in the thirteenth paper. Both models are new, and I will be glad to hear from any gentleman who may build from either drawing. The model given with this paper is designed to be twenty-six feet long on the water line, three feet and nine inches extreme draught of water, eight and one half feet beam, and will carry about 850 square feet of canvas. The dimensions may be larger or smaller, or may be adapted for a schooner by placing the sections further apart. Diagram No. 50 shows a detail in the construction of boats or yachts that has been omitted in



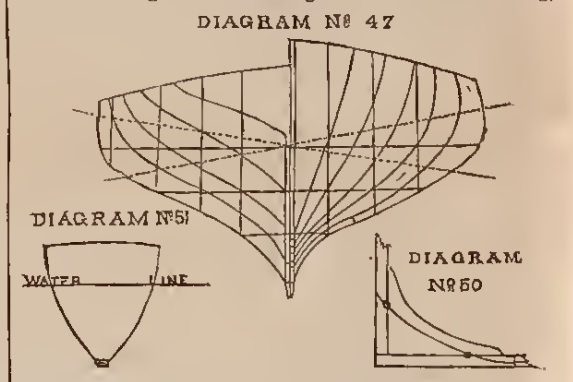
its proper place. The diagram shows the junction of the keel, stern post and stern deadwood; at the points where the grooves cross the joints between the keel and stern deadwood and stern post and stern deadwood, holes are bored through, wooden plugs driven in tightly and trimmed down to conform to the shape of the groove. These plugs are called "water stoppers," and their object is to prevent water leaking through between the joints and entering the boat. On yachts of this size a "tiller" is preferable for steering; if any steering gear is used, that known as the "Boston Steering Gear" can be recommended. In rigging yachts wooden blocks with brass sheaves should be chosen. The mainsail and jib halliards should be led through solid brass blocks fastened to the deck at the foot of the mast, and then led back and fastened to cleats, so as to be in easy reach in case of emergencies. Mast hoops are best of wood, copper fastened; jib hanks of brass, or galvanized iron large enough to give plenty of room for the "down haul;" the end of this rope should be led back into the cockpit so as to be convenient in case of necessity. The shrouds, jib stay and side stays of bowsprit are best of galvanized wire rope; the bob stay of iron, with a turn buckle to set it up. Sails for small boats can be made out of drilling, or twill muslin, and are easily sewn with a common needle of good size, or can be sewed on a sewing machine.

Large sails for yachts, made from duck, require sail needles for sewing and "palms" for forcing the needles through the cloth. The sewing of duck sails will be found hard work and, unless the amateur has plenty of patience, had better be made by a professional sailmaker. To cut the cloths for a sail, mark out on a floor the shape desired and allow sufficient for the hem that is required on the edges of the sail, commencing with the leech cloth. Lay down the cloth in place, stretching it in position by the centre of the cloth (never stretch the selvedge), tack it in place, after which the next cloth is laid down, lapped one inch on the first cloth, stretched and fastened in position as before and in like manner with the remaining cloths. Duck is of different widths, commonly about twenty-seven inches, and should be "highted" once, that is doubled on itself down the middle and seamed, to increase its strength and elasticity; if narrow duck is used highting is omitted. The next important point in sailmaking is the "roping;" for this purpose a special rope is made called bolt-rope which has extra flexibility.

The head, foot and hoist of the sail are roped flat; the leech is roped more or less elastic, according to the material used in the sail; if too much elasticity is given to the leech rope the canvas will be strained and in danger of tearing. On the other hand, if the leech rope has not sufficient elasticity a "bag sail" is the result. Experience alone can teach the amateur on this point. Turning in the rope increases its elasticity. Duck is more elastic than drilling, and requires more elasticity in the leech rope. Iron ballast should be well painted with hot tar before peing placed in position. Yachts of twenty-five or more feet length should be provided with a windlass, well fastened on the "Sampson post." If a large amount of chain cable is carried, the chain box should be located as far aft as possible—that is, near the forward end of the cockpit, otherwise the bows will be heavy in a sea. Air cushions are very comfortable, and can be used as life preservers, if necessary.

If a yacht is to be used at sea a "drogue" should be provided. A drogue is made by fastening a conical canvas bag on an iron hoop, two or more feet in diameter; to the hoop a strong rope is attached by a span, in such a manner that the bag will fill with water and act as a drag. A tripping line is attached to the tail of the bag, and serves to pull the end of the bag forward, so that the drogue can be easily spilled or taken on board. In running before the wind in a heavy sea there is great danger of a small boat being caught in a "comber," if the yachtsman is not skillful, and sometimes if he is. The boat rushes down the declivity, the bow is submerged, the stern lifted, and the boat performs a somersault, end over end, like sticks in a mill-race. If the wave catches the boat on the quarter the yacht capsizes, or "broaches-to;" the remedy is to tow the drogue astern thirty to fifty or more feet. In sailing against "combers," if sufficient speed can be kept to force the boat through the wave, the yachtsman is safe; otherwise, put out the drogue at the bow, and "lay to." If, when coming before the wind in rough water, there is any danger of the boom-end dipping by the rolling of the boat, thereby tripping or jibing the sail, lower the peak of the mainsail. If in danger of a capsize with the wind abeam, slack the jib *first*, after which let go the peak halliards, and, if necessary, lower the sail. Never let go the throat-halliards. Always keep the running ends of the halliards coiled up in such a manner that they will not pay out without fouling.

Catamarans are attracting much attention at the present time, and require some notice. Mr. Butler's paper on "The Flying Proa," in *Harper's Magazine* of last August, is interesting, but not altogether correct. The poor cat-boat is unmercifully run down, and the *Flying Proa* unduly extolled. Directions are given for building a double boat 16ft. long,



which is stated is capable of sustaining 3,000lbs. more than the weight of the hulls and rigging. This amount is at least 100 per cent. more than the truth, in the writer's opinion.

It is stated the *Proa* gives three times the available space for passengers furnished by a 16ft. cat-boat. Now, of what use is this space when it is known that two persons will load down the *Proa* more than eight will the cat-boat? The cost of the *Proa* is stated as but one-half that of the cat-boat of the same length. The truth is, the cost will be about the same. Mr. Butler "can intrust her to a consumptive theological student with the utmost confidence that she will resist all his attempts at drowning himself." The only comment necessary on the last statement is the fact that a catamaran will upset endways, or "pitch pole," as easily as an acrobat turns somersaults. To sum up the objections to double-hulled boats of the *Catamaran* or *Flying Proa* type: First—the tendency to "pitch pole," or upset endways; second—the resistance of the two hulls to head seas, making them very slow in stays and working to windward; third—if the connections of one hull to the other are not heavy and strong, there is danger of the hulls being wrenched apart (Mr. Herrishoff gains lightness and strength by elastic connections which are patented, and can only be used by him); fourth—catamarans are very wet boats in rough water, and only sail well when wind and tide are not opposed to one another; fifth—want of carrying capacity, a 30ft. catamaran not sailing well with more than two, or at most three, persons aboard; sixth—unfitness for cruising; seventh—they are unseaworthy. At the Caroline and Pelew Islands, the home of the *Flying Proa*, great loss of life is common. Any one who has sailed "the raging sea" knows the dexterity required to keep a lively, quick-working boat from broaching or pitching pole in a comber. What would become of a catamaran in such a situation is hardly a matter of doubt.

Mr. Herresboff's catamarans are the fastest and most successful of any yet built, and I cannot do better than give the dimensions of his boats. The midship sections of the hulls are shown in Diagram No. 51, both hulls being alike. The bows and sterns of hulls are shaped alike: Length on deck, 32ft.; beam at midships, 28in.; depth of hulls at ends, 2½ft.; draught of water at ends, 1ft.; draught of water at midships, 21in. The hulls are placed 16ft. apart, from centre to centre: forward end of centre-boards (one in each hull), 16ft. 8in. from bow of boat; centre-boards, 2ft. long; rudders, 2ft. long, one on each hull; mast stepped 12ft. 10in. aft of the bows; bowsprit, 22ft. 8in. long; main boom, 31ft. 4in. long; sails, of the usual shape. The hulls may be connected by five or six cross beams, strongly fastened to the decks. Cross beams 6in. wide, and two or more inches thick. The plat-

form or cockpit is fastened on the cross beams, and may be of any degree of simplicity or complexity. The cross beams and bulls are kept in shape and strengthened by diagonal rods of iron. The mast is held upright by stays, three on each side.

NAUTIOUS.

YACHTING NEWS.

KNICKERBOCKER YACHT CLUB.—This club will hold its spring regatta at their club house, Port Morris, May 30. Boats will be started at 2 P. M. The club reports to us a flattering condition of its affairs, and many accessions of yachts and members to its list. Their burgee is a red triangular flag, white cross and blue star in centre of cross.

PAVONIA YACHT CLUB.—The following officers have been elected for the season. Commodore, Edward A. Davis; Vice-Commodore, Theo. Crumenauer; Rear-Commodore, William Taylor; Secretary, Alexander W. Murray; Treasurer, Harry H. Holmes; President, John G. Northrup; Steward, James Dainty; Measurer, Walter G. Moulds; Sailing Master, Charles W. Wild. The Board of Trustees consists of J. L. Kreymayer, H. H. Holmes and Otto Crumenauer.

NEWBURYPORT YACHT CLUB.—The old club at Newburyport, Mass., has been brought into life again under the following board of officers: Commodore, F. H. Boardman; Vice-commodore, Wm. C. Thompson; Captain, Benj. P. Davis; Secretary and Treasurer, Edward A. Williams; Regatta Committee, Captains W. A. Davis, Thomas McKinney, and Daniel Pierce.

DELAWARE RIVER YACHT CLUB.—The date fixed for their match is May 20. Start from Market street wharf, Camden, around red buoy at Chester and return. There will also be an open regatta June 10, Vice-Com. Paul Klotz in charge, on the Delaware, from Chester round the Cherry Island buoy and return, distance 22 miles.

SEAWANHAKA YACHT CLUB.—Under the auspices of this club, the Eighth Corinthian Match will take place June 15, for second class schooners and first, second and third class sloops. Race open to yachts belonging to any recognized club and governed by sailing regulations of the Seawanhaka Yacht Club. Second class schooners comprise all whose areas are 1,950ft. or less; first class sloops, all whose areas exceeds 900ft.; second class sloops, all whose areas are between 900ft. and 550ft. Four prizes, one in each class; two to start or no race. Yachts must be manned by amateurs exclusively to the satisfaction of the regatta committee. They will be allowed one man for every 5ft. of length on deck, and one for every additional fractional part of 5ft. Sailing master, pilot and cook not allowed to interfere with management of boats, and each yacht to be steered and sailed by her owner. Only plain, working sails permitted. The start will be a flying one from club steamer, and the course to and around buoy No. 10, on Southwest Spit, keeping it on port hand, thence to and around Sandy Hook Light-ship, keeping it on starboard, and return over same course. Yachts must keep to the eastward of buoys 9, 11 and 13, on the west bank, and outside buoy 5½, on Sandy Hook Point. The Regatta Committee consists of Messrs. Rosevelt, Schuyler, J. H. Elliott, C. Wylly, S. Betts, Henry De F. Weekes and L. P. Bayard.

YACHTING AT HALIFAX, NOVA SCOTIA.—The Nova Scotia Yacht Squadron had fixed the 15th of June for their opening cruise. Several yachts are already in commission. The schooner *Sea Foam*, Captain Larcom, R. A., has, indeed, been in commission all winter, and her owner and some friends enjoyed a midwinter cruise in search of sport. They got plenty of wind and sea, and little else. The *Phantom*, sloop, formerly owned by Mr. H. E. Billing, has passed into the hands of Lt. Hammersley, 20th Regt., who commissioned her about a month ago. She has proved herself a very stiff, powerful, handy and speedy craft, but has not yet been tried in a regular race. The *Hebe*, sloop, Mr. J. E. Butler, was the next out. She was the champion yacht last season, and will no doubt give a good account of herself this year. She has a new boom and is fitted with lazy crails instead of the single topping lifts she carried last year. Lt. G. E. Capel Core, 20th Regt., who sailed the little *Muta* last season, has become the owner of the *Psyche*, sloop, built by Mr. Butler in 1876. She will cut out work for all her rivals, as her owner sails her hard. She is in commission, as is also Lt. Groves' (97th Regt.) *Little Annie*. Mr. E. Moseley, Dartmouth, has put his sloop *Squirrel* into the water after extensive repairs, including new keel and floors, new cabin, skylight, etc. She has shortened her top-mast four feet. She will not fit out for some time yet, her owners being busy building a steamer for the War Department. The *Mystery*, sloop, Messrs. F. C. Sumichrast and W. H. Troup, is being fitted out rapidly. She has had a new mast put in and a new running top-mast, being the only craft on the station re-rigged. She has had a thorough overhaul, new wire standing-rigging, and is to have more ballast. Her owners use her principally for cruising. The *Osprey* schooner, a comfortable and staunch cruiser, has been purchased by Captain Cantley, 97th Regt., who put her in commission about a month ago, and has already tested her sea-going qualities. Her cabins have been altered and improved, and with the addition of a jib-boom and flying-jib she will travel well. The *Albatross*, schooner, Mr. D. Cronan, is fitting out; she is a fast and handsome vessel of her class, and often bothers sloops even turning to windward, her owner sailing her with remarkable skill. The *Spray*, sloop, Mr. H. St. G. Twining, will shortly fit out. She had a complete overhaul last year, and is now in good order. The *Kestrel*, yawl, Vice-Commodore White, will probably not fit out until the return of her owner, who is now in Europe. The *Nymphia*, yawl, Mr. C. E. Brown, will fit out in June, after the first glory of the salmon fishing is over, her owner being as enthusiastic a fisherman as he is a skilled yachtsman. The *Kate*, sloop, Mr. W. H. Brookfield, has been in commision since the end of April. Her owner went to Prince Edward Island in her last summer.

American yachts are always welcome in Halifax harbor, and the Hon. Secretary of the Nova Scotia Yacht Squadron, Mr. G. C. Sumichrast, will, if required, take charge of letters and papers and have them delivered on board yachts on their arrival, and give any information and assistance in his power to yachtsmen.

QUAKER CITY YACHT CLUB.—This is now the most prominent club on the Delaware. It was organized in Philadelphia in February, 1876. At first it was intended to include only the larger class of cabin yachts, but this season a class has been made for open yachts between twenty and thirty feet in length. The membership of the club numbers eighty-three, with a fleet of thirteen cabin and three open yachts. The officers of the club for 1878 are: Commodore, A. F. Bancroft; Vice-Commodore, L. Coleman; Rear Commodore, Paul Klotz, of Chester; President, N. B. Boyd; Treasurer, Robert Baird; Secretary, Charles S. Salin; Assistant Secretary, J. J. Baughman; Measurer, Captain John Vanderslice; Regatta Committee: Commodore A. F. Bancroft, John E. Pomeroy, Robert Baird, L. Coleman, Charles S. Austin, Paul Klotz and John M. Seigel. The third annual spring regatta takes place May 23. Course from Laurel street wharf, Philadelphia, to Chester red buoy and return. The George W. Barrow Challenge Cup will be awarded to the yacht making fastest time. The other prizes consist of marine glasses, cabin lamp, yacht ensign, and kedge anchor. The following programme has been arranged for the coming season: Opening Review and Harbor Cruise, May 12; Annual Spring Regatta, May 23; Chester Regatta, June 10; Review and Harbor Cruise, June 23; Corinthian Regatta (yachts to be sailed by their owners, and crews to be composed of amateurs, for prizes offered by the flag officers) July 4; Review and Harbor Cruise, July 14, and August 4; Annual Cruise to the Delaware Bay, August 17 to 31; Fall Regatta, September 19; Closing Review September 29. The Corinthian races and the club cruises are most commendable features of this organization, and we hope they will be strictly carried out as per programme.

—Owing to want of space a number of communications and other matter has been unavoidably deferred.

YACHTING DRIFT.

There will not be many big schooners in commission this year. Most owners have gone to Paris, but things will be very lively among the smaller craft.....*Seawitch*, ex-Com. F. H. Stott, has been on a cruise. Her owner is a thorough yachtsman and a professional salt..... Corinthian races are becoming more popular, also yachts of a size suitable to such sport.....Time allowance of the Sewanhaka Club is based on area obtained by multiplying extreme beam and mean of lengths on water-line and over all.....New Orleans parties are forming a new yacht club.....Seven cabin and twenty open boats have entered for the South Boston Yacht Club race. Keels and centre boards will be raced in one class. This is as it should be. No reason at all for giving each a separate class.....*Undine*, of New York, is in the hands of a builder at Cohasset, Mass.....Keels and cutters are coming more into fashion; so much the better for seamanship and cruising..... Mr. A. Cary Smith is designing a thoroughbred keel cutter..... Ballast on keel and garboards is also coming into vogue. About time, too.....Commodore Peabody's new cutter is attracting much attention in Boston waters; this was to be expected, but why on earth has he got tarred rope?—hemp, perhaps—for running gear? We give him just four weeks to reeve off an entire new batch of manilla instead.....Hutchins and Pryor, well known in Boston as builders of fast jib-and-mainsails, have launched eight boats last week.....Two suicidal individuals are going to cross the wide, wide seas from Boston to Europe in a 19-ft. dory called the *Nautilus*. Their venture is as stale and second-handed as the name of their coffin.....Commodore West, of the Madison Yacht Club, is working hard to get up a fine June regatta on Fourth Lake, Wis.....He has matched his *Whisper* against *Lulu* of Geneva Lake.....Mr. Colgate, of the *Idler*, has returned to the N. Y. Y. C. the Brenton's Reef Challenge cup as required by the conditions governing it, as he will not commission his schooner this year. The race for this cup will take place June 27, from New York to Newport and return, outside course. Will any one come to the line for this event? It seems doubtful..... *Wanderer*, Mr. Stillman owner, is another of the big ones that will not show up this year.

THE OAR AND PADDLE.

COLLEGE PROSPECTS.—At Williams the rowing will not be extensive this year. The course will be improved to a mile and a half in length on the Hoosac with the appropriation of $5,000 presented to the college by Cyrus W. Field. Cornell's spring regatta will be rowed on Cayuga Lake, June 17. All classes but the freshmen will furnish a six-oared crew, and there will be a race of sixes between the crews of the Tom Hughes and Sprague clubs, composed of members of all the classes. At Brown College the three lower classes will come together, the seniors having withdrawn, June 14. The freshmen will pull against the Narragansett crew on the Seekonk River in six-oared shells, three miles with a turn, on May 30. At Bowdoin the juniors, sophomores and freshmen will row for the champion cup in four-oared gigs with coxswains, probably on June 8. At Philadelphia the University of Pennsylvania will have a four-oared crew at the Schuylkill Regatta. The juniors have also accepted a challenge from the freshmen for a six-oared race, to take place May 24, and the freshmen have a similar contest in prospect with the sophomores. At Princeton, boating matters seem at a low ebb, the expected contest of their freshmen with those of Columbia having fallen through. At Michigan University there is next to nothing doing. Marietta College, Ohio, is the only one in that State that will muster a racing crew, though no fixtures have as yet been settled upon. California University being high and dry in a desert, its students can only indulge in hoeing potatoes for a wager, and shell boats and sculls to them must ever remain a mystery. Rutgers has men in training, but no definite races in view. Wesleyan oarsmen are quiet. Columbia has given an account of herself on the Harlem, and the public will watch with eagerness the doings of the brave four that go to Henley.

HANLON-PLAISTED RACE.—As expected by all who had witnessed the two men at practice, Hanlon easily beat Plaisted, the race being pretty much of a walk-over for the Canadian. It was pulled at Toronto, May 14, the course being from Gooderham's to Queen's Wharf, and the weather and water fair. No coaching was allowed, and suspicious persons were not allowed to accompany the oarsman. Stephen Roberts, the Harlem boat builder, was referee. Hanlon turned the scales at 163½ pounds, his adversary weighing 3½ pounds less. The former pulled in a shell by Elliott of Greenpoint, L. I., the latter in a paper boat by Waters & Sons, of Troy. At 6h. 8m. the word "go" was given. Plaisted took the water first and started off with a stroke of 34, taking the lead for a short distance. Hanlon's long, steady swing of 28 soon told, however, for in less than three-quarters of a mile he had distanced the New Yorker by a length. He then rowed leisurely with two lengths between the boats. Finally the Canadian won in 13m. 40s., three lengths and a half ahead. In connection with the race it is to the credit of American shell builders and of Judge Elliott, of Greenpoint, in particular, that Hanlon gave a decided preference to his Long Island boat over several imported from England. Col. Shaw, the popular American Consul, was the backer of Hanlon. Let us have no more such one-sided races for the championship, but let those interested trot out make Courtney, the best man in America, who will it warmer for the Kanuck than any other man we know of.

THE EUREKAS.—For the Newark Regatta the Eureka Club has the following powerful four: Augleman, stroke; George Clark, bow; P. Young and Wm. Flavell in the waist. They are said to have made better time recently than ever before. The entries for the Passaic River Amateur Rowing Association Regatta will close June 14. Mr. Young's absence will prevent the Eurekas from attending Watkins, but he will return in time for the Passaic regatta.

YALE SPRING REGATTA.—The Yale navy met on Lake Saltonstall during a drizzling rain May 15. The first event was a race between the Juniors and Sophomores. The former had made the best time on record for two miles, and when the Sophomores showed up first at the finish the surprise was great, for they had actually eclipsed the Juniors' wonderful time. Distance, two miles; time, 12m. 57¼s. In the second barge race between the academic and scientific freshmen, the latter made a fine spurt toward the finish and won in 13m. 43¾s. In the Junior scull race B. S. Keaton easily beat G. M. Edwards and A. F. Jones in 15m. 15¾s. In the senior scull race E. P. Livingston won in 15m. 13s., defeating H. H. Donaldson.

ROWING RIFFLES.

Great preparations are being made by the Schuylkill clubs for the regatta, June 10.....Pennsylvania Barge Club has received a new four for a crew averaging 170 lbs.....The Undines, of Philadelphia, are after the Crescents.....The latter have the heaviest four, the Ridgeway crew, on the Schuylkill.....Ellis Ward, now permanently located in the Quaker City, wants to take the shine out of Flick or Kilshy to the tune of $200, or will pull a pair with his brother Gilbert against the two..... Hiawatha is the name of a new club just organized in Philadelphia.....Hanlon is going to Pittsburgh .....At last! Frenchy Johnson has found a backer and he is prepared to tackle Reagan, of Boston. The Plaisted-Reagan race is off, the latter not having come to time; probably the best thing he could do, for his friends would have lost their money.....The Quincy Rowing Club has organized in Quincy, Mass.....Pool law in force in Canada. Only private bets hereafter among our friends across the border.....Hanlon says he likes his Greenpoint boat better than any other..... The Union Boat Club of Boston has a fine four composed of Peabody, stroke, Williams, Haughton and Jones. Peabody rowed in one of the Oxford crews, also at Henley. Williams 2d. is coxswain. They pull 38 stroke, English style..... Plaisted works with his arms to much, in the old New York Battery style, now happily dying out. The jerky stroke never could do anything alongside of the "steady" English swing.

New Publications.

MODERN OBSERVATIONS ON RIFLE SHOOTING, with Improved System of Score Book and Silicate Slate for Use on the Range. Second edition. Edward A. Perry, Editor and Publisher.

It is difficult to imagine how in a more compact and convenient form the author of this score book could have embodied so many useful facts in regard to rifle practice. It is by no means a simple score book, but contains all the information the beginner in rifle practice can require It is quite a *desideratum* with one who commences to understand clearly what tools he may want and Mr. Perry gives in detail all the requisites. How to care for a rifle, how to clean it, how shells should be preserved, how powder should be handled and all that is known of bullets are to be found in the book. When it comes to the more delicate manipulation of the rifle, the precautions to be taken, as to light and wind, the book is particularly excellent. Allowances for elevation are minutely given and nothing is neglected. The chapter entitled "Reasons for Failures" is very much to the point and really explains many of those puzzling points which set the tyro at sea when unacquainted with the mysteries of rifle shooting. The whole system of team shooting is explained. When we state that to all this is added the rules and regulations of rifle associations our readers can understand that nothing has been left out. When we come to the method of targets, with the silicate slate—a blotter in fact, for use in the field—into which the scores can be copied for future and permanent reference, Mr. Perry's system is absolutely perfect. We have, since the book has been on our shelf, frequently used it for reference, have recommended it and have no hesitation in advising all those using rifles on ranges to purchase Perry's book as it is the best for the purposes intended that has yet come under our notice.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

BEAUTIFUL NATIVE PLANTS.

THE following list of native plants was exhibited by Messrs. Woolson & Co., Passaic, N. J., at the last meeting of the New York Horticultural Society. It was a very interesting and instructive exhibit, and, in connection with the group of hardy flowering plants, but seldom cultivated and exhibited that they should be better known, were of as much interest to many, as the rare and choice orchids shown by Messrs. Sneh, Bennett and Buchanan: Berberis vulgaris, var. purpurea; Cercis japonica; Euonymus latifolius, very fine in fruit; Exochorda grandiflora; Halesia tetraptera Kerria japonica var., usually kept as a greenhouse plant, but perfectly hardy with us; Lonicera Ruprechtii; do. Tartarica, var. grandiflora; Neviusia Alabamensis, one of the rarest American shrubs, with fruit like Clematis; Rhodotypus kerrioides, a recent introduction from Japan and very showy.

The following is the list of native (North American) plants, forty species and varieties: Amsonia ciliata; do. Tabernæmontana; Andromeda polifolia; Aquilegia cærulea; Aquilegia Canadensis; Aquilegia Canadensis, var. flava; Brodæia grandiflora; Camassia esculenta: Clematis Douglasii; Cypripedium arietinum; Cypripedium pubescens; Dicentra eximia; Geum triflorum; Iris cristata; Iris tenax; Dayla platyglossa; Lindheimeria texana; Mertensia lanceolata; Mertensia virginica; Phlox amœna; Phlox divaricata; Phlox stolonifera; Podophyllum peltatum; Polemonium reptans; Sedum obtusatum; Sedum ternatum; Seubertia laxa; Silene Pennsylvanicum; Smilacina stellata; Spigelia Marilandica; Tellima parviflora; Thalictrum anemonoides; Trillium erectum, var. album; Trillium grandiflorum; Uvularia perfoliata; Uvularia sessilifolia; Viola Canadensis; Viola pedata; Viola pubescens Waldsteinia fragarioides.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL.

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MAY 23, 1878.

To Correspondents.

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We cannot promise to return rejected manuscripts.

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Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager.

S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, May 24.—Creedmoor—Short Range: "Natio al Guardsman" and o her matches; subscriptions a d stated prizes. Long Range: Sharps' Military Team; subscriptions and stated prizes. Rowing: Univ. of Pa, Juniors vs. Freshmen. Yacht Regatta at Gananock. Dog Show at Worcester. Base Ball: Allegheny vs Rochester, at Rochester; Buffalo vs. Tecumseh, at London. Trotting: Hillsdale, Mich. Running Meetings: Baltimore, Md.; Louisville, Ky.

Saturday, May 25.—Creedmoor—Short Range: Directors' Match; Military Team Match; Carbine Team Match; Subscriptions and stated prizes. Mid-Range: "National Guardsman" Match; Subscriptions and stated prizes. Cricket: Philadelphia vs. Young Americas, at Nicetown; Merion vs. Germantown, at Ardmore; Dorian vs. Philadelphia, at Haverford. Mystic Boat Club Games, at Waverly Park, Newark. Base Ball: Utica vs. Live Oak, at Lynn; Allegheny vs. Buffalo, at Buffalo; Indianapolis vs Milwaukee at Milwaukee; Cincinnati vs. Chicago, at Chicago. Running Meeting; Louisville, Ky.

Monday, May 27.—Southwark, Phila, Yacht Club Regatta. Base Ball: Utica vs Lynn, at Lynn. Running Meeting at Louisville, Ky.

Tuesday, May 28.—Watkins Open Amateur Regatta. Base Ball: Indianapolis vs. Cincinnati, at Cincinnati; Milwaukee vs. Providence, at Providence. Trotting; Le Roy, N. Y.; Parker City, Pa; Providence, R. I.; Point Breeze Park, Phila.; Pittsburgh, Pa.; Freeport, Ill.

Wednesday, May 29.—Watkins Open Regatta. Cricket: Merion vs. Baltimore, at Ardmore. Trotting as above; also at Princeton, N. J., and Hudson, Mich.

Thursday, May 30.—Watkins Open Amateur Regatta; Eastern Rowing Association Open Regatta; Brown University Class Races; South Carolina Annual Regatta, at Charleston; Atlantic Yacht Club, Brooklyn, Opening Day; Providence, R. I., Yacht Club Regatta, at Bullock's Pond; South Boston Yacht Club Union Regatta, Club Course; Knickerbocker Yacht Club Opening Regatta. New York Athletic Club Games, at Mott Haven; Yonkers Lyceum Games. Cricket. St George vs. Philadelphia, at Hoboken; Germantown vs. Belmont, at Nicetown; Merion (yet) vs. Commercial Exchange. Base Ball: Chicago vs. Boston, at Boston; Milwaukee vs. Providence, at Providence; Indianapolis vs Cincinnati, at Cincinnati. Trotting as above, and at Delphos, O. Running Meeting at Jerome Park.

— No sportsman should think of going into the country for the summer without a copy of the Sportsman's Gazetteer. Consult it for choice of routes, localities, outfits, kinds of fish to be caught and the methods of taking them.

PROFESSOR SPENCER F. BAIRD.

At an election held by the trustees of the Smithsonian Institution, on the occasion of the vacation of the position of Secretary caused by the death of the much lamented Professor Henry, Professor Spencer F. Baird was unanimously chosen as Secretary. It may be said that no higher scientific position nor place of greater trust is accessable to any one in the United States. The choice of the trustees means the merited approval of the country, and is a just reward to the admirable administrative powers and high scientific acquirements of the present incumbent. Endeavoring in every way to follow out the wishes of the founder of the Smithsonian Institution to make it the great fountain head in America for the distribution of general knowledge, the efforts of Professor Baird in the past are as a guarantee of the future.

One of the greatest gifts Professor Baird possesses, apart from his cosmical knowledge, is this peculiar inherent power: by simple contact alone he imbues those who work with him or under him with a truer love of science for science's sake alone. In administrative ability, in the practical handling of vast subjects, in steadfast philosophical research, in putting aside without an effort the chaff, and in seizing in the grain, always holding steadfastly before him the great public good, Professor Baird has few equals among that learned group of men who stand in the first rank in the history of our country.

MANHATTAN BEACH AND WHITE-BAIT.

CERTAINLY, when matters ichthyological and gastronomic can be combined, the pleasures are twofold; but when, in addition to these two elements, the one purely scientific and the other physical, a third enjoyment—that of a pleasant jaunt to the sea side—is added, then a man's happiness may be said to be filled.

Of course, it has been said quite frequently of late in the public prints, that Coney Island is quite accessible to New York. Some 2,000,000 of people, who were formerly cooped up during the summer heats in those great cities which centre at the confluence of the North and East Rivers, have had opened to them a delightful resort, right on the Atlantic Ocean. Whereas your Londoner has to travel no end of miles to reach Brighton, your New Yorker, your Brooklynite, or Jersey City man, can now in an hour revel in the delights of a cool breeze and refresh himself in the tumbling billows of the ocean. The Manhattan Beach Railway is the latest system of locomotion which brings the world of New York to the sea side. In point of enterprise, the project of the Manhattan Beach R. R. by no means dwindles with the idea of being a narrow-gauge road, for, if the tracks are narrow, it has no less than three distinct connections with New York and the neighboring cities. Most, if not all, of this work, conceived on the largest plan, is due to D. C. Corbin, Esq., the active Manager and Director of the Manhattan Beach Railroad. Administrative powers, so far as railroad men are concerned, are sorely taxed when the problem to be solved is to take up an enormous number of passengers in the shortest conceivable time, and to land them, and then to swoop them all up again and to put them back again where they came from. The Manhattan Beach R. R. is prepared to accomplish the feat of collecting some 20,000 odd people, of landing them at their hotel on the beach, and of taking them back again to New York without accident or delay, all within the limit of some six to eight hours.

On Wednesday last, at the invitation of the Manhattan Beach Railroad, a large company of gentlemen, representing the New York and Brooklyn Press, passed, by steamboat and railroad, to the superb hotel on the beach, owned by the company. A very superb dinner was provided by the proprietors, Messrs. Keefer & Co. Now, there are dinners and dinners, and we may as well state that your representative of the press is mostly a dainty individual, and appreciative withal. We have no hesitation in saying that the dinner was superb—fully equal to any feast served at Delmonico's in every way, and the ability of the *chef*, Monsieur Auguste Conrad, was conspicuous. To dine seventy-five people quite as well and quickly as if there were but ten, is the acme of culinary skill. The very notable event in the dinner was the presence of white-bait, furnished, for the first time in the United States, by Mr. E. G. Blackford. In the FOREST AND STREAM AND ROD AND GUN, in a former issue, we gave full particulars in regard to this notable fish.

Ichthyologically, we are quite well satisfied that it is the young of some species of the herring; gastronomically, we must affirm that whitebait is a most dainty fish. Of course, we feel in no way bound to quarrel with any one who would assert that a square meal of codfish balls was better than a dainty fry of whitebait. The only thing we would insist upon is this, that in some of the accounts given in the public prints of this dinner the authenticity of the fish themselves was disputed. Who could expect a poor ordinary reporter to feel the solemnity of the occasion, when first the realm of whitebait was opened before him? Such a man would joke about the equator. *Bona fide* whitebait were they, however, upon as good authority as that which can be furnished by the Smithsonian Institution. Delicately fried (Miss Corson having solved the method of serving them), we may now bid defiance to Greenwich, and the many famous whitebait houses there. The dinner was a delightful one, the excellent fare being supplemented by the numerous clever speeches made by the gentlemen present. When pleasant talk was subdued for a moment, the fine music of Grafulla's band filled up the hiatus. That whitebait were eaten with gusto is quite evident from the fact that in a twinkling all the plates were emptied. No longer, then, will free Americans be subservient to aristocratic Englishmen. Should, then, Lord Beaconsfield resign, and the Tories lose power in England, we should not hesitate a moment to invite Disraeli to the Manhattan Beach House, feeling sure that we could give him quite as good a dinner—whitebait included—as the Premier ever enjoyed at any Ministerial repast at Greenwich. We shall be sending whitebait to London before very long.

WHITE-BAIT.—It is hardly necessary to add anything more to the facts in regard to white-bait. However, to set all matters at rest, we publish the following letter from the Secretary of the Smithsonian Institution:

"*Dear Mr. Blackford*—Mr. Bean and Prof. Goode have been examining the question of white-bait, and find the specimens to contain the young of two distinct species—one the *Pomolobus pseudo harengus*, the common alewife or gaspereau, the other, the *P. mediocris*, or sea or Taylor shad. It is probable that some other species may also be mixed in, such as the young of the sea-herring, *Clupea elongata*, the thread herring, etc. The English white-bait is now generally considered to be composed of young fish, possibly of one or both species of English shad, the sprat, etc. A great deal of discussion has been wasted upon the subject, especially as to whether the sizes usually caught represent a distinct, fully grown species. So far, there is no evidence of that fact.

"Yours truly, SPENCER F. BAIRD, Commissioner."

FRANK FORESTER.

IN MEMORIAM.

TWENTY-FIVE or thirty years ago, when the flats around Chatham and Pine Brook swarmed with snipe, and the Warwick woodlands of Orange County were invaded by a sabaoth of Bob Whites and timber doodles, "Frank Forester" might have been encountered in the gray dawn pacing rapidly over the dusty Newark road, *en route* for the Jersey meadows," or the rattling of the long, boxed shooting wagon have awakened the drowsy tavern-keeper for the sparkling *eau de vie*, as old "Herbert," in company with some devoted friend, drove toward the gem in the mountains (Long Pond) or sought the hospitable log ranche of Tom Ward (old fat Tom Draw) within the quiet solitudes of Warwick, New York.

But for twenty years his mortal remains have slumbered quietly within the environs of Mount Pleasant Cemetery, near Belleville, and the balmy breezes of the tranquil spring have sung their appropriate lullabys and bedecked the little grassy hillock with the daisy, and the sweet violet and the departing woodland year has also contributed her sympathies with murmuring sighs and weird lamentations. There remains not a vestige of the little Mary Tudor cottage, "The Cedars," at one time half- ed among the towering foliage on the banks of the Passaic, where the gifted author and great sportsman, in a sort of English hospitality, would entertain his friends of the rod and rifle, or pen from the historic annals of tradition such masterpieces as King Henry the VIII., "Captains of the Old World," etc.

In glancing over his sporting works, I imagine the peculiar odor from the stagnant sedges at Montauk, the familiar drafts from The Cedars; nay, I thought I heard but a moment ago Bob White's cheery whistle as he broke his fast in yonder stubble, and the spirited whir-r-r of the fat autumnal woodcock as he sprang from the brake just beyond the brook on the verge of the meadow. To the devoted student of nature, such as was the lamented "Frank Forester," the budding spring time has many strange fascinations. That glorious season of the fleeting year, when the warbler carols forth his tuneful praise to his Creator for the pleasant sunshine, filling the woodland far and wide with his thrilling music, and gladdening the heart of all mankind. There is something, too, in the "melancholy" days of the golden autumn, when the songster from the forest seeks again his home in sunnier climes, when the floweret which lately bloomed by the wayside blooms no more, and perhaps with the falling leaf there flashes through the mind the remembrance of some bright, familiar face who but a year ago departed with the choicest flower from the hillside. But, gentle reader, it required the inspired Herbert to picture forth nature's attractions, and it would appear that from him she bid nothing. How feelingly does he describe the tranquil decline of the woodland year to the extreme beauty of the ill-fated consumptive. It will bear many readings before the sportsman tires of its repetition: "It leads to death, indeed, but it seems to me rather to resemble the tranquil close of a well spent life, beautiful by the consciousness of good deeds done during the heat of youth and in the heyday of manhood, and enriched by the hope of glories to shine forth after the winter of the grave, than the termination of an existence to be dreaded or deplored." When the Indian summer, with its mellow hues and balmy, almost breathless atmosphere, had inspired the overtaxed intellect of our departed friend, he was eager to penetrate the wilds of nature along some craggy cavern in the wood or the upland, or in the stubble, and, in a word, wherever nature's smiling beauties enticed his willing step, there would he wander with his faithful spaniel "to heel," surprising some foolish "quack" sailing lazily up and down the creek, or cutting down a "brace" in the open by his very frequent accomplishment—a "truly cool, quick, double shot."

But "Old Herbert" has departed from the brakes and marshes these twenty long years, leaving Miss Quailina to canvass the buckwheat stubble *ad libitum*. Mr. Editor, it be-

comes a very painful duty at times for your humble servant to pass the old "Stevens House" on Broadway opposite the Bowling-Green when I recollect its history, for it was in this old dwelling that Henry William Herbert passed his last hours of pain and anguish on that fatal May morning, the 19th, 1858; and I venture to say that the numberless readers of this journal would be compelled to shed the sympathetic tear had they the privilege of reading his last farewell to the Press of America. "A pilgrim in a foreign land, with no home or country for six and twenty years, subjected to treatment and circumstances far below his merit by education." "You will miss me when I am gone" is a phrase in his doleful epistle which has indeed proved only too true.

There seemed to be an air about "Old Herbert" which gave him rather an eccentric appearance, and he was classed among the "curious;" but so did they abuse the great Audubon, and that most illustrious gentleman, Alexander Wilson, whose zeal for the advancement of that most interesting of all branches of science, Ornithology, that he had written seven (small) volumes of his "American Ornithology" before he received a single cent from the publishers as a recompense for his labors. Summing up: Henry William Herbert was one of the most interesting writers in this country, and the wild-fowler at Currituck or on the Chesapeake, the moose hunter in snow-clad wilds of Canada, or the salmon angler on the Restigouche may follow the fascinating pleasures of the Forest and Stream and Rod and Gun, but never more can he find through his careless rambles such a brilliant mind as the "Lord of the Cedars" possessed, hereditary by the best blood of Old England. GELLERT.

OUR WASHINGTON LETTER.

FOREST AND STREAM AS AN ADVERTISING MEDIUM—TAXING AND PROTECTING DOGS—A BAD SEASON FOR JACK SNIPE—GLASS BALL SHOOTING—PISCATORIAL, ETC.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., May 13, 1878.

Looking over the columns of FOREST AND STREAM, and especially those containing the advertisements, by no means the least interesting part of this valuable journal, an incident was brought to mind which shows its popularity and the extensive circulation it enjoys. Several months ago a few friends and myself had some delightful shooting in one of the lower counties of Maryland, where the true sportsman can find every comfort and a hearty welcome. In one or two of my letters I gave a description of this country, the pleasure to be found there, abundance of game, etc., and the result was to unexpectedly flood me with letters from various parts of the country inquiring as to routes by which the section mentioned could be reached, terms, accommodations, and other details. The proprietor of the hotel there, himself a sportsman and capital fellow, has since informed me that he has had many guests drawn thither by the brief mention of its advantages which appeared in FOREST AND STREAM, besides having received scores of inquiring letters. I mention this fact for the benefit of hotel proprietors and others having summer resorts, especially those in the neighborhood of good shooting and fishing localities, that they may send forward their advertisements, for every dollar invested in advertising in FOREST AND STREAM will be repaid tenfold. Many are just now selecting places to pass their summer vacation, and a judicious advertisement is sure to attract attention, especially in a paper where those columns are read as carefully and with as much interest as any other part of the journal.

OUR NEW DOG LAW.

After many trials and disappointments we at last have a prospect for a dog law which will protect valuable dogs and rid the city of many worthless curs now infesting our streets, the House of Representatives having recently passed a bill levying a tax on dogs, and there seems to be no doubt that it will be passed by the Senate. Under our old municipal *regime* dogs were taxed, but they were not recognized as property, and therefore the owner was not protected. When this question came to be tested in the courts it was decided that the city had no power to levy and collect a tax on any thing not recognized as property by its laws. The owner of every dog of any value is willing to pay a reasonable tax thereon, but at the same time he is entitled to protection against any miscreant who may injure the dog, or thief who may steal it. Since that decision miserable curs have increased and multiplied throughout the city until there are more worthless dogs in Washington now than in any other city of the Union. The District Board of Health issues its proclamation annually, about the middle of May, declaring that all dogs found on the street unmuzzled between that time and the first of October shall be impounded, but may be redeemed within twenty-four hours by the payment of one dollar. The dog catchers, as a matter of course, always keep a sharp lookout for dogs which they know will be redeemed while the uncared for curs are unmolested. The owner of a valuable dog dare not take him out for a walk even with a muzzle on, as the street curs, always unmuzzled, are sure to attack a dog encumbered with one. They seem to know he is powerless to defend himself against their cowardly attacks. There are many valuable dogs owned in this District. Among them Mr. F. B. Farnsworth's Livy, a field trial setter imported from a celebrated English kennel; Mr. E. L. Mills' black and tan Gordon setter Ben, Willie Clark's Rose, Col. Kinney's Tramp, Col. Burnsides' celebrated setter whose name I cannot now recall, Col. Rives' Duke, Maj. Harry Clarke's Rover and Pink, besides many other dogs of wide reputation and pure blood. The new law provides for a tax of $2 per annum upon all dogs owned or kept in the District. The authorities are to furnish a suitable metallic tag, stamped with the year, to be attached to the collar of the dog, showing that the tax has been paid. Dogs found at large without such tax tag are to be impounded and sold or destroyed after forty eight hours, unless redeemed by the owners upon payment of two dollars. Dogs wearing such tax tags are to be regarded as personal property, and any person injuring or destroying such animal shall be liable to a civil action for damages, and also be deemed to have committed a misdemeanor, and upon conviction thereof be liable to a fine of not less than $20 nor more than $30, or in default of payment, be imprisoned not less than ten nor more than thirty days. The owner of any dog shall also be liable in a civil action for any damage done by his dog. All dogs are to wear a collar, bearing inscribed thereon the name of the owner, to which collar the tax tag shall be attached. The bill further provides for the muzzling of dogs during a period to be defined by the District Commissioners, and prescribes a penalty of not less than five nor more than twenty dollars for removing or causing to be removed the collar or tax tag from any dog. Fierce and dangerous dogs are not permitted to go at large.

SNIPE SHOOTING.

Snipe shooting this spring has been a failure, for the reason that the weather of the past winter—and especially since January—has been so exceedingly mild that the birds have been gradually migrating north since the latter part of that month, instead of reaching our latitude in large numbers late in March and early in April, as they usually do. During the past winter it was not often that the thermometer here fell to the freezing point. About the 15th of January a snipe was killed upon a meadow near the city, but I then thought it was a belated bird of last year on his way south. Now I am convinced that it was just the reverse (*i. e.*, an early bird of this year on his way north), the mild weather having started them north from their winter quarters in the south thus early in the season. The marshes and lowlands bordering on the Patuxent River in Maryland are generally filled with snipe about the 1st of April, and a number of sportsmen from this city and Baltimore usually have some delightful shooting there about that time, a good shot often bagging as many as fifty or seventy-five birds in a day's tramp over the meadows and marshes, from which the reeds and grass are always burned in February, preparatory to snipe shooting. This year the birds made their appearance even before the grass was burned, and their migration northward was kept up until the close of the season. So, instead of having a point on a bird behind nearly every tussock, as had been the case in former years, we were glad to put up a dozen birds in meadows where we had put up fifty or more in a few hours heretofore.

GLASS BALL SHOOTING.

In several letters I have referred to the fact that the respectable class of gentlemen to be found among our Washington sportsmen is gratifying to every true lover of the pleasure derived from rod and gun. As a general thing they are men who use every honorable means to encourage legitimate field sports, and the skill displayed by some of them in the field is much to their credit. Upon a recent Saturday afternoon I witnessed the glass ball shooting at Kalorama, a short distance north of the city, where many of our sportsmen assemble once a week at this season for practice at glass balls, using the Bogardus trap and the Paine feather-filled ball. I could not help noticing the gentlemanly bearing and appearance of all engaged in the sport. There was an entire absence of any loud or boisterous language, no arguments or disputes over shots, but the whole thing was conducted by gentlemen and in a manner to please gentlemen. Mr. E. L. Mills, of the Treasury Department, was the champion. He is an excellent marksman, shoots very quick, and rarely misses a ball. Messrs. McLeod, Lauritson, Henderson, Alexander, Derrick, Williams, Daw, Clark and others shot well and won applause from many visitors.

BLACK BASS AND PERCH FISHING.

The white perch fishing of the Upper Potomac in the vicinity of the chain bridge and Little Falls has been a failure this season. Many small ones, but very few large ones have been taken. They usually ascend the river with the shad, and from the first to the fifteenth or twentieth of April they bite ravenously at common angling worms. I have frequently caught them from ten to twelve inches in length and weighing a pound, which we believe is about the greatest weight this fish ever attain in our waters. Genio C. Scott, in his admirable work on "Fishing in American Waters," says: "It is a little fish at best, ranging all the way from three ounces to three pounds," but I have never heard of one so large being caught in this river. They remain in the deep holes of the Upper Potomac, where the bottom is rocky, until about the first of May and then return to salt water, but are caught at all times lower down the river, their favorite haunts being in the neighborhood of Aquia Creek, where the water begins to get brackish, and between this point and Blackiston's Island they are always plentiful.

We have no law here to protect black bass, and the result is they are caught in their spawning season just as at any other time. I have heard of many being captured at the foot of the Great Falls this spring and others below the Little Falls and at other points along the river. Bass are game fish in every sense of the word, and it is an outrage to take them during the spawning period, which commences about the middle of April and continues until June. The proper season to catch them is from the middle of July to the first of December, when they are in prime condition and bite ravenously, but now they are poor, and, in my judgment, not fit to eat.

The carp ponds, of which I gave a description a few weeks ago, are nearly finished, and already some of the carp have been brought over from Baltimore and placed in one of them. Prof. Baird has taken every precaution to have the ponds guarded, and a watchman is always on duty to prevent persons from throwing anything in the water and to keep out dogs, as all such disturbances are injurious to the fish.

OBITUARY.

Black Prince, a valuable black and tan setter owned by Dr D. W. Prentiss, of this city, died a few days ago after suffering two months from cerebro spinal meningitis, the worst form of English distemper, producing paralysis of the hind extremities and St. Vitus dance. He was a remarkably intelligent animal, and this disease, always so fatal in blooded dogs, was more than he could bear, although he received the best medical attention. He was a combination of the Gordon blood with the Laverack, his grandmother being Ruby by Mystery out of Cora, bred by Mr. Laverack, and imported by Dr. J. H. Gautier, and his grandfather, Dan, by Dandy out of Di, also imported by that gentleman. Well trained and obedient, Prince gave promise of a useful career. "After life's fitful fever he sleeps well" in his new-made grave in the stable yard, where he so often impatiently scampered in early morn while waiting for the horses to be harnessed to take us to some neighboring county of Maryland or Virginia for a day's shooting. The well worn gun-cases and the satchels containing shells and other paraphernalia were familiar sights to Prince, and with that intelligence which amounted to reason, he well knew that these implements meant sport for him as well as his master that day. R. F. B.

AN INTERESTING CABINET AND CURIOSITIES OF A NATURALIST.

DR. W. WOOD, of East Windsor Hill, Conn., has one of, if not, the best and most extensive private collections of ornithological, archæological, historical and oological specimens in New England. The Doctor is a practicing physician, with a wide country practice, still he finds time to bring down with his unerring shot-gun many rare specimens of our feathered and other visitants and residents, and to set them up with his own hands in his own inimitable manner. Visitors, who have examined larger collections in our own and other lands, uniformly award the Doctor the praise of seeing no specimens set up with greater taste and scientific nicety. In the indulgence of his taste he makes a specialty of ornithology, oology and archæology; historical, etc., specimens come in as incidental, being collected as occasion offers, presented by friends, and sent in by his collectors of other specimens. His collection, in the ornithological line, includes over 230 species, and of each he has specimens of both sexes, as well as in the different stages of maturity. Where they vary, as is the case with many of the rapacious birds, such as are several years in acquiring adult plumage, he has them in all the intermediate stages, swelling the number of specimens to about 600. Among the thirteen or more varieties and species of hawks, I noticed the duck hawk (*Falco anatum*, Bon.,) which it has been claimed does not nest in Conn.; but the Doctor disproves this by showing six eggs taken from two nests not far away from his residence. His collection includes all of the different species known in his vicinity, from the largest to the smallest. Ten species of owls here stand peering at you through their glassy eyes, and all, except the hawk owl (which was taken in Vermont), were taken in Connecticut. That noble bird, the bald eagle (*Haliætus leucocephalus*, S.,) stands looking as if he were watching some lesser bird catching a fish, which he is prepared to relieve it of as soon as the bird rises in the air with it. Twenty-five varieties of humming birds, mounted and in skins, are included, most of which were taken in South America. The belted kingfisher's nests are quite common on the banks of the Scantic River, near the Doctor's residence, and he has made a study of its nesting and other habits. The wild turkey (*Meleagris gallopavo*, Linn.), the loon (*Colymbus torquatos*), the latter shot by N. Jones in the Connecticut River in South Windsor, are observed in all their majestic beauty. Splendid specimens of the wood duck (*Aix sponsa*, Bon.), the most beautiful bird that flies, together with all other kinds which visit our New England waters. It would be impossible to even name all the different species and varieties in an ordinary letter which adorn his collection, so I will pass them to see his Albinos. Here are Albino robins (red breast), A. bobolink or reed-bird, A. bluebird, A. muskrat, A. mink, A. swallow, A. red squirrel, and A. rats, mice, rabbits, etc. Common minks, muskrats, rabbits, foxes, skunks (young and old), star and other moles; rats and mice of all kinds found in this section; black rats, wharf rats, spotted mouse, red weasel, mink, snakes from the boa constrictor down to hair snake, lizards and insects in variety. An India bat spreading its wings three feet; snapping-turtle (taken in Scantic River after being watched for four years) weighing twenty-four pounds. In dark cases are exhibited a deformed calf, from a common cow, with a head and nose resembling a bull-dog, feet set on rudimentary legs only two or three inches long; a pig (from the town farm) with one head and body, with eight legs, four ears—two natural, and the rudiments of two others; a chicken with four legs; a porcupine, etc., with duplicates of before-mentioned specimens. In one corner is a sort of nondescript or What-is-it, named, by the Doctor, "Short-tailed Ho-ax;" to be appreciated it must be seen and examined.

Turning to another apartment we were shown a compressed burbot or eelpout, taken in Scantic River four or five miles from its junction with the Connecticut, May 22, 1868, and by the Doctor, described in the *American Naturalist*, Vol. III., No. 1. Of eggs there are shown some 5,000 to 6,000 specimens of 300 to 400 varieties, ranging from that of the ostrich to that of the humming-bird; also eggs of the different varieties of turtles, etc., found in Connecticut. In blowing the eggs the Doctor uses an instrument invented and patented by his brother-in-law, Mr. E. W. Ellsworth, whereby the work is expeditiously performed with the thumb and two fingers, the egg being held in the other hand; no blowing with the mouth through a blower, straining the eyes out of the head, but all done with a little instrument with a barrel no larger than a spool of No. 40 or 50 sewing cotton, and much better than in any other way. Among the Doctor's specimens is a splendid otter, captured in the woods of Wapping Parish, South Windsor, by F. Tryon, son and dog, after a long chase and worry by the dog, with which the dog could not have done anything had not his master come to his assistance. It measures three feet ten inches from tip of nose to end of tail. This, so far as I am informed, is the only specimen of the kind ever captured in that vicinity, certainly the first and only one within the memory of the present inhabitants, and how this one should have strayed to the vicinity is a wonder not easily accounted for. A wild cat (red lynx) captured in East Hartland, which had first killed twenty sheep the winter taken—a most ferocious-looking animal, with limbs and muscle of immense strength for an animal of its size. A raccoon, captured in the woods of South Windsor lately, being the first seen in that locality for some thirty-five or more years. What gives peculiar interest to such specimens is that they were captured in his own town and near locality. A jet black woodchuck also stands guard on his native understanding; this also was killed in the near vicinity. A splendid specimen leopard from Africa, measuring about eight feet from tip of nose to end of tail is also here shown—truly a splendid looking animal, for all his savage appearance or general reputation. Having gone through with the main specimens on this floor (the Doctor does not keep all his collection on one floor of his office, or even in the same building), let us ascend to the floor above and see what of interest he may show us. We pass, first, several large boxes nailed fast, but filled with stuffed birds, kept here for convenience and safety. Next we come to three others filled with birds' nests of various kinds and description. The first to attract our attention is a humming bird's nest, a natural curiosity, if you please, or whatever you may please to term it—it is still a curiosity, showing what can be accomplished by the smallest specimen of the feathered tribe. Build them where they may, they are very inconspicuous, scarcely discernible from the object on which they are built; a soft nest made from spider's webs, scarcely large enough to admit the end of your finger. On the top of a limb it looks like a small knot covered with lichens, as the outside is of that material. Some years since a friend of the writer told him of finding one of these nests fastened to an apple on an apple tree. A nest of the blue yellow-back la

peculiar, as they make them by simply working a hole into a bunch of hanging moss, where one would not suspect such a thing existed unless they happened to see a bird go to or come from it, and then examined particularly. Suspended from some branch, few would think of looking at such a bunch of moss for a bird's nest. A nice piece of workmanship for so small a bird is the nest of the marsh wren. It consists of a neat, symmetrical ball, worked by fastening the tops of tall grass together, leaving an opening in the side just large enough to admit the worker. Here the tiny occupant can sit, swaying to and fro, undisturbed by the strongest wind, secure while tempests rage to the destruction of strong trees. See here how the yellow warbler provides for the comfort and warmth of its young, and also for retaining heat while incubating, by lining its nest with soft cotton. The cow-bird—lazy, shiftless creature, indifferent to its progeny, so it can but obtain its own ends by stealth—is a great annoyance to the warbler. Never building a nest for itself, it frequently deposits its one egg in their nest, for them to incubate, sometimes it goes so far as to tumble out an egg in a full nest in order to make room for its own, or to allay suspicion. Sometimes the warbler or other bird will tamely submit to this imposition, at others they will, in turn, attempt to throw out the interloping egg. Often, if unsuccessful, they will build a new nest directly over the egg, covering it entirely. Look! here are three robins' nests, made of bits of tobacco twine, all inseparably woven together—not the three nests, but each. They were found in a shed for hanging tobacco for curing in, and were all built during one season. Now, the query arises, "Did one robin build the three nests before commencing to lay, or did she build and occupy them in succession?" Probably the former is the correct conclusion. That the three nests belong to the same robin must be certain, as two or more robins could not agree to incubate so near each other. The Doctor says he once knew a robin build two nests before commencing to lay. Here we have the nest of the great crested fly-catcher, made from snake skins, constructed in a hollow limb, and cannot be removed without destroying it. This is the little fly-catcher's nest, all lined with feathers, nice and warm. The chimney swallow builds a strong nest, as evidenced by this specimen, made of bits of sticks, all firmly glued together with secretions from its own mouth, and strongly attached to the inside of the chimney by means of the same gummy substance from the same source.

Perhaps enough nests have been mentioned to satisfy the reader, so now we will turn our attention to reviewing the Doctor's Indian and other relics. Of stone implements he has some 400 lbs., having presented the Smithsonian Institute as much more in the past. These implements were found in South Windsor or vicinity. Of stone pots, here are three perfect specimens made from soapstone, besides several broken ones. One is two feet long by ten inches wide and six inches deep, with ears projecting from the ends about two inches for it to rest on stones, so that fire may be built underneath for heating, cooking, etc. A Yankee could not form one more perfect in form and shape, as it is very symmetrical. This is the "succotash pot," not just the vessel, but dish and name we Yankees have borrowed from the aboriginal inhabitants of this land of "steady habits." The other two are smaller, one holding only about a quart, the other two quarts. Here we have the greater portion of one two and a half feet long, one foot wide and eight inches deep. Here are also portions of pots made of clay and pulverized stone, like the Bolton quarry stone used for stone walks formerly, baked, apparently similar to the pottery of the present day. These were found some thirty years ago, and are now only found in small pieces. They are handsomely shaped, resembling in form and shape our old-fashioned "bellied" pots, the outside being quite elaborately figured, showing that ceramics is no new thing in New England. Here we have an Indian chief's war club, a savage looking instrument, yet a perfect piece of workmanship, made of stone, two and a half feet long, six inches in circumference at one end, diminishing in size to one inch at the other end. There, too, are primitive tools for grinding corn that "Big Indian" may eat his corn bread, after "squaw" has ground the corn and baked the cake, she having also first dug the ground, planted and tended the crop to maturity, harvesting, etc., with her pappoose strapped, perhaps, to her back, while performing the various duties of culture, etc. Here we have no fewer than six pestles, from eight to eighteen inches in length, and from four to six inches in circumference; these they used in their stone mortars to pound or grind their corn to fine meal, a practice adopted by the "Pilgrim Fathers." For digging up the ground for planting, here are eight stone picks, a somewhat flat instrument, four to eight inches long, three-quarters to one-and-a-half inches thick, shaped like the letter V, with a groove worked around near the upper end for the purpose of fastening a handle to—a split stick at one end, the halves passing on either side, a withe binding to the stone instrument, making quite an effective tool for the purpose. For hoeing the corn, here we have ten hoes somewhat after the fashion of the picks, except that they are sharp at one end, and both ends of near the same width. For skinning animals, here are venison knives, sharp and strong, made of flint stones. For some of their work, here are gouges of stone, in shape very similar to those of steel of the present day used by carpenters, one side being rounded and the other hollowed to correspond, the end being brought to an edge. The larger ones are grooved around the centre for the purpose of being handled similar to the pick described. Hatchets, with a groove around for affixing a handle, in other respects similarly shaped to those of the present day of iron and steel. Chisels for framing and other purposes, of various sizes and lengths, flat and sharp at one end and round at the other; a squaw's chisel, sharp and flat at both ends. I suppose "Big Indian" thought "squaw do more work; want double tools;" can't account for double-edged tools other ways. Here are scalping knives of stone, shaped like the chisel, only smaller, thinner and very sharp; among them are two, which, from appearance, have seen service, being thoroughly stained with blood, so much so that soap, sand, water and hard scouring fail to remove it. Here is one called the "cutting knife," being formed exactly like an old-fashioned chopping-knife, and a very perfect instrument; sling stones about the size of a butternut, with a small groove cut around near the smaller end for the purpose of receiving the strip of raw-hide, with which it is slung with great force. And here we have a hand-spear, a marvel of workmanship, being made of flint stone, very perfectly formed, twelve inches long by one-and-a-half inches wide, two-edged, terminating in a sharp point, the two edges being very sharp their whole length; in no part is it over one-fourth of an inch thick. How so hard a stone could be worked to that length, thickness, and double-edged, too, so sharp, exceeds our comprehension. Here are also flint stones formed into picks, five to eight inches long, two to three inches wide, and double-edged, running to a point, for digging out canoes; scrapers for cleaning skins, rub-stones for rubbing and making them pliable. These implements have been seen and are named by a native red man, so we have his authority for names.

We will now, if you please, pass to another and more fancy class of articles, such as various ornaments worn by the beauty and *elite* of the females of the Indian race for the decoration of the person, for charms, etc., such as flat stones three to five inches long, three-quarters to one inch wide at one end, running to nearly a point at the other, with a hole in the larger end to receive a strip of raw-hide or cord to tie around the neck. Here are some with two holes near the centre, designed to be worn crossways, same as our ladies at the present wear a breastpin; these stones are flat and thin, with both ends of the same width, one to one-and-a-half inches, and the middle expanding from one-and-a-half to two inches. Here is one oval oblong, two inches in length, one-and-a-half inches wide, flat on one side, and three-quarters of an inch thick, with a hole through its long diameter, evidently designed to be worn the flat side next the body; it is very handsome as well as rare. For smoking their tobacco, here are stone pipes of various patterns, one quite elaborately worked out.

From Major Hamilton, of Oregon, the doctor obtained some very handsome arrows, heads fastened to reeds, some two feet long, with feathers on the opposite end, all ready for use. Here are bone arrows for shooting fish, very much larger and longer than those used in war or for killing game; the bone head is some four or five inches long, and about one-half inch wide at the widest, tapering to a very sharp point; there are notches near three-quarters its length similar to the barb of a fish-hook; this head is loosely inserted in a hole in the shaft; also a strip of raw hide, three to four feet long, is attached, one end to the bone head, the other tied to the centre of the shaft, the last being about three feet long and two feet in circumference, with feathers in one end. When shot into the fish the shaft becomes detached, but is still held by the strip of hide to the head, and acts as a float to drown the fish. Also, here are hundreds of arrow and spear-heads of various forms and sizes. All these names and uses are given by the above-mentioned Indian, who paid this archaeological cabinet a visit.

Kind reader, if not already too tired, we will pass along and look at some relics and curiosities of a somewhat different kind, some from foreign countries, for this collection embraces foreign as well as those collected near at home. Here is a pillow, such as those who are accustomed to downy ones would hardly care to use commonly. It is called "tube pillow," designed for the chief or some distinguished character; it is made of wood, worked out from a single stick about eighteen inches long, with two legs at each end, six or eight inches high; the common people cannot afford such extragance, consequently use pieces of wood with branches for legs. These pillows, instead of being used to rest the head on, as is common with us, are for using under the neck, keeping the head from resting on anything, so that the elaborately barbared hair may not be disarranged. What time and labor is here saved! (Ladies, take the hint and save expense and time; for once arranging the hair will last several days.) This neatly-worked utensil is a Zulu milk pail, made from a stick of wood about one foot high and six or eight inches in diameter, dug out, with ears worked out of the sides. For straining the milk they use strainers made from flags or coarse braided glass nearly two feet long, hollow and about one foot in circumference at the larger end, and closed at the other, shaped similar to the bill of a sword-fish. In this we have the rule of authority to subdue the fractious, undutiful wives of the chief, called the "Zulu knob stick;" it is simply a small handle of wood with a knob or knot on one end about one foot in circumference, the wood being almost as heavy as iron; the whole length being fifteen to eighteen inches; a single blow from which would be supposed sufficient to subdue the thickest skull, break a limb, or bring to terms the most obstinate. Horns for blowing music are made from the head appendages of the large and small African bush-buck and the little reed-buck. The latter are little, straight, pointed bits of things, only about four feet long. In this we see a relic from a Zulu ox once owned by the Rev. Josiah Tyler, who says it is of moderate size compared with some—it is only three feet four inches long, and twelve inches in circumference at the large end. The oxen are much smaller than our New England cattle. This is an African shield made from the skin of an ox, hair on, three feet long and two feet wide at the centre, oval oblong; a stick is fastened on the inside by strips of skin passing around the stick and through the shield; the left arm passes through between the stick and shield, and thus held to protect the head and body, while both hands are at liberty to use the bow and arrow.

Here we have a large collection of curiosities from the Sandwich Islands, brought away while yet in the uncivilized state—game boards and various implements and trinkets used by the heathen. Here is one, a stick three feet long, semi-circular at one end with an ivory tip, said to be used by the chief for the unique purpose of scratching his back. This gourd, four feet long with a hole in each end, is used by the Sandwich Island girls to blow upon when they wish to get married—they blow till a lover comes. From appearances, this has been used by others since it came into the Doctor's possession, as it is now sadly cracked. The Doctor won't say certainly, but rather mistrusts that some lady visitor tried it so hard as to crack it, and still failed to call the lover anticipated. Here we have a costly fly-brush, used only by the chief to keep the flies off, so expensive that only the chiefs may use it. It is made of birds' feathers, only two of which are found on one bird, and the birds are rare. Hundreds of feathers are required to make one, and are attached to a very elaborately worked handle. This wristlet don't look very like those worn by the ladies of to-day; it is only worn by the princess, and is made of wild boars' tusks. Through each tusk are two holes, drilled about an inch apart, near the centre, through which strings are passed to form the wristlet; it takes about twenty tusks to make one wristlet. And here we have a very curious musical instrument and personal ornament worn by the princess when she dances. It is worn on the leg, extending from above the knee to the calf of the leg, and is made of dogs' tushes, each tush having a hole drilled through it at the largest end, and all strung together with strong cords. There are are twenty-four rows and one hundred and twenty teeth in each row, and all interlaced together, making an amount of 2,800 tushes of dogs dangling about the leg, and while dancing they must make quite a sensation striking together. Just think how many poor dogs it takes to supply all of those teeth—pity some which we know could not be served in the same way, there would be more sheep on our hill farms. Here are traveling bags, drums, gourds, idols, beads, necklaces, etc., etc., too numerous to notice separately. This is a whalebone eight feet long, one edge of which is covered with hairs two to six inches long; it comes from a species of whale which has its mouth filled with these hairs. What purpose do they serve? Is it for straining and separating their drink and food? Such would seem to be the case; for in passing, the water is covered with insects, the mouth is opened, taking in both insects and water, the water being ejected while the insects are retained for food. Here we have also numbers of teeth of the sperm whale, and immense sized teeth of the sea-cow. These skulls are those of the leopard, hyena, wolf, alligator and various other smaller animals. A very handsome collection of coral and shells, with a little in almost every department of natural history, makes up the collection. In addition, the Doctor shows us an aerolite found in Wapping. A remarkable specimen of petrification of a section of a chestnut tree, marks of the axe and the rings denoting age, as perfect as when first cut. And here we will close our review of this interesting cabinet, acknowledging the kind courtesy of the the Doctor in showing and explaining all to us. W. H. W.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Connecticut State Sportsmen's Association, Hartford, May 15.

Iowa State Sportsmen's Association, Des Moines, May 28.

Nebraska State Sportsmen's Association, Fremont, May 21st and 22d.

National Sportsmen's Association, Wilkesbarre, Pa., June 11.

Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.

The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.

Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.

Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President.

Missouri State Sportsmen's Association.

NATIONAL SPORTSMEN'S CONVENTION.—The next annual meeting of the National Sportsmen's Association will be held on the 11th of June, 1878, at 8 P. M., in the Club Rooms of the Wyoming Hotel, at Wilkes Barre, Pa. We urge upon State Associations the importance of sending representatives to this Convention, and bespeak a full representation of the different sections of the country.

NEW YORK STATE ASSOCIATION.—*Buffalo, May* 20.—Association assembled at McArthur's Hall, this evening, Senator R. V. Pierce, Pres., in the chair; Vice-Pres., J. J. Flannigan, of Utica; Second Vice-Pres., John Vanderburg, of Clyde; John B. Sage, of Buffalo, Sec., and S. M. Spencer, the Treas., of Rochester, all being present. The following clubs were represented by their delegates: Albion Rifle Sportsmen's Club; Albion Audubon Club; Rochester Audubon Club; Buffalo Adirondack Club; Adams Central New York Sportsmen's Club; Utica Central City Sportsmen's Association, Syracuse; Deen Richmond Club, Batavia; Dansville Sportsmen's Association, Dansville; Forerter Club, Buffalo; Forester Club, Rochester; Forester Club, of Yates County, Pa.; Genesee Sportsmen's Club, Irondiquoit; Ilion Sportsmen's Club, Ilion; Jordan Sportsmen's Club, Jordan; Leather-Stocking Club, Oswego; Leroy Sportsmen's Club, Leroy; Livingston Association, Genesee; Madison County Sportsmen's Club, Morrisville; Monroe County Club, Rochester; Mount Morris Sportsmen's Association, Mount Morris; Niagara Falls Shooting Club, Niagara Falls; Onondaga County Sportsmen's Club, Syracuse; Phœnix Sportsmen's Club, Seneca Fall; Queen City Sportsmen's Club, Buffalo; Rochester Sportsmen's Club, Rochester; Riverside Shooting Club, Buffalo; Rome Sportsmen's Club, Rome; Skaneateles Sportsmen's Club, Skaneateles; Wayne County Sportsmen's Club, Clyde. The following new clubs were admitted: Brooklyn Gun Club, East Buffalo Shooting Club, Buffalo Gun Club. A petition was received from the Windsor Hotel, of New York City, by P. P. Flowers without giving the name of the club, but admitted under the name of the Windsor Hotel Association; Corning Sportsmen's Club, Scottsburg Sportsmen's Association of Livingston County; Bay View Rifle Association, of Buffalo; Seneca Gun Club, of Seneca Falls; Ellicott Sporting Club, of the town of Amherst, N. Y.; Onondaga County Fishing Club, of Syracuse; Farmer Village Sportsmen's Club; Forest and Stream Sportsmen's Club, of Akron. The following officers were elected: President, A. B. Lamberton, of Rochester; Vice-President, Childs Horace Silsby, Seneca Falls; Secretary, John B. Sage, of Buffalo; Treasurer, William Babcock; Corresponding Secretary, L. A. Pratt, of Rochester. The treasurer reported a balance on hand of $696.70. The president reported that in accordance with the resolution passed at the last meeting, the association had been incorporated under the laws of the State. Rochester was selected as the place for the next annual meeting.

May 21.—There were 114 entries in to-day's matches. The first contest, a single trap shoot at ten single birds, resulted as follows: First prize, a breech-loading shot-gun, J. F. Lawrence, of the Seneca Falls Club; second prize, a meerschaum pipe, R. V. Pierce, of the Buffalo Foresters; third prize, twenty-four pounds of Dupont powder, diamond grain, J. M. Whitmer, of the Niagara Falls Club; fourth prize, a Bogardus glass ball trap and balls, P. J. Fisher, of the Le Roy Club; fifth prize, a game and cartridge belt, J. Sees, of the Wayne County Club, New York.

—The Kennebec (Me.) Association send as delegates to the National Convention at Wilkesbarre, Pa., Col. Waterman Smith, of Manchester; Charles F. Stark, of Dunbarton, and Dr. William Jarvis, of Claremont.

GAME PROTECTION—AN ARREST AND FINE.—Thos. Camp, of Stedmansville, Atlantic Co., N. J., was arrested May 14, for killing a deer out of season. The case having been brought before Squire Moor, of May's Landing, Camp was fined $55.54. This prosecution was due to the West Jersey Game Protective Society. We have before this commented on the efficiency of the officers of this association.

—The guides at Greenwood Lake are complained of for using land-locked salmon fry for bait. If the lake did not lie under the jurisdiction of two States it would be easier to prevent such senseless folly and wrong.

MIGRATORY QUAIL—*Nashua, N. H., May* 12.—I am confident that I have seen at least one of that species, and, from

a description furnished by a friend, am positive that others have been seen in this vicinity. I am satisfied that their introduction is going to be a successful undertaking. There was a bevy of them let loose in Groton, Mass., some fifteen miles from here, last season, and perhaps those seen here belonged to them.

WEBB.

The Rifle.

MAINE—*Portland, May* 16.—First match; Maine Rifle Club:

	500 yards.	1,000 yards.
E C Farrington	4 4 5 5 4 5 5 5 5 4—46	2 0 0 4 3 2 2 0 0 2—15—61
G L Bailey	4 4 4 5 5 4 5 5 5 5—46	3 5 4 5 4 0 2 5 4 4—36—82
L G Daniels	4 4 4 5 5 5 5 4 5 3—44	3 4 0 0 0 3 2 2 5 2—15—59
W A Stillings	4 0 4 4 5 4 5 5 5—41	5 0 0 0 0 2 3 0 3 0—13—54
W Jones	4 0 4 3 5 3 5 5 3 0—32	
E McAllister		5 0 2 2 0 0 3 0 0 0—12

WALNUT HILL, *May* 16.—Eighth renewed shot-gun match. Day cold, with strong east wind, but excellent shooting. Conditions, 800, 900 and 1,000 yards; possible 225. Captain Jackson made a capital score:

Captain W H Jackson.														
800	5	4	5	4	5	5	5	5	5	5	5	5	5	5—73
900	5	5	5	5	5	3	5	5	5	4	5	5	5	4—71
1,000	5	5	5	5	3	3	4	5	5	5	5	5	5	4—69—213
A H Hebbard.														
800	3	5	5	3	4	5	5	5	5	5	5	5	5	4—69
900	5	5	5	5	5	5	5	5	5	5	4	5	5	5—74
1,000	4	5	0	4	3	5	5	5	5	5	5	5	4	5—65—208
J B Osborne.														
800	4	5	5	5	5	4	4	5	5	4	5	5	5	4—70
900	5	5	4	5	5	5	4	5	5	3	5	5	4	5—68
1,000	0	5	5	4	5	5	4	5	3	4	5	5	4	5—64—202
Salem Wilder.														
800	4	3	5	5	5	5	4	5	5	5	5	5	4	5—69
900	5	5	5	0	4	0	3	5	5	5	5	5	5	4—61
1,000	4	4	5	5	5	A	5	5	5	5	5	4	5	5—66—195
William Poland.														
800	5	2	4	5	0	5	5	4	4	5	5	5	5	5—63
900	5	5	3	4	5	3	5	5	5	5	5	5	5	5—68
1,000	5	4	3	4	0	5	5	3	5	4	5	5	5	5	3—61—192
J F Brown.														
800	4	4	5	5	5	5	4	5	4	5	5	5	5	5	5—69
900	5	4	4	4	5	5	5	5	4	5	5	5	5	0	6—66
1,000	3	5	5	5	5	5	4	0	4	4	0	0	4	5	5—54—189
L Saunders.														
800	4	4	5	3	4	4	5	5	3	4	4	5	5	5	5—65
900	4	2	4	4	5	5	5	5	5	3	5	4	3	4	5—63
1,000	0	0	4	5	5	4	5	4	3	4	4	5	4	5	5—57—185
L L Hubbard.														
800	5	0	5	5	5	5	5	5	5	5	3	5	5	4	8—65
900	0	3	3	4	0	5	5	5	5	4	4	3	5	5	5—56
1,000	4	5	5	5	3	4	3	3	0	4	3	4	0	4	0—47—168

The leading Boston shots will be shortly in New York, and will participate in the spring meeting at Creedmoor.

May 18.—Second trial, amateur series. Conditions—Ten shots at 200 yards. The following are the scores:

W Gerrish	5	5	4	5	4	4	5	5	4—45
E B Souther	4	5	4	4	5	4	5	4	5—44
S Wilder	4	5	5	3	5	5	5	4	4—44
H Seversoce	4	4	4	4	4	5	5	4	4—42
W Poland	4	5	4	4	5	4	4	4	4—42
C M Meiggs	4	4	5	4	4	4	4	4	4—41
H Mortimer	4	5	4	4	4	4	4	4	4—41
H B Sargent, Jr	4	4	5	4	4	4	3	4	5—41
C Russell	5	5	3	4	4	4	4	4	3—40
J B Parker	4	3	3	3	4	4	4	4	5—38
J N Frye	4	4	5	3	4	4	3	4	3—34

Match No 3; same distance and conditions:

W Poland	5 5 4 4 5 5 5—33	H T Rockwell	4 5 5 4 4 4 4—30
E B Souther	4 5 5 3 4 5 4—32	S Wilder	4 4 4 4 3 4 3—26
J B Osborn	5 4 4 4 4 5 3—30		

CONNECTICUT RIFLE ASSOCIATION.—This association will have regular shooting days at Willowbrook on the 2d and 4th Saturday of each month. First competition for purse is to be held on Saturday, May 28. The following prizes have been provided:

Long Range—Regular prize of 1878, ten shots each, at 800, 900, and 1,000 yards. To be won three times before becoming the property of the winner.

Mid-Range—"Remington prize," a revolver. Ten shots at 500 yards. To be won three times.

Military Prize—A prize for military men only. Seven shots, 200 and 500 yards. Any military rifle. Aggregate score to win. To be won three times.

All Comers' Prize—Seven shots at 200 yards. Any rifle and any trigger pull. To be won three times.

CREEDMOOR—May 15.—Day cloudy, rain in morning; not much wind. First match for the Appleton prize—complete set of American Encyclopædia. Open to all comers, 200 and 300 yards; seven shots; scores:

W M Farrow	60	J W Todd	51
E E Lewis	60	G L Morse	51
R H Keene	60	John Cavanagh	51
Homer Fisher	57	N O'Donnel	50
A J Howlett	57	F McMorrow	49
Dr S T G Dudley	56	A W Dimock	49
Capt W R Livermore	55	J E Irwin	48
J S Conlin	55	E N Whiton	46
P Fenning	54	F G Fulligraff	46
J L Paulding	54	S Case	45
D F Davids	51	F W Leavitt	44
J R Grohman	54	V Daly	43
F H Holton	54	N D Ward	41
E H Sanford	53	C Rodman	37
J W Hitchcock	53	J A Hatry	35
Dr M M Maltby	52	O H Styles	31
E H Raymond	52		

Amateur Club; mid-range contest; 600 yards; 15 shots:

Ransom Rathbone	72	G L Morse	67
R H Keene	71	Lieut.-Col E H Sanford	66
W M Farrow	70	F H Holton	55
Homer Fisher	68		

Eighth Regiment Rifle Club's contest for Douglas cup; 200 and 500 yards; 10 shots at each distance. Capt. Chas. Reizman, with 73, won the trophy, though Dr. G. D. Hobart had the trophy upon the higher aggregate.

Canadian Wimbledon Team.—The following is the composition of the team: From Ontario, Capt. Gibson and Corp. F. Newby; from Quebec, Sergt. Riddle, Capt Thomas, Sergt. Hatley and Private J. J. Wardell; from New Brunswick, Sergt. J. F. Parker, Brigadier J. T. Hart, Trooper J. Langstroth, Private J. M. Kinnear, Capt. G. R. Arnold, Capt. E. Arnold, Sergt. C. W. Weyman, Ensign T. G. Loggie, Private J. D. Perkins and Trooper J. J. Ryan; from Nova Scotia, Sergt. K. Power, Sergt. S. S. Hard and Lieut. B. Weston. The party will leave Quebec for England on June 15, under command of Lieut.-Col. Beers, Seventy-fourth Battalion, New Brunswick, and Ensign Fitch, Seventy-eighth Highlanders, Nova Scotia.

May 18.—By the withdrawal of the Remington $300 prize, some of the riflemen were disappointed. The only match hot was the first competition for the champion marksman's badge. Conditions—Open to members of the N. G., also members of the N. R. A.; distance, 200 and 500 yards; trophy to belong to competitor winning the greatest number of times during the season. The following are the scores:

J Le Boutillier	42	J L Paulding	34
G E Moore	43	J R Andrews	32
J W Gardner	42	J T Fyfe	32
W A Bryant	41	F H Schenck	31
E W Candee	40	J H Teackle	31
Capt C F Robbins	40	B H Adams	31
Dr Moreau Morris	39	F E Parsons	30
Capt J L Price	39	E W Barnett	30
C H Eagle	38	James Ross	30
H C Titus	38	C M Eagles	29
J B Holland	38	J A Camaden	29
H W Clements	36	W S Duncombe	28
A B Van Heuseo	36	W H Heisser	27
D Chauncey, Jr	35	A L White	27
G F Merchant	34	J A Shaw	25
P McMorrow	34	S J Gorman	25
Lieut W G Dominick	34	W O Knight	25
E W Price	34	F S Howard	25

The Stock Exchange Rifle Club shot for the "Woerishoeffer" badge at 200 yards, 10 shots off-hand. Mr. R. W. Day won with 40 out of a possible 50 points.

It is but paying a passing tribute to Gen. Dakin, whose sudden death was mentioned by us in last week's issue, to state that his memory, at least at Creedmoor, was not forgotten. Many were the kind comments passed on him by the riflemen on Saturday, and his appearance, as he was last seen at the range, was vividly recalled. Perhaps if any permanency were possible on the buildings now erected at Creedmoor, so one tablet might be raised commemorative of Gen. Dakin. How would it do to call the main avenue leading up to the range Dakin Avenue?

SEPPENFELDT RIFLE CLUB, *May* 10.—Match shot at 104 Bowery; 175 feet distance, 2½-in. bull's-eye, Creedmoor rules, possible 50:

A H Anderson	48	M Heuman	44
Wm Seppenfeldt	47	Th Reagan	43
T Garrison	47	F Macker	43
Er Holtzmann	46	Max Kern	43
Albert Keller	46	G Laing	41
Ed Story, Jr	45	H Rothenberg	41
C Rasch	45	W J Loarry	42
Aug Graeneberg	45	J Hosgland	40
John W Adams	45	Mt Bullwinkle	39
T Waeker	44	G Hosson	37

Scores made by the same club in Myrtle Avenue Park, distance 200 yards, on Wednesday, May 15:

Er Holtzmann	215	Wm Seppenfeldt	186
A H Anderson	199	M Morrissey	167
Aug Graeneberg	198	M Heoman	152
Isaac Garrison	191	B Sullivan	137
Albert Keller	186	Max Kern	123

CREEDMOOR SPRING MEETING.—This event takes place today. The "Leech Cup" match will open the ball—fifteen shots at 800, 900, and 1,000 yards, at 10 A. M. At 1 A. M. the Frazer match—200 yards, and at the same time the Soldiers' match. The day's programme will conclude with the Skirmishers' match. On Friday there will be no less than 21 matches, 15 of them subscription matches. The *National Guardsman's* match, first stage, will be for a Remington rifle. Conditions, 300 yards, 7 shots, at 9 o'clock. The long range match (No. 10) "Sharp's" military team at 1 o'clock. Second stage of the same at 3 o'clock. The final stage, 1,000 yards. On Saturday the Directors' match will begin at 9 A. M. There are twelve matches on Saturday, of which eight are subscription matches.

—The Corps of Cadets of the Twenty-third Regiment will give a reception and complimentary drill for the Vigilantia Medals, with a dress parade and promenade concert, next Friday evening, May 24, at the Armory. Col. Ward will review the corps.

SYRACUSE.—The Inspector of Rifle Practice of the Fifty-fifth Regiment has received from the Messrs. Tiffany the handsome silver cup presented by this leading firm of silversmiths, and the trophy is now on exhibition in Syracuse.

NEWARK RIFLE ASSOCIATION VS. NEW JERSEY SCHUTZEN CORPS—*Newark, May* 15.—Twenty men a side, ring targets. The match was won by the New Jersey Schutzen Corps with three rings. The number of points was as follows:

New Jersey Schutzen Team.

Job Eschbach	173	Reinprank	139
John Schneider	156	Bergman	192
F Blumenberg	170	Dilmar	158
F Rathyen	188	Herman Raschen	151
Charles Zeitler	177	John Raschen	187
Appel	134	F Hansen	154
Grube	143	Zengner	192
Cook	165	Ermisch	196
Engle	181	Fledner	158
Jacoble	132	H W Cordts	171
Total			3,327

Newark Team.

D Terrell	158	Belcher	171
J Terrell	173	Cleveland	174
Knecht	157	Flamna	193
Fracke	165	McLord	194
A Kaegle	181	Fowel	128
Seltz	202	Harrison	127
Hayes	206	Hariman	143
H Kaegle	198	Bayen	141
Begora	167	Beck	111
Christe	136	Gardner	149
Total			3,324

ROCHESTER VS. NEWARK.—On the 15th the Rochester Amateur Club visited Newark, N. Y., and were the victors. Conditions—200 yards, 10 shots:

Rochester Team.

C E Rider	5	4	5	4	5	5	5	4	5	4—46
James H Brown	5	4	4	4	4	4	4	4	5	4—42
Lieut Col R B Yates	4	5	4	4	5	3	4	4	4	5—42
S A Servis	4	3	5	4	4	5	4	5	4	4—42
Maj W S Smith, Jr	3	3	4	4	4	4	4	4	5	4—39
Adj A H Bruman	4	4	3	4	4	4	4	5	4	3—39
H F Hart	3	4	3	4	4	4	4	4	4	5—37
Maj B J Charles	0	4	5	2	4	4	3	4	4	4—34—321

Newark Team.

R B Pomeroy	3	4	5	4	4	4	4	4	5	4—41
H P Van Dusen	4	3	4	4	4	4	4	4	5	4—40
E B Elliott	4	5	4	4	4	4	4	4	4	4—40
C A Peake	4	4	4	4	4	5	3	4	4	4—40
Henry Hamilton	4	4	4	4	4	5	4	4	4	3—40
W H Nicholoy	4	4	3	4	4	4	4	4	4	4—39
Dr D F Wilcox	5	3	4	4	4	4	4	4	4	3—39
Frank Garlock	3	3	4	4	5	3	4	3	4	4—37—317

TENNESSEE—*Nashville, May* 16.—At the barbecue at Melrose Park, the magnificent country seat of Mrs. Gov. A. V. Brown, about three miles from town, the company, in all about fifty, was composed principally of the merchants of Broad and Market streets. While waiting for dinner the gentlemen amused themselves in various ways—jumping, running, wrestling and rifle shooting. A very interesting match was shot by the teams made up on the grounds. Each team was composed of eight members, each to have ten shots at 50 yards with the ordinary squirrel rifle; target, three inches diameter:

Thos H Bradford	1	1	1	1	1	1	1	0	0	1—8
Julian Cooley	1	1	1	1	0	1	1	0	0	0—6
William Jackson	1	1	1	1	0	0	1	1	0	1—7
Thos W Harris	0	0	1	0	1	1	1	0	1	0—5
F Wright	1	0	1	1	0	0	1	1	1	0—6
Dr Hancock	0	0	0	1	1	0	1	0	0	1—4
F Moulton	1	1	0	0	0	0	1	1	0	0—4
Harry D Martin	1	1	1	0	0	1	1	1	1	0—7—47
John Moseley	1	1	1	1	0	0	1	1	0	1—7
Thos Chadwell	0	0	1	1	1	0	0	1	1	1—6
J P Bradford	1	0	0	1	0	0	1	1	1	0—5
S Wilkinson	1	1	1	1	0	0	0	0	1	0—5
P Goddard	1	1	0	0	1	0	0	1	0	0—4
C Cooley	1	1	1	0	0	1	0	0	0	0—4
Dr Parsons	1	1	1	1	0	0	0	0	1	0—5
F Bloum	1	0	1	1	1	0	0	0	1	1—6—42

Match at 50 yards with squirrel rifle, three shots each; size of target, three inches:

Wm Jackson	1 1 1—3	Gov Porter	0 1 1—2
F Wright	1 0 1—2	Jo Horton	0 0 1—1
Dr Turney	0 0 1—1	Col Hillman	1 0 1—2
Col J C Burch	1 1 0—2	Ed Willard	1 0 0—1

J D H.

COLORADO—*Denver.*—The following handsome scores were made last month by three members of the club; distance, 200 yards:

G Gove	4	4	4	5	4	4	5	4	4	5	3	4—39
Spangler	4	4	4	5	5	4	4	4	4	5	4	4—39
C Gove	5	5	5	5	4	4	5	5	4	4	5	5—46

On May 10, for the Fay medal; the following are the scores:

	800 yds.	900 yds.	1,000 yds.	Total.
J M Swem	27	20	23	70
M Spangler	33	28	16	76
J P Lower	25	22	14	61
H Miner	33	20	28	81
F Church	24	30	26	80
W J Fay	30	22	23	75
C Gove	31	32	30	93

A telegraph match has been made between the Denver Rifle Club and the Saratoga riflemen. On a late occasion, Mr. C. Gove, at 500 yards, made a perfect score. Considering that Mr. Gove is 61, he must still have a clear eye and a steady hand.

WINCHESTER REPEATING RIFLES.—The history of this important enterprise is one in which the energy and determination of a single man whose name is given to these well-known fire-arms is most conspicuous. Originating some twenty-eight years ago, the manufacture of the repeating rifle has had no end of vicissitudes. First called the Jennings repeating gun, it was not until 1866 that the present association, the Winchester Repeating Arms Company, was organized and commenced the manufacture of the new and improved arms. To-day there is no private establishment in the world which has such enormous facilities for manufacture nor one whose arms are held higher in general estimation. It has taken, of course, over twenty-five years to establish the fact that the magazine gun, the arm having within itself some fifteen or more consecutive fires, was the arm of the present. Governments understand these things apparently later than do individuals. Strange it is to state that the United States has been among the last to look carefully into the practicability of such a repeating arm, when with the old model of 1866 in the hands of the Turk they made last year such havock in the Russian forces at Plevna. An arm with which even a man who is not an adept can discharge fifteen shots in ten seconds must be terribly effective. With increasing business the Winchester Repeating Arms Company have opened a handsome establishment at No. 245 Broadway, New York, in the old locality, formerly occupied by Grange Judd & Co. Mr. A. W. Hooper will act as agent for the company. Mr. P. G. Sandford, so long and favorably known in New York in the gun trade as an expert in fire-arms, will attend to the disposal of the Winchester rifles. The capacities of the company are immense. With a producing power of 300 perfect arms every twenty-four hours in a day's time, from stock on hand 12,000 guns can be furnished. As to the excellence of the arm for sporting purposes our columns have frequently borne witness. Without being too heavy, resisting all the accidents which rough usage subjects fire-arms to, its wonderful accuracy and simplicity of mechanism most especially commends it to the public. It is not only rifles which the Winchester Repeating Arms Company manufactures. Any one who has visited New Haven has not seen the most notable thing in the Elm City unless he has passed some hours at the arms factory. In addition to a large number of mechanics fully employed in making rifles, hundreds of workmen and boys are occupied in preparing cartridges. The capability of turning out perfected cartridges is 1,000,000 per diem; and this company have furnished even more rapidly than at the above rate per diem, some 255,000,000 of cartridges for the Turkish Government. Every kind of cartridge is made, not only for their own special arms, but for all known systems. One specialty of the company is the making of bullets for long-range shooting. Perfection of shape, size, weight, and density of metal being the great *desiderata*, the most careful mechanical appliances have been invented and brought into use in order to turn the balls, which are absolutely identical one with another.

Returning once more to the arms, the model of 1866 manufactured by the company, using a rim fire cartridge, 44-100, is still popular. Of the model of 1873 some 175,000 are now in use. This uses a longer cartridge, with more powder, giving the ball an initial velocity of some 1,300 feet per second. The model of 1876 is of 45-100 calibre, and uses 75 grains of powder, with 350 grains of lead, being nearly double the charge in the model of 1873.

It is the intention of the company to introduce shortly on the market the Hotchkiss repeater, which holds the magazine in the butt. It will carry from five to seven cartridges. It is a perfect military arm, and at the same time a long-range sporting rifle.

ANOTHER "ACCIDENT."—The shooting of an apple from a person's head is still practiced in the variety theatres and circuses, and the recent fatal accident in Rhode Island, instead of serving as a warning, seems to have stimulated the interest in the dangerous and thoroughly reprehensible feat. In an Indiana circus the other day a man was shooting at the apple on his wife's head, the bullets going through the canvas tent into the crowd outside. At the third shot a boy was killed, then the circus man folded his tent and slid away before the people lynched him. A liberal term of State's prison would be the proper thing for him.

THE BEST SUBSTITUTE FOR EXPLOSIVE AND EXPRESS BULLETS.

March 10, 1878.

EDITOR FOREST AND STREAM:

The very practical communications of Mr. Van Dyke and Mr. Rigby, in late numbers of your journal, have a direct bearing upon a subject that has doubtless engaged the attention of every one who, to any extent, has hunted large game. I allude to the large number of animals hit by the rifle bullet that escape, either to die a lingering death or fall a prey to the first wolf or mountain lion that crosses their track. Mr. Van Dyke estimates this proportion at one-third of the total number hit. I believe his estimate is too small, and think it should be nearer one-half, basing the opinion upon my own experience, and upon information from old hunters.

This is not astonishing, when the following circumstances are considered: First. With antelope and white and black tail deer (the most numerous class of large game found in this country), good standing shots at short range (say within one hundred yards) are not numerous, and which, at best, require a quiet aim and steady nerve. The most numerous shots are "on the jump," and at distances varying from 150 to 300 yards. These remarks apply to hunting on the prairies and mountains of the West, where the bulk of the large game is found, and not to timbered districts.

Second. The vital parts of the deer, etc., are a space about twelve by fourteen inches over the region of the heart, and including a part of the shoulder, the brain and the spinal column. What is meant by vital parts is, that a bullet penetrating or striking such parts will cause them to fall and die within ten or fifteen minutes. With the buffalo, elk and bear, the vital space is, of course, larger. An animal struck in the limbs, paunch, or any other point than as above described, will either escape, or, if secured at all, it will be at the expense of much labor in following up.

Thirdly. All these animals have an extraordinary vitality. I have frequently shot deer and antelope through the paunch or entrails that gave not the least indication of it, but trotted off as proudly as if untouched, and the fact would never have been ascertained had they not been brought down by a second or third shot. I am satisfied that an antelope or deer, especially a yearling fawn, have as much or more vitality than the buffalo, elk or bear, and, in hunting parlance, will "pack off more lead" than either of the last-named. These animals, often shot through the heart, will run one hundred to two hundred yards before falling. I recall an instance where I shot, with a 95-450 grain cartridge, at 125 yards, a doe standing facing me, the ball entering near the striking point, ranging back through the vitals, breaking every rib on one side, and lodging against the skin of the ham, the ball being flattened out into a shape that would have satisfied the most enthusiastic "Express ball" man, yet she ran 250 yards before dropping, and was, of course, perfectly dead when found. Another similar instance: a large white tail buck, shot with same ball at seventy yards, the ball ranging through vitals in same manner, and coming out of rear. He ran about same distance before falling, and was perfectly dead when found. I recall another instance of a buck antelope fired at, at 250 yards distance, gave no sign of being hit, and I continued on my route. After traveling a half mile, in sweeping the prairie with my field glass, he was discovered a half mile off floundering up and down, and fighting off the inevitable with all his strength. As it was in an Indian country, had plenty of fat buffalo meat, and the study of the effect of projectiles not being at the time uppermost in my mind, the character of the wound was never ascertained. Such examples are within the experience of every hunter, and are merely mentioned to illustrate the subject under discussion. Many game are hit and mortally wounded without the hunter's knowledge, and escape to die within a few hours. It then becomes a matter of common humanity—if there is such a thing as humanity in connection with the killing of game—to devise means to lessen the useless suffering that appears inseparable from hunting such game, as well as save a large amount of valuable food.

Mr. Rigby and our British friends think the Express bullet properly sent is the best device for instantly killing. Mr. Van Dyke has detailed in a very entertaining and practicable manner his experiments with explosive bullets upon deer, and appears to have arrived at the same conclusion to which my own experiment had brought me, that the explosive principle possessed no other merit except expanding the end of the bullets at moment of contact—the same result as is accomplished by the "Express" bullet without the explosive. I have given the question of "explosive" and "Express" projectiles a great deal of thought, and am convinced that these devices are very partial remedies for the evil under discussion, and that the only effectual remedy is by the use of a good hunting dog, a dog trained to follow "to heel," to "go for" any wounded animal you may order; will follow him until brought to bay, and remain with him until you come up. With such a dog you are always sure of your game, even when slightly disabled. Such is the vitality of the antelope, deer, elk, buffalo and bear, that unless shot through the vitals, as before described, no projectile much short of a six-pounder will kill them at once. I feel sure that such calibres as .50 or .57 possess no appreciable advantage in killing effects over the .44 or .45 calibre. Neither will kill at once, unless the projectile is through the vitals. In reasons given hereafter I feel sure the "Express" rifle will do no more.

Making due allowance for some of the exaggerated statements of the destructive effects of the projectile, the rifle must have much merit for killing game, if for no other reason for the double shots and low trajectory claimed for it. Its low trajectory is, however, combined with the disadvantage of a very light projectile. To compensate for the lightness of the bullet, its point is made hollow, so that at the moment of contact it flattens out, and its high velocity suddenly arrested by its increased surface communicates a much greater shock to the animal struck. It is questionable with me, however, whether what is gained in velocity is not lost to a great extent in momentum from lightness of projectile, and consequently in shock. Cannot equally as great velocity be given the Express bullet from the American breech-loader, with the same charge of powder and ball? I get a very flat trajectory up to 200 yards with a charge of 100 grains powder and 297 grains lead from a Sharps .44, with twist of one turn in 20in. The balls were naked, and the target not as good as had they been patched balls. The Sharps system of rifling appears very similar to the Henry used in the Express rifle, having six narrow, shallow lands instead of seven as in the Henry system. The lands in the latter are also slightly pointed.

My principal objection to the Express principle is that the light ball which gives the flat trajectory up to a certain distance, say 250 yards, must drop rapidly afterward, and deprive it of a respectably long range. This would be no serious objection in a thickly timbered country like India, where respectably long shots must be the exception, but it would be in a prairie and mountain district where close shots are the exception, and where, with careful and skillful shooting, a good deal of game can be killed up to 400 or 600 yards.

I feel sure that Mr. Rigby's 200 and 300-grain projectile would be unsuitable for hunting in the Rocky Mountain region, because, if for no other reason when hunting for deer and antelope you are liable at any time to come across bear and straggling buffalo. You need an arm that will master any animal liable to be met. On account of the above considerations, my preference is for an arm, .44 or .45 calibre, throwing a projectile of at least 450 grains weight (1¼ inch long), with plenty of strong powder behind it (say 90 to 100 grains), fitted up with convenient and accurate peep and globe sights that can be used, at a moment's notice, in place of the open sights necessary only for short range. Such a rifle was used by me during two seasons' hunting in Montana. In examining the character of the wound, I found that the length of the ball (one and a quarter inches), as a rule, caused it to tip over in passing through the animal, and to come out sideways, tearing a larger hole, and causing a greater shock. When a bone was struck, it was considerably smashed up, and must have had the "shock" effect as claimed for the Express ball. I have no hesitation in claiming that such a projectile is as effective in killing the large game of this country as the Express bullet; certainly more so than the 300 gmin bullet Mr. Rigby speaks of, on account of its increased range. Black tail deer, and antelope, when over 300 yards, will frequently allow you to get in four or five shots without moving much. By watching where the balls strike you can frequently get in a bull's-eye. When put through the vitals it never failed to bring down the largest animals. Frequently when struck through the paunch the shock was such as to drop them. Sometimes they will fail to get up, but as a rule they would make off. The Express rifle would accomplish nothing more. Mr. Rigby admits that, when in his letter he provides "if shot anywhere forward, and not too high."

But to return to the dog and how I became convinced that he was the "only effectual remedy." I spent last winter, to the 7th February, hunting in the foot-hills of the Highwood Mountains, Montana, on the waters of Belt Creek. Up to Christmas had met with fair success hunting white and black tail deer, and, though without a dog, had secured often, after much fatigue and labor, all the wounded ones known to be hit, for I was then pretty "sharp set" after this kind of sport.

About that time, in two days' hunting, I lost three does and a large black tail buck, all seriously wounded. An old doe, wounded through the groin, and hind leg broken high up, was followed at least four hours over hill and through brush, with snow ten inches deep, and though fired at repeatedly, generally 150 to 200 yards, and on the move, she failed to respond. As twilight set in my last cartridge was fired, and had the satisfaction of seeing her disappear over the next hill, hobbling along just fast enough to keep out of reach. My disappointment was none the less when it was realized that I was afoot, four miles from camp, and bitter cold, the thermometer, on reaching camp, after a weary tramp, registering eleven degrees below zero. As some compensation for the day's fatigue, however, a young buck had been killed early in the day. A snow-storm prevailing that night obliterated all traces of the old doe, and it was never ascertained how many balls, if any, had touched her. Oscar Olinger, at whose ranche I was stopping, had a large, black, lubberly-looking bob-tailed shepherd dog, resembling a Newfoundland, accustomed to lie around the fire, and a playmate for the children. On hearing of my bad luck, he advised me to take along "Old Maj" on the next hunt. A few days afterward the black-tail buck before alluded to was wounded, and old "Maj" was persuaded to go in the search of him. He was soon jumped in the canyon of a coulee, and after a lively chase up and down the canyon was brought to bay and dispatched. The dog's action pleased me so much that he became my constant companion for the balance of the winter's hunt. Possessed of a thorough knowledge of the habits of game, and eye keen enough to see a deer's head almost a mile over the prairie, a good, quick shot, Oscar Olinger had no superior in Montana as a successful hunter, and in several years' hunting had thoroughly trained the dog for wounded game. He would follow at my mare's heels until game was discovered, and when I dismounted to approach he would remain with the mare. At the crack of the rifle he would come up, and if his services were not needed he would remain quietly by. If told to go for any wounded animal, he would follow unerringly, and his welcome bark would soon be heard when it was brought to bay. He would then remain with it until you came up, worring it and nipping it, if it attempted to get off. If game got down before you came up, he did not mutilate it. He was not active, yet by "main strength and awkwardness" did not once fail to overtake and bring to bay every wounded animal he was sent after. A slightly disabling wound, such as the breaking of the ankle bone (in one case the shattering of buck's hoof), was all that was necessary for "Old Maj." Nothing escaped his eye on the prairie, and no animal, man, or beast could approach me without his premonitory growl. With such a hunting companion, of course all trouble about wounded animals ceased. During the six weeks "Maj" was with me a good many deer were killed (more than half of my fall and winter hunt), and, as before remarked, not once did he fail to secure anything known to be hit. I recall only two instances of his "breaking shot." Not including three buffalo, the result of the winter's hunt was forty-three white and black tail and antelope known to be hit, all of which were secured except the three does before alluded to.

If Mr. Van Dyke will only secure the services of such a dog as "Maj" he will be troubled no more about wounded game, the subject of destructive projectiles will not occupy his thoughts, and "melodious Thomas cats" will roam ever afterward undisturbed around his premises. The use of such a dog is the only sure way to secure the large percentage of wounded game and the saving of much valuable food, and no hunter of large game can afford to do without one. "Maj" has been described so much in detail as an indication of what a hunting dog should be. There are a hundred of such dogs in use by hunters, though Maj has few equals. I have frequently known the common cur dogs of the South to be excellent on the slow trail in wooded districts. Any intelligent setter, with sufficient courage and inclination to run after stock, could be trained for this purpose. In a deer hunt in Minnesota in 1875 my black setter was very useful, the only difficulty being the deer were so smart and wary in the poplar thickets that there were few opportunities afforded for practicing him on bringing them to "hay." Following to heel, he always indicated by his actions when near them. In this way a setter can be made very useful, for deer are too wary to allow him to approach near enough for a "stand." When you know they are near additional caution will generally secure you a shot. The instincts of the shepherd dog being for running after and controlling stock would seem to indicate that breed the most suitable for this work. Such a dog must be under perfect control, for if allowed to run around good shots would be rare.

BEAR PAW.

National Pastimes.

INTERCOLLEGIATE ATHLETICS.—At the annual meeting of college representatives at Mott Haven, last Saturday, the following colleges were represented: Columbia, Princeton, University of Pennsylvania, Union, Lehigh, Dartmouth, Harvard, Rutgers and the College of the City of New York. The weather was all that could have been asked, the merry crowds of students and their lady friends in the best of humor, and the contests of the day passed off most pleasantly. Columbia was naturally strongest in members, and bore off the greatest number of prizes—eleven. Next came Princeton with nine, and then the University of Pennsylvania, whose home field days are always excellent, took home five medals as her share. The contests were as follows:

Standing broad leap—F Larkin, Princeton, '79, 9ft 11½in; N N Lee, Univ. Pa., 9ft 1½in.

One-mile walk—Chas Eldridge, Columbia, '79, won in 7m 38⅝s; W M Watson, College City N Y, '80.

Putting the 16-pound shot—G E Potter, Lehigh, '80; W J McNulty, Union, '80; J D Wilson, Dartmouth; F Larkin, Princeton. Larkin, 32ft 11in; Wilson, 32ft 7⅝in.

Running high leap—J P Conover, Columbia, '80, 5ft 6½in; G W Heinz, Univ Pa, 5ft 2in.

Half-mile run—A J Burton, Columbia, '79; W Cramer, Rutgers; J N Simmons, Harvard, '80; O G Brown, Union, '80; C N Cogswell, Dartmouth, '80. Burton, 2m 8¼s; Simmons, 2m 9⅝s.

Pole vaulting—G Fabragou, College City N Y, 9ft; B F Harrah, Univ Pa, 8ft 10in; F Larkin, Princeton, and G E Potter, Lehigh, 8ft 1in; J W Pryor, Lehigh, and J Withington, Princeton, 7ft 7in.

Hundred-yards dash—First heat, W J McNulty, Union, 11⅜s; T Flint Jr, Dartmouth, and L A Stewart, College City N Y, a dead heat for second place. Second heat, Lee, Univ Pa, 10 4-5s; Waller, Columbia, second; W R Randolph, Lehigh, third. Final heat, Lee, 10¼s; Waller, a good second.

Running broad leap—Conover, Columbia, 19ft 2½in; Withington, Princeton, 18ft 10in; McChesney, Rutgers, 17ft 7in.

Quarter-mile Run—Burton, Columbia, 54 1-5s; Simmons, Harvard, 54 2-5s; Stewart, Princeton, third.

Standing high leap—Larkin, Princeton, 4ft 3¾in; Pryor, Columbia, 4ft 1⅝in.

Two hundred and twenty yards dash—Lee and Waller, Univ Pa; McNulty, Union. Lee came in ahead, time not placed on record. McNulty claimed foul on Waller; Waller claimed foul on Lee. Race ordered to be run over again; Lee and Waller refuse; walk over for McNulty in 25s. Only unpleasantness of the day.

Two-mile walk—Eldridge, Columbia, 16m 33s; Watson, College City N Y, 16m 43s.

Hurdle race, 120 yards, 10 hurdles—Pryor, Columbia, 21 3-5s; B Hughes, Univ Pa, '80, second.

Throwing hammer—Larkin, Princeton, 76ft 9in; Blackwell, same college, 75ft 10in; Ridabock and J H Montgomery, Columbia; J D Wilson, Dartmouth.

Hundred yards Dash—F J Duffield, Princeton '76, 11 1-5s; L H Geyelin, Univ Pa, '77.

One-mile walk—G D Parmley, Princeton, '76, 9m 31⅛s; E T Weed, College City N Y, '77.

DARTMOUTH SPORTS.—The successful competitors in the athletic games at Dartmouth College, May 15 and 16, were as follows:

Half mile run, C. H. Cogswell, of North Easton, Mass., 2m. 16s.; hundred yards dash backwards, W. Warner, Jr., of Tecumseh, Ala., 16s.; one mile walk, J. E. Horn, of Dover, N. H., 8m. 15⅝s.; one mile run, A. G. Lombard, of Franklin, N. H., 5m. 34s.; pole vaulting, G. S. Sloane, of Washington, D. C., 7ft. 5in.; running long jump, J. B. Gerould, Keene, N. H., 16ft.; standing long jump, F. W. Shattuck, Felchville, Vt., 11ft. ½in.; quarter mile race, C. H. Cogswell, North Easton, Mass., 58⅛s.; running high jump, Thomas Flint, Jr., San Juan, Cal., 5ft.; sack race, 100 yards, F. W. Shattuck, Felchville, Vt., 32⅛s.; three-legged race, 100 yards, Danforth and Sloan, 14s.; throwing base-ball, J. B. Gerould, Keene, N. H., 353ft. 9in.; potato race, five-sixths of a mile, W. E. Badger, Concord, N. H., 31⅛s.; two hundred and twenty yards dash, Thomas Flint, Jr., San Juan, Cal., 24⅝s.; hop, skip and jump, W. M. Mason, Concord, 35ft. 4in.; three mile walk between C. S. Dutton, of Norwich, Vt., and J. H. King, of Malone, N. Y., was a tie; time, 29m. 6s.; horizontal bar, Oscar Mickel, Albany, N. Y.; three mile run, A. G. Lombard, Franklin, N. H., time, 19m. 8s.; hurdle race, 120 yards, eleven hurdles, W. E. Badger, Concord, 21⅛s.; one hundred yard dash, final heat, G. H. Danforth, Dover, N. H., 10⅛s.; consolation race, one quarter of a mile, open to all contestants who had won no prize, G. W. Spring, Lebanon, 1m. 1⅛s. The sports concluded with a Rugby match game of football between two picked elevens, H. S. Dewey, of New York city, captain of reds, and G. E. Thompson, of Dover, N. H., captain of blues. Neither side made a point in the given time; declared a draw.

ST. LAWRENCE UNIVERSITY.—The annual field day sports resulted as follows:

Running jump won by J. V. Witherbee, 17ft. 3in.; standing high jump, A. A. Rice, 4ft. 1in.; one hundred yards dash, J. V. Witherbee, 12s.; throwing base-ball, 272ft.; standing three jumps, G. R. Malby, 33ft. 5½in.; throwing hammer, D. Lamphear, 60ft.; one mile walk, G. Barnes, 10m.; one hundred yards backwards, J. V. Witherbee, 17s.; standing jump, J. L. Heaton, 12ft. 3in.; half mile run, H. L. Robinson, 2m. 31s.; potato race, H. L. Robinson, 3m. 5s. (25 potatoes one yard apart); three-legged race, 100 yards dash, 15s.; rope pull between departments of the university was won by the Theological Department.

POLO.—The sports attending the opening games at the grounds, Fordham, last Saturday, were introduced by a football match between elevens of Columbia and Fordham freshmen, the teams being made up as follows: Columbia—J. D. Crane, capt.; R. Combs, T. Patten, T. J. Brereton, F. W. Reid, P. Treman, W. Forster, R. G. Angell, M. Undermeyer, G. Rawson, H Muller. Fordham—J. Davidson, captain; Percy Morgan, J. B. Devoe, J. Ammelung, L. Camman, H. Herrich, Ch. Gibbons. L. Gibbons, P. J. Hoyt, J. Camp, W. Coffin. In the half hour allowed, Fordham secured two South-downs. A

game of lacrosse followed, the players being: New York—E. C. La Montaigne, captain; H. F. Ficken, F. E. Randall, R. La Montaigne, E. Merritt, H. P. Montant, H. Inman, T. M. Mitchell, W. C. Hall, W. B. Dowd, M. T. Pyne, G. H. Hammond. Ravenswood—Ed. Cluff, captain; W. P. Ritchie, A. P. Ritchie, J. L. Smith, C. Smith, A. G. Goldsmith, G. B. Wilson, R. Wilson, F. Gutterson, J. A. Nicholls, R. Slater, R. Graham. Some exciting playing was witnessed, but neither side made a goal in the time allotted to this game, and the polo players were next being matched as follows: Reds—Harry Oelrichs, A. Belmont, Jr.; H. Austin. Blues—Hermann Oelrichs, F. Griswold, B. Purdy. In the two matches the reds and the blues secured three goals each. There was more foot-ball, with a goal and a South-down for Columbia, and a dispute having subsequently arisen, the match is to be played over again. The Ravenswood Lacrosse Club having secured two goals to the New Yorkers one, carried off the silver cup.

—Gen. Grant and the Prince of Wales were among the spectators at a game of polo in the Bois de Boulogne last week.

PEDESTRIANISM.—George Ouyon, who was defeated by Harriman in the late walking championship matches, is to meet his rival again at Chicago, August 9 and 10 next.

LONG DISTANCE WALKING.—Another series of long distance walking has been arranged, the amateur walk being twenty-five miles, and the professional of forty-eight hours' duration. The winner of the former will receive a gold stop watch, while the prizes in the latter are $350 and a champion belt to the first, $200 to the second, $100 to the third, and the fourth to save his entrance. The tournament will take place on June 6, 7, 8, at the American Institute.

O'LEARY.—The world's champion long distance walker has returned to Chicago, where at the solicitation of friends he will probably give a walking exhibition. New York will be visited in turn, and we may see for ourselves how the thing is done. O'Leary goes to the Paris Exposition.

BOSTON'S LACROSSE CLUB.—The game of lacrosse is growing in popular favor. Boston's new club, the Union Lacrosse Club, went into practice the present week. The club numbers among its members players from the Shamrocks, of Montreal, Torontos and Ontarios. It is proposed to engage the New York players in a match June 29.

—The Harvard freshmen have organized a lacrosse club.

STATEN ISLAND CRICKET CLUB.—A club game was played May 18, with the following score:

W. M. DONALD'S SIDE.		HARVEY'S SIDE.	
Marsh, retired	32	Harvey, b. Marsh	21
Brittain, c. Henshaw, b. Stevens	4	Stevens, b. J. Eyre	6
Roberts, b. Harvey	0	Sprague, b. Donald	4
Donald, c. Stevens, b. Harvey	2	Ronaldson, retired	23
McKeon, retired	3	Taylor, c. Sprague, b. Kessler	1
M. Eyre, c. Sprague, b. Harvey	4	Duer, c. Sprague, b. J. Eyre	2
J Eyre, not out	3	Henshaw, run out	3
Kessler, b. Harvey	0	Jarvis, not out	8
Byes	5	Wides	4
Total	53	Total	73

—The St. George's and the Philadelphia Club play a match game on Decoration Day.

—The cricket players of St. Louis, Mo., are organizing new clubs and renewing the interest of the old ones. A number of games are arranged for the season.

BASE BALL GAMES FOR MAY.—The following are the model games for the past half month:

May 1	Boston vs Providence, at Providence	1—0
May 3	Star vs Buffalo, at Syracuse	1—0
May 7	Live Oak vs Cricket, at Lynn	1—0
May 11	Indianapolis vs Milwaukee, at Indianapolis	1—0
May 8	Amherst vs Clipper, at Amherst	2—0
May 3	Tecumseh vs Auburn, at Auburn	2—1
May 4	Springfield vs Amherst, at Amherst	2—1
May 7	Erie vs Forest City, at Cleveland	2—1
May 8	Hornell vs Utica, at Utica	2—1
May 9	Milwaukee vs Indianapolis, at Indianapolis	2—1
May 10	Lowell vs Buffalo, at Lowell	2—1
May 13	Manchester vs Buffalo, at Manchester	2—1
May 7	Milwaukee vs Indianapolis, at Indianapolis	2—2
May 1	Star vs Utica, at Syracuse	3—0
May 9	Buffalo vs Lowell, at Lowell	3—0
May 14	Tecumseh vs Manchester at Manchester	3—0
May 1	Hornell vs Live Oak, at Lynn	3—1
May 1	Rochester vs Springfield, at Springfield	3—1
May 2	New Bedford vs Hornell, at New Bedford	3—1
May 2	Madison Freshmen vs Seniors, at Hamilton, N. Y.	3—1
May 6	Chicago vs Indianapolis, at Indianapolis	3—1
May 6	Buffalo vs Pittsfield, at Pittsfield	3—1
May 11	Harvard vs. Princeton, at Princeton	3—1
May 8	Westboro vs Worcester, at Worcester	3—2
May 8	Live Oak vs New Bedford, at New Bedford	3—2
May 8	Providence vs Boston, at Providence	3—2
May 4	Utica vs Buffalo, at Utica	3—3
May 8	Pittsfield vs Springfield, at Pittsfield	3—3
May 8	Brooklyn vs Alaska, at Brooklyn	3—3
May 14	Worcester vs Westboro, at Worcester	3—3
	TEN INNINGS.	
May 7	Milwaukee vs Indianapolis, Ind	2—2
May 4	Utica vs Buffalo, at Utica, N. Y.	3—3
May 7	Racine College vs Northwest University, at Evanston, Wis	5—1
May 9	Madison University vs Hamilton College, at Clinton, N. Y.	6—5
May 9	Rochester vs Utica, at Rochester	8—7
May 2	Lowell vs Cricket, at Lowell	10—6
	ELEVEN INNINGS.	
May 7	Meriden vs New Haven, at Meriden	4—3
May 13	Cricket vs Utica, at Utica	6—4
	THIRTEEN INNINGS.	
May 11	Rose Hill vs Athlete, at St. John's College, Fordham	6—5
	FOURTEEN INNINGS.	
May 14	Worcester vs Westboro, at Worcester	3—2
May 11	Lowell vs Tecumseh, at Lowell	11—9
	FIFTEEN INNINGS.	
May 7	Live Oak vs Cricket, at Lynn	1—0

The Stars vs. Uticas, at Utica last Saturday, tied on 4 at close of the ninth inning. Six more innings were necessary to decide the game, when the score stood, Stars, 7; Uticas, 6.

—A Boston bicycle rider died of heart disease while driving his vehicle at a rapid pace.

—The Yonkers Lyceum games take place on the 30th inst.

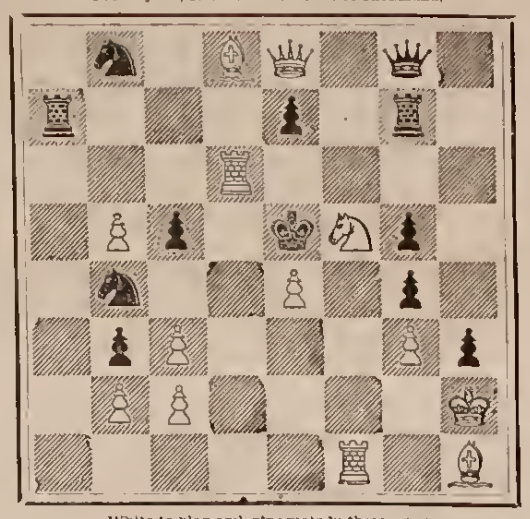
☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 17.

Tourney set, No. 13. Motto: On to Richmond.



White to play and give mate in three moves.

SOLUTIONS TO PROBLEMS—NO. 13.

1—B-K4	1—R tks B	1—	1—P tks B
2—Q-Q3 ch	2—P tks Q	2—R-Q6 ch	2—Kt-Q4
3—P mates		3—Q mates	Other variations

PROBLEM NO. 14.

1—Kt tks B P	1—Any
2—Mates	

PROBLEM NO. 15.

1—Q-B8	1—K tks Kt
2—Q-K B5	2—K-K6
3—Q-K B2 mate	Other variations

PROBLEM NO. 16.

1—S-Q S	1—Any
2—Mates	

The following are variations translated from the *Handbuch*:

Game No. 59.—PETROFF DEFENCE.

White.	Black.	White.	Black.
1—P-K4	1—P-K4	9—B tks P	9—Castles
2—Kt-K B3	2—Kt-K B3	10—Kt-K5	10—P-Q B3
3—Kt tks P	3—P-Q3	11—Kt-Q B3	11—Kt-Q2
4—Kt-K B3	4—Kt tks P	12—B-K3	12—Kt-K13
5—P-Q4	5—P-Q4	13—B-Q3	13—Kt-Q4
6—B-Q3	6—Kt-K B3 (a)	14—Q-K2	14—B-K3
7—Castles	7—B-K2	15—P-K B4	15—P-K B4
8—P-Q B4	8—P tks B P	White has the best game.	

NOTES.

(a) 6—Kt-K B3 or 6—Kt-Q3 is disadvantageous.

Game No. 60.—PETROFF DEFENCE.

The first five moves are the same as in the above game:

White.	Black.	White.	Black.
6—B-Q3	6—Kt-Q3	10—Castles	10—Castles
7—B-K B4	7—B-K3	11—Kt-Q2	11—Kt-Q2
8—P-Q B3	8—B-K2	12—K R-K	12—P-Q B4
9—Q-Q Kt3	9—P-Q Kt3	Even game.	

Game No. 61.—PETROFF DEFENCE.

The first five moves are the same as above:

White.	Black.	White.	Black.
6—B-Q3	6—Kt Q B3	10—Q tks Kt	10—B tks B
7—Q-K2	7—B-K B4 (a)	11—Q tks B	11—Castles Q R
8—Kt-Q2	8—Q K2	Even game.	
9—Castles	9—K tks Kt		

NOTES.

(a) If 7—Q-K2, 8—P-Q B4 [Castles then Kt-Q3], 8—Kt-K B3; 9—B-K3.

Game No. 62.—PETROFF DEFENCE.

The first six moves are the same as in the preceding game:

White.	Black.	White.	Black.
7—Castles (a)	7—B-K2	11—Q tks Kt P ?	11—B Q4
8—P-Q B1 (b)	8—Kt-K B3	12—B tks P	12—Kt-Q R4
9—P-K R3	9—B-K3	13—B-Kt5 ch	13—P-Q B3
10—Q-Q Kt3	10—P tks B P	Black has a winning game.	

NOTES.

(a) If 7—P-Q B4, 7—B-K Kt5 ch; 8—B-Q2, 8—Kt tks B ch; 9—Kt tks Kt, 9—Castles; 10—Castles, 10—B tks Kt; 11—Q tks B, 11—B Q Kt5, and Black has the best game.

(b) If 8—R-K, then 8—Kt-Q3, or still better, Kt-K B3.

SOLVERS' TABLE.

The following contains the number of solutions—but not duals and variations—received from different solvers up to May 17, 1878. Several of our solvers have, of late, much to our surprise, sent in incorrect solutions:

G R, Philadelphia, Pa, 14; Waldman, Rocky Hill, N J, 14; E H W, New Haven, Conn, 16; Rev L W M, Princeton, N J, 16; W B, Waterbury, Conn, 17; Wm Mylchrist, Middletown, Conn, 10; K H S, Holyoke, Mass, 16; Prof D S Jordan, Irvington, Ind, 9; Prof C Jacobus, New Brighton, Pa, 7; E I Bradford, Webster, Mass, 6; N D Mills, Savannah, Tenn, 9; Rook, N Y City, 6; Franklin Benner, Astoria, L I, 12; W A Briggs, Montpelier, Vt, 13; Wm Parker, New Britain, Conn, 8; Richard Fairly, Chatham, N B, 2; Geo Noble, Fishersville, Canada, 1; Chas C Hubbard, Cambridge, Mass, 11; G K Andrews, Mahonington, Pa, 6; Geo A Lee, 1; Harry M Wheelock, Red Wing, Mich, 8; Status, Boston, Mass, 15; A Taylor, Philadelphia, Pa, 1; Incog, Boston, Mass, 13; F A N, New Orleans, La, 15; A M J, Galveston, Texas, 13; Echo, Brookline, Mass, 8; Commodore C W Pickering, Portsmouth, N H, 1; H E Dillenbeck, Fort Plains, N Y, 11; ——, New Haven, Conn, 8; C E Minard, Syracuse, N Y, 4.

We shall esteem it a favor if correspondents notify us of any errors in the above table, which we will gladly correct if our correspondence file contains the uncredited solutions.

—"Time and tide wait for no man" is well known as a saying, and in our case, so far as this chess department is concerned, of late courts of law and fishing would not wait, and in consequence, our readers have been more than indignant. On this account, we shall try to propitiate with an extract from the *Westminster Papers* for May. This should get us into their good graces again:

"The FOREST AND STREAM is giving a series of the chess openings translated from the *Handbuch*, a very useful work, indeed, and one for which Mr. Kunkie deserves the thanks of all English speaking amateurs."

Game Bag and Gun.

MAY IS A CLOSE MONTH FOR GAME.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game.—Wilson Snipe, $2.50 per dozen; bay birds, large, $3 per dozen; small do, 20 to 75 cents; wild pigeons, flights, $1; stall fed do, $1.50; Philadelphia squabs, 25 cents; wild do, 50 to $1.

Poultry.—Philadelphia and Bucks County dry picked chickens, 25 cents per pound; do fowls, 18 cents; do turkeys, 18 cents; do ducks, 18 cents; State and Western chickens, 15 cents; do turkeys, 15 cents; do fowls, 14 cents; do ducks, 15 cents; spring chickens 30 to 35 cents.

THE SHOOTING SEASON.—We are in receipt of letters almost every day containing most favorable reports of the prospects for the coming season's sport. The increased vigilance of game protective associations has had its good results, and to this must be added the very favorable weather of an unusually mild winter. We shall expect to chronicle in our game columns next fall reports of uniformly good sport.

CONNECTICUT—*Waterbury, May* 14.—We will have good woodcock shooting here this season. A gun club has just been started here. F. V.

KENTUCKY—*Stanford, May* 17.—Flattering indications of a quail crop which will delight even a greedy pot-hunter should nesting season prove favorable. Cold weather and high water has put a stop to the fishing. KENTUCKIAN.

NORTH CAROLINA—*Lilesville, May* 11.—No shooting here now save for squirrels, which as mulberries and wheat ripen grow fat. From April 1 to October no game bird or wild turkey can be shot "according to law" in this (Anson) county, and with no act of his life is your correspondent more satisfied than that of originating the movement which led to the passage of the law. It has since been adopted by several counties. Yes, the hunting season is over, and Alto seems, by her wistful, longing look, as she lies there in her favorite corner, to know that possibly she and her master may not live to see another. Both are growing old—their best days are gone, and when she dies none will be left like unto her. She never went to a "bench show," never took a "prize," but, even though she will not retrieve, and will sometimes mash and chaw a bird, she can, even yet, hunt over more ground, flush fewer birds, and stand more steadily and magnificently on a "point" than any dog she ever hunted with. When she dies "Percy's spur will grow cold," and that good old 13-gauge muzzle-loader—which wouldn't be exchanged now for a cart-load of breechers—will be honorably and decorously laid away and willed to the owner's oldest boy! E. R. A.

ONE WAY TO HUNT TURKEYS.—A correspondent in Huntington, Tenn., contributes this remarkable method of hunting wild turkeys, as given in Bigland's "History of Birds, Fishes, Reptiles and Insects:"

"The natives of America hunt wild turkeys with a dog, driving them to take shelter in a tree, where they sit quite spent and fatigued until the hunter comes up with a long pole and knocks them down one after another."

OHIO—*Hudson.*—Woodcock are very plenty this season, more so than usual. E. B. B.

ILLINOIS—*Charleston, May* 10.—Ducks are scarcer on the prairies this spring than I have ever seen them before. Snipe and brant in moderate numbers. The geese, plover and woodcock and jacksnipe very scarce. Rabbits by the thousand. The game in the timber is plentier than I have seen it for several years—such as quail, ruffed grouse, turkey and squirrel. There is a stray deer to be seen occasionally. Joseph Waldrupe killed the last one; it weighed 150lbs, and was about two years old. J. B. D.

—Mr. Goodenough, of Manistee, Mich., has during the spring trapped and killed five full-grown bears. And it has been a poor season for bears too.

UTAH—*Salt Lake City, May* 8.—Our game law has been amended to allow the killing of quail or grouse from Aug. 15 to March 15; wild ducks, otter or beaver from November to April, and elk, deer, mountain sheep or antelope from Aug. 1 to January. The old law prohibited killing grouse before Sept. 15. Pinnated grouse are very abundant, and so are geese and ducks, staying here the year round. They are killed in great numbers at the mouth of Bear River and Utah Lake. C. S. H.

CALIFORNIA—*Folsom, May* 6.—We have had no snipe shooting this spring, although I have heard of some good bags being made on the borders of the overflowed lands near Sacramento. Glass balls are now the rage. Doves will be large enough to shoot about the middle of June; they usually give us good sport with little exertion. Much running would be almost impossible with the mercury high in the nineties. Our style of shooting doves is for three or four to take a team, about 5 P. M., and drive out three or four miles to some point where the birds are passing from their feeding grounds to to their roosting places, with ten or twenty pounds of ice and a bucket of water, three or four bottles of claret or "Budweiser;" take a stand and go to shooting, the birds passing in such numbers that you can use fifty to seventy-five shells in a couple of hours. They fly quite as rapidly as a teal duck, so that it takes a good shot to make a respectable bag. W. F. J.

A CALIFORNIA MARKET SHOOTER.—Mr. L. W. Smith, a resident of Merced, Merced County, Cal., shows the following as the result of the past season's shooting: Mr. Smith killed with a No. 4 gauge gun, weighing 22 pounds, between Sept. 15, 1877, and April 21, 1878, 6,380 geese, 5,956 ducks, 367 sand hill crane, and 60 swan. He is a regular gunner, whose business it is to shoot for the Sacramento market.

CAPTAIN BOGARDUS.—We had the pleasure of a visit from Captain Bogardus. On Saturday the captain will shoot at Binghamton, N. Y. On the 30th Captain Bogardus and Eugene will leave in the City of Montreal for England. The great event which calls the American champion to England is to meet Mr. Pennell in the match for £400, to be shot sometime toward the close of June. The 1,000 glass ball matches against time will be repeated by the champion in London, Liverpool and Paris.

SOCIAL GUN AND RIFLE CLUB.—This new club in Philadelphia will take in, as its name designates, both the shot gun and rifle. The President of the club is Dr. Lloyd W. Bickley, and the Secretary F. Perot Ogden, Esq., with a large list of member composed of the leading gentlemen and sportsmen of Philadelphia. We feel very certain that the Social Gun and Rifle Club will occupy a prominent position. We are glad to learn that rifle practice will commence at last in Philadelphia.

PIGEON MATCHES.

NEW YORK—*Newark, May* 14.—B trap, 28 yards rise, glass balls. The following are the scores:

Newark Club.

Miller	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Pomeroy	0 0 1 1 1 1 1 1 0 1 1 0 0 0 0—8
Duffey	0 0 1 1 0 0 1 1 1 0 1 1 0 0 0—7
Palms	1 0 1 1 1 1 0 0 1 1 0 1 1 0 0—9—38

Clifton Club.

Briggs	1 1 1 1 0 1 1 0 1 1 1 1 0 0 0—10
Goodwin	0 1 1 1 1 1 1 1 1 1 1 1 1 1 0—13
Archer	0 1 1 0 1 1 1 1 1 0 1 1 1 1 0—11
Lay	1 1 1 0 1 1 1 1 1 1 0 1 1 1 1—14—48

Contest for oil painting, B trap ten glass balls, 18 yards rise. Score:

Goodwin	1 0 1 1 1 1 1 0 0 1—7	Varwick	1 0 1 0 1 0 1 1 0 1—9
Ellis	0 1 0 1 1 1 1 0 1 0—6	Archir	1 1 1 0 1 1 0 0 1 1—7
Briggs	1 1 1 1 1 1 1 1 1 0—9	Sneckle	1 0 1 1 1 1 1 1 1 1—9
Raines	0 1 0 0 1 0 1 0 1 1—5	Miller	1 1 1 1 1 1 1 1 1 1—10

LONG ISLAND.—Team match; Brown's Driving Park, May 16; American rules; 21 yards rise:

Allen Nichols	1 1 1 1 * 1 1 1 1 1 1 1 1 1 0—13
W R Henderson	0 1 1 1 1 1 0 0 1 1 1 1 0 0 1—10—23
Geo Ridley	1 1 1 0 1 1 1 0 0 1 1 1 1 0 1—11
Fred Walters	1 1 1 0 0 * 0 1 1 1 1 0 1 1 1—10—21

Clyde, N. Y., May 16.—Bogardus trap, 18 yards rise, glass balls:

Andrews	1 0 1 1 1—4	York	1 1 1 0 1—4
Hudson	1 1 1 1 1—5	Westbrook	1 1 1 1 1—5
Smith	0 1 1 0 0—2	Jones	0 1 1 1 0—3
Hill	1 1 0 1 1—4	Helmer	1 1 1 1 0—4
Whitbeck	1 0 0 1 1—3	Dayton	1 1 1 1 1—5
Miller	1 1 1 1 1—5	Elliott	1 1 1 1 1—5

Ties on five—21 yards rise.

Miller	3	Dayton	0
Hudson	3	Elliott	1
Westbrook	2		

Ties on three.

Hudson	2	Miller	3

Ties on four.

Andrews	2	Hill	3
York	1	Helmer	1

Ties on three.

Whitbeck	3	Jones	1

Score:

Hudson	1 1 1 0 0—3	Wurts	1 1 0 0 0—2
Miller	1 1 1 1 1—5	Helmer	1 1 0 0 0—2
Elliott	1 0 0 0 0—1		

Ties on five.

Miller	3	Dayton	2

JERSEY CITY HEIGHTS GUN CLUB—*Marion, May* 08, 1878.—Regular competition for twenty-ball badge; three Bogardus traps, Bogardus rules to govern:

J Cole	14 yds	1 1 0 1 1 1 0 0 0 1 1 1 1 0 1 1 0 0 0 1—12
A Heritage	18 "	0 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1—16
J B Bardett	19 "	1 1 1 1 0 1 1 1 1 1 1 1 0 1 0 0 0 0 1 1—14
A McCool	14 "	0 0 1 1 1 1 1 0 0 0 1 1 1 0 1 0 1 0 0 1—11
F Cummins	16 "	1 0 1 0 1 1 1 1 1 1 0 0 0 0 1 1 0 0 1 1—12
J Harrison	17 "	1 1 1 1 1 1 1 1 1 0 0 0 0 1 1 1 1 1 1 1—16
P W Levering	16 "	0 0 0 0 0 1 1 0 1 1 1 0 1 0 0 0 1 1 1 0—9
Wm Hughes	18 "	0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1—17
J A Nan Gtider	15 "	0 1 1 0 0 1 1 0 0 0 0 1 1 1 0 1 0 1 0 1—10

JACOBSTAFF.

LOUISVILLE GUN CLUB—*Louisville, Ky., May* 17.—Match for club prizes; 40 birds, 20 single, 10 double rises; to be shot at in four matches, 10 birds each match; present match at 10 single birds, 23 yards rise; birds strong flyers:

R P Bonnie	12 cal	1 1 1 0 0 1 0 1 1 1—7
J H Bedford	10	1 0 1 1 0 1 1 0 1 0—6
L G Tucker	12	1 0 1 1 1 0 0 1 1 0—6
R H Harding	10	0 1 1 0 1 0 1 1 0 1—6
W J Watkins	10	0 1 1 0 1 1 1 1 0 1—7
J M Barbour	12	1 1 1 1 1 1 1 1 1 1—10
C W Moore	10	1 1 1 1 0 1 1 1 1 1—9
P B Fields	10	0 1 1 0 1 0 1 1 1 0—6
T W Thompson	12	0 1 1 1 1 1 1 0 1 1—8
W R Fox	10	0 0 0 1 1 0 0 0 1 1—4
E H Cary	10	1 0 0 1 1 1 1 1 1 0—7
T H Hastings	10	1 1 1 0 0 1 1 1 1 0—7
W W Watson	10	1 1 1 1 1 1 1 0 1 1—9
S Hutchings	10	1 1 1 1 1 1 0 1 0 1—8
Jos Griffith	12	0 1 1 0 1 1 1 1 1 1—8
J W Gaubert	12	1 0 1 1 0 0 1 1 1 0—6
John E Green	12	1 1 1 1 1 1 1 1 1 0—9
H S Gilmore	12	1 1 1 1 1 1 0 1 1 1—9
J V Cowling, Jr.	10	0 1 1 1 1 0 0 1 1 1—7
P S Campbell	12	1 1 1 1 0 1 1 0 1 1—8
E Y Peak	12	0 0 1 0 1 1 0 1 1 0—5
J Watts Kearney	1	1 1 0 1 0 0 1 0 0 0—4
T S Randall	[illegible]	0 1 1 1 0 1 0 1 1 1—7
L W Noel	10	0 0 0 0 0 0 1 0 1 1—3
W W Thompson	12	1 0 1 1 1 1 1 1 1 1—9
M S Fishback	10	1 0 0 1 1 1 1 1 0 1—7
J O Barbour	12	1 0 1 1 0 1 1 1 1 1—8
P F Green	12	0 0 0 1 0 1 1 1 1 0—5
J H Tyler	12	1 1 0 0 1 1 1 0 1 0—6
C Merriweather	10	0 1 0 0 0 1 1 0 1 0—4

Private match, sweepstakes; 3 pairs double birds:

10 guns, 20 yards.			12 guns, 18 yards.		
R P Bonnie	12 cal	11 01 10—4	Jos Griffith	12 cal	11 11 11—6
J V Cowling, Jr.	10	11 11 10—5	W Thompson	12	11 10 01—4
J E Green	12	00 00 10—1	J H Bedford	10	11 01 10—4
H S Gilmore	12	10 00 11—3	P F Green	12	00 11 00—2
S Hutchings	10	01 11 11—5	L G Tucker	12	10 01 11—4
Watts Kearney	10	01 10 00—2	J H Tyler	12	10 00 01—2
			T Thompson	12	01 11 10—4

Cowling and Hutchings divided second money.

MAI FEST—*Waco, Texas, May* 10.—For association prize of $50, open to all clubs in the State; 18 yards rise; Huber revolving trap.

Tatham Club.

E Early	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1—19
E McCall	1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 0—17
C C McCulloch	1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1—18
John Thompson	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—19
W S Almond	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20—93

Washington Club.

A McCulloch	1 1 1 0 1 1 1 1 1 1 0 0 0 1 0 1 1 1 1—15
W T Lane	1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—18
G B Gerald	1 1 1 0 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1—16
C M Downs	1 1 1 0 1 1 1 1 0 1 1 1 0 1 1 0 1 0 0—14
C M Hobby	1 1 1 0 1 1 0 1 1 1 1 1 0 0 1 1 1 1 1—16—81

H. M. T.

The Waco Club withdrew.

—The Philadelphia Gun Club has challenged the Narragansett Gun C

CHICAGO—*Dexter Park, May* 15.—Single birds, 21 yards:

Abner Price	1 1 1 1 1 1 1 1 1 1—10
Fred Kimble	1 1 1 1 1 1 1 1 1 1—10
S H Turrill	1 1 1 1 1 1 1 1 1 1—10
W W Foss	0 1 1 1 1 1 1 1 1 1—9
J J Gillespie	1 1 0 1 1 1 1 1 1 1—9
Charles Morris	1 1 1 1 1 1 0 1 1 1—9
C E Willard	1 1 1 1 1 1 1 0 1 1—9
O H Roche	0 1 1 1 1 0 1 1 1 1—8
W T Johnson	0 0 1 1 1 1 1 1 1 1—8
H F Aledhardt	1 1 0 1 1 1 1 0 1 1—8
Charles Kern	1 1 0 0 1 1 1 1 1 1—8
G Mosher	1 1 1 1 0 1 1 0 1 1—8
C E Felton	1 1 1 1 1 1 0 1 0 1—8
Abe Kleinman	0 1 1 0 1 1 1 0 1 1—7
D E Woodman	1 1 1 1 1 0 0 1 0 1—7
W B Wilcox	0 1 1 0 0 1 0 1 1 1—6
R B Organ	0 0 1 1 0 1 1 0 1 0—5

In shoot off at 26 yards, Turrill and Kimble tied again on 5; again, at 31 yards, Turrill killed 4 out of 5 and won first. Ties on nine divided by Gillespie and Willard, who killed 4 each at 26 yards. Ties on 8 won by Felton with 5 straight; ties on 7 won by Woodman with 2 out of 5 at 31 yards.

—A match at Denver, Col., glass balls, between J. P. Lower, with rifle, at 18 ft., and W. A. Babcock, with shot-gun, at 18 yards, resulted in favor of former; score, 40 to 21.

—The Logans Gun Club, Logansport, Ind., hold a tournament May 28, 29 and 30.

IN A HAIL STORM.—Pigeon Match at Keokuk, Ia.; rain and hail falling; no conditions given:

J N Welch—1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—45.

J Worthen—1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 0 0 1 1—42.

Dead out of bounds—Welch, 1; Worthen, 1. John Shuler was referee.

[*Several scores unavoidably deferred until next week.*]

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

C. A. ROBB.—For snipe, pheasant and partridge shooting get a setter

MONROE, S. C.—For powder measure see Answers to Correspondents, May 2, 1878.

B. C. M., London, Ont.—For live quail address Reiche Bros., Chatham st., New York.

F. F., Columbus, Ohio.—Please give me address of the manufacturer of the Meek Reel? Ans. B. C. Milam, Frankfort, Kentucky. See advertisement.

W. E. B., Boston.—The names of Adirondack guides are legion. Tell us what part of the woods you wish to go to. Your other question is also indefinite.

J. T., Philadelphia.—Noticed an advertisement of Irish setter for sale by ——. Is he reliable as regards the pedigree of dogs? Ans. We believe him to be reliable.

CHICKENS, Sag Harbor, L. I.—Our game market reports are furnished to us by Knapp & Van Nostrand, of Washington Market, this city. You may send your chickens to them.

R. D. M., Cleveland.—Where can I get paper pin-fire cartridges for a .28 inch double barrel rifle? Can they be got in New York? Ans. Cannot be had for rifles in New York.

MADAM M.—You can take your children to the Bradner House, Greenwood Lake, with perfect confidence. Terms $8 per week. There is a farm of 116 acres attached to the house.

H. E. K., Manchester.—From whom can I obtain a well bred beagle hound? Ans. Address A. F. de Navarre, East Washington Place, New York, and S. J. Martinet, Jr., Baltimore, Md.

GREASER, Baltimore.—Your pheasant is the ruffed grouse (*Bonasus umbellus*); a bird weighing from 1½ to 2¼ pounds. For description and habits see "Hallock's Sportsman's Gazetteer."

SCALES, Niantic, Conn.—June is a close month for black bass in Connecticut, except in the Connecticut and Farmington Rivers, in which they may be taken at any time and in any way.

G. E. M., New York.—There is a good hotel near the upper iron works at Lake Sanford in the Adirondacks. Last week by substituting "no" for "a" (as written) the printer reversed our statement.

R. D., Warren, Pa.—Will you please inform me what will stain walnut dark? Ans. Collect lampblack from a lamp or candle on a piece of slate. Scrape off the deposit, mix with French polish and apply with brush.

E. G.—Will you be kind enough to inform me what are the best rules published on target practice, and where can I obtain them? Ans. You will find in E. A. Perry's Modern Observations on Rifle Shooting, second edition, what you want.

H. K., Wilmington, Vt.—Will you please inform me through the columns of your valuable paper the name of the best work on fish culture? Also, where it may be obtained, and price? Ans. Livingston Stone's "Domesticated Trout." Osgood & Co., Boston; $2.

R. E. S., Newark.—Can you recommend anything for a rough coat on a setter one year old? Ans. Nothing but regular and careful feeding and plenty of exercise. Just at this time, when the animal is getting on his spring suit, he may soon change for the better.

J. K., Boston.—You will find in the vicinity of Moosehead Lake, deer cariboo, bears, wolves, squirrels, hares, ruffed grouse, ducks, geese, sandpipers, loons and herons. The abundance varies with the season. You will find September and October pleasant months.

J. H. S., Brooklyn.—You will find excellent camping locations in Pa. a little off from the line of the Pennsylvania, or the Erie railroads in Pactor, McKean, Cameron and Clinton counties. Emporium will be a good initial point. Send to these railroads for their summer excursion circulars.

C. BROS., Grand Rapids, Mich.—Can you inform me where a Chesapeake Bay dog can be had, either pup or full grown, say from one to two years of age; the probable cost, etc.? Ans. Address H. E. Johnson, Baltimore, Md. Could not state price. Also, address George Brown, Brooklandville, Baltimore, Md.

S. W. H., Elk City.—I have a pointer pup about 6 months old; had distemper; was taken with jerking of the muscles of left fore leg and shoulder. What will I do for him to effect a cure? Ans. Oftentimes impossible to cure. Give him ⅛th gr. nux vomica three times a day for a couple of weeks and note effects.

PLUVIER, Boston.—The very best work on physical culture that we know of is "A Complete System of Physical Development," by Archibald McLaren, of Oxford University. It is imported by Macmillan & Co., New York, and costs $3.00 or $2.50. There was an excellent article in *Harper's* last month on this subject.

T. O. W., Tyler, Texas.—Have a fine imported setter, a nervous dog. Every spring something appears on his side. It rises to a head, and when opened discharges thin blood and water. Is 3 years old. What can I do for him? Ans. After opening, wash out the sac with a weak lotion of carbolic acid, one part to forty of water, twice a day.

E. M. E., Hancock, N. Y.—What breed of dogs do you consider the best for ruffed grouse? Also, would the same be best for pinnated grouse? Does the cocker spaniel follow the partridge to the tree? Do they raise the bird without giving warning; if so, how? Ans. Pointer or setter equally good. The spaniel gives tongue on raising the bird.

F. J. M., Brooklyn.—What kind of fishing will I find at Fort Hamilton the last of this month? What bait shall I use? Ans. Blackfish, sea bass and striped bass, and possibly bluefish, weakfish and sheepshead; but it will be a little too early for the last three named, although bluefish are abundant around Barnegat. Clams, fiddlers and shrimp.

G. M., Brooklyn.—There exists no publication on the construction of canoes. You will find general information in our back files and in Canoeing in Kanukia, published by Putnam's Sons. Better consult Everson, canoe builder, 485 First st., Williamsburg, or Mr. J. F. West, of Orange, N. J., who has made a specialty of the canvas Qui Vive canoe.

MANSON, Westchester.—Now is a good time to stock your lake with black bass. For method of procuring spawn, fry and breeders consult U. S. Fish Commissioner's Reports for 1872-3, pages 37 and 38. Catch your bass which are now spawning and place them in your pond, and turn loose also a good supply of minnows for them to feed on. Both bass and minnows will increase.

R. M. W., Pomeroy, Iowa.—Please inform me regarding the eggs which I send, through correspondent's column? Ans. We have submitted your eggs to several entomologists, but have not succeeded in finding any one who could recognize them. But little is known of the breeding habits of many of our insects. We will keep the specimens, and if they hatch will notify you.

E. P., New York.—Can trout lines of oiled silk, whose tapering end has become used up, be retapered? It seems to me that where the remaining line is good the makers could splice on a taper of new material. Ans. Yes: they can easily be spliced, but it is better to buy a new line. Use your short line for bait-fishing, tying parcels, splicing rods, and a dozen other like necessities.

C. J. K., Philadelphia.—The dobson is the larva of the *Sciurus latalis*, found in May under stones along the sides of brooks and rivers. It looks like a centipede, but has not so many legs. Is harmless, and is used in the same way that a minnow is used. To waterproof linen lines: Dissolve equal parts of sugar of lead and powdered alum in rain water, and steep your line in it, letting it soak thoroughly.

C. J. S., Boston.—I have a setter pup, nine months old, that has a red bunch on his left eye, in the right hand corner. I was told to get it lanced, but I don't like the idea of using a knife. The dog passes flat worms. What is best to do for him? Ans. Better consult some surgeon in your neighborhood, and let him use the knife if necessary. Give a few doses of areca nut, and follow with castor oil for the worms.

L. A., Mount Carmel, Conn.—Give treatment for distemper in dogs, first stages? Ans. The principles and methods of treatment for distemper in its various stages are too lengthy for Correspondents' Column. They may be summarized thus: Mild alteratives and correctives for stomach and bowels, warmth, fresh air, sustaining broths as food, and, finally, tonics. At some future time we may, possibly, treat the subject in detail.

S. L., Belleville, Ont.—The printer's punctuation made nonsense of our answer to your query last week, and we therefore repeat: You can find good trout fishing in the Eastern Townships; at Michipicoton Island; reached via the Collingwood steamers; in the Nepigon River; all through the Muskoka District, especially in the south branch of the river. Joseph Scott, Gravenhurst, will furnish all desirable information as to the place last named.

C. E. S., Hanover, Me.—For travelling and cruising on the lakes of Maine you will find the Shadow canoe a satisfactory boat for one man, especially if there is "carrying" to be done. For two or three men, and no "carrying" to be done, use a flat bottomed boat, 15ft. long, 5ft. beam. For details of such a boat see issues of Aug. 9 and 20 and Sept. 20 and 27, 1877. A centre-board is better than a keel in small boats. For size see numbers mentioned.

W. O. W., Charlottesville, Va.—Is not the .32 short cartridge just as accurate (for a shorter distance, of course,) as the 32 long in a rifle chambered for the long? If not, what is the difference? Ans. If the short cartridge is put in a long chambered rifle the precision would not be the same as with a properly fitted cartridge. The reason is because in the shorter cartridge the ball if not presented exactly to the axis of the barrel might strip, or be contused.

C. B., Shakopee, Minn.—1. My setter bitch has a fine litter of puppies; one of them must have had a sore on his back, which, from the continual licking of its dam, keeps raw and is enlarging. It is a choice dog puppy, but too young to wean, or I would take it off the dam and let the sore heal up. What can I do? 2. Can the Ditmar powder be procured here in the West? Ans. 1. The licking by dam will do no harm, but occasionally rub in a little tar ointment. 2. No agencies in the West yet formed. In about a month there will be.

YOUNG NATURALIST, Adams, Mass.—1. Has the publishers of Studer's "Birds of North America" stopped issuing that work? 2. In binding the above ought the plates to be all together at the commencement of each volume? 3. What kind of binding would be best for the above work that is cheap, durable and neat? 4. Did you receive my "Scraps," sent Jan. 31, this year? Ans. 1. We do not know the work; better write to the publishers. 2. Probably. 3. Full sheep. 4. We think not.

J. A. T., Newtonville.—1. Ought I to get a good breech-loading gun for $85 (the price of mine)? 2. What is the reputation of ——? 3. Are the patterns I send good? 4. Would you keep the gun as it is, or have it bored to shoot closer? Ans. 1. Yes, certainly. 2. Excellent 3. The patterns you sent are only fair. As you do not mention distance if the targets you send were made at 40 yards it is only passable, if at 30 yards not up to standard. 4. I would keep the gun and have it choked, or rearranged. Your load is right.

F. V., Waterbury, Conn.—1. I want a book to help me in making preparations of North American birds. 2. Do they make good guns at Luttick (*Lubeck*)? 3. A friend can send me a good one from there costing $28. What will the duty be? 4. Do you know —— fine London guns? Ans. 1. Audubon is the best book, but might be too expensive. Try Wilson's Ornithology, published by Bouton, of New York. 2. Could not tell you. 3. Duty would be 35 per cent. 4. Never heard of such a maker. Much obliged for information as to game.

KENTUCKY.—1. Will chilled shot strain or in any way damage full choked barrels? 2. Are either metallic or paper shells dangerous to carry loose in pocket? Which is least dangerous? Ans. Not in the least. 2. Cases of accident are quite exceptional. Have not heard in in fact any positive assertion of explosion of cartridges when carried in the pocket. If by any accident such an explosion, under the circumstances you mention, should take place the paper shells would be the less dangerous because of less resistance to powder.

H. A. T., Boston.—I would like to have some Messina quail, say about $25 worth, but suppose it is too late in the season to send out for any. Do you know of any lots coming in of which the importers would like to let me have a part, I paying, of course, my proportionate part of the cost to about the above amount? Ans. It would be too late this season to import. We believe that next season quite a quantity will be wanted, now that arrangements have been made by us. We should be glad, say about November of this year, to take charge of such an importation. If you will write us then, we should be glad to assist you in such an excellent undertaking. An aggregate of nearly 1,200 have already been ordered by various clubs, among them the West Jersey Game Protective Society and the Lakeville, Conn., Club.

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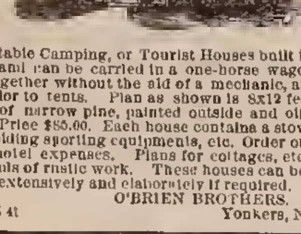

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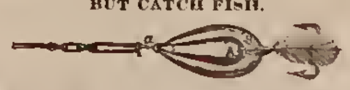

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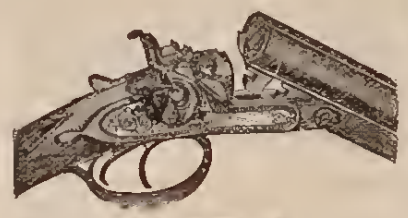

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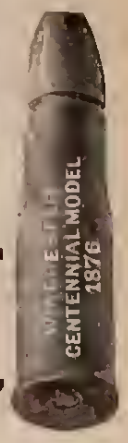

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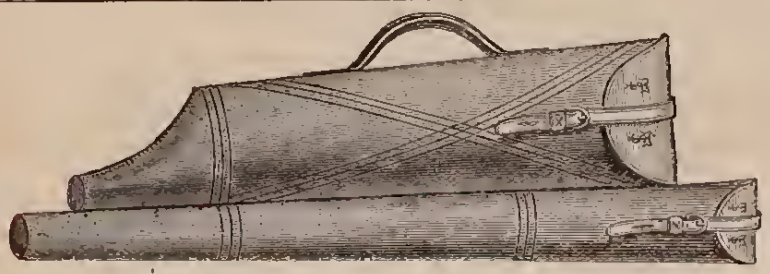

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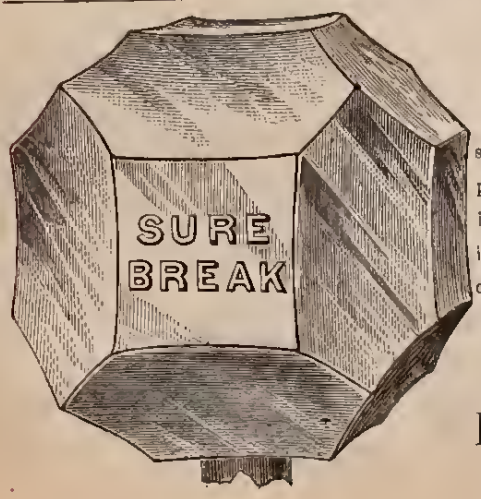

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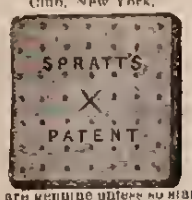

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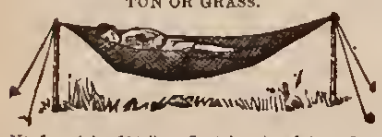

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Not affected by Wind, Rain or Jolting. Burns kerosene safely without a chimney. Throws a powerful light 200 feet ahead. As a DASH LAMP for CARRIAGES it has no equal. Fits on any shape dash or on any vehicle.

PRICE.

Jack and Dash.....$8 00
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C. O. D., with privilege of examination.

WHITE M'F'G COMPANY,
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ESTABLISHED 1822.

WM. MILLS & SON.

Successors to THOMAS H. BATE & CO.

7 Warren Street, New York.

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ALL DESCRIPTION OF

FISHING TACKLE, WHOLESALE AND RETAIL,

FINE SPLIT BAMBOO FLY RODS, $17 to $30 EACH. OUR $18 ROD EQUAL TO ANY $25 ROD IN THE MARKET.

Best enamelled waterproof silk-tapered Fly Line, eight cents per yard. Rubber Click Reels from $2.50 to $8 50 each. **Multiplying Click Reels** for black bass fishing.

The **Perfect Bass Rod**, for fly or bait fishing; brass mounted, two tips, $10; German silver mounted, $12.50 each.

Three-Piece Fine Hand-made Trout Fly Rod, Lancewood Middle-Joint and Tip, $5 each; German silver mounted, with two tips, $8, extra fine quality, $10 each.

Trout and Bass Flies tied to any pattern. Scarlet Ibis, Fergneson, Grizzley King, and all leading Bass Flies for casting and trolling. Trout Flies selected for any locality. Buell's, Mann's, and other makes of Trolling Bait from 25 cents to $1 each.

The "Dobell" or "Helgramite," the new bait for black bass, 50 cents each.

Our New Russia Leather Fly Book, with the "Hyde" clip to keep each fly separate; small size, $3.50; large, $5 each.

H. L. Leonard's Split Bamboo Fly Rods; three-piece, with extra tip and solid German silver reel plate, $30 each. Orvis' Click Reels, $5 each.

OUTFITS FOR TROUT AND BASS FISHING.

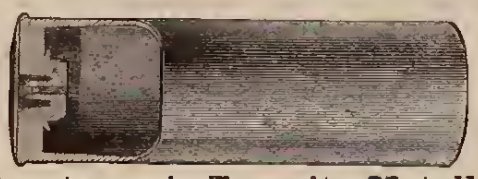
No. 1. Three-piece Trout Fly Rod, lancewood tip, brass click reel, twenty-five yards braided oiled silk, one dozen hooks on gut, one dozen flies and fly case, $5.

No. 2. Fine hand made, three-piece, brass, full-mounted fly rod, lancewood middle-joint and tip, rubber click reel, twenty-five yards braided oiled silk line, one dozen best trout flies, one dozen hooks on gut, leader and fly book, $10. Above outfit, with German silver mounted rod and extra tip, $13 50.

No. 3. Three-piece, brass, full-mounted bait rod; brass multiplying or click reel; twenty-five yards braided oiled silk line, one dozen hooks on double gut, three-feet double leader, $6.50.

No. 4. Extra fine finished, hand-made, three-piece, brass, full mounted black bass rod (suitable for fly or bait fishing), lancewood middle-joint and two tips, wound hard piece, fine multiplying click reel (new pattern), thirty yards best enamelled waterproof line, one dozen hooks on double gut, half oz. bass flies, two double gut leaders, fly spoon, $20. Above outfit, with German silver mounted rod and German silver reel, $25.

A club taking six outfits, one outfit furnished at half price; taking ten outfits, one outfit free. Goods sent by express on receipt of price, or C. O. D. if funds sufficient to defray express charge accompany order. All goods, from the **cheapest to the finest quality**, furnished as low as they can be sold. We shall be pleased to quote prices on any different styles of outfits or single articles that parties may desire.



Hart's Sportsman's Favorite Metallic Shells.

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These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2⅜ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

SHARPS' RIFLES---MODEL 1878.

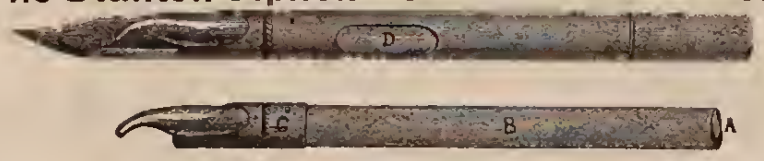
ORDERS FOR THE NEW MILITARY AND LONG-RANGE RIFLE ARE NOW BEING FILLED.

SEND FOR ILLUSTRATED PRICE LIST.

Sharps' Rifle Co., Bridgeport, Conn.

NEW YORK WAREROOMS, 177 BROADWAY.

The Stanton Siphon Fountain Pen Holder.



The Only Practical and Really Useful Fountain Pen-Holder Ever Manufactured.

The only Fountain Pen-holder with a FLEXIBLE SIPHON, so that any size or make of Pen can be used. The only Fountain Pen-holder in which the INK does not come in contact with oxidizable metal, and therefore cannot decompose or coagulate. No spilling of ink can occur in filling, as the tube is filled by suction from any vessel containing writing fluid.

No Inkstand or Special Ink Required.

ALWAYS READY FOR USE.

Is a very handsome and convenient pocket article; is made of strong metal, heavily nickel-plated and polished. Contains sufficient ink to closely write *twenty pages of foolscap;* will feed to the point of the pen until the last drop of ink is exhausted, and being air-tight the ink can neither evaporate nor mould. Is easily replenished, *always perfectly clean* and any steel or gold pen can be substituted for the handsome *Esterbrook Indestructible Golden Pen* furnished with each holder.

Sportsmen will find it a most Convenient Companion when away from home.

Will carry sufficient ink for TEN DAYS' ordinary use. Especially adapted to the use of Doctors, Lawyers, Commercial Travelers, Collectors, Government Officers, Railway Officials, Tourists, and all who can appreciate the immense comfort in always having their own pen and ink with them.

Sent by mail on receipt of 25 cents, with full directions.

STENT & CO., Manufacturers' Agents.

P. O. Box 2,997. **132 Nassau St., New York.**

The Trade Supplied. Send for Catalogue of Useful Novelties.

TATHAM'S

IMPROVED CHILLED SHOT.

American Standard Diameters.

(RED LABEL.)

Gives greater penetration and better pattern than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found **free from shrinkage**, more **spherical**, more **uniform in size**, **harder, heavier** and of **brighter** and **cleaner** finish than any other. SEND FOR CIRCULAR.

TATHAM & BROS., 82 Beekman St., NEW YORK.

Also manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

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Craige's Full-Length Fly Book

with the "Hyde Clip," bound in fine Russia Leather and sewed.

No. 1 book, stiff cover, holding 1 gross flies, $7 00
No. 2 " flexible " " 8 dozen " 5 00
No. 4 " " " " 6 " " 3 75

Sent C. O. D. or upon receipt of price. Steadman's Flea Powder and Areca Nut, each 50 cents per package, postpaid. TEMPLE F. CRAIGE (formerly at W. Holberton's Sportsmen's Emporium), Sportsmen's Purchasing Agent. Office, 95 Maiden Lane, N. Y.

STONE'S

Sporting Emporium.

No. 213 South Fifth Street, Philadelphia.

PARTICULAR ATTENTION PAID TO LOADING SHELLS.

Taxidermy in all its branches. Repairing of Guns, Rifle, Pistols and Fishing Tackle a specialty.

Amusements, Etc.

THE GREAT NEW-YORK AQUARIUM,
Broadway and 35th st.,
rare Tropical Fishes, curious Amphibious Animals,
Wonderful Marine Creatures,
Group of Chimpanzees and Orang Outangs
Special performances at 2:30 and 8 o'clock P. M.
LOUISIANA TROUBADOUR QUARTET,
HARRY BRYANT, Ventriloqual Seances.
Mlle DE LA VERE, the Water Queen.
Admission 50 cents. No extra charges.

Sportsmen's Routes.

Chesapeake & Ohio RR.

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
ap Richmond, Va.

The Route of the Tourist,
Sportsman and Pleasure Seeker.

TAKE THE

People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, except Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.
EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the office on the pier, at all West-coit Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. R. MAYO, Gen'l Passenger Agent.

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

HENRY PRATT, G. T. A.
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SALMON, CURLEW, TROUT.

An opportunity will be given *sportsmen* to visit the coast of LABRADOR the coming summer. Address M. M. CHICK, 41 Franklin street, Boston.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING NOVEMBER 26, 1877.

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:50, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 5:30, 10 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 5:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept18 1y H. P. BALDWIN, Gen. Pass. Agent.

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday: Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

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TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
FRANK THOMSON, Gen'l Manager. feb17-tf

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St. at 5: 0 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 338 Washington St., Brooklyn.

PROVIDENCE LINE.

Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

L W PILKINS, O P. Agent, D. S. BABCOCK, Pres.

ST. AUGUSTINE, FLA., NASSAU, N. P., HAVANA, CUBA.

From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 25, Feb. 9 and 23.

FOR NASSAU DIRECT,

Steamship Carondelet, February 6 and March 9, and monthly thereafter from Pier 16, East River, New York.

For all particulars, illustrated guide, &c., apply to

MURRAY, FERRIS & CO.,
No. 62 South St.

HUNTING

FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad

FISHING

FOR PIKE, PICKEREL, BASS, ETC.,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

Shooting season expires December 15. For information as to routes, ratio and best points for the various kinds of game, etc. Apply to

A B. LEET, Gen. Pass Agent,
A HOPPE, Grand Rapids, Mich
Eastern Agent, 116 Market St., Phila., Pa.
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NEW HAVEN, HARTFORD, SPRINGFIELD AND THE NORTH

The first-class steamer ELM CITY leaves Pier 25, East River, daily (Sundays excepted) at 5 P. M. Passengers to North and East at 12 P. M.

NIGHT LINE—The CONTINENTAL leaves New York at 11 P. M., arriving in New Haven in time for the early morning trains

Merchandise forwarded by daily express freight train from New Haven through to Massachusetts, Vermont, Western New Hampshire, Northern New York and Canada. Freight received until 5 P. M.

RICHARD PECK, General Agent.

Sportsmen's Routes.

Fall River Line

—FOR—

BOSTON.

And all Points East, via Newport and Fall River. Mammoth Palace Steamers, BRISTOL and PROVIDENCE, leave New York daily from foot of Murray street.

5 P. M. { SUNDAY TRIPS, June 23 to Sept. 8, incl'sive. } FROM PIER 28, N. R.

Leave Brooklyn via "Annex" boat at 4:30 P. M.
Tickets and State Rooms secured at all principal hotels and ticket offices, at the pier and on steamers.

BORDEN & LOVELL, Agents. GEO L. CONNOR, General Pass. Agent.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 92 South Delaware Avenue, Phila.

Dec14-1y

St. Louis, Minneapolis AND ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids. C. J. IVES, General Passenger Agent.

E. F. WINSLOW, General Manager. tf

CHICAGO & ALTON RAILROAD.

THE ONLY DIRECT RAILROAD from Chicago to St. Louis, and Chicago to Kansas City,

WITHOUT CHANGE OF CARS.

FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

JAMES CHARLTON,
General Passenger Agent,
Chicago, Ills

"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon to the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds send to

A. B. LEET, G. P. A.,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.
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Hotels and Resorts for Sportsmen.

ORDWAY HOUSE.
BLUE MOUNTAIN LAKE,
HAMILTON COUNTY, N. Y.

Route via Saratoga and Adirondack Railroad to North Creek.

Daily Stage to House.

Quickest and Cheapest Route to the Adirondacks.
Address JAMES M. ORDWAY,
Indian Lake P. O., Hamilton Co., N Y.
☞ Guides, Boats, Camp-Kits, etc., furnished.
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C. M. BRENNAN.
OLD KENTUCKY BOURBON & MONONGAHELA
South Clark Street, Chicago.

Ashland House,

Fourth Avenue, corner of Twenty-fourth

NEW YORK CITY.

Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Deshrosses street ferry, Deshrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

H. N. BROCKWAY, PROPRIETOR.
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Sportsmen's Headquarters.

Bromfield House,

AND

LADIES' AND GENTS' DINING ROOMS,
55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER, Proprietor.
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Wild Fowl Shooting.

SPRINGVILLE HOUSE OR SPORTSMEN'S RETREAT, SHINNECOCK BAY, L. I.,

By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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St. George Hotel,

Cooper, Greenwood Lake, N J.

S. W. GEORGE, Proprietor.

P. O address, Greenwood Lake, Orange Co., N. Y.
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BRADNER HOUSE, Greenwood Lake, N Y.
G. S. BRADNER - - - - - - - Proprietor.
Terms $1 per day till June 20th. Favorable rates for the season. Boats and bait furnished. P. O. Address, Greenwood Lake, Orange Co., N. Y.
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MT. KINEO HOUSE

Moosehead Lake, Maine.

TROUT FISHING good this month.

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A. MEYER,

IMPORTER OF AND DEALER IN

California, Rhine, Hungarian Wines,

AMERICAN CHAMPAGNES.

392, BOWERY 392,

Near Fourth avenue, NEW YORK

BOWLING AND BILLIARD HALL.
The longest Rifle Range in the city, for Sharpshooters only.
Feb28

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address True & Co., Augusta, Maine.

Sportsmen's Goods.

Eaton's Rust Preventer.

For Guns, Cutlery and Surgical Instruments safe to handle, WILL NOT GUM, and will keep in any climate. Sportsmen everywhere in the United States pronounce it the best gun oil in the market Judge Holmes, of Bay City, Mich., writes: "It is the best preparation I have found in thirty-five years of active and frequent use of guns."

The trade supplied by sole manufacturer, GEO B. EATON, 570 Pavonia Avenue, Jersey City Heights, N. J.

Sold by principal New York dealers, and by Wm. Read & Sons, Boston, Mass.; B. Kittredge & Co., Cincinnati, Ohio; E. E. Eaton, Chicago, Ill.; Brown & Bilder, St. Louis, Mo.

CANNOT BE SENT BY MAIL.

Sportsmen's Goods.

A

WHITE RIBBON.

Blue Ribbon

AND

SILVER MEDAL

Were awarded to Messrs. G W. SIMMONS & SON, of Boston, Mass., Through their agents and exhibitors Messrs. Brown & Hilder, of St. Louis, Mo., at the Exhibition of the "St. Louis Bench Show and Sportsmen's Association," for an unusually fine display of Duck, Moleskin and Leather

HUNTING SUITS,

which attracted great attention and were much admired by all Sportsmen.

THE BOSTON

SHOOTING SUIT.

Manufactured only by

G. W. SIMMONS & SON.
BOSTON, MASS.

NEW YORK AGENTS:

Fowler & Fulton,

300 BROADWAY,

The Best in Use.

ONLY ONE QUALITY MADE, AND THAT IS THE VERY BEST.

Flexible Waterproof, Tan-Color Duck.

Each article—coat, trousers, vest and foul cap—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

We make no discount except to the trade. The price of the suit complete is $13.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are copper-riveted, and nothing is neglected to make the whole suit complete in every way.

This is what one of our best sportsmen says of it, writing from camp: "Although I had been nearly eight hours under incessant rain, laboring and striving along under adverse circumstances, yet I found myself comparatively dry, and my clothes without a tear. For the benefit of our brother sportsmen, let me advise one of Messrs Simmons' (of Boston, Mass.) Waterproof Suits. Oh! what a relief it was to find one's tobacco was dry, and that one could light a pipe; that you could laugh at your miserable friend, who stood shivering and shaking as if he had the palsy; and then, next morning, oh! what fun it was to see him mending his clothes, while I had not a tear to complain of! Ventilation, that great bugbear of waterproof suits, is legislated for in the most ingenious manner. No sportsman should fail to supply himself with a suit which is at once cheap, practical, and will last an almost indefinite time."

Our Flexible Tan-Colored Water-Proof Leather Coats, Breeches, Vest, Leggings and Caps are considered the finest things ever made.

PRICE LIST.

BOSTON SHOOTING SUITS.

Made Only by G. W. SIMMONS & SON.

Oak Hall, Boston, Mass

WATERPROOF DUCK.

Suits, $13	Coat	$6 50
	Pants	3 50
	Vest	3 00
	Cap or Hat	1 50

CORDUROY, Black or Brown.

Suits, $22	Coat	$12 00
	Pants	5 00
	Vest	3 00
	Cap	2 00

MOLESKIN.

Suits, $25	Coat	$14 00
	Pants	6 00
	Vest	3 00
	Cap	2 00

TAN LEATHER.

Suits, $60	Coat	$22 00
	Pants	15 00
	Vest	10 00
	Cap	5 00
	Leggings	6 00

An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

OUR HUNTER'S TENTS made of tan-colored duck; light; easily transported. Size, 7 ft. x 7 ft. Price, $10, complete Made on the umbrella principle, folding into a neat roll, 4 ft. long.

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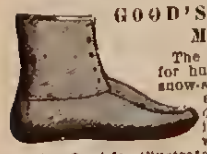

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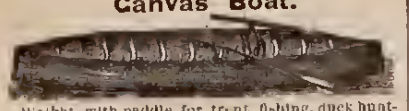

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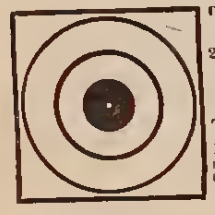

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SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union take pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 11 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must be one to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr F HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

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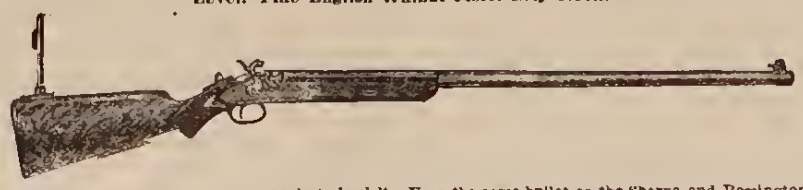

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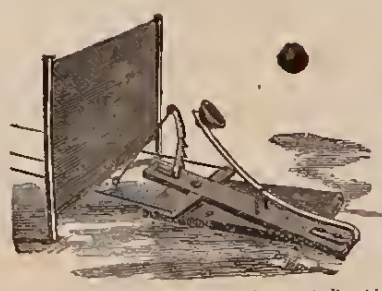

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, MAY 30, 1878.

Volume 10.—No. 17. No. 111 Fulton St., N. Y.

FOREST HAUNTS.

YE olden oaks, deep clad in greenness vernal,
With summer's sunlight on your rugged brows,
Methinks I hear the voice of the Eternal
Go out amid the swaying of your boughs.

Oh, not the mythic fear-inspiring Monarch
That but with dread our doubting thoughts invest,
But He who bears above Wrong's throned Anarch
Earth's sorrowing children on His loving breast.

And oft unto your solemn shades retiring,
Of temple, altar, shrine, my heart to him
Has poured the burden of its high aspiring
In measured cadence through your cloisters dim.

As wayward child, touched by some anguished arrow
From the full quiver of the coming years,
On mother's breast unbosoms wild its sorrow,
While loving kisses dry the brimming tears;

So turn I, yearning for your dear caressing;
World-worn and weary do I come again
To win some measure of maternal blessing,
If but a brief forgetfulness of pain.

From Life's fierce conflict, from its toil unending,
Awhile to rest me where no care intrudes,
And feel my soul in quickened pulses blending
With kindred souls that dwell in solitudes;

To lowly listen to the mystic voices
That through your boundless sanctuaries ring,
And feel, while Nature in her heart rejoices,
Some thrill of rapture in my own upspring.

The mossy bank wears meek a smile of blessing;
There lives a gladness in each floral bell,
A spirit-healing in the mild caressing
Of balmy zephyrs in the woodland dell.

And hark! a thousand tiny throats are winging
Joy's silvery songs amid the murmuring trees;
O happy choir! a choral anthem singing—
The blended music of the birds and bees.

These shall restore me to the pure and tender
Of feelings stifled in embittered strife;
Some faint ray kindle of Hope's morning splendor,
That shed a halo on each dream of life.

O gentle spirit that afar is hiding
In unfrequented wilds of wood and glen,
Couldst thou as in these tranquil haunts abiding
Dwell in the homes and in the hearts of men,

I had not need to medicine this longing
With calm and quiet in your green retreat;
Life's stony paths, with weary pilgrims thronging,
Were fair and flowery to these bleeding feet.

—*Country Gentleman.*

For Forest and Stream and Rod and Gun.

A Day With the "Hard-Goers."

Suppose you challenge in a glass,
And name the pretty doe;
I'll prove your lass can't mine surpass—
I'll swallow hogsheads to my lass—
Or my name's not Tally-ho!

Let me, as o'er life's chase I pass,
Crop pleasure as I go;
I'll take my glass and toast my lass,
I'll ride and dance and sport my brass,
For my name is Tally-ho!

THUS sang, or should, or would have sung the amateur minstrel at a Yule feast in old Virginia. And by St. Hubert! you may breed statesmen, merchants, lawyers and doctors, soldiers and priests in the North, but for a real "hard-goer," and a reckless, devil-may-care rider, you must have the strain of Celtic blood that flows in the veins of the Virginians; and it comes from the far-off time of the Puritan and the cavalier, when the families in old England, who boasted that blood by their birthright of traditional aristocracy, irrespective of fortune, followed the rightful monarch. And while the business-like Puritan, wrecked by war, came to Plymouth, the careless, dashing cavalier settled in the Colony, which was, from the first settlement, characteristic of his element. The remarkable individuality of the Southern in society, politics and war still marks the strong antithesis to the North, which moves with the impetus of steady will and organization. The Highland Scotch, the Welsh and Irish have imparted to the South the fiery spirit that echoed over the historic fields of the late civil war with a fierce slogan that defied the deep toned shout of the blue battalions. And, if the impassioned disarray of the gray battalions reminded an acute observer of the Celtic clans, it is not less true that the Southern fox-hunter is highly suggestive of the character of the "bard-goers" who flourish in the glowing pages of Barrington and Lever.

But to our tale.

You are not likely to see at a meet in the Old Dominion the picturesque scarlet coats and corduroy breeches that follow the Fitzwilliam pack, but the horsemanship may challenge comparison with the world, and the dogs, light and wiry, are equal to the "best of black St. Hubert's breed"—not so long as the English dog, but with a cross on the barrier which has imparted a marvelous pertinacity and endurance, while the silken coat and the black, tan and bluish black in colors, make a fine pack, a rare delight to the eye of a true sportsman. And then they run as if tipping the ground now and then, in order to remember not to fly. Uncle Billy S., whom I shall presently describe, says, that for a good run after an old red, you should be able to cover the pack in full cry with a blanket—which aphorism means that twelve good dogs, trained together to know the leader and the huntsman, are worth all the noisy, riotous packs made up from all the neighborhoods in the county.

Were you to see Uncle Billy leading the field, with his immense horn flapping at his side, and the red bandana round his neck waving in the wind like a banner, you would pronounce it a sight at once beautiful and heroic. And then such a blast!

"Like that which erst the Viking blew."

The lash of his whip can reach more than twice the stride of his big gray gelding, Dick Wildfire; and once, when he had tried to make a "cutting dog" *ware*, he fetched the unfortunate offender such a wipe that one-half of the dog remained tangled in the lash while the other half lay quivering on the ground. He has been known to drink the best riders of three counties drunk the over-night, then blow up his pack the next morning and take a brush before anybody else could get out of bed for the headaches. He made a forty-seven-mile run after a red, straight from the "Slashes" of Hanover to the Piedmont, and dug out reynard stark and stiff at sunset, while all along he had left the best men of his county; and he swore that when he blew a "mort" and tied the brush to his saddle-bow, all the people thought that the new railroad was finished, for nothing but a steam whistle could blow such a blast. He also declared that Dick Wildfire was so fresh that he ran away twice on the way to the nearest farmhouse, and he had to couple up his favorites, Rattler and Whalebone, to keep them from going off on another trail. His rambling old cottage mansion, with twenty rooms, stands midway between Helltown and Niggerfoot, two villages noted for their fighting and drinking in the country, that gave the name of "The Mill Boy of the Slashes" to Henry Clay.

Here is Uncle Billy's letter from his house, "Ringwood," to his "dear little Baron," meaning Munchausen:

"Come down Christmas and I'll fill you to the muzzle with stone-fence the over-night so you won't be fit to live the next morning, and won't be afraid to ride Madge Wildfire, the prettiest filly ever foaled at Bullfield. Her mouth is velvet, the rest of her lightning and red pepper.

"Yours, to count on, WM. S.

The Squire of Ringwood has three sons in the West, two in Texas and another sleeping under the tall cedars that shade the graves of his sires, with a stone over him marked with the historic name, Chancellorsville, and four married daughters. He has declared to me that he couldn't remember the names of his grand-children. Sitting before his great log fire, with a face that rivals its glow, he is a picture as he smokes his pipe of brier-root through a stem of "seven bark," so long that a little darkey is always at hand to light it. A giant punch-bowl, surrounded with mugs and tumblers, gave token that a drinking bout was in progress. The sporting gentry of the vicinage were sitting around, with a fine background of foxes' tails and other trophies of the chase, hunting horns, etc., hung on the walls to make a background to the picture. The four pictures, "The Meet," "The Breaking Cover," "The Full Cry" and "The Death," ornamented the walls, and, though dingy, retained the fine characterization of the originals. How the evening progressed, and how we got to bed, were long to tell. As the young, unwary chanticleer saluted the rising moon I fell asleep with the impression of twenty bed-posts waltzing around me; the next thing was the sound of a steam whistle right in my ears, and, waking with a start, I beheld Uncle Billy's great red face right over me, his great hunting-horn in his mouth, and his cheeks puffed out with the blast he was sounding.

"Jump into your breeches, youngster; a fox-hunter should ha' been up long ago."

"Stone-fence!" I muttered.

"Pshaw! you children can't drink. I can empty that bowl by myself, and then want a night-cap."

There was a hullabaloo already in the yard, and crawling to the window and throwing up the sash I saw eight groggy heads poked out of four windows, and every one calling stupidly the name of his nag; little and big "niggers" running to and fro from house to stable and repeating the orders given from the windows. Barking of dogs and quacking of geese and ducks added to the effect of the chorus. The varied breakfast couldn't tempt me out of the "remorse of a guilty stomach," but I got on my spurs and swaggered out on the long portico utterly reckless of any and all risks to life and limb. Sure enough there was Madge Wildfire, a beautiful chestnut filly, plunging like wild, while the little nigger groom's eyes danced like sancers in a pool of ink.

"Look sharp now, youngster," sang out Uncle Billy, who was already on his big gelding beyond the gate, and surrounded by twenty riders and thirty-five hounds, with their keen tails in the air, just waiting the steam-whistle blast.

"Never mind, old man; I can ride a streak of lightning if it's got a bridle on." And before the filly knew it I had the reins, then canted my head down and heels up and was in the saddle. But before I could get a stirrup Uncle Billy had slammed the gate, and his fluttering red bandana vanished down the hill, while the early Agricola, four miles away, heard that trumpet-like voice.

"To cover; hark! Rattler, Whalebone." Then I felt like flying through the air as the filly went over the gate with her feet gathered under her like a deer's; and then pulling on the curb I came up abreast of the big raw boned gray gelding. The pack were scouring through a brushy lowland, when old Rattler gave a short yelp, *sotto voce*, then another louder and prolonged, and in a second more the startled echoes rang with the magnificent chorus of thirty-five hounds, and the younger riders screeching themselves hoarse.

Reynard was picking the feathers of his Christmas goose out of his teeth and was loth for a long run, so he took the chase, tearing down the slash, ran up the branch, then cunningly doubled back and sneaked up into a plowed field. But Uncle Billy's two favorites had too often "made it good at a cold fault" to be easily baffled, and it was a sight to see old Rattler and Whalebone flying around that field with noses to the ground, "but not saying a word." The wary old huntsman then took the two hounds carefully over the plowed field and in ten minutes jumped the object of search; and then, men, horses and hounds took him a "sight chase" for a quarter of a mile with such a chorus as is rarely heard. Helter-skelter, pell-mell, through swamp and brushwood leaving three gallant sports floundering on the ground, while two of the riderless horses pushed wildly up to the pack with the stirrups flying at every leap; over an old rotten worm fence that broke under some of the horses as we scrambled over; then in full cry along a level ridge for a mile, driving like a whirlwind over the sedge and little stunted pines. Everybody is drunk with the excitement and the music of that intoxicating chorus as it wakes field and woodland and sends the chase as if on the wings of the wind. Uncle Billy never draws his rein, but keeps right up to the hounds, though his red bandana is in tatters and the blood streaming from more than one wound inflicted on his rubicund face by the brush and briers. But he sits his gallant nag as if he were in a rocking chair, and ever and anon as the filly comes tearing up to his side, Dick Wildfire shakes his crest, gives a plunge forward, and settling again to his work still leads the field with his untiring stride.

Over the height of a ridge we came, and down a slope to a broad ditch, beyond which was a half-mile of smooth, beautiful wheatfield rising to the next low ridge—a scrap of exquisite rich green, making an Arcadian picture set in the gray copse and woodland which enclosed it. We had already lost six stout and bold riders, and now as through that wheatfield the pack in full view sent forth the full cry of thirty-four full-tongued hounds, and the distant echoes just caught and gave back the magnificent refrain, no wonder that a ringing whoop burst from each huntsman as he pushed his nag down the hill and just took one look at the broad, dangerous ditch in the little valley. The filly was pressing up once more to the big gelding, when Uncle Billy said quietly:

"Steady now, youngster; pull hard on the snaffle till you're right up to it, then give her her head and over she goes."

As well have spoken to the wild wind that whistled past our ears. I was fairly drunk with the lightning speed and the maddening music of the pack. The hoofs rang sharp and clear on the frosty ground, the horses flecked with foam and mad as the riders, sent forth smoke on the keen winter air; and as for me, my blood tingled and my hair seemed to rise and lift my hat. As Uncle Billy steadied his splendid nag for the fearful leap the filly shot three lengths ahead of him, down the hill like mad, and with a desperate rush drove at the ditch, her rider, crazy, but sitting well down in the narrow cantled English saddle, and letting curb and bridoon both free. There was a long gleaming streak of ice enclosed in two stiff ridges of briers—twenty-three feet, if an inch. I almost felt my heels on the other side, when the sun's face flashed from the frozen mirrow full in the filly's face, and she faltered at the very second that she left the ground with her four feet gathered under her. A crash, and the rider was down in the ice, mud and water, and the filly falling backwards with her feet in the air; the gray gelding and the red bandana flashed overhead, then there was a momentary scramble, and the first thing I knew the filly was flying across the wheatfield, stirrups in the air and I running after, hatless and covered with mud and water.

Uncle Billy caught her rein, and, as I scrambled into the saddle, said impatiently: "You durned fool, can't you stop hollerin' and get on your horse?" Then away we swept again, the keen tails of the last of the pack just vanishing over

the hill. The chorus comes faintly for a moment, then as the pack plunges into a wooded glen it wakes again with ten thousand wild, mad echoes, and on and on we drive, reckless and headlong over bush and bramble, through swamp and woodland. What man with a heart and soul could think of risk to life and limb.

And still on and on the mad chase drives, till the blue hills that mark the outposts of the Blue Ridge Mountains rise against the horizon, and it is only then that we estimate the distance we have traversed, for horse and rider maintain their mettle in four instances at least.

"'Twere long to tell what steeds gave o'er,
As swept the chase by Cumbus moor;
But when the brig of Turk was won
The foremost horseman rode alone."

Alone, but, with the tattered red bandana waving in defiance and the gray gelding still plying his long, untiring stride, Uncle Billy was going for the brush, which he swore to himself he had pre-empted some four hours ago against the claim of any rider in that hunt.

But where were Madge Wildfire and her rider?"

Upon our right hand there rose in view a pretty gray old mansion surrounded with giant oaks on the rise of hill, and as we scoured along the valley below, the pack lost the trail in a chapparal of alder bushes through which trickled a "spring branch," as it is called in old Virginia. It was not a cold fault, however, and Uncle Billy took a rapid glance at the situation and waited quietly for his two veterans to find the trail, for they were already circling around the little cover. As luck would have it then, my eye caught the sight of something reddish or yellow that flashed through the broom ridge along the hill-side and made right for the house, and I knew that Reynard, hard pressed, was after running through the farm yard and losing the dogs among the sheep and stock; so, quickly getting two of the dogs on the trail, I went up the hill as fast as the filly could put her feet to the ground, and it seemed in a second more I saw the tails of the two hounds vanish over the garden fence It was an old rotten paling, and down it went as soon as the filly's fore-feet struck it, and then there rose such a hullabaloo as might appal any but a huntsman in the heat of the chase. Ducks quacked and geese squeaked, roosters and hens cackled as they fled, and a half dozen dogs of various sizes barked; several little incipient F. F. V.'s yelled, and a big, fat, greasy-looking black cook bawled at everything and everybody; one of them leaped frantically up a great old knotted tree and felt sprawling down on his back; but what was the hubbub and clamor to me? I leaped from the saddle and rushed for the brush. By this time there was a group of people on the portico and several couples of bright eyes ready to witness my triumph, when, all at once, the big black cook exclaimed:

"Run here; Mars' John, 'fore de Lord, dogs and man done treed our yaller cat!"

And so it was; there was the quarry in the fork of the tree, gazing down on the baffled pursuers with his green eyes.

Reader, my tale is done. I wish that I had the one which, of course, Uncle Billy took, and which in the goodness of his heart he gave me to sport as my own fairly won trophy.

GLENROY.

ANGLING IN TENNESSEE.

In Hallock's "Sportsman's Gazetteer" we find in the article devoted to 'Southern Inland Fishes" the statement that angling had until recently received but little attention from Southern gentlemen, but had been pursued mainly by the negroes and "poor whites." While this statement is in the main true, it is necessary to except many localities, and especially that drained by the clear-flowing Tennessee and its numerous tributaries. It has been my fortune to pass many happy years in this section, and to kill many noble bass and other game fish in the clear streams which form one of its many beauties. With the desire of making some return for the many joys that I have received, I pen these lines in order, if my feeble efforts may be of any avail, to bring to the attention of the lovers of sport some of the characteristic features of this region, and will begin with Cypress Creek.

This beautiful tributary of the Tennessee River empties its waters into that stream a mile or more below the pleasant little town of Florence not very far below the far-famed Mussel Shoals. It is true that the stream is no longer, as in former years, the haunt of the multitudes of fish that once inhabited its waters. The shoals of bass, pike-perch, channel-cat and other varieties of game and food fishes that once frequented its waters and gladdened the heart of the angler and pot fisherman have become for the most part but a cherished memory. The trot line, fish trap, wing and bait net, seine, grab hook, and other devices of the enemy, have done their work only too well, and but a tithe of the former multitude now remains. Still, the skilled and patient angler may yet enjoy many a thrill of exultation when at last, after many efforts, he has succeeded in luring from his haunt some finny patriarch, and after a bold fight shall lift him sparkling in the sunlight over the gunwale of his skiff. Much, too, can be found along its winding course to delight the eye of the artist and the lover of nature. On one bank rise bold cliffs of gray limestone, over whose rugged brow the laurel loves to display its pink tinted blossoms, and the fringe tree to droop its pendent sprays. On the other, fields of grain or Indian corn slope to the very margin, while over all is spread a sky whose azure hue may rival that of storied Italy, and the whole landscape is vocal with the songs of birds. The fish that are to be found here are two varieties of bass, called here black and white trout, the pike-perch or Ohio salmon, many varieties of perch, and the blue or channel cat. The last mentioned fish, although the tribe to which he belongs is universally execrated (and, it may be said, universally eaten), deserves none of the opprobrium that, justly or unjustly, has been showered upon all of his *feline* race. Whatever may be said of the rest, the channel-cat is as bold in the water and as toothsome on the board as any fish of them all.

To the bass, however, is the attention of the local angler chiefly devoted, and on any day in the season may you find him at Hood's mill, the Schim dam, the old factory, Gunnelford, or at the "mouth," as the stage of water may warrant, busily plying his favorite art. You will find him equipped with a rod of long and taper Japanese cane mounted by Portlock, who knows what is right in such matters; a Frankfort reel, No. 4, containing one hundred yards of oiled silk, or cable laid sea-grass line, and a 50 or 60 Carlisle hook, upon which is impaled a live chub from Sweet Water, or a silver-side from the river. Great interest is taken by the Florentines in fish and fishing, and on days when it is known that the fish are "biting well" excitement rises high Many amusing anecdotes might be told in this connection, but I will limit myself to one in which figures a waggish shoemaker, who, as will appear, was thoroughly imbued with the idea first promulgated by the ancient artist, to wit: that no cobbler should go beyond his last.

This disciple of St. Crispin had a son whom he was endeavoring to train in the way he should go, and whom he was bringing rapidly to a waxed end. This youth had a love for nature, and on a balmy day when the westerly breeze was blowing, and all nature seemed to invite one out of doors, he had heard that the fish were abroad and were willing to take bait. After many stage asides, and broad hints intended for the obdurate parent, who sat pegging away unheeding, the anxious youth, driven to desperation, ventured the remark: "Pappy, they say the fish are biting." "Well, my son," remarked the hard-hearted sire, "stick to your bench and they won't bite you." On one occasion there came to F. a gentleman who, as Mark Twain says, was a very good and clever man although a clergyman. At that time, in the golden age, "before the war," Florence boasted an organized fishing club Now it happened that the aforementioned clergyman was a votary of St. Peter in a double sense, and consequently was invited to go fishing with the club, As an especial honor he was assigned to a seat in the president's boat. The president of the club was a man of much humor but of few words. In a few moments after the fishing had commenced the parson got a bite, and without wasting time hoisted a three-pound bass out of the water and into the boat very much after the manner in which a red checked urchin extracts his first shiner from his father's spring branch.

The parson had just straightened himself and was looking around to receive the congratulations of his companions, when the old president, removing his pipe from his lips, said: "Throw that fish back" The member of the club nearest the scene of action immediately obeyed the mandate.

"In the name of redemption! what does this mean?" shouted the preacher.

"Fish had no chance," calmly replied the old gentleman, at the same time returning the pipe to his lips.

The fair sex, too, are not always proof against the infection; and, though there may be those who, aware that the time for fishing is the season when, among other natural phenomena, spoken of by Mr. Tennyson,

A young man's fancies lightly turn to thoughts of love,

frequent the stream to fish—but not for the scaly inhabitants; yet there are some who go from pure love of sport and not as fishers of men. Prominent in my memory stands a lady who some years ago, while fishing in old Cypress, had the good fortune to hook a six-pound salmon, and after a long struggle, to land him on a low pebbly bar. The salmon getting free from the hook began to flounder back to the water. Aid was loudly summoned, but before it could come the fish would get back into the water. Now, fair readers, what would you have done under the circumstances? Leaving you to guess it or to give it up at your pleasure, I will tell you what my heroine did. She simply sat down on him, and as she was a healthy specimen and weighed over 12 stone, the salmon wisely concluded to reconsider the matter and remained where he was.

Now, while I am on this subject, I might go on and tell of the old lady who caught two bass on the same hook and at the same time knocked two men overboard; but I am afraid my readers may think I have ceased to deal in facts and have gone to telling fish stories, so I will desist. In glancing over what I have written I see that I have been led astray from the course first laid out, and instead of writing about the fishing in Cypress Creek, and the methods used there, have been betrayed into telling a number of fishy anecdotes. However, I must take my leave of you for the present, hoping to appear again at some future time to tell what I know of the fishing in other streams of this region.

WILL.

Fish Culture.

FISH CULTURE IN MAINE.—Mr. Geo. Shepard Page, of the Oquossoc Angling Association, states that Capt. Fred Barker, of the steamer Oquossoc, which runs from Indian Rock to the Upper Dam, at the outlet of Lake Moosenomognotic, writes, under date of May 10, that he had just taken Fish Commissioner Stanley to Berna Stream, where he deposited 110,000 young brook trout, and the same number of blue-back trout (*Salmo equussa*). They were a part of the 400,000 hatched in the house erected last October, at the outlet of Rangeley Lake, by private subscription of five members of the Oquossoc Angling Association.

MAINE.—Cobbosseecontee Lake, near Augusta, has been stocked with 5,000 landlocked salmon, and an equal number are to be added annually until the lake is fully stocked. Five thousand Sebago salmon have been placed in the Sidney ponds.

TENNESSEE—*Nashville, May* 23.—Nothing has been heard from the shad in the Cumberland, though an old lady residing here says that when she first settled here, some sixty years ago, she remembers distinctly to have seen shad that were caught in this river.

J. D. H.

TENNESSEE—*Huntington, May* 24.—Mr. S. M. Rixey, of the United States Fish Commission, on last Monday, placed in Beaver Creek at Huntington 50,000 young shad. They appeared to be in good condition.

FORESTER.

FISH CULTURE IN MISSISSIPPI—*Aberdeen, Miss., May* 20.—Our river (Tombigbee) was stocked with young shad last Saturday, May 18, by the United States Fish Commission, on request of Hon. H. L. Muldrow, our able member of Congress of this district. It was managed under the supervision of United States Fish Commissioner Mr. Wm. Russ, of Havre de Grace, Md, in presence of our excellent Major, T. B. Lykes, and many citizens. The Commissioner deposited at this place, Aberdeen, county seat of Monroe, 60,000 young shad, and at Fulton, county seat of Itawamba, 30 miles up the river, 90,000; also at Demopolis, 100 miles down the river, 60,000. This is a sufficient number for this part of the Tombigbee River, and I hope in course of three or four years we will have this fine fish on our family table. I will have you well posted from time to time how the young shad improve, and will inform you when the first grown shad is caught in this section.

W. K.

—A new fish has been introduced into French waters. It comes from China and is called the *Setz*.

DESERVING OF MUCH CREDIT.—Mr. G. S. Lamphear, of the well-known firm of Morn & Lamphear, wholesale fish dealers of Fulton Market, New York, has received the thanks of the Secretary of the Smithsonian Institute for his exertion in collecting the statistics of the fishery receipts of New York. At the last meeting of the American Fish Culturalists it may be remembered that the society urged on members the necessity of collecting such statistics. It was shown by Professor Baird that we were very much at fault in our controversy with the English Commissioners in regard to the Dominion fisheries, because no such data of our own were at hand. As the collection of these necessary statistics is a voluntary one on the part of Mr. Lamphear, and by no means is easy, we are pleased to note that an acknowledgment has been made from such a high source.

Natural History.

RECENT ADDITIONS TO THE U. S. NATIONAL MUSEUM.

While wood and field are rejoicing in their renewed accession of chickweed, bluets, buttercups, anemones, spring beauties, blood-root, saxifrage, and trailing arbutus, and the parks resound with the melody of the song sparrow, the robin and their associates, the museum is harvesting the results of that increased activity in collecting which is usually ushered in by the advancing spring.

The anadromous shad and salmon, returning from their ancestral haunts in the mysterious somewhere of the Atlantic, or from their "new reservation" in the Gulf, seeking, in their maturity, the shallows and eddies which sheltered the fryhood of their existence, become trophies of the skill and guardianship of their foster parents—the Fish Commissioners. Venturesome sirens, tritons, lizards and snakes, burrowing in the black ooze of the rice swamps in search of unwary worms, or dreaming, in the unsafe retreat of a fallen log, of the twilight which lulls the drowsy fly, or tarrying too long at the fascinating brookside, or basking dreamily in the warm sunshine, fall a prey to the quick hand of the collector, and devote the remainder of their lives to the service of the artists, who copy their colors and perpetuate their forms in plaster. The number of tortoises and turtles has become so great as to call for a series of inclosures in which they have access to water and grass, and such nests as they require. Here a great many species may be collected and observed. Each individual is indelibly marked with a catalogue number and its locality, for convenience in taking notes. When required by the artist, it is easy to select any species and have its colors faithfully copied. Then a cast is made in plaster or paper mache, which is subsequently painted in imitation of the artist's sketch. The series of casts embraces nearly all the testudinata from the Mississippi Valley eastward, and additions are being made rapidly. The species now living in the inclosures are the snapping turtle, *Chelydra serpentina;* the diamond back terrapin, *Malacoclemmys palustris;* the geographic terrapin, *Malacoclemmys geographicus;* the Florida terrapin, *Pseudemys floridana;* a Louisiana species, *Pseudemys elegans;* the slider, *Chrysemys pictra;* Troost's terrapin, *Pseudemys troostii;* the box turtle, *Cistudo clausa;* the speckled tortoise, *Chelopus guttata*, and the stink pot, *Aromochelys odorata.* Some of these burrow and hide away out of sight; others show only their heads and a part of the carapax above water; but there are unguarded moments when one may add something to his knowledge of their habits.

Another object of interest is the snake cage, now containing a collection sent by Mr. G. Brown Goode from Florida, for which the museum is indebted to Mr. F. C. Goode and Col. J. S. Simmis. The species are the green snake, *Cyclophis æstivus;* the adder, *Herterodon atmodes(?);* the king snake, *Ophibolus getulus;* the calico snake, *Coluber guttatus*, and the horn snake, *Abastor erythrogrammus.* These pets fare sumptuously on mice and frogs, feeding probably at night, since they are not observed in the act during the day. The frogs nestle fearlessly on the coils of the serpents, little knowing how soon they will be honored with inside accommodation. With the consignment of snakes from Florida came a beautiful six-lined lizard, *Cremidophorus sexlineatus*, which is now luxuriating, not in clover, but in a bed of "black moss," *Tillandsia usneoides*, which may recall its southern home.

A pretty lot of tritons, *Plethodon glutinosa*, sent from North Carolina by Mr. Milner, Deputy Commissioner of Fisheries, adds another species to the vivarium. The great difficulty is to catch flies enough for their maintenance. The object in sending living reptiles to the museum is to secure faithful sketches of their life colors, to serve as models for painting the casts which are made after their death. So closely do the casts imitate the original that it is hard to distinguish them from the animals themselves.

The rattlesnake, prone, passive or defiant, looks out upon you in a most realistic fashion; the iguana leads a procession of scaly satellites away from the open jaws of the alligator; the tortoises seem about projecting a new trial of speed with a colony of over-confident hares. Day by day the combinations multiply, and material accumulates for the student and sight-seer.

Many interesting additions have been made to the collection of fishes. Mr. T. S. Doran, of Montgomery, Ala., has sent a

fine adult shad from the Coosa River. Mr. E. J. Anderson, of Trenton, N. J., forwarded the second salmon, *salmo salar*, received, within a short time, from the Delaware River. This fine specimen, weighing 23¼ pounds, is now seen daily by many persons. It is believed to be one of the returns from eggs presented by the German Government in 1873, about 5,000 of which were successfully planted in one of the tributaries of the Delaware.

Mr. Blackford contributed brook trout from at least twenty localities in the United States and Canada, besides species of *salmo* from England, Ireland and Scotland. From these a series of beautiful casts have been prepared. FOREST AND STREAM AND ROD AND GUN has already noticed the 47½ pound salmon trout and the 60 pound cod which came from Mr. Blackford two weeks ago. The stomachs of both were empty, That of the cod was perforated by the pubic bone of a pleuronectoid, the pre-anal spine of one just appearing externally. two other bones having escaped into the abdominal cavity.

A beautiful albino cod was shipped by Messrs. Smith and Oakes, of Gloucester. This was said to be entirely lemon-yellow and white when caught. On its arrival the lemon-yellow was interspersed with spots and blotches of orange, and small areas of gray and black. A second individual like the above was reported a few days later. There was no sign of disease about either of these cod, indeed they were in prime condition.

Among a lot of fresh fishes sent by Mr. G. Brown Goode from Charleston, is one not often received here; it is the "gilt head," called "bastard snapper" in Charleston market, the *Sparus aculeatus* of Prof. Gill's catalogue of East Coast Fishes. Another interesting species is a *Sargus*, which closely resembles Poey's *Sargus caudimacula*. No species of *Sargus* is recorded from the East Coast of the United States, except *Sargus ambassis* of Gunther, which is nothing more than our common scup.

To Mr. Silas Stearns, of Pensacola, Fla., the collection is indebted for an addition to the fauna of the United States in the fine species of *Caulolatilus* secured by him. This has been described in full under the name of *Caulolatilus microps*, Goode and Bean. It is readily distinguished from *C. chrysops*, Cuv. and Val., and *C. cyanops*, Poey, by its deeper and thicker body, its smaller eye, which is contained 6 times in head, instead of 3¾ times as in *cyanops*, or 4 times as in *chrysops*, by the position of its nostrils midway from snout to eye, by its shorter pectoral, and by its greater number of scales (120) in the lateral line. A detailed description will appear in the proceedings of the U. S. National Museum.

Just as this hasty sketch was supposed to be finished, a new arrival made its appearance, and as it is of special interest it deserves mention. I refer to a bishop-ray or whip-ray, called also skate and corn cracker, the *Ætobatis narinari* of Muller and Henle. One of its young is just escaping through the vent; the whole of the tail, which is remarkably long compared with that of the parent, being extruded.

TARLETON H. BEAN.

U. S. National Museum, April 20, 1878.

MORE ABOUT THE EUROPEAN STARLING.

ST. JOHN, N. B., Mar. 17, 1878.

EDITOR FOREST AND STREAM:

The south of England is the home of this beautiful bird, and in that part of it called the Weald of Sussex they are found in great numbers. They choose the old hollow trees abounding in the lovely parks in that part of the island as their nesting places, although I have known, in my native town, an occasional nest under the eaves of the old parish church, and each returning spring saw a battle between the starlings and the house-sparrows for the possession of a nesting place under the eaves of the old house at home, the former always coming off victorious. I have never seen a nest in a stone quarry; they love, rather, to make their homes adjacent to rich meadows, pastures and lawns, where their food abounds. They never frequent the woods. Their comical chattering and shrill whistling is most amusing, and in captivity they can be taught many imitative sounds. Their eggs, legs and size are about the same as the American blackbird. I have never known them nest twice a year. The plumage of the young (generally four or five in number) is of a dirty ash color, and they are the most shy of any young bird I know of. The plumage of the male is nearly black, inclining to dark green, spotted with white, and inclining to dirty yellow. The plumage has a rich, metallic lustre.

The starlings are gregarious only in winter, when they are to be seen by thousands in a flock, curving and sweeping the air. When the frost is very severe the flocks break up, and reassemble when a thaw takes place, and on the approach of spring they pair off. They are very fond of the company of sheep, and are frequently seen on the backs of the latter, probably in search of parasites. The only little sin they commit is in robbing the cherry orchards—this to a limited extent. But many of the choicest song birds of Europe are given to fruit stealing, "Philomela" not excepted. I know well the north of Europe; have never seen the starling in the winter in the Baltic provinces, and I believe that the birds bred in the north of England come south in severe weather. I have frequently picked them up dead from the effects of a severe winter in the south.

This is all I know of the habits of the starling, remembered from some thirty years since, when with me

"No pleasures could equal the joys of a school-boy,
When Christmas vacation as large lets him run,
To seek thro' the fields and to chase up the hedge-rows,
And popper a blackbird with cross-bow and gun;
Or with stones went a-shying at robins, or trying,
Now sitting, now flying, to knock o'er a lark,
What a lark to shoot o'er the meadows from daylight till dark!"

LOCAL NOMENCLATURE.—A correspondent, Mr. Charles Baylies, of Taunton, Mass., writes to us remarking upon the great abundance of birds recently noticed by him while on a trouting excursion. He sends us a list of fifty-seven species observed by him during his trip, all of them being mentioned by their local names. In these local designations consists the chief interest of the list, and as a few of them are new to us we should like to have the assistance of some of our correspondents in identifying the birds to which they belong. What species is it that is called chulet? and what is the snake hawk? Dibdaber is, we presume, *Podilymbus podiceps*, and partridge woodpecker, *Hylotomus pileatus*, while the snake hawk may, perhaps, be *Buteo lineatus*, as it kills a good many snakes. Others of the names are more easily recognized, as mourning dove, chewee, oven bird, skunk blackbird, striped woodpecker, marsh quail and canker bird (cedar bird). The last named, so called from its supposed habit of destroying great numbers of canker worms.

INABILITY OF OUR QUAIL TO MAKE LONG FLIGHTS.—*Mr. Editor*—It was the opinion of my grandfather, the late George Mason, of Gunston Hall, Fairfax County, Va., a sportsman of great skill and experience, that the Virginia quail (*Ortyx virginianus*) was incapable of flying a greater distance than about half a mile. This belief was founded on the fact that full grown coveys attempting to fly across Pohick Creek, between his estate and Cedar Grove, the residence of the McCartys, at a point where it was half a mile wide, were often picked up on the beach in an exhausted condition, or even fell into the water, unable to reach the shore; and on the further fact, that he had never seen one of these birds fly further than half a mile over land. My own experience (and few men have had more with this bird in the past thirty years), is to the same effect. They will seldom attempt to cross water much over 200 yards wide. I have shot many hundreds of them along both banks of the Potomac, near Leesburg, where it averages 600 yards in width, and never saw one of them attempt to fly across. A friend, however, informed me that he had flushed a covey on the Virginia shore and they flew straight across, and he thought all reached the Maryland shore safely. In this case the lands were low on both sides, and the covey had no advantage of elevation in starting. This flight was probably 650 yards. Last November I saw a covey fly 800 yards over land to cover, and though accurately marked down by a person standing near the spot where they reached cover, I could not flush one, though using two very good setters. I thought they were exhausted by their long flight and were withholding their scent, which power, I believe, they unquestionably possess. M. G. E.

Blacksburg, Virginia.

WINTER RANGE OF THE AMERICAN GOLDFINCH.—*Warner, N. H. March* 26, 1878.—I noticed in a recent number of the FOREST AND STREAM a note from H. D., of Boston, on the American goldfinch, and your reply as to their wintering in Connecticut. I have noticed for many years that they wintered here, and are often seen in large flocks. During the winter of '76-'77 there was an unusually large flock of these birds in this vicinity, and I often saw them and have specimens taken at the time. But I never knew them to assume the yellow and black plumage of the male until much later in the season than H. D. mentions. M. C. H.

[This is an extremely interesting note, as *Chrysomitris tristis* has never before, we think, been reported to winter so far north.—ED.]

BOOMING OF THE BITTERN—*Peotone, Ill., April* 29, 1878.—H. W. T. E. asks if any one can disprove Thoreau's theory about the booming of bittern. I have been quite close to the bird at times and have never noticed the "spouting" when making the noise called "booming." Robins have young ones several days old. D. H. E.

A WORD OF CAUTION.—H. D. Minot, of Boston, Mass., says;

"Every spring items appear in the papers announcing the unusually early arrival of certain birds. Let me state in your columns that robins, song sparrows, goldfinches and pigeon woodpeckers, all pass the winter about Boston. I have invariably seen them for several years. Bluebirds and purple finches are said to have been found in southern New England throughout the year. A consideration of these facts will save much unnecessary astonishment."

BLUEBIRDS AND WOODPECKERS—*Nashville, May* 23.—I have been much interested for the last few days in watching a prolonged combat between some bluebirds and two woodpeckers. In a tree close by my bedroom window some woodpeckers built a nest last year by hollowing out a place in the tree. This year the bluebirds arrived first and occupied the nest, and raised some young ones in it. By the time the latter were beginning to take their first flights, the woodpeckers returned and tried to take possession of their old home. Then commenced the fight, which lasted for more than a week. The bluebirds, old and young, defended their home, and to my surprise were able to keep the woodpeckers off, and the latter contented themselves by building a new nest in another branch of the same tree.

AN EPICUREAN EAGLE.—Our correspondent, John, of Hornellsville, N. Y., writes us under date of May 12, saying:

A large white-headed eagle swooped down on a flock of sheep here and made a breakfast on lamb chops before he could be driven off. Five pure white robins have been observed here this spring; all males. They have mated and built nests. Two have been shot and stuffed.

We hope that no more of those white robins will be shot, but that their offspring will be watched so as to see whether there is anything abnormal in their coloration.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDENS FOR WEEK ENDING TUESDAY, MAY 21.—One blue jay, *Cyanura cristata*, presented; one ring-necked snake, *Diadophus punctatus*, presented; one alligator, *A. mississippiensis*, presented; nine prairie dogs, *Cynomys ludovicianus*, born in garden. ARTHUR E. BROWN, Gen. Supt.

—Dr. Dio Lewis has organized a party of forty or fifty ladies and gentlemen who are to camp out on one of the California mountains for about five months.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

SOWING WILD RICE.

SALEM, Mass., May 23, 1878.

EDITOR FOREST AND STREAM:

Your issue of April 18 contains a letter from Jackson Gilbanks on the cultivation of wild rice. What I want to know is, whether wild rice, or any other seed, will reproduce unless thoroughly mature? Can wild rice be mature when in the milk, or partially so? Does any plant drop its seed before said seed is ripe? In the case in point, I take it that when the seed is ripe it drops into the water, sinks, and finds its own resting place, and, in due season, is reproduced—there is no cultivation or covering with soil; nature furnishes all that is necessary in the natural sediment in the water. It would, no doubt, be well for any one who is going to plant new localities, to first break up the bottom of the pond and offer a better resting place for the seed. I shall try this experiment this fall if I live, but shall order thoroughly ripe seed, but no mud. Yours respectfully, C. T. J.

Nearly five years ago we began giving instructions in planting wild rice, and those persons who were fortunate enough to obtain the seed and follow our instructions have generally succeeded. Wild rice seed does not wait to harden before it rattles out of the heads, as other grain does. When the heads become heavy their weight bends the stalks down to the surface, where the kernels become soaked in the water. The stalks begin to bend at full maturity, but the grain is succulent and soft, though not strictly milky. In grain which has been gathered a long time and become hardened, the germ is very tardy in developing itself, and old seed is not likely to propagate. We must imitate nature closely in what we do, and therefore it is important to gather the rice at the period of its full ripeness, and to sow it in such a manner that it will not be swept out of the mud by currents or eaten by insects or creatures, or left to decay on unsuitable bottoms where it cannot take root. Therefore, as our correspondent says, it is well to chop a strip of three feet wide in the mud around the margin of the lake or pond, and to sow broadcast before an anticipated rise of water by rains or artificial means. Where the water can be regulated, it is well to draw off and flood, and cover the seed twice.

FLORIDA ORANGES.—A gentleman at Palatka, Florida, writes May 22:

There will not be a full crop this year. At the time the oranges were the size of small peas we had a very violent rain storm that stripped the trees, more or less, all over the State, when the storm passed.

QUEENS COUNTY AGRICULTURAL SOCIETY.—There will be a grand fair held on Thursday and Friday the 13th and 14th of June, at Mineola, L. I. The horticular exhibition will be very complete and the money awards handsome. In addition to the horses' performances there will be a base ball tournament. For full information apply to J. Howard Rushmore, Old Westbury, Queens County, L. I.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

WORCESTER DOG SHOW.

FOLLOWING the example of other cities, Worcester, Mass., has had its dog show; and though the exhibition of the canine *elite* was not on so grand a scale as those of the larger cities, the display was most creditable to the enterprise of its managers. There was a good display of local dogs in the various classes. Mechanic's Hall proved an excellent place for the exhibition, and Worcester people were present in goodly numbers. Below we give the list of awards:

PREMIUMS.

Newfoundlands—Lonsdale, G Helgate, Lonsdale, R I. He, Major, George F Dinsmore; Frank, C H Kimball.

Siberian Bloodhounds—Nero, Al Watts, Boston.

St Bernards—Ponto, C B Hathaway, Westborough.

Mastiffs—Romeo, A D Warren. Vhc, Josie, W E Sessions. He, Bruno, F G Davis, Millbury.

Shepherd Dogs—Beauty, C E Bond. Vhc, Tam O'Shanter, T W Lawson, Boston. He, Watch, Wm T Slater.

Champion English Setters—Jennie, W Tallman, Watchemoket, R I.

Champion Irish Setters—Pat, W Tallman, Watchemoket, R I.

Champion Pointers—Dog pup, L M Rand; bitch, Buff, J H C Hadley.

Imported English Setters—Dog, Dan, A D Warren; bitch, Bonibel, W Tallman, Watchemoket, R I. Vhc, Fritz, Al Watts, Boston; Lib. A D Warren.

Native English Setters—Dog, Pete, W S Perry; bitch, Gypsy, L F Alden. Vhc, Sam, M Brigham, Natick; Don, R L Colbert; Ralph, J Winn; Jennie, W Tallman, Watchemoket, R I; Jack, S L Bigelow, West Boylston; pups, Duke and Trim, J J Coburn.

Imported Red, or Red and White Irish Setters—Pat, W Tallman, Watchemoket, R I. Vhc, Dan, I Jones; bitch, Peg, A D Warren.

Native Red, or Red and White Irish Setters—Tim, Geo E Kendall. Vhc, Dash, J W Clark, New York; Dick, Dana K Fitch;

Don, W C Clark. Dog pup, Dash, Charles W Smith, Jr; bitch pup, Bess, W Tallman, Watchemoket, R I.

Black and Tan, or Black, White and Tan Gordon Setters. Native or Imported—Dog, Don, Lyman Miller, Westborough; bitch Gypsy, L M Holman. V h c, Don, Wm Forrest, Oxford. H c, Dick, A P Pond. Bitch, V h c, Tip, A E Knights West Boylston. Dog Pup—Mack, J S Forrest, Oxford. V h c, Pete, L M Rand. H c, bitch, Whiskey, J F Knight, West Boylston. Bitch Pup—Kilder, E C Greenleaf, Westborough. V h c, Tib II, G Walton, Boston.

Pointers, 50lbs and over—Sam, L P Day, Westborough. V h c, Rake II, J W Coffin, Providence, R I; King, M G Fuller. H c, Mack, F Hoyle. Bitch, Kit, H S Hall. V h c, Fly, E R Howe. H c, Belle, B W Prentice.

Pointers Under 50lbs—Fritz, J Hayden Greene. V h c, Mac, Dr J H Wright, Natick. H c, Don, B W Prentice. Bitch, Dolly, T Horrigan, Brighton. V h c, Nellie, Melvin Hoyt.

Pointer Puppies—Shot, Chas Allen. V h c, Snyder, E R Howe.

Bulldogs—Billy, Al Watts, Boston.

Bull Terriers—Bitch, Sting, Matthew Gay, Boston. V h c, Daisy, Jerome F Hale, Boston; No 146, entered by Thacher Goddard, Boston. H c, Kate, L M Rand

Cocker Spaniels—Grip. V h c, No 139, entered by Chas Allen. H c, No 141, entered by Frank Brophy.

Foxhounds—Sport and Diamond, H Ramsdell, Natick. V h c, Zack and mate, same owner.

Beagle Hounds—Jack, Willie T Brigham, West Boylston. V h c, Sancho, Al Watts.

Fox Terriers—Turk, Al Watts.

Pugs—Charley, George Walton, Boston. V h c, Punch, Al Watts. H c, Toby, Thatcher Goddard, Boston.

Poodles—Pedro, L M Rand.

Black and Tan Terriers—Rocket, Charles Allen. V h c, Fido, Charles E Haven. H c, Daisy, John Fitzgibbons, South Boston.

King Charles Spaniels—Charley, Mrs S K Hindley. V h c, Lady, same owner.

Best Native Red or Red and White Setter Stud Dog—Dick, Dana K Fitch.

Esquimaux Dogs—Ned, George H Wood, West Boylston. V h c, Button, A C Lombard. H c, Emperor, J B Small.

Italian Greyhounds—Snyder, Charles B Dennis, Fitchburg V h c, Carlo, V P Curtis.

Dalmatian or Coach Dogs—Rex, W M Plaisted. V h c, Ned, Charles Allen. H c, Sport, Oscar Foote, Reading.

Skye Terriers—Snyder, George H Whitney. H c, Silver, George Walton, Boston; Jeff, M Garrity; Ginger, Charles T Pratt, Millbury. V h c, Topsy, M P Goff, South Boston.

Yorkshire Terriers—Rags, J A Condy. V h c, Dot, F S Waitt, Boston. H c, Fan, M P Goff, South Boston.

Field Spaniels—Conrad, C F Mann. V h c, Rover, H Wesby.

Miscellaneous Class—Felix, St Bernard and Newfoundland, entered by H M Goddard, Millbury.

Retrieving Spaniels—Sport, R M Waterman, Athol. V h c, bitch, Norah, T M Larnard, Worcester. H c, Nameless, H G Reed, Worcester.

BEAR DOGS.

In reply to some inquiries made by us in regard to a bear dog, a correspondent kindly furnishes us with some facts as to the character of the dog. If to the sagacity of the collie the weight and courage of a bulldog could be added, as our correspondent suggests, very possibly a good dog could be had. In such hunting camps as we have seen, bear dogs, as shown to us, seemed to be a mixture of all kinds—in fact, of no particular breed at all. We would refer our readers to a capital article, "Two Bear Stories," commenced in our last issue, which describes the method of attacking a bear by a dog:

EDITOR FOREST AND STREAM:

There is no breed of bear dogs in this immediate vicinity. A friend of mine—Palmer—who lives in the Saginaw region, and hunts there, owns a splendid dog. I talked with him on the subject, and he told me the dog was half shepherd and bull. The dog is a still hunter—that is, he gives tongue only when he closes with or trees the bear. Palmer says this is better than if the dog gave tongue when first striking the trail, as it does not alarm the bear and scare other game that might happen to be in the vicinity. The same authority informs me that to make a dog a good one for bears there is as much in training as in breed, provided the dog has courage to take hold of a bear, but if not, he is not worth breaking for bear. A small bear is the best to commence with, as he generally runs, and the dog will be more sure to bite him behind and tree him. A large bear is more apt to stand ground and fight, and should the dog attack him in front, the chances are that the dog will soon be a "still hunter." There is another dog here of the same breed, and only a pup (and very lame all the time), yet, with his first bear he took him behind, and made it lively for bruin for a few minutes. The bear, however, escaped. I mention this to show that shepherd and bull is a good cross. There is a bear dog in Crawford County, sire shepherd, dam pointer and Scotch terrier, weighing about twenty five or thirty pounds, which hunted two years ago successfully, his master, with the dog, scoring fourteen bears to his opponent's one in a few weeks' hunting match. I don't know if the other party hunted with a dog. No hunter uses more than one dog here, and I know of none for sale.

Respectfully yours, C. MURPHY.

Otsego Lake, May 15, 1878.

HOW DOGS FIGHT.—Two dogs that had always run together peacefully—one a hound belonging to A. A. Bills, and the bulldog owned by L. F. Bills—ran a rabbit into the wall on David's Hill, and by some means got to quarreling, and a terrible fight ensued. They were heard in the afternoon, and as they did not reach home at six o'clock, the owner of the hound went to find it. The dogs lay about six feet apart, facing each other, exhausted by loss of blood, and neither could stand. They were buried in one grave.—*Amherst (N. H.) Cabinet.*

DISCRIMINATING IN SCENT.—A correspondent in South Carolina sends us the following interesting points on this much discussed subject:

"In one of your back copies an article headed "Discriminating Scent" attracted my attention, and while I can indorse the statement of your correspondent, it has been, and is still, a mystery to me. In my experience, which is a long one, I have known and seen one dog, and only one, while bringing in a dead bird, to come to a full and steady point on a single live bird, and not on a covey, as your correspondent reports. And more than once have I seen the said dog (old Banko) the property of my lamented old hunting companion Joah Mosley, of Aiken, South Carolina, perform to us the same wonderful feat. Banko was a pointer of medium nose and steady goer, but had some very mean tricks, and was hard to control, but when he did come down you might bet your bottom dollar that the game was *thar*. But how old Banko could tell the difference between a dead bird that he was chewing up—for it was one of his bad tricks—and a live one on the ground, has always been one of the unaccountables to

"ONE OF THE GANG."

AN ENRAGED HEN OGES FOR A PUPPY.—From time to time questions have been put to us how to cure puppies of chasing chickens. A correspondent in Princeton sends us the following amusing incident—a lesson, in fact, with a moral:

"I have two setter puppies, neither of which, I venture to say, will ever chase a chicken. I was strolling about the place playing with the puppies, when, in our perambulations, we encountered a hen with her chicks. (I may here mention that I keep only pure game fowls, as I find them by far the most thrifty and healthy). Well, with the natural inquisitiveness of puppies, one of my gentlemen proceeded to investigate the chicks, who incontinently scuttled off into the grass. In far less time, however, than it took them to disappear, the enraged mamma was straddling that unfortunate puppy, belaboring him with her wings, clawing him all over the back, and pecking away at the top of his head like a wood-pecker on a hollow limb. The whole thing did not last a minute, but a more chopfallen puppy never came out of a scrimmage. The other effected a masterly retreat between my legs as soon as hostilities commenced, from which 'coign of vantage" he surveyed the total rout of his brother with intense interest, and his head very much on one side. Now, if either of those puppies is guilty in maturer years of chasing chickens, I am very much mistaken. Moral—To prevent dogs from chasing fowl keep a game hen or two. W. J. SLIDELL."

THE NATIONAL AMERICAN KENNEL CLUB MEETING.—The book of Mr. Burges, so long in hand, it was reported was now nearly ready for press. Without having transacted any business worthy of special mention, the club appointed a committee, consisting of Messrs. L. H. Smith, John Davidson and C. B. Whitford to draw up a series of rules to regulate Field Trials, which should be presented on the 8th of November next at Baltimore.

A NEW KENNEL.—M. P. Noel has established a kennel at Milburn, N. J. The kennel will be known by the name of the "Kenilworth Kennel," which may be hard on the romance, but admirable for a dog nursery. Mr. Noel will have leading stock, and doubtlessly we may look for a fine race of dogs, as emanating from Kenilworth.

VISITS.—Rusa by imported Statue, May 12, St. Louis.

New York, May 22.—Joseph H. Dew's Fanny Kean; Leicester—Dart to Gladstone. L. H. Smith, Mersey, Leicester—Dart to Gladstone.

Game Bag and Gun.

MAY IS A CLOSE MONTH FOR GAME.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game.—Wilson Snipe, $2.50 per dozen; plover, $3 per dozen; bay birds, large, $2.50 per dozen; small do, 20 cents; wild pigeons, flights, $1; stall fed do, $1.50; Philadelphia squabs, $2.25; wild do, 75 cents.

Poultry.—Philadelphia and Bucks County dry picked chickens, 25 cents per pound; do fowls, 18 cents; do turkeys, 18 cents; do ducks, 18 cents; do geese, 18; State and Western chickens, 15 cents; do turkeys, 15 cents; do fowls, 18 cents; capons, 40 cents; spring chickens 20 to 35 cents.

MASSACHUSETTS—*Salem, May* 21.—On a recent trip from Salem to Ameshury, stopping at Ipswich, Rowley and West Newbury, the birds seen and shot were some robin, snipe, winters, butter-heads, jacks, curlew, peeps and ring-necks. The peeps were very plenty some days at Ipswich. Also shot old squaws and loons; saw one good flock of sheldrakes. Most of the birds were seen last of last week and first of the present week. "Quawks" or night herons are increasing in numbers rapidly. Eagle Hill slough and the road to same is much dryer than commonly. R. L. N.

FOUNTAIN GUN CLUB.—The following officers have been elected: Pres., Charles F. Fiske; Vice-Pres., Abel Crook; Sec., Arthur P. Curlin; Treas., Henry G. Miller; Trustees, Hugh Goodwin, William Cleaver, John Hanley, F. W. Hausen, and John Randolph. The club is in a very flourishing condition at present. One prominent feature, and worthy of imitation, is the prohibition of betting or wagering in any way whatever.

NEW JERSEY—*Stanley, May* 23.—A letter just received from Byron, Franklin Co., Maine, from one of the best guides it was ever my good fortune to know (Stephen Taylor) gives information which it may be deemed of sufficient interest to fill a place in the columns of your valuable journal. He says: "My brother Austin writes me from Hartford, Me., that he saw a woodcock on her nest. When she flew she made a sharp whistling sound with her wings. When on the nest she did not stir, not even so much as wink. There were four eggs about the size of a partridge's; color, a pale yellow, covered with brown blotches." It must be unusually early for nesting woodcock in Northern Maine. He continues: "I was fortunate enough to trap a bear this week. I think he was two years old. He had a splendid skin." Mr. Taylor and his brother-in-law, Addison Young, are famous bear hunters. They have killed 39 in the past nine years. One enormous fellow they followed eleven days in the dead of winter, with the thermometer below zero all the time. But they took that bear's carcass on a hand sled, over mountain, through forest and valley to Byron. It netted $40.

GEO. SHEPARD PAGE.

Kinsey's Ashley House, Barnegat Inlet, May 25.—Bay birds quite plentiful. William Middleton (schooner yacht *Sans Soucie*) bagged 50 on the 23d and 30 on the 24th. Samuel Lard, F. Schober and brother, Philadelphia, bagged 390 in three days. B.

VIRGINIA—*Chincoteague Island.*—Mr. Isaac Hinckley, President of the Wilmington and Baltimore Railroad, and a party of friends have just returned from Chincoteague Island, where they report having had magnificent sport. Mr. Diston and friends, of Philadelphia, bagged some 1,300 in less than a week's shooting. The Old Dominion Line of steamers should have their hands full when this kind of racket is going on, for it carries passengers almost to the very grounds by means of its railway connections in Accomac.

A WEST VIRGINIA PARK.—A gentleman from West Virginia has for sale a tract of 31,000 acres of unimproved land, well stocked with bears, panthers, deer, turkeys, pheasants, etc., and containing some fine trout streams. He wishes to dispose of it to a sportsmen's club, in which he will himself take a large share. Further particulars may be had by addressing this office.

TENNESSEE—*Nashville, May* 23.—The prospects for a great many partridges (quail) were never better than now, there being great numbers of old birds, and they have long since mated. The woods are full of squirrels, so I learn from several sources.

MINNESOTA—*Owatonna, May* 20.—Prairie chicken prospects unusually fine. Hope some of our friends will give us a call. Can assure them fine sport. J. P. E.

Sleepy Eye, May 23.—The prairies are teaming with curlew, both straight and side bill; golden, sandy and upland plover, the latter so tame that we drive within ten feet of pairs frequently. A few geese are breeding in the sloughs, and I have found several ducks' nests with seven or eight eggs each. I have seen but one snipe this year, and the sand hills are not so plenty as they are south of here. VERD MONT.

Nobles County, May 20.—A young man killed five wolves near Worthington last week. We have right here at our doors the Okabena Lakes, in which fishing is pretty good. R. E. DUCAIGNE.

IDAHO—*Camp Cœur D'Alene, May* 8.—Our bag for the past week, without counting fish, consists of one very large gray (timber) wolf, one otter, with pelt in good trim, and one panther, 7ft. 2in. MONMOUTH.

A CARD.

NEW YORK, May 28, 1878.

To my Friends and the Sporting Public in General:

Before leaving for England, where I trust to compete with the leading English shots, where I also hope to be able to uphold the American name, I would like to call the attention of the general public to my traps and glass balls. I have made the fullest arrangements with my agents for the continuation of my business, and there will be constantly held in hand, ready for orders, a large assortment of traps and balls. I hereby forbid all makers or dealers of glass balls and traps from infringing on my patents, and agents for selling the same, as I shall prosecute any one trespassing on my vested rights. A. H. BOGARDUS.

THE PARKER GUN AT THE STATE CONVENTION.—Among the prizes most highly valued by members of the Sportsmen's Association for many years past have been the guns presented by Messrs. Parker Brothers, of Meriden, Conn. The gun donated by them to the tournament just closed, as a first prize in the double bird contest, was one of the finest, and is valued at $300. It was won by Mr. George J. Marsh, of the Forester Club of Buffalo. A large proportion of the guns used at this tournament were of this well known make. Ten prizes were won by sportsmen using the Parker gun, among them were first prizes in three contests and the special prize offered by the FOREST AND STREAM for the best average.—*Adv.*

LAMINATED STEEL AND DAMASCUS GUN BARRELS.—In your impression of April 11th, you answer a correspondent on the above under an error which I feel assured you will correct by the publication of this short letter. You confound "Damascus," which is half steel and half iron, with the inferior quality of metal composed solely of iron, but which is technically always called "stub-Damascus." The term "Damascus" applies solely to barrels composed of one-half of steel scraps, old springs, etc., and the other half of the finest iron, such as old horseshoe nails. "Laminated steel" is composed of 52 per cent. of such steel and 48 per cent. of such iron. The manipulation of the metal is somewhat different, the laminated steel being left more in plates, hence its name. The Damascus is much better worked out into an endless congeries of circular fibres, eliminating all foreign matter which is apt to lodge between the *laminæ*. The cast of the barrels is identically the same, but the use of the Damascus by all the best gunmakers, men to whom the prime cost of the raw material is as hut dust in the balance compared with final results, has long ago settled the question of its superiority over laminated steel. The latter was for instance found wanting when some years ago many breech-loaders were converted from "pin" to "central" fire, and had to undergo a new proof. The percentage of bursts at proof were greatly in excess in the laminated steel, which is also apt to fly to pieces in very cold weather. Yours, etc., J. D. DOUGALL.

Express Rifle Office, 59 St. James st., London.

[We take great pleasure in publishing Mr. Dougall's letter, though we are not conscious of having made any error, that is as to the materials from which barrels are made, as understood in the United States and supported by some strong English authorities. We are not so fully satisfied as to the greater excellence of Damascus over laminated steel for gun barrels. Mr. Greener, and quite a number of leading English gun builders, affirm that laminated steel is the stronger and tougher material of the two. They insist that although frequent working of the metal removes impurities, that the fibres of the metal are weakened by twisting. Mr. Greener says: "Laminated steel barrels are the most suitable for choke-bore guns, and more tenacious than Damascus, and therefore resist the repeated strain of heavy charges better. They will be found more durable and to lead less than barrels of softer material." What we believe is, that though theoretically there may be some difference, practically, for all ordinary purposes, Damascus and laminated steel are on a par.—ED.]

THE NATIONAL CONVENTION.—The Luzerne County Sportsmen's Club, of Wilkesbarre, Pa., cordially invite all delegates to the National Convention, June 11, to provide themselves with gun, etc., for pigeon-shooting. The Luzerne Club propose to entertain the visiting sportsmen with a free shooting tournament on the 12th.

NEW YORK STATE SPORTSMEN'S ASSOCIATION.

The twentieth annual convention of the New York State Association for the Protection of Fish and Game, held at Buffalo last week, was decidedly the largest on record. The meetings were held at the elegant club rooms of the Forester Club, and the doors were open to all comers during the week, and bountiful collations provided for every evening. The shooting grounds at the Driving Park were handsomely flagged; the localities of tents well arranged, and every comfort for the inner man provided for at the grand stand by the veteran caterer Peter Hauour, in a manner far superior to any previous occasion. The management of the whole tournament was in the hands of veterans, and went off with military precision. The hotels in the city were crowded with visitors, especially the Tifft House, which was the headquarters, and the proprietors won the commendations of their numerous guests. The immense Tourists Hotel of Dr. J. V. Pierce was visited by nearly all, and the general style and beauty of this elegant mansion, superbly furnished, was greatly admired. The contests in shooting were very harmonious, and the Forester Club justly deserve the thanks of the association for their good management and the hospitable manner in which they received their guests.

The second day of the Convention opened the contests at the Driving Park, the first match being contested by one hundred and fourteen marksmen, and subsequent contests proving equally full of interest. The sport of this day and the succeeding days was in every way most satisfactory, and of the general excellence of the shooting the following scores speak for themselves. A lack of space precludes more than this general comment upon what proved to be one of the most successful shooting tournaments ever held:

OFFICIAL SCORES.

CONTEST NO. 1—SINGLE TRAP SHOOT.—Ten single birds; open only to members of clubs belonging to the State association. Class shooting, May 21. Judges—H. M. Morse, Rochester; R. A. Augur, Le Roy. Referee, Jas. M. Curry, Clyde.

Nichols	1 1 1 e 1 1 1 0 1 1— 8	Andrews	1 1 1 1 0 1 1 1 0 1— 8
Dunham	1 1 1 1 e e 1 1 1 1— 8	Richmond	0 1 1 1 1 1 e 1 0 1— 7
Sees	0 0 1 1 1 1 1 0 e 1— 6	Ten Eyck	1 1 1 0 0 1 1 1 1 1— 8
Hotchkiss	1 0 1 1 0 1 1 1 e 1— 7	Tilston	e 0 e 0 1 1 1 e 1 1— 5
Walzer	1 0 1 1 1 1 1 1 1 1— 9	G Smith	0 1 1 1 1 1 0 0 1 1— 7
Pierce	1 1 1 1 1 1 1 1 1 0— 9	T Collins	1 0 1 1 0 1 1 1 1 1— 8
Sloan	1 0 1 1 0 1 0 1 1 1— 7	Aspell	1 1 1 e 1 1 1 1 1 1— 9
Eggert	0 0 0 0 1 1 1 e 1 0— 4	Cowden	0 1 1 0 1 0 1 0 1 1— 6
Thompson	1 1 0 1 1 1 0 1 1 0— 7	Murray	0 1 1 1 1 1 0 0 1 1— 7
Brown	1 1 1 1 e 0 1 1 e 1— 7	Sholtz	1 1 1 0 0 1 0 1 e 1— 6
Lawrence	1 1 1 1 1 1 1 1 1 1—10	Tucker	1 1 1 e 1 1 1 1 1 1— 9
Manning	1 0 1 0 1 1 1 1 1 1— 8	Tinman	1 1 1 1 0 0 1 e 0 1— 6
Rosencranz	1 0 1 1 0 0 1 1 0 1— 0	Raymond	1 e 0 1 1 1 1 1 1 0— 7
Russell	0 1 1 1 1 e 1 1 1 0— 7	Demont	1 0 1 1 1 1 1 1 1 1— 9
Forsyth	0 e 1 1 1 0 0 1 1 1— 6	Ridley	1 1 1 0 1 1 0 0 1 0— 0
Sackett	0 1 1 0 1 0 1 1 1 0— 6	S Green	0 1 1 1 0 1 0 1 1 0— 6
Burroughs	1 1 e 1 0 0 1 1 1 0— 6	Streeter	0 1 0 1 1 0 1 0 0 1— 5
Miller	1 1 1 1 1 1 0 1 1 1— 9	Catonpole	1 1 0 e 1 1 1 1 1 0— 7
Greene	e 1 0 0 0 0 1 1 1 e— 4	York	0 1 0 1 1 0 0 e 1 1— 0
Morse	1 1 1 1 1 0 0 0 1 1— 7	Cook, Jr	0 1 1 0 1 0 1 1 1 1— 7
Hoag	0 1 1 1 0 1 1 1 1 0— 7	Grobe	1 1 1 1 0 1 e 1 0 1— 7
Lipp	1 0 1 0 1 1 0 1 0 1— 6	Sage	0 0 1 0 0 0 1 0 1 0— 8
Babcock	0 1 1 1 1 0 1 0 1 0— 6	Jones	1 1 1 1 1 1 1 1 1 1—10
Crouch	1 1 1 1 1 1 1 1 1 1—10	Warner	0 1 1 1 1 0 1 1 1 1— 8
Drake	1 1 0 e 0 0 e 0 0 0— 2	Geo Smith	1 1 1 1 1 1 1 0 1 0— 8
Twist	1 e 1 1 1 1 1 1 0 1— 8	E Dumont	1 0 0 0 1 1 1 1 1 1— 7
Moore	0 0 1 1 0 0 1 1 0 0— 4	Dorr	0 1 1 1 1 1 1 1 1 0— 8
D S Drake	1 1 1 1 1 1 0 1 0— 7	Vanbleck	1 1 1 1 0 1 1 1 0 1— 8
Bonnell	1 0 0 1 0 0 1 1 1 1— 5	Pope	1 0 1 0 1 1 1 1 1 1— 8
Hammond	1 0 1 0 0 0 0 1 1 0— 4	Kolb	0 1 1 0 1 1 1 1 1 1— 8
Morse	1 1 1 1 0 1 0 e 1 1— 7	Nechter	0 e 0 0 0 1 1 1 1 0— 4
Stacey	1 1 1 1 1 1 1 1 0 1— 9	Geo Smith	1 1 0 e 1 1 1 1 1 1— 8
Youngs	0 0 1 1 0 1 1 0 1 1— 6	Jacns	1 1 0 1 1 1 1 0 0 0— 6
White	1 e 0 0 1 1 1 0 0 1— 5	J B Sage	1 0 0 0 1 0 0 e 1 1— 4
Witmer	e 0 1 1 1 1 1 1 1 1— 8	Lord	0 0 0 1 0 1 1 0 1 0— 4
Flower	1 1 0 1 1 1 0 1 1 1— 8	Ward	1 0 1 1 1 1 0 1 1 1— 8
Hudson	1 1 0 1 1 1 1 1 1 1— 9	Marsh	1 1 1 1 1 1 1 0 1 0— 8
Dennison	0 0 1 1 1 0 1 1 1 0— 6	Sidway	0 1 0 1 0 1 1 1 0 1— 6
Frazier	0 1 1 1 1 1 1 1 1 0— 8	Fulton	1 0 1 1 1 0 0 0 1 1— 6
Pratt	1 1 1 1 1 0 1 0 1 0— 7	Bamfield	1 1 1 0 0 1 0 1 1 1— 7
Burroughs	0 0 1 1 e 0 1 e 0 1— 4	Henry	0 0 1 1 1 1 0 1 1 1— 7
Lawrence	0 1 1 1 0 0 1 0 0 0— 4	Woods	1 1 0 0 0 0 0 1 1 1— 5
Thompson	1 1 1 1 0 0 1 1 1 1— 8	Schiebert	1 1 1 1 1 1 1 1 0 1— 9
Bowman	1 1 0 1 1 1 1 1 1 0— 8	Selden	1 0 1 0 0 1 1 1 1 1— 7
Sheridan	1 1 1 0 1 1 1 1 1 1— 9	Damewood	1 1 1 0 1 1 1 1 1 1— 9
Curtiss	0 1 1 0 0 0 e 0 0 1— 3	Wurts	e 1 1 1 1 e 0 1 1 e— 6
Evershed	0 e 1 1 1 1 1 1 1 1— 8	Dayton	1 1 1 1 1 1 1 1 1 1—10
Fleischman	1 e 1 1 e 1 1 0 1 1— 7	Kaufman	0 0 1 0 1 1 1 0 0 1— 5
Lusk	1 1 1 e 1 1 1 1 e 0— 7	Niver	0 0 1 1 1 0 1 1 1 1— 7
Heinhold	1 1 1 0 e 1 0 1 1 1— 7	Newell	1 0 1 1 1 1 0 1 1 1— 8
Fischer	1 0 0 1 1 1 1 1 0 1— 7	French	1 0 1 1 1 0 1 1 0 1— 7
Heinz	1 e 0 0 1 1 1 1 1 1— 7	Dickson	1 0 1 1 1 1 1 1 1 1— 9
Bier, Jr	1 1 1 1 1 0 1 1 1 1— 9	Gray	0 0 0 0 1 1 1 0 1 1— 5
Hourt	1 0 1 1 1 1 1 1 1 e— 8	Netter	1 0 1 1 0 1 0 0 0 1— 0
Chaffee	1 1 1 1 1 1 1 1 1 e— 9	F Drake	1 1 1 1 1 1 1 1 0 1— 9
Redmond	1 1 1 1 1 1 1 1 1 1—10	Hall	0 0 0 0 0 0 0 0 0 0— 0
J E Pierce	1 1 1 1 1 1 1 1 1 0— 9	Parsons	1 1 0 1 0 1 1 0 1 1— 7

Ties on ten for first prize—26 yards.

J F Lawrence	1 1 1 0 1—4	H R Jones	0 1 1 1 1—4
G W Crouch	1 1 1 1 0—4	S A Dayton	1 0 0 1 w
E Redmond	1 1 1 1 0—4		

Second tie—31 yards.

J F Lawrence	1 1 0 1 1—4	E Redmond	1 1 1 0 0—3
G W Crouch	e 1 0 0 1—2	H R Jones	0 1 1 1 0—3

Mr. Lawrence, of Seneca Gun Club, Seneca Falls, awarded first prize

Ties on nine for second prize—26 yards.

Walzer	1 e w	J E Pierce	1 e 1 1 1—4
R V Pierce	1 1 1 1 1—5	J R Aspell	1 0 1 1 1—4
W Miller	0 1 1 0 0—2	S A Tucker	0 0 1 1 1—3
J G Stacey	1 0 0 1 1—3	A Demont	1 1 1 0 0—3
E Hudson	1 0 0 1 0—2	F Scheiuert	1 1 1 0 0—3
A H Sheridan	0 1 1 1 w	Damewood	0 0 1 1 0—2
J Bier, Jr	1 0 0 0 w	R J Dickson	0 0 1 1 0—2
F Chaffee	1 1 1 1 0—4		

Second prize won by R. V. Pierce, of the Forester Club, Buffalo.

Ties on eight for third prize—26 yards.

J A Nichols	1 1 1 1 1—5	C Warner	1 1 1 1 0—4
F W Dunham	1 1 1 1 1—5	G W Smith	1 0 w
J Manning	1 1 1 1 1—5	F I Dorr	e 0 w
H Twist	1 0 w	G H Van Vleck	1 0 w
J M Witmer	1 1 1 1 1—5	E B Pope	1 1 0 w
R P Flower	0 0 1 1 0—2	C A Kolb	1 1 0 1 w
F Frazer	1 1 0 0 1—3	Geo Smith	0 w
S Thompson	1 0 0 1 1—3	R Ward	1 1 1 0 0—3
W H Bowman	1 1 1 0 0—3	G J Marsh	0 w
A Evershed	0 w	R Newell	1 1 1 0 w
M Hourt	e 0 0 w	J A Nichols	1 1 0 1 e—3
J H Andrews	1 0 w	F W Dunham	0 0 0 w
E M Ten Eyck	1 1 0 w	J Manning	1 1 0 0 1—3
Tom Collins	1 1 0 0 0—2	J M Witmer	0 e 1 1 1—3

Second tie—31 yards.

J A Nichols	0 1 1 1 0—3	J M Witmer	0 1 1 1 1—4
J Manning	1 1 e 1 1—4		

Third tie—31 yards.

J Manning	1 e 1 0 w	J M Witmer	1 1 1 1 w

J. M. Witmer, of the Niagara Falls Shooting Club, third prize.

Ties on seven for fourth prize—26 yards.

H G Hotchkiss	1 1 1 1 1—5	W E Richmond	1 0 0 0 0—1
W W Sloan	1 1 1 0 w	Greene Smith	0 0 1 e 1—2
F M Thompson	0 0 0 0 1—1	W S Murray	0 w
E M Brown	1 0 0 w	F H Raymond	1 1 0 1 1—4
C Russell	0 0 0 1 0—1	B Catchpole	0 w
C C Morse	1 0 0 1 1—3	J Cook, Jr	0 w
M Hoag	0 0 1 w	J Grobe	0 w
D S Drake	0 0 0 w	E B Dumont	1 0 w
O Morse	0 0 1 w	J Bamfield	0 w
H D Pratt	0 w	P Henry	0 w
H Fleischman	1 1 1 1 1—5	R Selden	0 w
F R Lusk	e 1 1 1 1—4	J A Niver	1 1 0 w
C J Heinhold	1 1 1 0 1—4	H C French	1 1 0 w
J P Fischer	1 1 1 1 1—0	H B Parsons	1 e w
P Heinz	1 1 1 1 0—4		

Second tie—31 yards.

H G Hotchkiss	0 1 1 1 1—4	J P Fischer	1 1 1 1 0—4
G Fleischman	0 1 0 1 0—2		

Third tie—31 yards.

H G Hotchkiss	1 0 1 1 1—4	J Fischer	1 1 1 1 1—5

J P Fischer, of the Audubon Club of Buffalo, fourth prize.

Ties on six for fifth prize—20 yards.

J Sees	1 1 1 1 1—5	A N Cowdon	0 w
W A Sackett	1 0 w	B M Shultz	0 w
M S Forsyth	1 0 w	R Ridley	0 w
I D Burroughs	0 w	W C Jacus	0 w
W S Babcock	1 1 1 e w	Seth Green	1 0 w
A Bonnell	0 w	J Sidway	1 1 1 0 0—3
E Youngs	1 0 1 1 1—4	R Fulton	0 w
F P Dennison	0 w		

J Sees, of the Wayne County Club of Lyons, fifth prize.

CONTEST NO. 2—AMATEUR SHOOT—Ten single birds; open to members of organized clubs belonging to the State Association, who have never won a prize at any of the conventions. Class shooting. W. Lawrence, of Seneca Falls, and A. H. Worshed, of Irondequoit, judges. M. S. Forsyth, of Genesee, referee.

Ford	1 0 0 e 0 0 0 1 1 1— 4	Hammond	1 1 0 0 0 1 0 1 1 0— 5
Stacey	1 0 1 1 1 1 1 1 1 1— 9	Hinckley	0 1 0 1 0 1 1 1 1 0— 6
Burroughs	1 0 e 1 1 1 1 0 1 1— 7	Rumsey	1 0 1 0 1 0 0 0 1 1— 5
Rozencranz	1 1 0 1 0 0 1 1 0 1— 0	Tolama	e 0 0 1 1 1 1 1 0 0— 5
Demont	0 1 1 1 1 1 1 1 1 1— 9	Link	0 0 0 1 1 e 0 1 1 1— 5
Andrews	1 1 1 1 1 1 0 1 0 1— 8	Fleischman	0 0 1 1 1 e 1 1 0 1— 6
Chaffee	e 1 1 1 1 1 1 1 1 1— 9	Peck	0 1 1 e 1 1 1 1 1 0— 7
McFetridge	1 1 0 1 1 0 1 0 0 0— 5	Page	0 1 1 1 1 1 1 1 1 0— 8
White	1 1 0 0 1 1 1 0 1 1— 7	Wiemer	0 e 0 0 1 1 0 0 0 1— 3
Sliker	0 0 1 0 1 1 1 1 0 0— 5	Heinhold	1 0 1 1 0 0 1 0 0 0— 4
Sidway	1 1 0 0 1 0 1 1 1 1— 7	Youngs	1 1 e 0 0 0 1 1 0 1— 5
Niver	1 0 1 1 1 1 1 0 1 1— 8	Lewis	1 1 0 1 0 1 0 1 0 1— 6
Webster	1 1 e 0 1 1 0 1 1 0— 6	Sawyer	1 1 1 0 1 1 1 1 1 1— 9
Conklin	0 1 1 1 1 1 1 1 1 0— 8	Kipp	0 1 0 0 1 1 0 1 1 1— 6
Young	1 1 0 0 0 0 1 1 1 0— 5	Sayre	1 1 1 1 1 1 1 0 1 1— 9
Sackett	1 1 1 e 1 0 0 1 1 0— 6	Bamfield	1 0 0 0 1 0 0 0w
Bedford	1 1 1 1 e 1 1 1 1 0— 8	Aspell	0 1 1 1 0 1 1 1 1 1— 8
Shelton	1 1 0 1 1 1 0 1 1 0— 7	Dickson	1 1 1 1 1 1 1 1 1 0— 9
Russell	0 1 1 1 1 1 1 1 0 1— 8	Twist	1 1 1 1 1 e 1 1 1 0— 8
Burroughs	1 1 1 1 1 1 0 0 1 1— 8	Scheiuert	0 1 1 0 1 1 1 1 1 0— 7
Pratt	e 1 0 1 1 0 1 1 1 1— 7	Redmond	1 e 1 1 1 1 1 1 1 0— 8
Wykoff	1 1 1 1 1 1 0 1 1 1— 9	Franklin, Jr	1 1 1 0 0 1 1 1 0 1— 7
Knuber, Jr	1 1 1 1 0 1 1 0 0 1— 7	Rafferty	1 0 0 1 0 0 1 1 1 1— 6
Dunham	1 1 1 1 1 1 1 1 1 1—10	Thomas	1 1 1 1 0 1 0 1 0 1— 7
Pierce	1 1 1 1 1 1 0 0 0 e— 6	Woods	0 1 1 1 0 1 1 1 1 1— 8
Elliott	1 1 1 1 1 1 1 1 1 1—10	Warner	1 1 1 1 1 1 1 0 0 0— 7
Strong	1 1 1 1 1 0 e 0 0 1— 5	Selden	1 1 0 1 0 1 1 1 1 0— 7
Gibbons	1 1 0 0 1 1 e 0 1 0— 5	Waterbury	0 1 0 0 0 0 1 0 1 1— 4
Streeter	1 1 1 1 1 1 1 e 1 1— 9	Gray	1 0 0 1 1 1 0 1 0 1— 6
Catonpole	1 1 1 1 1 1 1 1 1 1—10	Hyland	1 0 1 0 1 0 1 1 1 0— 6
Sees	1 1 1 0 1 1 1 1 1 1— 9	Kaufman	1 0 1 1 0 0 0 1 1 0— 5
Parson	1 1 0 1 1 0 1 1 1 1— 8	Suckow	0 1 1 0 1 1 1 0 1 0— 6
Green	0 0 1 1 1 1 0 e 0 0— 4	Hourt	1 0 1 0 0 0 1 1 0w
Cowden	0 1 1 1 0 1 1 1 1 0— 7	Kienck	e 0 1 0 1 1 1 0 1 1— 6
Lamberton	1 1 1 0 1 1 0 1 1 0— 7	Fabor	0 0 1 1 1 0 1 1 1 1— 7
Dennison	1 0 1 1 1 1 1 1 1 1— 9	Burgess	1 1 1 1 1 1 1 1 1 1—10
Frazier	1 0 1 1 1 1 1 1 0 1— 8	Raymond	1 1 1 1 1 0 1 1 1 1— 9
Thompson	1 1 1 1 1 1 1 1 0 e— 7	Stanher	0 0 0 1 0 0 1 1 0 1— 4
Botchkiss	1 1 1 0 1 1 1 1 1 1— 9	August	1 1 1 1 1 1 0 0 1 1— 8
Saget	0 1 1 1 1 0 0 1 1 0— 6	Rinewalt	0 0 1 0 1 1 1 1 1 0 1— 6
Wurts	1 1 0 1 1 1 0 e 1 1— 7	Kolb	0 e 0 0 1 0w
Curtiss	0 0 1 0 1 1 0 1 1 0— 5	Smith	1 0 1 0 1 1 1 1 1 1— 8
Brownell	1 1 1 1 0 1 1 0 1 1— 8	Neckter	0 0 1 1 1 0 0 1 1 1— 6
Damewood	1 1 1 1 1 0 1 1 1 1— 9	Kener	1 1 1 1 1 0 0 1 0 1— 7
Morse	1 1 1 0 1 1 1 1 1 1— 9	Tyler	1 1 0 0 1 e 0 1 0 0— 4
Miller	1 1 1 0 1 1 1 1 0 0— 7	Cole	0 1 1 1 1 1 1 0 1 0— 7
Moore	1 0 0 0 0 0 0 1 1 1— 4	Tucker	1 0 1 1 1 1 1 1 0 1— 8
J Drake	1 0 1 0 0 0 1 1 1 0— 5	Dumont	e e 1 1 0 0 1 1 0 0— 4
D Drake	0 1 0 1 0 1 1 0 1 1— 6	Collins	0 1 1 1 0 1 1 1 1 1— 8
Eggert	0 0 0 1 1 1 1 1 0 0— 5	Dingens	1 1 1 1 0 0 1 1 1 1— 8
Pope	0 e 1 1 1 e 1 1 1 1— 7	Suter	0 0 e 1 0 0 1 1 1 0— 4
Pierson	0 1 1 1 1 1 1 0 1 e— 7	Franklin	1 1 1 1 1 1 1 0 1 1— 0
Fridenburg	1 0 1 0 e 1 0 1 1 0— 5	Dann	1 1 0 0 1 1 0 1 1 1— 7
Lewis	1 1 1 e 1 0 0 1 1 1— 7	Wiard	1 1 0 1 1 1 0 0 1 1— 7
Johnson	1 1 0 1 1 0 1 1 1 0— 7	Sloen	1 1 e 1 1 1 1 1 1 1— 9
Fischer	1 0 1 1 1 1 1 1 e 1— 8	Hodge	1 1 1 1 0 1 1 0 e 0— 6
Hyde	1 1 0 0 e 1 1 1 1 1— 7	G Smith	1 1 1 1 e 0 1 0 0 0— 5
Bier, Jr	1 1 0 1 1 1 1 1 1 0— 8	Morse	1 0 1 1 1 1 1 1 1 1— 9
Seymour	1 e 0 1 1 1 0 1 1 0— 6	Reigelmann	0 0 0 1 1 0 1 1 1 1— 6
Voltz	1 1 1 1 1 1 1 1 1 1—10	Carey	1 1 1 e 1 1 0 1 1 0— 7
Thompson	0 1 1 1 e 0 1 1 1 1— 5	Jaeger	1 1 1 1 1 1 1 0 1 1— 9
Vine	1 0 e 0 1 1 0 1 1 1— 6	Tompkins	1 0 1 1 1 1 1 0 0 0— 6

Ties on ten for first prize—26 yards.

Dunham	1 1 0 0 1—3	Voltz	0 0 0 0w
Elliott	0 0 0 0w	Burgess	0 0 1 1 0—2
Catchpole	1 1 0 0 0—2		

Mr. Dunham, of the Albion Club, first prize.

Ties on nine for second prize—26 yards.

Stacey	1 1 0w	Moore	0w
Demont	1 0w	Sawyer	0w
Chaffee	1 1 1 1 1—5	Sayre	1 0w
Wykoff	0w	Dickson	1 1 1 1 1—5
Streeter	1 0w	Raymond	0 1 0 1 0—2
Sees	0w	Franklin	1 0w
Dennison	1 0w	Sloan	1 1 1 1 0—4
Hotchkiss	1 0w	Morse	1 1 0w
Damewood	1 0w	Jaeger	0w

Second tie—31 yards.

Chaffee	1 1 1 1—4	Dickson	e 1 0w

Mr. Chaffee took second prize.

Ties on eight—20 yards.

Andrews	1 1 1 0w	Aspell	1 ew
Niver	1 0w	Twist	1 0w
Conklin	0w	Redmond	1 1 1 0w
Bedford	1 0w	Wood	1 0w
Russell	1 1 1 0w	August	1 1 1 0w
Burroughs	0w	G W Smith	1 0w
Parsons	0w	Tucker	1 1 1 1 0—4
Frazier	1 1 1 1 1—5	Collins	1 0w
Fischer	1 1 1 1 1—5	Dingens	1 1 1 1 1—5
Bier, Jr	1 1 0w	Brownell	0w
Page	1w		

Second tie—31 yards.

Frazier	1 1 0 1 1—4	Dingens	0 1w
Fischer	1 0 0 1w		

Mr. Frazier, of Central City Club of Syracuse, took third prize.

Ties on seven—26 yards.

Burroughs	0 1 0w	Hyde	1 1 0 1 1—4
White	0 0w	Peck	0 1 1 1 1—4
Sidway	0 1 1 0w	Franklin, Jr	1 1 1 0 0—3
Shelton	0 0w	Thomas	1 0 1 1 0—3
Pratt	1 1 1 1 0—4	Warner	0 0w
Kimber, Jr	0 0w	Selden	1 1 0 0w
Conden	1 1 1 0 0—3	Tabor	1 0 1 1 0—3
Thompson	1 0 ew	Kenner	1 0 0w
Wurts	1 1 1 1 0—4	Cole	1 0 1 0w
Miller	1 1 1 0 1—4	Dann	0 1 1 1 0—3
Pierson	0 1w	Wiard	0 1 0w
Lewis	e 1 0w	Fulton	1 1 e 1 1—4
Johnson	1 1 0 0w		

Second tie—31 yards.

Pratt	0w	Hyde	1 1 1 0w
Wurts	0w	Peck	0w
Miller	1 0w	Fulton	1 1 1 1 1—5

Mr. Fulton, of the Niagara Falls Shooting Club, fourth prize.

Tie on six—26 yards rise.

Rosencrans	1 0w	Lewis	0w
Webster	1 1 1 1 1—5	Rafferty	0w
Sackett	1 0w	Gray	0w
Pierce	1 1 1 1 1—5	Klinck	1 1 1 1 1—5
Strong	1w	Rinewalt	0w
Sage	0w	Neckter	1 0w
Seymour	1 0w	Hodge	1 0w
Thompson	1 0w	Reigelmann	1 0w
Hinckley	0w	Tompkins	0w
Fleischman	1 1 0w		

Second tie—31 yards.

Webster	0 0 1 0w	Klinck	0 0 1 0w
Pierce	1 0 1 1 0—3		

Mr. Pierce of the Buffalo Gun Club, won fifth prize.

CONTEST NO. 3—SINGLE TRAP SHOOT FOR DR. R. V. PIERCE DIAMOND BADGE. VALUE $350.—Fifteen birds, twenty-one yards rise. Open only to members of clubs belonging to the State Association. W. C. Christian, Geo. Smith, judges; J. Sidway, referee.

Tompkins	0 1 1 1 1 1 1 1 1 1 1 0 1 1 0—12
Gerber Jr	0 1 1 1 1 1 1 1 1 0 1 1 1 1 1—13
Lawrence	1 1 1 1 1 1 1 1 1 1 1 0 1 1 1—14
Pierce	1 1 1 1 1 1 1 1 1 1 e 1 0 1 1—18
Truman	1 1 1 1 1 1 1 1 1 1 1 1 n 1 1—14
Redmond	1 1 1 0 1 1 1 1 0 0 1 0 0 0 0— 8
Jacns	1 1 0 1 1 1 1 1 1 e 1 1 1 1 0—12
Vanbleck	1 1 1 0 1 1 0 1 e 1 1 1 1 1 1—12
Shultz	1 1 e 1 1 1 1 1 1 1 e 0 1 1 1—12
Heinz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Ward	1 1 1 1 1 1 1 0 1 1 1 1 1 1 1—14
Flower	0 1 1 1 e 1 0 0 0 0 0 1 1 0 1— 7
Christian	1 1 1 1 1 1 w
Heinhold	0 0 1 0 0 w
Jones	1 1 1 1 0 1 1 1 0 1 1 1 1 0 1—12
Smith	1 0 1 1 0 1 0 w
Voltz	1 1 1 1 1 1 1 0 1 w
Fischer	1 1 e w
Vine	1 1 1 1 1 1 1 1 1 1 1 e 0 1 1—13
Fleischman	0 1 0 1 1 1 1 1 0 1 0 1 1 0 1—10
Walzer	e 1 1 1 1 1 1 1 1 0 1 1 1 1 1—18
Crouch	1 1 1 1 1 1 0 1 1 e 1 0 1 1 0—11
Hooker	1 1 1 1 1 1 1 1 1 1 0 1 0 1 1—13
Damewood	1 1 1 0 1 1 1 1 1 1 e 1 1 1 1—13
Silsby	1 1 1 0 1 0 1 1 1 1 1 1 1 1 1—13
Evershed	1 1 0 1 w
Cook Jr	1 1 1 1 1 1 1 1 0 w
Andrews	1 0 1 1 e 1 1 1 1 1 1 1 1 0 1—12
G Smith	1 1 1 1 t 1 1 1 1 1 0 0 1 1 0—12
Manning	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Hudson	1 1 1 1 1 0 w
Bier Jr	1 1 1 1 1 1 0 w
Marsh	1 1 1 1 1 1 0 w
Elliott	1 0 1 1 0 0 1 1 0 1 1 0 1 1 0— 9
Demont	1 1 1 1 0 1 0 w
Stacey	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Dorr	1 1 1 1 0 w
Wilmer	0 w
Scheihert	1 1 1 1 1 1 1 1 1 1 0 w
Collins	1 1 0 w
Crittenden	1 1 1 1 1 1 1 0 w
Newell	1 1 1 1 1 1 1 0 w
Nichols	1 1 0 w
Holloway	0 w
Sloan	1 1 w
French	1 1 1 e w
Fulton	1 1 1 1 1 1 0 w
Felton	1 1 1 1 1 1 1 0 0 1 w
Ridley	1 1 1 1 1 1 0 w
Pierce	1 1 1 1 1 1 1 1 1 0 1 1 0 1—13
Sheridan	1 1 1 1 0 w
Raymond	0 1 0 w
Sage	e w
Ten Eyck	0 1 1 1 0 1 1 1 1 1 1 1 1 1 1—13
Dayton	0 w
Stillson	1 1 1 0 w
Richmond	1 0 w
Meister	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Chaffee	1 1 0 w

Ties on fifteen—25 yds.

Heinz	1 1 1 1 1—5	Meister	1 1 1 1 1—5
Stacey	1 1 e 1 1—4		

Second tie on five—31 yds.

Heinz	1 1 1 1 1—5	Meister	0 1 1 1 1—4

P Heinz, of the Audubon Club of Buffalo, winner.

CONTEST NO. 4.—Double bird shoot; ten double rises. Open only to members of clubs belonging to the State Association. Class shooting. The score of this match having been mislaid we can give only the summary. The full score will appear next week. Messrs. R. Newell, Forester Club, and R. Ward, Audubon Club, tied on 18, Newell winning shoot off. There were ten ties on 14; the shoot off being won by G. J. Marsh, Forester Club. Tie for third won by N. Soule, Jr., Syracuse. Ties of 15 won by H. B. Hooker, of Rochester. Ties of 14 for fifth prize won by A. P. F. Compson, of the Seneca Falls Phoenix Club.

FOR BEST AVERAGE IN CONTESTS NOS. 1, 4 AND 5.—THE FOREST AND STREAM AND ROD AND GUN MEDAL, given by the Forest and Stream Publishing Co., New York. Value $150.

Match at 5 pairs; 21 yds.

Newell	10 11 11 01 10—7	Marsh	11 11 10 11 10—8

Ten single rises:

Newell	1 1 0 1 1 1 1 1 0 1—8	Marsh	0 1 0 1 1 1 0 0 1 1—6

Mr R Newell, of the Forester Club, of Buffalo, killed 15 to Mr Marsh's 14, was declared winner.

CONTEST NO. 5—SINGLE TRAP SHOOT.—Fifteen birds. Open only to members of organized clubs belonging to the State Association. Class shooting.

Hudson	1 1 1 1 1 0 1 0 1 1 1 1 1 0 1—12
Sheridan	1 1 1 1 1 1 1 0 1 1 1 0 1 1 1—13
Jones	0 1 1 1 1 1 1 1 1 1 1 0 0 1 1—12
Burroughs	0 1 1 1 0 1 0 1 1 0 1 1 1 1 1—11
Geo Smith	1 0 1 1 0 0 1 0 1 1 1 1 1 1 1—11
Warner	0 1 0 1 1 1 1 0 1 0 1 1 1 1 1—11
Lusk	1 1 1 0 0 0 1 1 1 1 0 1 1 0 1—10
Cook	1 1 1 1 1 1 0 1 1 1 0 1 1 1 1—13
Dunham	1 0 1 1 0 1 0 1 1 1 1 1 1 1 1—12
Lawrence	1 0 1 0 1 1 1 1 1 0 1 0 1 1 1—11
Geo W Smith	1 1 1 1 1 1 0 1 1 1 1 0 1 1 1—13
Forsyth	1 0 0 1 1 1 1 1 1 1 t 1 0 1 1—12
Stacey	0 1 1 1 1 1 0 1 1 1 1 1 1 1 1—13
Cowden	0 1 0 1 0 0 0 1 0 1 1 0 0 1 0— 5
Flower	1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—14
Selden	0 0 0 1 0 1 0 0 0 1 1 0 1 1 1— 7
Murray	1 0 1 1 1 1 1 1 1 1 1 0 1 1 0—12
Silsby	1 1 1 1 1 0 1 1 1 : 0 1 1 1 1—13
Pierce	1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—14
Kaufman	0 1 1 0 1 1 0 1 1 0 1 1 t 0 1—10
Nichols	1 1 1 1 0 1 1 1 1 1 1 1 0 1 1—13
H S Smith	1 1 1 1 1 1 1 1 1 1 0 1 1 1 1—14
Biddlecomb	1 1 0 0 0 0 0 1 0 0 1 0 0 1 0— 0
Babcock	1 1 1 1 0 1 0 0 1 1 1 1 1 1 0—11
Dennison	1 1 1 0 1 1 1 0 1 1 0 1 0 1 1—11
Thompson	1 0 0 0 1 0 1 1 1 1 1 0 1 1 0— 9
Kolb	1 1 1 0 1 1 1 1 0 1 1 1 1 1 0—12
Lobb	0 0 0 0 0 1 0 0 0 1 0 0 0 1 0— 8
Gibson	1 1 1 0 1 1 1 0 1 1 1 0 1 0 0—10
Oehling	0 0 1 1 0 1 0 1 1 0 1 1 0 1 0— 8
Hollister	0 0 1 0 0 1 0 1 1 1 1 1 0 1 0— 8
Weiss	1 1 1 1 1 1 1 1 1 1 0 1 0 1 1—13
Gerber	0 0 1 1 0 1 1 1 1 0 1 1 0 1 1—10
Wakeman	1 0 1 0 1 1 1 1 0 1 1 1 0 0 1—10
F A Thompson	1 0 1 1 0 1 1 1 1 1 1 1 1 1 1—13
Frazier	1 1 : 1 0 1 1 0 0 1 0 1 0 1 1—10
Link	0 1 0 1 0 1 0 1 1 1 1 1 1 1 1—11
Ten Eyck	0 1 0 0 1 1 1 1 0 0 1 1 0 1 1— 9
Collins	1 0 0 0 0 1 1 1 0 0 1 1 1 1 1— 9
Rosencrauz	0 1 1 1 1 1 0 0 1 1 1 1 1 0 1—11
Parsons	0 0 1 0 0 1 1 0 1 1 1 1 1 1 1— 9
Walzer	1 1 0 1 0 1 1 1 1 1 1 0 1 1 0—11
P Tompkins	1 1 1 0 0 0 1 1 0 1 1 1 0 1 1—10
Hooker	1 1 1 1 0 1 1 1 1 1 0 1 1 1 1—13
Chaffee	1 1 1 0 1 0 1 1 1 1 1 1 1 0 1—12
Van Vleck	1 1 1 1 0 1 0 1 1 1 0 1 1 1 1—12
Ward	1 0 1 1 1 1 1 0 1 0 1 1 0 1 0—10
Dorr	1 0 0 0 1 0 0 w
Heinz	1 1 1 1 1 1 0 0 0 1 1 1 0 0 1—10
Suckow	0 0 0 0 1 1 1 1 1 1 1 1 1 1 0—10
Meister	1 1 1 0 0 1 1 1 1 1 0 1 0 1 1—11
Johnson	1 0 1 0 1 1 1 1 1 1 1 1 1 0 1—12
Fleischman	1 1 1 0 1 1 0 1 0 1 1 0 1 1 1—11
Franklin Jr	0 1 1 1 1 1 1 1 1 0 0 1 0 0 0— 9

Beier Jr	0	1	1	1	0	1	1	1	0	0	1	0	1	0	1—9
Stillson	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1—12
Rafferty	0	1	1	1	0	1	1	1	1	0	1	0	1	1	1—11
Kimber	1	0	0	1	1	1	1	1	0	1	0	0	0	1	0—8
Dumont	0	1	1	0	1	1	0	0	1	0	0	1	1	1	0—8
Richmond	1	1	1	1	0	1	0	1	0	9	1	1	1	1	1—11
Manning	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1—14
Filton	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1—12
Fellon	1	1	1	1	1	0	1	1	1	1	0	0	1	0	1—11
Slauter	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0—13
Gray	1	1	0	1	0	0	0	1	0	w					—4
Netcher	0	0	1	1	0	1	1	0	0	0	1	0	0	0	1—6
Roberts	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1—13
Jacus	1	0	0	1	1	0	1	0	1	0	1	1	0	0	1—8
Crittenden	1	1	1	1	0	1	1	0	0	1	1	1	1	1	0—11
Page	1	1	0	1	1	1	1	1	0	0	1	1	1	0	1—11
Curtis	0	0	0	1	1	1	0	0	0	0	0	1	1	0	0—6
Holloway	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
Dickson	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1—14
Downs	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0—10
Heinold	0	1	1	0	0	1	0	0	0	1	0	1	0	1	0—6
Miller	1	1	0	1	1	0	1	1	1	0	1	1	1	1	1—12
Crouch	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1—9
Tolsma	0	1	1	1	0	1	1	1	1	0	0	1	0	1	1—10
Tucker	1	1	1	1	1	1	0	0	1	1	0	1	1	1	1—12
Youngs	0	1	0	0	1	1	1	1	0	1	0	1	1	1	1—10
Warner	1	1	0	0	1	0	0	1	0	1	1	1	1	1	0—9
Whipple	0	0	0	0	1	1	0	1	0	0	1	0	0	1	0—5
Witmer	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1—13
Ridley	1	1	0	0	1	0	0	1	0	1	1	1	1	1	1—10
Morse	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0—11
Hammond	0	1	1	0	0	1	0	1	0	0	1	1	1	0	1—9
Lewis	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1—13
Longnecker	1	1	0	1	1	1	1	1	0	0	0	1	0	0	1—9
Hodge	1	0	1	0	1	1	1	1	0	1	1	0	1	0	0—9
Rumsey	1	1	1	1	1	0	1	1	0	0	0	1	0	1	1—10
Dingens	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
Sutter	0	1	1	1	0	0	1	0	1	1	1	0	1	1	1—10
Marsh	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
Pierce	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1—13
Truman	1	1	1	1	1	1	1	6	1	1	1	1	1	1	1—14
Newell	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1—14
Volz	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1—13
Soule	0	1	0	1	1	0	0	1	1	1	0	0	1	1	0—8
Fischer	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1—13
G Smith	1	0	1	1	1	1	1	0	1	0	0	0	0	0	0—7
Bangs	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1—13
Sees	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
Bet	1	1	1	0	0	1	0	1	1	0	1	1	1	1	1—11
Thomas	0	1	0	0	1	1	1	0	0	1	1	1	0	1	1—10
Seymour	1	0	0	1	1	1	1	1	0	0	1	1	1	0	1—10
French	1	0	1	1	1	0	1	1	1	0	0	1	0	1	1—10
Sloan	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1—12
Itteguebeg	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1—12
Youngs	1	0	0	0	1	0	0	0	1	1	1	0	0	1	0—6
Palue	1	0	0	1	1	1	1	0	1	0	1	1	0	0	1—9

Ties of fifteen—26 yds.

Holloway..........1 1 1 0 1—4 Marsh............1 1 1 1 1—5
Dingens..........0 1 0 1 1—3 Sees............1 1 0 0 w

First prize, George F Marsh, Forester Club, Buffalo.

Ties on fourteen—26 yards, five birds each.

Flower..........0w Dickson..........1 1 1 1 1—5
Pierce..........1 1w Newell..........0w
H Smith..........0w Truman..........0w
Manning..........0w

Dickson, Forester Club, Buffalo, won second prize.

Ties on thirteen—26 yards.

Sheridan..........1 1 0w Stauber..........0w
Cooke, Jr..........1 1 1 0w Roberts..........1 0w
G W Smith..........1 1 1 1 1—5 Wilmer..........1 1 0w
Stacey..........1 1 1 1 1—5 Lewis..........1w
Selby..........1 10w Pierce..........1 1 1 1 1—5
Nichols..........0w Volz..........0w
Weiss..........1 1 0w Fisher..........1 0w
Thompson..........1 1 0w Bargis..........0w
Hooker..........1 1 0w

Tie on five at 31 yards.

G W Smith..........1 1 1 0 0—3 Pierce..........0 1 1 1 0—3
Stacey..........0 1 1 1 0—3

Third tie: Pierce, Forester Club, Buffalo, won third prize with four birds at 31 yards.

Tie on twelve—26 yards.

Hodson..........1 0w Johnson..........0w
Jones..........0w Stillson..........1 1 1 1 1—5
Forsyth..........1 0w Flin..........1 0w
Murray..........1 1 1 1 1—5 Miller..........1 1 1 1 1—5
Kolb..........1 0w Tucker..........1 1 1 1 0—4
Chaffee..........0w Sloan..........1 1 1 1 1—5
Van Vleck..........1 1 1 1 1—5 Itteguebeg..........1 1 1 1 0—4

Second tie—31 yards.

Murray..........1 0 0 0w Miller..........1 0 0w
Van Vleck..........1 0 1 1 0—3 Sloan..........1 0 1 0 0—2
Stillson..........1 1 1 0 0—3

Third tie—31 yards.

Van Vleck..........0 0 0 1 0—1 Sloan..........1 0 0 0 0—1
Stillson..........1 0 0 0 1—1

Fourth tie—31 yards.

Van Vleck..........1 0 1 0 1—3 Sloan..........1 0 0 0w
Stillson..........1 0 0 0w

G H Van Vleck, Forester Club, Buffalo, won fourth prize.

Tie on eleven—26 yards.

Burroughs..........0w Meister..........0w
Smith..........1 1 1 0w Fleischman..........1 1 1 0w
Warner..........1 1 0w Rafferty..........1 1 1 0w
Lawrence..........0w Richmond..........1 1 1 1 0—4
Babcock..........1 1 1 1 1—5 Morse..........0w
Dennison..........1 0w Beek..........1 1 1 0w
Walzer..........1 0w

W J Babcock, of Monroe County Club, won fifth prize.

Contest No. 6.—For the Livingston Sportsmen's Association Cup, donated by James W. Wadsworth, Esq, Geneseo, N. Y. Open to all organized clubs of this State, members of the State Association. To be shot for by two members resident of the county in which the club is located; 15 double rises each; in accordance with the rules of the New York State Association. J. F. Lawrence, of Seneca Falls, and C. C. Morse, of Rochester, judges; T. C. Banks, of Forest and Stream and Rod and Gun, referee.

Monroe County Club, Rochester.

H Walzer..........10 10 1e 11 00 11 11 e1 1e 11 10 00 11 01 10—18
H B Hooker..........11 00 01 10 1e 11 11 1e 11 11 0 11 11 11 11—22—40

Audubon Club, Buffalo.

J P Fischer..........11 11 11 10 11 01 10 10 00 11 00 11 11 10 11—21
W C Christian..........11 10 e1 11 e1 11 10 11 11 11 10 11 10 11 10—23—44

Phœnix Club, of Seneca Falls.

A H Sheridan..........10 11 00 1e 11 1e 10 11 10 10 01 11 11 10 11—20
A R Compson..........11 01 10 e0 11 11 11 11 11 1e 1e 10 1e 10 11—20—40

Central City Club, Syracuse.

J Holloway..........00 11 11 11 10 11 11 11 11 11 11 11 11 11 11—27
J Manning..........00 10 1e 11 1e 01 11 01 01 11 0e 10 10 11 00—16—43

Forester Club, Buffalo.

R Newell..........1e 11 11 11 11 11 1e 11 11 11 11 10 11 11 11—27
Geo Smith..........11 11 10 e0 10 11 1e 1e 00 0 10 10 10 11 01—16—43

Dean Richmond Club, Batavia.

W M Tompkins..........01 11 10 11 01 11 10 11 10 1e 01 11 01 11 10—19
B Tompkins..........11 11 01 1e 10 11 10 11 e1 11 01 11 11 11 10—22—41

Cup won by Audubon Club, Buffalo.

Contest No. 7.—Dean Richmond Trophy—Open to clubs belonging to the State Association. To be shot for by three members residents of the county in which the club is located. Twenty single birds, 21 yards rise, in accordance with the rules of the New York State Association. Entrance, $30. Entrance money to go to club making the highest score. The club making the next highest score to receive 500 lbs. of Improved Chilled Shot, donated by Tatham Bros., New York. N. Rowe, of Chicago, and H. H. Brown, of Cleveland, judges; T. C. Banks, of New York, referee.

Monroe County Club, of Rochester.

H B Hooker..........e1 11 11 10 11 11 11 11 11 11—18
F Chaffee..........10 11 10 11 11 11 11 11 10 11—17
J B Stillson..........11 01 11 11 11 11 10 11 01 11—17—52

Buffalo Gun Club.

J E Pierce..........11 11 11 11 11 e1 01 1e 11 11—17
Wm Price..........01 11 11 11 11 11 01 11 01 10—16
F B Pickering..........e1 11 e1 11 0e 11 10 01 11 00—12—

Forester Club, Buffalo.

R Newell..........11 11 11 11 11 11 11 11 10 00—17
G J Marsh..........11 11 10 11 01 11 11 11 11 e1—17
H R Jones..........11 11 11 11 11 11 11 11 11 10—19—53

Audubon Club, Buffalo.

Geo Meister..........11 11 11 11 11 11 11 11 01 01—18
J P Fischer..........11 11 e1 11 11 11 11 1e 11 11—18
J A Dingens..........11 01 11 10 1e 11 11 01 e1 11—15—51

Phœnix Club, Seneca Falls.

A F Compson..........11 11 11 10 11 01 10 10 01 11—15
A H Sheridan..........10 11 10 11 11 11 11 11 11 01—17
W S Murray..........11 11 11 01 11 e1 01 11 11 11—17—49

Central City Club, Syracuse.

J A Nichols..........11 11 11 01 11 11 11 11 10 e1—17
J Holloway..........01 01 11 e1 11 11 11 11 11 11—17
J Manning..........11 00 01 11 01 11 10 11 11 11—15—49

Seneca Gun Club, Seneca Falls.

J F Lawrence..........11 01 11 11 01 11 11 11 11 11—18
J G Stacey..........11 11 11 11 1e 11 11 11 11 10—18
M Hoag..........01 11 11 11 11 10 10 11 11 10—16—52

Genesee County Club, Rochester.

H Walzer..........e0 11 11 10 11 01 11 00 11 01—13
G W Crouch..........01 11 11 11 11 1e 11 10 11 g1—17
A H Eversbed..........11 e1 11 11 11 01 11 01 11 e1—16—46

Queen City Club, Buffalo.

P Volz..........10 01 11 01 11 10 11 11 11 11—16
C Gerber, Jr..........11 11 11 11 11 g1 01 11 e1 11—17
C Weiss..........11 11 11 10 11 10 10 11 11 11—17—50

Forester Club, of Buffalo, won trophy. Monroe County and Seneca clubs divided second.

The prize for the best club average, in contests 1, 4 and 5, was awarded to the Forester Club.

Prize for poorest average in same contests awarded to C. J. Heinhold, Audubon Club.

(e) Killed out of boundary. (g) Shot on ground.

OTHER PIGEON MATCHES.

Long Island Shooting Club—*Dexter Park, Cypress Hills, L. I., May* 24.—Regular monthly contest for club championship cup; handicapped rise, 50 yards boundary; ties shot off, 3 birds each:

	Yds.			Yds.	
Redding	25	0 1 1 1 1 1 1—6	Zellner	21	1 1 1 1 1 0 1—6
Gildersleeve	25	1 1 0 1 1 1 1—6	Durfee	25	1 1 1 1 1 0 1—6
Wyno	25	1 1 1 1 1 0 1—6	Madison	25	1 1 1 1 0 1 0—5

Ties on six.

Redding..........1 0 1—2 Zellner..........0 1 1—2
Gildersleeve..........0 1 1—2 Durfee..........0 0 w
Wyno..........1 0 1—2

Second tie.

Redding..........1 1 1—3 Wyno..........1 1 '—2
Gildersleeve..........' 1 1—2 Zellner..........0 1 1—2

Sweepstakes were divided by Messrs Terrill, Atkins and Gildersleeve, who tied on 8, at 25 yards rise.

Jersey City Heights Gun Club—*New Jersey, May* 25.—Second competition for double ball badge; from two traps, one Marchell and one Bogardus; 30 feet apart; both pulled at same time.

A Heritage..........18 yds..........11 11 10 11 11 01 11 01 11 11—17
J B Burdett..........18..........11 01 11 00 10 01 11 01 10 00—11
Wm Hughes..........19..........10 11 11 11 11 11 01 00 00 11—14
A McCool..........16..........11 01 01 11 01 01 10 00 11 11—13
F Cumming..........16..........01 10 10 11 01 00 10 10 01 11—11
J A Van Glider..........15..........10 11 01 01 01 11 00 11 11 10—13
P W Loveling..........15..........01 10 01 10 10 01 01 10 01 10—10

Jacobstaff.

Jersey City Heights vs. Jersey City.—*May* 22.—Return match at Marion—Hatch trap, throwing the ball in 400 (more or less) different directions; 10 yards rise, ten balls each.

New Jersey Gun Club.

Bepsley..........1 1 1 1 1 1 1 0 1 0—8
Pearson..........1 0 1 1 1 1 1 1 1 1—9
Saunders..........1 0 1 1 1 0 1 0 1 1—7
Sudore..........0 1 0 1 0 0 0 1 1 1—5
Smith..........1 0 1 0 1 0 0 1 0 1—5
Dusenbery..........1 1 1 1 1 1 0 1 0 1—8
Pearcy..........1 0 1 1 1 1 1 0 0 0—6
Hughes..........0 0 0 0 1 0 0 0 0 1—2—50

Jersey City Heights Gun Club.

Burdett..........0 1 0 1 1 1 1 1 0 1—7
Heritage..........1 1 1 1 0 0 1 1 1 0—7
Eaton..........1 1 0 1 1 0 1 1 1 1—'
Toffey..........1 0 1 0 1 1 1 0 1 1—7
Harrison..........0 1 0 1 1 1 1 1 1 1—8
Quimby..........1 0 1 0 1 0 0 1 1 0—5
Cole..........0 1 0 1 1 1 1 1 1 0—7
Cummins..........1 1 1 1 1 1 1 0 0 1—8—57

A number of sweepstakes followed. Jacobstaff.

New Jersey—*Newark, May* 18.—Newark Gun Club:

Duston, 16 yards..........0 0 0 1 0 0 1 1 1 1 1 1 1 0 0 0 0 1 1 0 0 1 0 0 1—12
Howell, 16 yards..........1 1 1 1 1 1 1 1 0 1 1 0 0 1 1 1 1 1 0 1 0 1 0 1 1—19
Kay, 20 yards..........0 0 1 1 1 1 0 0 0 1 0 1 1 1 1 0 1 0 1 1 1 1 1 1 1—17
Brentnal, 16 yards..........1 1 1 1 1 0 1 0 1 1 0 0 1 1 0 0 0 1 0 1 1 1 1 0 *—16
Van Volsingou g, 16 yds..........1 1 0 1 1 1 1 0 0 0 0 1 0 1 1 0 0 0 1 0 1 1 1 1—14
Decker, 12 yards..........1 1 0 1 1 0 1 0 1 0 1 1 1 0 0 1 1 1 0 1 1 0 0 1—16

—The Palisade Gun Club holds its inaugural shoot to-day at their grounds in West Hoboken, N. J.

Pennsylvania.—Northeastern Shooting Club match at balls for championship medal, May 17:

T Jarecki..........0 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 0 1—16
Capt Hayward..........0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 0—16
T Lynch..........1 1 1 0 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 0—16
Sam Thompson..........1 1 1 1 0 1 1 1 1 1 0 1 1 1 0 1 1 0 1 1—10
W W Derby..........1 0 1 1 1 0 1 1 0 1 1 1 1 1 0 1 w
Spence Burton..........0 1 0 1 1 1 1 1 1 0 1 1 0 1 0 1 1 1 1 1—15
John Smith..........1 1 1 1 1 1 1 0 1 1 0 0 1 0 0 1 1 0 1 1—14
Will Tracy..........0 1 1 0 1 0 1 1 1 1 1 1 0 1 0 0 1 0 0 1—12
Capt Riddle..........1 0 1 0 0 1 0 1 0 0 0 1 1 1 1 1 1 0 1 0—11
John Graham..........0 0 1 1 0 1 0 1 1 1 1 0 1 0 0 1 1 0 1 0—11
Jake Graham..........1 1 0 1 1 0 1 1 0 0 0 1 0 1 0 1 1 0 1 0—11
P Diefenbach..........1 1 0 0 1 1 0 1 0 0 1 0 0 1 0 1 0 1 0 0—9

In ties, shot off at 21 yards, Jarecki and Hayward tied again on 3, the former winning.

Pigeon shoot, free to all; 5 birds, H and T plunge traps, 21 yards rise:

W W Derby..........1 1 1 1 1—5 Will Tracy..........1 0 0 1 1—3
T Lynch..........1 1 1 0 1—4 G Johnson..........1 1 0 1 1—3
Capt Riddle..........1 1 1 1 0—4 Capt Hayward..........1 1 0 0 0—2
W Carpenter..........0 1 1 1 1—4 Geo Davis..........0 0 1 1 0—2
P Diefenbach..........0 1 1 1 1—4 T Jarecki..........0 1 0 0 1—2
Jake Graham..........1 1 0 0 1—3 John Jones..........0 0 0 0 0—0
John Smith..........1 1 0 0 1—3

Diefenbach won second, Tracy third.

Sharon Sportsmen's Association.—Sweepstakes at wild birds, May 10, at Sharon, Pa.; Parker traps; 31 yards rise, 80 yards boundary, Ohio State rules:

H F Dickson..........1 1 1—3 C Lovett..........1 1 0—2
F Pearson..........0 w H Crosthwaite..........1 1 1—3
J Lovett..........1 0 w C E Tribby..........0 w

Dickson and Crosthwaite divided first money, and C. Lovett second.

Second match.

H F Dickson..........1 0 w C Lovett..........0 w
F Pearson..........1 w H Crosthwaite..........1 1 1 1 0—4
J Lovett..........1 1 1 1 1—5 C E Tribby..........1 1 1 1 1—5

J. Lovett and C. E. Tribby divided first, and B. Crosthwaite second.

Third match, 21 yards rise.

Dickson..........0 1 1—2 C Lovett..........1 1 1—3
Pearson..........1 1 1—3 H Crosthwaite..........0 1 1—2
J Lovett..........1 1 1—3 C E Tribby..........1 1 0—2

Pearson, J. Lovett and C. Lovett divided first money, and Dickson, H. Crosthwaite and C. E. Tribby second.

Fourth match—21 yards.

Dickson..........1 1 0—2 H Crosthwaite..........1 1 0—2
Pearson..........1 1 1—3 C E Tribby..........1 1 1—3
J Lovett..........1 1 1—3 E Ohl..........1 1 1—3
C Lovett..........1 1 0—9 E Miller..........1 1 0—2

Ties on three—26 yards.

J Lovett..........1 0 w E Ohl..........1 1 1—3
C E Tribby..........1 1 1—3

C. E. Tribby and Ohl divided first money, and Dickson and Crosthwaite second.

Club medal; glass balls; 18 yards rise.

E Ohl..........9 H F Dickson..........6
C E Tribby..........7 A E Carter..........4
H Crosthwaite..........7 Geo D Herbert..........0

Sixth match; sweepstakes; five birds; usual rise and boundary.

Dickson..........1 0 1 0 1—3 Ohl..........1 1 0 1 1—4
Pearson..........1 1 1 1 1—5 P R Kerr..........1 0 1 1 0—3
J Lovett..........1 0 1 1 1—4 Jesse Reeves..........0 0 1 1 0—2
C Lovett..........1 1 0 1 1—4 Carter..........1 0 1 0 1—3
Crosthwaite..........1 0 1 1 0—3 Tribby..........1 1 1 0 1—4
Miller..........1 1 1 1 0—4

Ties on four—26 yards.

J Lovett..........1 0 —1 Ohl..........1 1 1—3
C Lovett..........0 1 —1 Tribby..........1 1 1—3
Miller..........1 1 1—3

Second tie—31 yards.

Miller..........0 —0 Tribby..........1 1 1—3
Ohl..........0 —0

Tie on three—26 yards.

Dickson..........1 1 1—3 P R Kerr..........1 —1
Crosthwaite..........1 —1 Carter..........1 1 1—3

Pearson first money, Tribby second, and Dickson and Carter divided third.

Seventh match, same conditions.

Dickson..........1 1 1 1 1—5 Reeves..........1 1 1 0 0—3
Pearson..........1 1 1 1 1—5 J Alexander..........1 1 1 1 1—5
J Lovett..........1 1 1 0 0—3 Ohl..........1 0 0 0 1—2
C Lovett..........1 0 1 1 1—4 Tribby..........1 0 0 1 1—3
Crosthwaite..........0 1 0 1 0—2 Carter..........1 1 0 0 1—3
Kerr..........0 0 1 0 0—1 P S Kimberley..........1 0 1 1 1—4
W T Solomon..........1 1 0 1 1—4

Tie on five—26 yards.

Dickson..........0 1—1 Pearson..........1 1 1—3
J Alexander..........0 1—1

Tie on four—26 yards.

C Lovett..........1 1 1—3 P S Kimberley..........0 —0
W T Solomon..........1 0 0—1

Tie on three—26 yards.

J Lovett..........1 0 —1 Tribby..........1 1 1—3
Reeves..........0 —0 Carter..........1 1 1—3

Pearson took first money, C. Lovett second and Tribby and Carter divided third.

Eighth match, same conditions.

J Lovett..........0 1 1 1 1—4 Tribby..........1 1 1 1 0—4
Crosthwaite..........0 1 1 0 —2 Alexander..........1 1 1 1 1—5
C Lovett..........1 1 1 1 1—5 Dickson..........1 1 0 1 1—4
Bearson..........1 1 1 1 1—5

Tie on five—26 yards.

C Lovett..........1 1 1—3 Alexander..........1 0 —1
Pearson..........1 1 1—3

Tie on four—26 yards.

J Lovett..........1 1 1—3 Dickson..........1 1 0—2
Tribby..........1 1 1—3

C. Lovett and Pearson divided first money, and J. Lovett and Tribby divided second. C. E. T.

Juvenile Shooting.—Match at Philadelphia, between M. N. Langstaff, aged 13, of Newark, N. J., and C. Marsden, aged 9, of Tacony, Pa.; balls thrown from trap:

Langstaff..........1 0 1 1 1 1 1 1 1 0 1 0 1 1 0—11
Marsden..........1 0 1 1 1 1 1 1 1 1 1 1 1 0 0—12

Traps pulled by shooters:

Langstaff..........1 0 0 1 0 1 0 1 0 1 1 1 1 0 1—9
Marsden..........1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—14

Balls thrown forward from hand of shooter:

Langstaff..........1 0 0 0 1 0 1 0 1 0 0 1 0 0 0—5
Marsden..........1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—14

Total—Marsden, 40; Langstaff, 25. G Haywood.

A Challenge.—I hereby challenge any boy in the United States under nineteen years of age to shoot with me 100 pigeons each, H and T traps; fifty birds at 21 yards, twenty-five at 26, and twenty-five at 31 yards rise, any gun, 1¼ ozs. shot, for the championship as boy wing shot of United States. Otto C. Wilkins.

Meadville, Pa., May 16, 1878.

Semper Felix Club—*Philadelphia, May* 25.—Weekly shoot; 12 yds 30 balls; Bogardus screened trap and rules:

C T Smith, M D, Capt..1 0 0 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1—24
E Young.1 0 1 1 1 0 0 0 0 0 0 0 1 1 1 0 1 1 1 0 0 1 1 1 1 1 1 1 1 1—19
Henry Wright...1 0 1 1 0 0 0 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 0 1 1 1 0 1—22

Illinois.—The Lacon Shooting Club hold a tournament June 5th. The Secretary is Philip Long, Lacon, Ill.

Iowa—*Pomeroy, May* 18.—Match at Paine's filled balls; 16 yards rise; Bogardus rules:

R M Wilbur..........1 1 1 0 1 0 0 1—5 Will Parker..........0 1 0 1 1 1 1 0—5
C M Billings..........1 1 1 1 1 1 0 0—6 Jim Dixon..........1 0 1 1 1 1 1 0—6
J F Parker..........0 1 0 1 1 1 1 1—0 Alex Lockie..........1 1 1 1 1 1 0 1—7

Second divided; Wilbur won third.

Same day; conditions as above.

Nels. Palmetier..........0 0 0 0 0 0 1 1 1 1—4
C M Billings..........0 0 1 1 1 0 0 1 1 1—6
Will Parker..........1 0 1 0 0 1 1 1 1 1—1
C H Mulliken..........0 0 1 0 1 0 0 1 0 1—4
R M Wilbur..........1 1 1 1 1 1 1 1 0 1—9

Abe Dacorah.

California—*Folsom.*—A recent glass ball match resulted as follows:

Parrott—1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—49.
Ruhl—1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0—44.
Hamilton—1 1 1 1 1 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 0 0 1 0 1 1 1 1 1 1 1 0 1 1 1—41.
Workman—1 1 1 0 1 1 0 1 0 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0—41.
Robnise—1 0 1 1 1 0 1 0 0 0 1 0 1 0 0 1 0 0 1 0 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0 0 0 1 1 0 1 1 1 1 1 1 0 1 1 0—31.
Cochran—1 1 1 0 1 1 1 1 1 1 0 0 0 1 1 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—40.
Todd—1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 0 1 0 0 1 1 1 1 1 1 1 1 0 1 1 1 1—42.
White—1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 0 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1—42
O'Brien—1 1 1 1 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 0 1 1 1 0 1 0 1 1 0 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 0 0 0 1 0 1—31
Kunz—0 1 1 0 1 1 1 0 1 1 0 1 1 0 1 1 0 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 0 1 1 1 1 0 1 1 0 0 1 1 1 1 1—34.
Brown—1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 0 1 0 1 0 1 0 1 1 1 1 1 1 0 0 1 1 1 0 0 0 1 0 0 1 0 0 1 1—35.
Kane—1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—48.
Verity—1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—46.
Bennett—1 0 0 0 0 1 1 0 0 1 1 1 1 1 0 1 0 0 1 0 1 0 1 0 0 1 1 0 0 1 1 1 0 1 1 0 0 1 1 1 0 0 0 1 1 0 1 1 0—27.
Coffee—1 1 0 1 1 1 1 0 0 0 1 0 1 1 1 1 1 0 0 1 0 0 0 0 1 0 1 1 1 0 0 1 1 1 0 0 0 0 0 1 1 0 0 0 1 0 1 0 0 1—25.
O'Neil—0 0 0 1 1 1 1 0 0 0 0 1 0 0 1 1 1 0 0 1 0 1 1 1 1 1 1 0 0 0 1 0 1 0 1 1 1 0 0 1 1 1 1 0 1 1 1 0 0—27.
Menke—1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 1 1 1 0 1—41.
Kilgariff—1 1 0 1 0 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 0 0 0 1 1 1—40.
Hopper—1 1 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1—42.

Todd, White and Hopper shot off tie, and Todd won. Hamilton, Workman and Menke divided the sixth prize. The conditions of this match were not given with the scores sent to us.

Toronto Gun Club.—This club was to have had a pigeon shoot yesterday, 400 birds having been received for the purpose.

A NEW WRINKLE.—This glass ball business is getting to be complicated. Here is a new trap, arranged to buzz around like a top and throw the ball into the air in—no living man tell—what direction. We have not tried it yet, but from an examination of the trap we should judge that this bird must fly in thirty-two directions at the same time. If this is really so, it will revolutionize the whole business. The trap is made by W. H. Cruitenden & Co., of Cazenova, N. Y.—(*See ads.*

Yachting and Boating.

HIGH WATER FOR THE WEEK

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
June 1	11	48	8	07	7	36
June 2	0	02	8	52	8	27
June 3	0	45	9	43	9	18
June 4	1	30	10	34	10	02
June 5	2	17	11	29	10	51
June 6	3	06	M		11	42
June 7	4	00	0	44	0	08

YACHTING NEWS.

ST. LAWRENCE YACHTING.—The Montreal Yacht Club, organized during the month of May, 1877, held its first annual meeting at Longueul, the headquarters of the club, on Saturday, 11th inst. The club, although so lately formed, now numbers nearly one hundred members and a fleet of some twenty yachts. As the cruising and regattas have to be sailed on the river St. Lawrence, the yachts are, as a rule, only from twenty to twenty-five feet in length. The club intends holding several open races during the season, and invites competition from all its friends, and there is a prospect of several yachts entering from Lake Champlain for the annual regatta. The club has as its guest Commodore R. W. Holmes, of the Long Island Yacht Club, with his yacht *Playful*, and now numbers him as one of its honorary members. The officers of the club for this year are: Dr. Chas. Brewster, Com.; Angus J. McIntosh, Vice-Com; Gregory Glassford, Sec'y; David Lewis, Jr., Treas.; R. T. McGregor, Measurer; Messrs. A. W. Glassford, A. A. Tracy and A. Holmes, Committee. The affairs of the club are in a very healthy condition, and very handsome prizes are offered for competition during the season.

QUEENS COUNTY YACHT CLUB.—The Sixth Annual Regatta of the Queens County Yacht Club at Flushing will take place June 4, at 11 A. M. Boats will be divided into four classes, and the course from the club-house, Little Bay Side, around the gangway buoy and one to the westward of City Island, thence around Throgg's Neck buoy and return, to be sailed over twice.

THE SOUTHERN YACHT CLUB.—At one time the Crescent City Yacht Club was among the active ones of our junior clubs, but, owing to some reason or other, interest in it has flagged of late. The Southern is the title of a new organization about to supersede the old and revive the racing spirit on Mississippi waters. It numbers already over ninety members, and is in a fair way to become a permanent institution. Its officers are: Com., Emile O'Brien; First Vice Com., J. E. Austin; Second Vice-Com., A. Claiborne; Treas., By. Denegre; Sec'y, O. Jamison. The more influential members are doing much to popularize cabin yachts and cruising, and in this they have our best wishes for success.

THE BRAYTON MOTOR.—At East Providence, Mr. J. P. Smith has put a new motor in the screw launch *Carilla*. It is of eight horse-power, starts instantly by the application of a match, stops quickly, cannot explode, and it occupies but little space. There is no steam, coal or ashes. The *Carilla* is 30ft. 6in. long over all, 8ft. beam, 3ft. 3in. deep, and is fitted with a cabin 12ft. long. Her speed remains to be determined. The same builder has in hand the steamer *Medora*, which he is lengthening 25ft., and also the *Lucille*, formerly of this City.

A SEA-GOING STEAM YACHT.—Messrs. Ward, Stanton & Co., the well-known engineers and ship builders of Newburg, have in hand another large steam yacht. These gentlemen have built and engined a very large fleet of steamers, among them several for the Government, as well as others for Mr. Lorillard, and some for foreign parties. Their engines have justly won a wide reputation for simplicity, strength and smooth working. We believe they were the first to introduce phosphor bronze for bearings of high speed engines in this country, and, judging from the large yachts recently built by them, they may justly claim to have made a specialty of that line of work to a greater degree than any other firm in America. Though they have so far confined themselves to wooden hulls, they are prepared to build of iron or steel, when desired. Only a short while ago they launched the fine sea-going yacht *Vidette* for Mr. Ph. Phoenix, of New York, and a few days ago they closed a contract with Mr. Dion Boucicault for the largest vessel of the kind in America. Like Mr. Phoenix's craft, the new one is to be a thorough sea-going ship, and her owner having so long and successfully trodden the boards of the stage, is now to tread the deck of a noble yacht, always providing he can borrow a pair of sea-legs as readily as he can the native brogue of the bogs. The steamer is to be 160ft long on deck, 27ft. beam and 12ft. water. Her general model will be of the medium type, compound engines, three water-tight compartments and half-brig rig. Her hull will be of oak, and copper fastened, while the interior arrangements, as might be supposed, will be perfectly gorgeous. A main saloon of twenty-five feet square, chart room and storage aft, three state-rooms on port side, smoking room amidships, and the owner's suit of rooms, bath-rooms, etc., will, in accord with nautical etiquette, be located on the starboard side. No name having been decided upon as yet for this beauty, we respectfully suggest *Shaughraun*, *Con* or *The Emerald Isle*.

MOHAWK REDIVIVUS.—The Coast Survey has purchased the *Mohawk* for its service at the low figure of $20,000. Captain Carlisle P. Patterson was instrumental in bringing about the sale. The *Mohawk* is undoubtedly a well and honestly built schooner, but whether the Coast Survey will not after all find itself saddled with a white elephant is a question. Though nominally of light draft, she is really the reverse on account of her board. Moreover, she seems to us entirely too large and unhandy for the service intended, and will entail a great expense upon the Bureau to keep her in commission. Her spars and canvas must be materially reduced for active work, for though very stable at the outset, her form is such that even at moderate angles under her present rig she reaches the vanishing point of her curve of stability, and her great beam and flat floor only increase the danger in a seaway. To be sure, all our shallow yachts suffer from the same deficiency, but none of them to the extent of the *Mohawk*. Her rig, for safety's sake as well as for handiness, should be considerably cut down. A smaller foresail and a square topsail would be preferable to the full fore and aft rig, as it would also allow shortening the head booms, an absolute necessity in rough water.

THE CLYTIE SCHOONER.—Perhaps one of the most successful schooners launched of late is the *Clytie*, Mr. Brooks owner. Her model is the production of both her owner and Ketchum, the City Island ship-builder. What "Boss" Ketchum does not know about a fast sailing schooner is generally not supposed to be worth knowing, and considering the more than satisfactory performance of *Clytie* during her first months out, whenever there was a chance of having a brush with any of her sisters, it will be acknowledged that in her Ketchum was not far astray. Though this schooner can hardly be said to have passed through any official ordeal in the way of regular match racing, the few spins she had while in company with the fleet of the N. Y. Y. C. were enough to show that the rest of the cracks may expect in her a Tartar this season. *Clytie's* model may be characterized as one combining extraordinary stiffness with a long, flat floor, rather full bow and fine run, and very high freeboard, especially forward. The first impression upon viewing her is that her sail carrying power is something wonderful; indeed we have it on good authority that it was found a difficult matter to fetch her "gunwale-to," and that it seemed as though her sticks would go out of her before she could ever be knocked down. Her design has boldness and ease throughout, and in so far as a successful attempt has been made to unite a powerful shoulder amidships with a somewhat hollow and plumb sided bow, without any swell or flaring belly along the fore harpins, too much credit cannot be given her designers for the care displayed with this in view. We believe Ketchum paid rather more attention to his diagonals and inclined water-lines than customary, and in attempting to keep them fine forward avoided entirely the belly referred to, without at the same time sacrificing her shoulder or giving too long an entrance to the craft. Aft, the floor rises bodily until it tapers off into the counter, which is of the Steers type, barring an overhang of some 6 or 8in. at the rudder hole. In short, the yacht is a very large boat for her length, and that this is not incompatible with speed her excellent sailing last season under the most unfavorable circumstances has amply proven. Still we cannot but think that off the wind or when keeling only moderately, a somewhat longer entrance would be beneficial, especially at high speeds. Froude has so clearly demonstrated the retardation, or more properly speaking, the resistance, due to wave making at high speeds, that under such circumstances a fine entrance becomes an absolute necessity. This is doubly the case in a seaway, and an additional four or six feet to *Clytie's* length forward would probably be found of decided benefit; but even as it is, she is a fast one and will give a good account of herself this season. She is flush decked, has roomy accomodations below, and makes as serviceable a cruiser as a smart sailer. We hope to give the calculated elements of this schooner at an early day and so afford a means of comparing her with others of her class in an intelligent way.

VESTED INTERESTS.—When the Yacht Racing Association in England thought it had put an extinguisher upon all further attempts at rectifying the abuses grown up under the fallacies of the Thames measurement rule, the eminent conservatives who composed the committee on measurement evidently counted with too much confidence upon the credulity of Englishmen in general. Hardly has their dictum been promulgated when we find those yachtsmen abroad, in whom the spirit of inquiry has not been entirely smothered by the august toploftiness of redtapeism, striking out afresh and with renewed vigor in the cause of common justice and common sense. Mr. Dixon Kemp makes a very fair proposition in accord with equity and the principles of naval science to tax depth in British yachts as a factor of size and power, whereupon an owner of a yacht (oh! libel on naval design!) with six beams to her length, jumps up and cries: "Vested interests! Let well enough alone." He must race his sixty tonner with the forties, says this gentleman of fair and candid mind; measure power and not size. "My model is such a miserable design that, though enormously large my hull, my canvas is extremely small. Tax that and I rest in peace, but you must let me put in an extra twenty tons of size if I choose; and to expect me to pay for that, you know, is the height of absurdity." When such logic is met with at the very outset, well may English yachtsmen despair of ever ousting vested interests and planting in their place a rule that will not squeeze their yachts any thinner than the latest types. Yachts they may call such things as *Christine*, *Jullanar*, and *Allarette* in England, in America we call them caricatures and lead mines.

UNION REGATTA.—The Brooklyn Yacht Club has concluded to have a "union" regatta in place of the usual club race, June 18. This on account of the probability of scant entries from the club alone; and the usual cruise will not be undertaken, an omission much to be regretted. Mr. George F. Randolph, of the sloop *Kate*, has been elected vice-commodore, Mr. R. H. Huntley having declined the offer to fill the vacancy caused by the death of J. B. Norris, Esq.

BALDERDASH CRITICISM.—As a specimen of what an unprofessional critic can accomplish in the way of compiling arrant nonsense, commend us to a review of the *Intrepid*, innocently published recently in a paper devoted to the turf. Here are some samples of that exasperative *olla-podrida*: The depth of the buttock should have been considered at the outset.....The *retroussement* of the stern on the upper sheer..... Neither is the daylight under the counter in harmony with the apparent lowness of sheer at the foremast.....The stand of the masts.....Longitudinal moment of inertia a minimum. But enough of this. With all due respect to the undeniable talents (slumbering) of this unlucky scribe, we beg to suggest to him the propriety of turning his attention to hoeing potatoes as a business: as a nautical critic he makes himself the laughing stock of all.

YACHTING DRIFT.

Tidal Wave has her sails bent, and will make a trial trip before leaving for California.....*Ariel* has arrived at San Francisco May 21, safe and sound.....Long Island Yacht Club has postponed its regatta to the 20th of June.....*Addie Taylor* and *H. H. Holmes* have been matched for $250 a side. Ira Smith will sail the former and Jake Schmidt the latter..... Herreshoff's latest catamaran has a trysail in place of main-sail. He has built six catamarans on his patent.....The Brooklyn Yacht Club will not have many vessels in commission this year.....The sloop *Latrobe* was launched at Baltimore for the South Baltimore Yacht Club. She is 36ft. 6in. long, 14ft. 2in. beam, and 8ft. hold.....*Estelle*, Mr. James D. Smith, has received a new boom 58ft. long, 28ft. of which are outboard.....A new collapsable boat of thin sheet steel has been brought to light in England.....*Viking*, sloop, Mr. W. H. Gorman, of Boston, is said to be sailing well.....Haverhill Yacht Club regatta June 17.....Hollow spars are being generally adopted in Boston. Why is New York behind in this respect?.....Hollow masts are stronger and lighter, and very advantageous for cats and small sloops, also for booms..... James D. Leary, of Williamsburgh, has built a thirty-five ton sloop for Judge Pratt, of the Supreme Court, Brooklyn..... Sloop *Gussie* was sold at auction to Mr. G. W. Root for $3,000. He has got a fine ship at a low figure.....Mr. Wallack prefers docile Swedes for his crew. They don't smoke, chew, or swear, but go to Sunday school; while for bright work they are not to be beaten.....It takes fourteen hands to run the *Columbia*. Too many by six.....*Columbia* will not race, but cruise. Her owner has taken a fancy to the sea, which we are glad to note.....Another 28ft. launched in Jersey City by Stephen Coolahan will race in the Bay Regatta..... *Adelphia* won the match on the Delaware from Kaighn's Point to Chester buoy and return, twenty-six miles; time, three hours, fifteen minutes.....Capt. Andrew Comstock, of Queen's Cup fame, will remain in command of the *Columbia*, schooner. .....Jersey City Yacht Club sails in squadron to Bath, L. I., on Decoration Day.....Mr. A. Carey Smith is designing a cutter yacht for Mr. Stillman, of the *Wanderer*. Good.....In the Portland challenge match, May 20, *Undine* retains cup in second class schooners, *Twilight* won the cup for second class sloops, and *Mist* keeps the cup in the third class.....Tarrytown wants to hold a grand union regatta on the Tappan Lee similar to its sister city, Newburgh.....In the Quincy Yacht Club match, sailed May 18, the winners in the first class were *Folly* and *Vision*; in the second class, *Nettie* and *Cora B.*; third class, *Imp* and *Annie*.....Schooner *Foam* is being lengthened to 80ft. 6in. on water line by Palmer, of Noank.

OAR AND PADDLE

OFF FOR HENLEY.—The Columbia crew took their last spin on the Harlem, May 20, before leaving for Europe. The best material Columbia College contained has been selected for the crew, and the only thing to be regretted is that they leave only as the representatives of a single institution instead of the champions of the country. The final make-up of the four is as follows: E. E. Sage, 23 years, 165 lbs, bow; Jasper T. Goodwin, 28 years, 165 lbs, stroke; Cyrus Edson, 20 years, 168 lbs, No. 2, and H. O. Ridabock, 21 years, 175 lbs, No. 3, with Charles Eldridge as supernumary. The men look in fine trim and are hopeful of the future. They will take with them two boats, a cedar built by Thomas Pearon and a paper from Waters & Son of Troy, with oars by Donoghue. The events to be rowed in by the four are the Steward's Cup and the Visitors' Cup or the college race. They sailed in the City of Chester May 22, with their boats aboard. From Liverpool they proceed directly to London, and to their quarters at the Red Lion Hotel, on the banks of the Thames. Their chances of disposing of the English amateurs do not seem very bright, but they will certainly give a good account of themselves at all events.

HARLEM REGATTA.—This event will be held Saturday, June 22. The programme will include singles, both junior and senior, pairs, fours, six-oared gigs, with coxswain, and four-oared gigs with coxswains for juniors. Winners of each heat in the singles will receive special prizes. Rules of the N. A. of A. O. will govern the regatta.

PARIS REGATTA.—It seems that the authorities of the Paris Exposition have finally determined to have a general regatta on the Seine on Aug. 11, 12, 13 and 14. Races open for singles, pairs and fours. All details concerning these events are still wanting on this side of the Atlantic. In France America still seems to be pretty much a *terra incognita*, and that rowing flourishes here they seem unaware of. Unless we send for information ourselves it is not likely to come from Frenchmen spontaneously by any means.

UNIVERSITY RACE.—Forecasts concerning the great annual 'Varsity race between the two leading institutions of the kind in America begin to attract more notice as the day for the event approaches. The race is to take place June 28 over the new course on the Thames at New London. From the gentlemen in charge at that place we have the assurance that every one who has inspected the course laid out has unqualifiedly approved of it, and its superiority over others heretofore tried is so manifest in more than one respect, that it would not be surprising to see it finally adopted as the permanent scene of the annual tussle of college skill and muscle at the oar. Though there is still some time for the Yale men to be brought into proper form and finish, the way matters stand at present their opponents rather have the advantage, many of the Harvard crew being old hands at the oar, having pulled in former college races. The Yale men on the contrary, while containing plenty of promising material, are comparatively green as yet. They do not work as well together as they should, nor do they show much finish, but they have done some honest work during the spring, and if a sharp coach can be procured to take them in hand and put them through in thorough style, they may yet come to the start in fine form. In weight both crews are pretty evenly matched, Harvard's avoirdupois being slightly in excess, but the balance may be changed after a few weeks' more training. With the exception of Le Moyne, the Harvards will muster the same crew that pulled last year. At latest advices the positions were as follows: Bow, Alvah Crocker; 2, N. M. Brigham; 3, V. D. L. Stow; 4, M. R. Jacobs; 5, B. J. Legate; 6, W. H. Schwartz; 7, F. W. Smith, and stroke, W. A. Bancroft, with L. N. Littauer and J. Parker as substitutes, and F. H. Allen for coxswain. Average weight, 176¼ lbs. Yale is doing work every pleasant day in the Kenst barge under direction of Capt. Thompson, who has been doing his best to trim the raw men down to the regulation Yale stroke. Only three of them can be said to have had much experience at the oar or anything like a reputation; the rest at the commencement were almost green. They have been pulling the old-fashioned ball weights in the gymnasium during cold weather, and in March were first tried at the oar in the barge. As the senior class has no representative in the crew, there should be no lack of good material for next year's match, and then they will be most likely to have the advantage as regards finished oarsmen that Harvard now enjoys. The average weight of the crew is 163 lbs, and they are said to be still coming down. Julian W. Curtiss pulls bow, next Frank E. Hyde, C. A. Wright No. 3, Hermann Livingston No. 4, H. W. Taft No. 5, Geo. B. Rogers No. 6, David Trumbull No. 7, and Oliver D. Thompson stroke. The coxswain has not yet been selected.

HARVARD-CORNELL FRESHMEN.—The two freshmen crews of these colleges have agreed upon Lake Owasco, near Auburn, for the place of their meeting, July 17. The Harvards have chosen their quarters and will row in a paper boat. They are

in training under direction of Mr. Crocker, their coach. As the crew contains some good material a close race with the Cornells is not unlikely.

WORLD'S CHAMPION.—Trickett has lost two fingers of his left hand through handling a beer keg in his hotel. It is possible that this mishap may put an end to his career as an oarsman, in which case the question arises as to whom the title rightfully belongs. Until Courtney shows up a little more among the professionals of England and settles matters with Hanlon, he can hardly lay claim to it. The sooner he gets to actual work the better.

CANOE RACING.—Would it not be a good plan for the Newark oarsmen to incorporate in their annual regatta in August an open match for canoes under canvas or paddle? Such an event, we know from parties interested, would be certain to draw to the waters of the Passaic many fine canoes and afford an opportunity for comparing their merits. In view of the many new models and devices in the canoeing line, brought to light since the adoption of the sport in America, an open trial of the claimants to public favor would be welcomed by those interested and by the public in general. We hope canoe men will see to it that something may come of it, since it is only required to familiarize the public with the wonderful range of usefulness and capacity of these boats to have them rapidly take hold of the sport *en masse*. Newark claims among its citizens the originator of the canvas canoe, a type which, for lightness and cheapness, cannot be surpassed, and quite a fleet of these is to be found on the Passaic ready to take part in any event on its waters.

ROWING RIPPLES.

The London *Field* is all mixed on American amateurs.....C. E. Steel won in the singles' race of the Crescents on the Schuylkill, May 18; time, 7m. 20s.; course one mile.....The Twilights won in the double-sculls, and the Chamonni crew the race for fours. In the six-oared barge race the Falcons were victorious. Time, 5m. 8s.....Winona Boat Club, of Jersey City, has moved into its new boat-house foot of Henderson street, erected at a cost of $5,000. Their opening takes place June 1.....New Orleans Club is in a flourishing condition, and owns one four-oared paper shell, one cedar ditto, one paper single, three four-oared gigs, two barges, two pairs, and three doubles.....Higgins, the English champion, rows Elliot June 3, from Putney to Northlake.....Hanlon will beat Morris over the Hulton course, Pittsburgh, June 20..... Palisades will enter an eight-oared barge for the Manhattan Regatta.....Great times ahead at Silver Lake, Boston, May 30. .....The jaw-breaking Shoewaecacemette four will row at Watkins.....Morris, of Pittsburgh, had better forfeit the money up; to pull Hanlon is simply ridiculous..... Boston thinks Hanlon can beat Courtney—hardly.....Colored men take to the oar in the Hub.....Potomac boys are alive and up to the times; they are doing much to popularize rowing at the capital.....The Analostans are in training for the race with the Undines of Baltimore. White, Campbell, Page and Burdette, how, will form the crew. The Potomacs have no outside matches on hand.

THE "HERALD" CANOE.

EDITOR FOREST AND STREAM:

Perhaps it will not be out of place if I offer your readers the results of some fifteen years' experience with almost all kinds of canoes. The desirable points for either a hunting or cruising canoe, are speed, buoyancy, strength, lightness and convenience for stowing dunnage. The *Herald* probably meets the second, third and fifth points as well as any canoe that is built. In point of strength it is probably unequaled, but, unfortunately, for a hunting canoe it is too heavy, and, as Mr. Alden remarks, her full bow makes her throw a good deal of spray in a head sea. This seeming fault, when reduced a very little by making the bow lines a shade finer, as in the canoes built by Mr. Wm. English, of Peterboro, Ont., proves to be one of the very best qualities a canoe can have in a heavy head sea. It gives her great buoyancy, and enables her to rise on and ride over the waves like a true Indian "bark" canoe; whereas, a canoe with very fine lines forward cuts into and goes through the waves, rendering a deck an absolute necessity, and in the case of heavy breakers or white caps, very likely to call into play the air-tight compartments, while the canoe with greater buoyancy would ride the waves like a duck. To illustrate this: A double canoe of the *English* pattern carried two friends of mine last November over a lake eight miles long and four miles wide, in a heavy gale—a very heavy sea, and white caps on every wave—and carried 350lbs. of venison, tent, blankets, etc., in addition to the two paddlers, whose united weight was 320lbs.—in all, 670lbs. carried through a heavy sea by a canoe which only weighs 62lbs., having no more deck than the *Herald*, and, as was often proved on the same trip, being very much superior to the *Herald* in point of speed. The dimensions of this canoe are: Length, 16ft. 6in.; width, 26in.; depth amidships, 11½in., and at the bow and stern, 13in.; has a sheer of 3½in.; built of 3-16 boards; ribs, ⅝x½in., 7in. apart; Carvel built, or smooth on the outside; joints battened on inside with 1x¾in. elm; wide bottom boards, on inside buttoned down to ribs, so can be taken out handy; two thwarts, 3½in. wide, and shaped. Said thwarts are always used to sit on, Mr. Alden to the contrary notwithstanding, and a very great rest they give the paddler, who sometimes sits on the thwart, his knees on a cushion, and his feet under the thwart; at others, sitting square on the thwart, his legs extended in front, or again, in the same position as when sitting on a chair. The expert paddler in this position, being so high up, and having the freest possible use of the upper portion of his body, and bracing himself well with knees and feet, can apply the whole power of the body, aided by the legs, to the paddle, and in this position can get twenty-five per cent. more power on the paddle with the same expenditure of force than can be got when sitting down flat or nearly so, say eight or nine inches lower in the canoe on a cushion. I quite agree with Mr. Garfield in the desirability of having your load stowed in an open space in preference to having it under a deck or in a locker. This is found to be especially the case in a canoe trip up the back lakes and rivers of Canada, where a portage or carry is met with every few miles, and on some good front streams, every half a mile.

I have made some fifteen or twenty canoe trips, of from fifty to one hundred miles and return, in a very rough and rocky country, and have used and owned canoes of six or seven different patterns and makes, from the birch bark up, and have yet to see the equal, for general purposes, of the canoe I have described above. I have one now, the *Emma*, a single, 13ft. 6in. long, 24in. beam, 11in. deep amidships, weighs 45lbs., will carry 250 to 275lbs., and I don't think can be beaten for speed, strength and buoyancy. English builds five or six sizes, at from $25 to $35, others for special purposes to order. Tom Gordon, of Lakefield, Ont., near Peterboro, builds a very similar canoe. Its one fault is that it is rather cranky. I prefer the *English* to the *Herald*, because the former has somewhat finer lines forward, giving greater speed with about the same buoyancy, weighs nearly one-third less, and, having bottom boards on top of ribs, you can take in a lot of splash or rain without the discomfort of having the blankets wet, or being compelled to kneel in a pool of water. Permit me to say in conclusion that I am in no way interested in the *English* or *Gordon* canoe. The three last I have owned I built for myself, and am therefore quite independent of all professional builders. G.

EDITOR FOREST AND STREAM:

I noticed in your journal of the 2d. and 9th inst., also in *Harper's Monthly* for April, that the merits and demerits of the *Herald* canoe are pretty well ventilated. Not so thoroughly, however, but that I think there is room left for further profitable discussion. In the first place, Mr. W. L. Alden is decidedly unfair in comparing the *Herald* with the cruising canoes mentioned in *Harper's*, for this reason: The *Herald* is not, and never was, intended for a cruising canoe, but is built and used in this country almost exclusively for fishing and hunting. On our inland lakes and rivers, for deer or duck hunting and fishing the *Shadow* (which, according to Mr. Alden, is perfection) would only be a nuisance. In shallow water the *Herald* certainly has an advantage in paddling through the rice and mud beds in the marshes. When duck shooting, the rice lake boat will move with more ease and less noise; and in trolling you certainly have more space in which to "land" your fish. Again, I think the captain of a *Shadow* would find some difficulty in taking a deer aboard when killed any distance from camp. The *Herald* canoe, as built at Rice Lake, is not intended for open water cruising; it is rigged with one sail, the size of which is left to the discretion of its owner. It is very simple in construction, can be set in a moment and is quickly taken down. Mr. Garfield is perfectly correct in saying what he does about the sail (as far as concerns the *Herald*), for with it no dandy or jib is required. Notwithstanding Mr. Alden, the *Herald* with this sail will run close to the wind tack and go about without aid from the paddle, if properly handled. Mr. Alden is right when he says the thwarts are necessary to hold the sides of the craft in position, but they also take the place of a seat for the paddler, as his position is partly kneeling and partly sitting. The middle thwart, however, is sometimes made to fasten with a couple of hooks on the under side, and can be taken out at pleasure, if it is desired to make up a bed, but in this country no one thinks of sleeping in or under his canoe, save the Indian, or trapper of the class that cannot afford a tent. The comforts of a good canvas tent that is both waterproof and flyproof are too well known to give the preference to a canoe, when we wish a good night's rest, and add little to the weight of your cargo and occupy a small space when packed; and the trouble of pitching the camp and striking it again is no great hardship. As a rule here with camping and hunting parties the double hunting canoe carries two men, with their tent, blankets, provisions, cooking utensils, shooting and fishing tackle, dogs, etc., yet according to Mr. Alden's idea of a canoeist these men, in order to maintain the dignity of the craft, must sleep in their boat. The "wobbling" tendency in the *Herald*, mentioned by Mr. A., is disposed of in Mr. Garfield's letter, and he might have added, the slight turn given the paddle to keep the craft in her proper course is no fatigue to an experienced paddler, in fact no one becomes perfect in the use of the paddle till that slight turn of the wrist is acquired, and it is no more a hindrance to the speed of a *Herald* than it is to a *Shadow*. There are other canoes in this vicinity quite as well known as the *Herald* and in some respects superior. The *English*, the *Gordon* and the *Stephenson* canoe are all good boats, resembling the *Herald* in appearance, but for strength, beauty of model and speed under sail or paddle, the *Stephenson* is in advance of any portable hunting canoe manufactured from wood. These boats are one and a half feet longer than the *Nautilus* or *Shadow* and carry their bearings much better than the shorter boats, and if we are to judge of the deck plan of the several boats, as represented in *Harper's*, the *Herald* does not exhibit that tub-like appearance noticeable in the *Rob Roy*, *Nautilus* and *Shadow*. The builder and designer of the *Stephenson* is now finishing a new style of hunting canoe, which of course has yet to be tried, but if it meets the anticipations of the builder it will really be the substance of all Shadows yet turned out. In and about the city of New York the *Shadow* may be the perfection of a canoe, but here in the woods it would be looked upon as a kind of a cross between a skiff and a small sail boat. She has this advantage, however, of being converted into a Saratoga trunk, a sleeping berth, or a packing case. If the New York canoeists can boast of a *Shadow* we in the backwoods of Canada claim the substance and, of course, are happy. C. A. POST.

Peterboro, Canada, May 15, 1878.

EDITOR FOREST AND STREAM:

I notice in the edition of May 9, F. AND S., a communication from W. L. Alden, in which he attacks my article on the *Herald* canoe published May 2 in F. AND S. He says that the *Herald* patent canoe cannot be built without thwarts, and remarks that Mr. Herald is the authority for this statement. I allow that Mr. Herald knows as much about his canoes as I do, and I have the written statement from Mr. Herald that his canoes are made without thwarts if so ordered, and I still maintain that the thwarts are for the convenience of the paddler, and not to hold the sides of the canoe in position. I am well aware that if the canoe be turned bottom side up in the water it will not sink, and I still hold that if it be filled with water the canoe will not sink, and there will be buoyancy enough in the craft in this condition to keep two persons from drowning.

Mr. Alden says my statement about having the sails in one shows that I know nothing whatever about sailing a canoe. I will answer that in making that statement I had in mind general cruising, and still adhere to that assertion, and have the testimony of one who has had practical experience for twenty-five years in cruising and hunting in a canoe. I am perfectly aware that in an open bay where a steady breeze can be had, more than one sail can be used to advantage; but on rivers and streams, as a general thing, more than one sail on a canoe is an abomination. It should be as simple as possible, so as to be easily shipped in a moment's notice, and take up but little room.

Mr. Alden says the *Herald*, after being fitted up with air-tight compartments, etc., is a strong, swift, safe and commodious canoe, and says that this fitting up must be done by the purchaser. This is not necessary, as Mr. Herald will do all the fitting up that the purchaser may want, in the way of air-tight compartments, etc., when so ordered.

The *Herald* canoe is in no danger of having her bottom ripped out when running a rapid, as there is no keel to strike on the rocks, and it does not scrape along on the bottom of shallow streams as is the case with other canoes.

Mr. Herald having seen my article in F. AND S. of May 2 on the *Herald* canoe, informs me that he fully indorses my statements. I received from him a letter, in which he informs me that he has just completed a canoe without thwarts, and equipped with air-tight compartments; also, cover for open space in the centre of canoe buttoned on for sleeping under, and also one to use in case of heavy sea to keep out spray. This canoe is for Mr. Smith, of New York city, a canoeist by reputation. Mr. Alden will no doubt be pleased to meet him and have the pleasure of examining a *Herald* canoe without thwarts and with the air-tight compartments, all completed, at Mr. Herald's work shop.

WM. B. GARFIELD.

FOR LADIES ONLY.—English ladies in India engage in shooting matches. At Sangur, in the Central Provinces, last November, twelve ladies competed in a match with gentlemen. The majority of the ladies made very good scores. Miss Hanlon, a sister of the Canadian oarsman, offers to row any woman in the United States or Canada, for a purse of $500 over a three mile course. It is said that she can defeat her brother in a mile race.

New Publications.

ON THE EBB: A Few Log Lines from an Old Salt—Chas. F. Hotchkiss. Tuttle, Morehouse & Taylor, Printers, New Haven, Conn.

This is a little volume of experiences, written in a style peculiarly quaint and original, and sold by subscription chiefly. There is a great deal of information in it which will prove serviceable to salt water anglers, and a perusal of the book will more than compensate for the price of subscription, which is $1.00. The book is one of those curiosities of literature which gentlemen should desire to add to their libraries. Here is an extract from the author's preface, by which the author's estimate of his own work may be gauged:

"It is my business, and mine alone, to work up some of the incidents of seventy-three years, put it in pamphlet form, pay the printer, and sell it, provided it has merit. It stands on its own bottom. If the purchaser, after getting possession, has made a satisfactory bargain, we are even; and if he, she, or it, is not suited, we are even again. It was my barrel of flour, or my string of fish, and as I never recommend the quality, they should have looked the horse in the mouth. I do not send fish to market in a wheel-barrow, trumpeting the quality or kind—it is your business to open its gills; for who would cry 'Stale fish?' I am too old to meddle with fiction in any shape, for it is much easier to catch fish with good, clean, live bait than an old dead winkle. Fish are not fools always, neither are the majority of the human family full of wisdom. My experience, piscatorially (as my friends will indorse), has been large, long and deep, and at my standpoint of life, I have concluded that game fish are much more smart than the human family, for they never take stinking bait in their mouth, consequently they never vomit. No, never! Mankind swoops up everything of the book species that is announced, provided it comes under Turkey, Morocco and Gold Leaf. I send this book out in its plain Quaker garb, extracting from it all the scales, flippers, backbone, head and inwards, leaving the purchaser the clean marrow. In fact, it is like a Connecticut River shad, all washed clean of fiction, well bloated, and ready for broiling."

The style of the author is worthy of Mark Twain. The information which he gives about fishing in Long Island Sound is just what many anglers have long desired, and those who wish to take a summer cruise cannot do better than to follow the precepts contained in the first chapter of the book. All the best localities are designated, and the best methods and times of fishing also. For sale at this office.

POGANUC PEOPLE, by Mrs. Harriet Beecher Stowe. New York: Fords, Howard & Hulbert; 1878. Price $1.50.

Though Mrs. Stowe's "Uncle Tom's Cabin" was written for grown folks, it has been read and re-read by thousands and thousands of children. With the little ones this writer has ever been a favorite, and now she has given us a new story, "Poganuc People," written, we presume, especially for their delectation. We can unhesitatingly commend the book to the youthful readers of this paper. They will find in it reading of a pleasant character that will do them no harm. It's just the kind of a goody book for a Sunday-school library.

BIRDS OF A FEATHER FLOCK TOGETHER; or, Talks With Sothern, edited by F. G. DeFontaine. New York: G. W. Carleton & Co; 1878.

This volume, as its name imports, is made up of choice stories from an almost inexhaustible fund, concerning the daily life, theatrical experience, practical jokes, and the many different phases of character exhibited by Sothern, *Dundreary* and the *Crushed Tragedian*. Any one who knows anything about Sothern knows that a dozen books might be written about him. Mr. DeFontaine has exercised commendable good judgment in his selection from the vast amount of material at his command, and the result is an entertaining book. Those who have seen *Dundreary*—and who has not?—will enjoy these papers.

CANADA UNDER THE ADMINISTRATION OF LORD DUFFERIN.—Mr. George Stewart, Jr., well known throughout Canada, and to a less degree to readers in the United States, is engaged upon a history of Canada under the Administration of Lord Dufferin. The rare good judgment with which that excellent statesman fulfilled the responsible trusts given him, his popularity with the people under his rule and with the United States, and the prosperity of the Canadian Dominion during his term, afford ample material for a most worthy contribution to American-British history. The publishers are the Rose-Belford Pub. Co., Toronto, Can.

UPLAND GAME BIRDS AND WATER-FOWL OF THE UNITED STATES, by A. Pope, Jr. Scribner, Armstrong & Co., New York. 1878. Part V.

How can the criticism of this excellent series of birds be otherwise than descriptive? Now, here is the pinnated grouse—the prairie chicken, the *Cupidonia cupido*, the beloved of all sportsmen, the bird *par excellence* which our English cousins cross the ocean to shoot, and which they would like to introduce into their own moors. Mr. Pope has made the bird erect, and almost the size of life. The bird turns his game head just a little on one side, as if ready to make that peculiar noise which is called "booting." The two narrow feathers which overlie the neck are in repose now. There he stands, just prepared for swift flight. Come but a little nearer to him and he is off, skimming the prairie, to alight some three hundred yards off. Both cock and hen are perfectly true to nature in their coats of brown with the mahogany lintings. To beg such a fellow you would walk miles over the prairies, and the semblance of him in the picture must recall good times with dog and gun. In contrast with him Mr. Pope has given us a brace of red heads, the true American pochard. As to his appearance, his reddish head allows the artist a nice bit of coloring, for he is really a handsomer bird than the canvas back. Feeding, as he does, on the same juicy water plants as the canvas duck, he is quite as good to eat. He is well known to be a thief, and steals what he can from his companion ducks. Of course, the suggestive element of a picture may strike people so differently. If, in seeing Mr. Kilbourne work for that future publication, which is to be called "The Game Fish of the United States," we should watch him in the act of adding that little bit of frosting to the sides of a Connecticut salmon so that it should be of silver, we hardly think green peas as an accompaniment to the salmon would be uppermost in our mind. It must be a coarser taste, then, which brings to our memory the sweet savor of a well roasted red head. Still, the picture is good enough to make one think of cluttering ducks and blinds and No. to guns and Chesapeake Bay dogs and all that kind of thing. As Messrs. Scribners' pictures reach us we have them framed, and they ornament our rooms. If we can't shoot ourselves, we can at least keep looking at the "Game Birds of America."

JORDAN'S VERTEBRATES.—We are happy to be able to announce the appearance of a second edition of Prof. D. S. Jordan's Manual of Vertebrates, and to recommend it once more to our readers. We know of no book which is more needed by the very large and constantly increasing class of students who at present know little or nothing of North American animals, but who are ready and anxious to observe and learn if they can only have some reliable work to which to refer It is certain that there is no book from which an individual wholly ignorant of the subject can so easily acquire a knowledge of our animals as the one under discussion, and those who make use of Prof. Jordan's work will soon appreciate its value. The fishes are the favorite study of the author and the portion of the book devoted to this class has been entirely rewritten and all the *genera* exactly characterized. A feature which especially recommends the work to the angler is the detailed description of the North American *Salmonidæ*, with an account of the *habitat* and range of each species. The copious bibliography and the glossary of scientific terms are other additions which much increase the value of the Manual.

MANUAL OF ENGLISH HISTORY, by Edward M. Lancaster. New York: A. S. Barnes & Co., 1877.

There has been of late years a most decided advance in the character of the text books of history designed for use in schools. The old system of committing tables of chronology and royal genealogy, of cramming dates and facts without much regard to the important inner life of the people and the spirit of advance everywhere underlying and prompting the outward changes is happily giving way to more intelligent study. Mr. E. Lancaster, the accomplished principal of the Boston Stoughton School, has prepared this little text book of English history with a special view to making clear the cause and effect in the long struggle between King and People. In this the author has admirably succeeded.

PETTENGILL'S NEWSPAPER DIRECTORY.—S. M. Pettengill & Co., the popular advertising agents, have just issued their Newspaper Directory for 1878. We must confess that statistics have oftentimes great interest to us, and this compilation is full of instructive information:

"The list contains the titles of 8,415 newspapers published in America, including British America, divided as follows: In the New England section there are 775 newspapers, of which 73 are daily, 1 tri-weekly, 18 semi-weekly, 527 weekly, 7 semi-monthly, 83 monthly, 2 bi-monthly, and 13 quarterly. Middle section—216 daily, 6 tri-weekly, 33 semi-weekly, 1,410 weekly, 42 semi-monthly, 378 monthly, 11 bi-monthly, 31 quarterly. Total, 2,157. Western section—288 daily, 30 tri-weekly, 35 semi-weekly, 2,742 weekly, 42 semi-monthly, 248 monthly, 1 quarterly. Total 3,381. Pacific section—65 daily, 2 tri-weekly, 7 semi-weekly, 249 weekly, 2 semi-monthly, 17 monthly, 1 bi-monthly, 1 quarterly. Total, 344. Southern section—128 daily, 7 tri-weekly, 21 semi-weekly, 1,226 weekly, 18 semi-monthly, 106 monthly, 5 quarterly. Total, 1,526. British America—44 daily, 15 tri-weekly, 14 semi-weekly, 360 weekly, 4 semi-monthly, 41 monthly, 3 bi-monthly, 1 quarterly. Total, 482."

The volume is issued from the office at 37 Park Row, New York.

GEOGRAPHICAL WORK OF THE WORLD IN 1877.—We are indebted to the American Geographical Society for the annual address of its president, Chief Justice Daly, LL. B. The very able *resume* of the geographical discoveries and explorations of the past year is creditable both to the Society and to President Daly who so ably presides over it.

THE MAGAZINES.

SCRIBNER'S.—Art people will find two papers in the June *Scribner*: Mr. W. J. Linton's "The Engraver; His Function and Status," and Mr. Russell Sturgis' article on George Cruikshank. Dr. Brewer contributes the second of his able papers on "Bird Architecture," which is illustrated by Mr. Riordan. Charles Barnard, under the title "A New American Industry," describes the work of fruit evaporating. Frank R. Stockton, in "That Same Old Coon," weaves in some very practical coon-hunting information, with a very enjoyable study of some Virginia dialects.

APPLETON'S.—Miss Susan Fennimore Cooper, in *Appleton's*, discusses the present scarcity of birds about Otsego now compared with their numbers twenty years ago. The reason of this she enumerates as the lawless destruction of birds during the nesting season in spring; the capture of birds for their plumage, Fashion's whim being for feathered ornaments; the increased Southern travel, and a corresponding consumption of small birds on Southern tables. Mr. W. H. Rideing describes the "Genesis and History of a Silver Dollar," the illustrations by Keely materially adding to the text. C. P. Cranch has an essay on "Old Fogies," and there are a score more of stories, poems and essays.

LIPPINCOTT'S.—*Apropos* of the recent trip of the Coaching Club to Philadelphia, *Lippincott's* has a description of the "Four-in-Hand, and Glances at the Literature of Coaching." The European excursion this month takes us on a jaunt "On the Riviera," and is descriptive of the holiday of an Oxford professor and a London barrister among the Maritime Alps. Edward King continues his Roumania sketches; Dr. H. S. Schell gives some discoveries in "Visual Photography," and Lucy H. Hooper describes "Paris Maniacs and Mad-houses."

THE OOLOGIST.—We are glad to note the prosperity of this little monthly, as evinced by the new dress in which the March number appears. Another new feature is the page devoted to colored plates of eggs. There are excellent representations of the eggs of the broad-winged hawk, little fly-catcher, blue grosbeak, white ptarmigan, Wilson's phalarope and the Arkansas fly-catcher. The papers discuss the nesting of the black-and-white creeper and the white-rumped shrike. There are "Notes for March," and a variety of other papers and Editorial notes.

AMERICAN AGRICULTURIST.—Following the newspaper law of combination, the *Country Home*, a projected journal to be devoted to the interests of country people, has been merged into the *American Agriculturist*. This monthly, now in its thirty-sixth year, is *par excellence*, the agricultural paper of the world, and we shall look for still further excellence in the new energy added to its management.

THE MAGAZINE OF ART.—This is an illustrated monthly magazine published in London and New York by Cassell, Petter & Galpin. The present number contains several full-page illustrations, with a variety of matter pertaining to art and artists.

—*Baldwin's Monthly* is a novel, neat and in every way a most admirable little monthly paper, published and distributed free by Baldwin the Clothier, of this city. The literary matter is of a high order.

BOOKS RECEIVED.

THE CANOE AND THE FLYING PROA by W. L. Alden. New York: Harper Bros'. Half Hour Series.

THE COQUETTE; or, The Life and Letters of Eliza Wharton, Mrs. Hannah Foster. T. B. Peterson & Bros.: Philadelphia, 1878.

A PIPE.—As handsome a prize as was offered at Buffalo in the contest given by the N. Y. State Association was a pipe presented by Mr. F. J. Kaldenberg, of Fulton st., New York. Of course, material is one thing. Meerschaum must be white, creamy and of just that porosity which will take color. But that is not all. The art question must come in, and Kaldenberg lavishes no end of care in the embellishment of his pipes. A man smokes æsthetically when he has a Kaldenberg pipe between his lips. The other day when visiting the handsomest pipe store maybe in the world, crouched on a table was a delightful pug, a prize winner of numerous shows. Before him was Mr. F. Kaldenberg, chisel in hand, chipping away at a lump of meerschaum. Every time a chip of the silicate of magnesia would fly—for that is what meerschaum is made of—that pug would first growl, then wink. Gradually the lump of inanimate material was fashioned into a lovely little pug, truthful to the funniest wrinkle, and even to the double twist in the tail and the cock of the ear. Mr. Fritz Kaldenberg is a thorough artist, and though chiseling pipes, has conceived and executed a most thrilling statuette of General Custer in his last charge. The illustrated catalogue issued by this house is most comprehensive in its character, and embraces every variety and style of meerschaum and wooden pipe.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

J. M. H.—The *Nuttall Bulletin* is published at $2 per annum.

J. P. E., Owatonna, Minn.—Can you recommend the —— as a reliable sporting rifle? Ans. Excellent; none better.

S. B. B., Atchison, Kas.—You will find Knapp & Van Nostrand, Washington Market, New York, reliable game dealers.

W. F. F., Hickman, Ky.—1. Is —— a first-class maker? 2. Did they take gold medal at St. Louis Beach Show? Ans. 1. Very reliable. 2. So it seems.

R. A. C., Rockland, Maine.—Is the Webb Cartridge Loader what it is recommended to be, and does it work satisfactorily? Ans. As good as is made.

J. B. B., Jersey City.—We have known dogs of the breed you want, but it was quite a number of years ago. You might find what you want by advertising.

L. D., Philadelphia.—Where can I get tried potatoes to carry into camp; am going on an exploring tour into the Rocky Mountains? Ans. Write to O. G. Rafferty, 71 and 73 Front st., city.

ANXIOUS INQUIRER.—Yes, should as frequently as possible in your communications to us employ the phrases "speckled beauties," "true sportsman," "dear old Isaac," etc. We have all these electrotyped.

C. D. T., Kansas City.—It would be impossible for us to advise you as to a rifle for range shooting. At Creedmoor both Remington and Sharps are used, and it has never been decided which is the better.

J. V. M., Phila.—Will you oblige me by stating if —— make of guns is reliable? I mean their $90 gun; it is plain bore 10 gauge. Could I have it choked? Ans. Very good, fair guns and safe. Mr. Squires, of No. 1 Cortlandt street, could choke it.

CONSTANT READER, Macon, Mo.—At a shooting tournament A bets that there is not a man present who can break more balls out of the first ten than B. C takes the bet, and B and C break nine each. Who wins? Ans. A wins, of course. Why do you ask?

S. L. W., Albany.—You need not be under the least uneasiness. The arm is considered to be a perfectly safe one, and the company say that they never heard of what you speak about, and that they think it impossible. If such a thing had ever happened we would have been among the very first to hear of it.

E. L. W., Elmira.—Single sculls are pulled by one person using one pair of sculls. They are termed singles on account of the single occupant. Double sculls are pulled by two persons, each with one pair of sculls. Pair oared shells are pulled by two persons, each with only one oar.

A. B. C., Jersey City.—Do black bass bite best near the surface, or near the bottom, and within what distance from the surface, or bottom? At what distance from the surface do trout bite best? Ans. Depends on the whether and time of day and year. For many pages of instruction see "Hallock's Gazetteer."

D. O. C., N. Y.—I have a muzzle-loading gun, 32in. barrels, weight 8 lbs., 11 bore; marked on barrels, "W. W. Greener, St. Mary's Works, Birmingham," and on lock-plates, "W. W. Greener," and numbered 10,800. I bought it second-hand. Can you tell me whether it is a first-class Greener or not? Ans. Very probably an excellent gun, though an old one. Greener is now running in the 20,000.

O. F., New York.—Where can I buy good maps of Wyoming Territory, Utah and Colorado? They must be quite strong so as to stand rough usage in camp and travel. Ans. The Cottons, 172 William st., are map publishers, but you will have to back the maps you buy with muslin. A very good map accompanies the "Sportsman's Gazetteer," which also gives routes, localities, etc.

JAPHET, East Side.—By far the best microscope we know of for the price can be obtained from the Orange Judd Publishing Co., this city. For three dollars, we believe, you can not only obtain the microscope, but a year's subscription to the most useful periodical published in America, namely, *The American Agriculturist*. We do not know the power of the microscope, but it will enable you to count all the hairs in a mosquito's eye-winker.

F. C. S., Brooklyn.—There is no recognized proportion for the relative length and breadth of the American flag, except in the army regimental flag, which is six feet and a half long by six feet wide. In one of this size which we saw at Schuyler, Hartley & Graham's, the blue field was thirty-three inches long, and thirty-seven inches wide, that is, up and down. The proportions depend upon individual tastes.

SEMPLE, Niagara Falls.—For catching pike-perch use a heavy bass rod and reel, or artificial minnow. In Canada, where they are also known as doree, they are protected from April 15 to May 15. The close season for maskinonge is the same; for black bass, from May 15 to June 15. The pickerel is also sometimes called doree in Canada; that is, we have seen pickerel in the Quebec market which the fishmongers in charge of the stall told us were doree.

P. A. M. V. W., New Hamburg.—Which do you consider the best rod for all purposes, the round or hexagonal split bamboo? I want a rod for fly fishing for both trout and black bass. Ans. As the showman said, "You pays your money, and you takes your choice." We cannot aver that either is superior. While you can handle a black bass on an eight ounce rod, if you are expert, we should recommend you to take two rods—the heavier one for the bass. A wooden rod is as good as any.

J. W., Le Roy, N. Y.—Have a foxhound five years old with difficulty in breathing when exercised. He will work all day, though working hard. He is affected sometimes when he eats and is as if choking. Does not grow thin. He coughs, but I do not think his trouble arises from a disease of the lungs. It seems as if something rises in his throat. Ans. There is doubtless some trouble in the windpipe. It may be from pressure owing to lodgment of foreign matter in the gullet, or to existence of a tumor.

C. L. A., Chicago.—What is the close season for black bass in northern Michigan? or, if there is no statute regulating the matter, at what time do bass spawn in the region named? Many gentlemen from this city take May and June as the best months for bass fishing, and I had supposed that during this season the bass either spawned, or were guarding their spawning beds? Ans. Black bass begin to spawn about the middle of May and are in season from July 1st. There is nothing in the Michigan laws restricting the taking of black bass with hook and line at any time.

CANVASS BACK.—Can you tell what makes a shot-gun lead? Has quality of powder, or size of grain used, or amount of charge anything to do with it? Do not some guns lead more easily than others, and if so why? Does not a choke-bore lead more easily than a straight-bore? Ans. Your question would require too much space. It is not, however, the kind of powder, or amount of charge which leads a barrel, or the construction of the barrel. A choke-bore does lead more easily than a straight-bore.

R. H. D., Warrenton, Va.—Please name the inclosed fish caught in tributaries of Rappahannoc River half a mile from Warrenton. Ans. Your little fish is one of the numerous varieties of darters (*family etheostomatidæ*). Jordan enumerates forty-two varieties in his new book on Vertebrates. Many of these fishes carry the second dorsal fin very high and their sides are barred transversely with dusky and orange stripes like your specimen. They are beautiful little fishes. So far as we can judge from the specimen before us, in which the colors are much faded, we should incline to say that it is *E. exilis*, the gilded darter, a rare variety.

F. P. M., Reading, Pa.—1. Where is the —— double breech-loader manufactured? 2. What is meant by "locks well freed," as used in Bonehill gun description by H. C. Squires? 3. What bait would you advise me to use in catching black bass? 4. Have you any knowledge as to the excellence of —— $50 breech-loaders? 5. Which barrel is generally preferred for a good gun, the laminated steel, the Damascus steel or the plain twist? Ans. 1. No name at all; anybody can use it. Never put on a first-class gun. 2. Locks that neither bind on the metal or wood. 3. A fly. 4. Good gun. 5. The two first—one as good as the other. Plain twist is not used for the best guns.

F. H. M., Oakland.—1. I wish to buy a breech-loading shot-gun. Would any gun recommended by Messrs. B. Kittredge & Co., of Cincinnati; Wm. Read & Sons, of Boston; H. Squires, of New York; Jos. C. Grubb & Co, of Philadelphia; or Turner & Ross, of Boston, be a good and reliable gun? 2. What bore is the best for general use? 3. Are Remington's, Draper's, Berdan's, or Orcutt's shells the best? Ans. 1. You happen to mention four among the most reliable gun dealers in the United States. 2. A ten or a twelve. If there is four-footed game a ten, but for ordinary purposes a twelve, if strong enough at breech; and all good guns so made will answer your purpose. 3. Draper's are out of use. Take the Remington or Berdan which are quite similar. The Orcutt has a peculiar primer which makes it hard to reload.

GRUMBLED, Warren.—Did we act as you advise we would at once have, say, 1,500 first-class rows on hand. Demented parentices, inventors and makers would lay for us at street corners and we would become practical targets for pattern and penetration. If you are newspaper people you ought to know that the policy you wish us to enter into would be suicidal. Did you ever know two men to agree which was the handsomer woman, or the better gun, or dog, or horse? When Paris decided that Venus was the most comely of the three beauties vicissitudes numberless arose and Troy went up. There are a thousand major reasons why we should not alter from our course. When an arm is bad, or a false name is put on a gun, or there is any kind of humbugging, we are quick enough to denounce it.

PIGEON SHOOTER, Philadelphia, Pa.—Some twenty shooters shoot at forty birds each. A bets B that the one killing thirty-four will win. The questions in dispute are: If only one kills thirty-four, or even more, does A win? If no one kills thirty-four does A win? Ans. You ought not to come all the way to New York for the settlement of such a question. If A means that no one will exceed the score of thirty-four he wins, provided there is no higher score. If he means that the winner will not make a poorer score than 31, he loses, provided the best score made is not so high as 34. But we cannot tell from your statement of the case, just what the bet was. For ourselves, we should gladly see all betting at pigeon and glass ball matches discarded. But if bets are made they should be worded so definitely that there can be none of this constant misunderstanding.

N. H., Philadelphia.—It is difficult to draw a strict line of demarkation between barges and gigs. Originally a barge was not intended for rowing, but for carrying passengers in the stern sheets besides the regular crew on their own thwarts. A gig was a somewhat lighter boat and generally carried only fewer no passengers. Both pulled from a gunwale, neither had outriggers. When the racing spirit developed barges were built lighter until they became gigs and gigs were made to approach undecked shells. The difference nowadays consists mainly in the outriggers. A barge must still be pulled from the gunwale, while a gig may have outriggers. Both must be open and have straight continuous gunwales. The difference between the two necessitates greater beam in the barge.

W. A. B., Strathroy, Canada.—1. Did Capt., now Major, Cotton, of "A" battery of artillery, and Col. Gen. A. Kirkpatrick, M. P., both of Kingston, Can., ever shoot with the Canadian team at Wimbledon? 2. What was the best score made by each while at Wimbledon? 3. Did their shooting compare favorably with that of other members of Canadian and other teams? 4. In what places do they stand respectively with regard to other members of Canadian team? 5. What and by whom was the best score made at Wimbledon that year? 6. How did the Canadian team come out in the shoot for the Queen's cup? 7. Are crickets considered good bait for bass, if so in what season? Ans. 1. Col. Kirkpatrick was the officer in command of the Canadian team at Wimbledon in 1876, and Major Cotton was the officer second in command. They were not members of, and did not shoot with the team. This answers questions 2, 3 and 4. 5. Too indefinite. 6. There is no such cup as the Queen's cup at Wimbledon. It is possible you refer to the Rajah of Kolapore's Imperial Challenge Cup, which in 1876 was won by the mother country team with a score of 568 points as against 544 points made by the Canadians. It is possible, also, you refer to the Queen's Prize of $1,250.00 which is not shot for by teams, but by individuals in two stages, the first sixty in the first stage being entitled to shoot for the prize. Lt. Cole, of Canada, won a place in the sixty, but retired without completing his shooting, he being at the time of retirement far behind the leading scores. 7. Yes, whenever you can catch them.

NICHOLS & LEFEVER'S CATALOGUE, 1878.—As the recipients of numerous gold medals for their guns, Messrs. Nichols & Lefever may justly be proud, but decisions of judges, though good in their way, hardly compare with the encomiums sportsmen pay the guns made at Syracuse by this firm. It is not alone the fine mechanism of the locks which make the Nichols & Lefever guns so popular, but because the entire finish of the gun is so thorough. The barrels of these guns are made of the best laminated and Damascus steel. As early as 1860, Messrs. Nichols & Lefever made close shooting guns by a process of their own, and by numerous improvements are now able to turn out a gun which will produce a maximum of pattern. Among the various guns manufactured is a combined breech-loading rifle and shot-gun, a double barrel breech-loading rifle, and a single barrel shot-gun. In addition to guns of their own make, Messrs. Nichols & Lefever manufacture leather gun cases with all the traps necessary for a perfect outfit. Six grades of guns are made by these leading manufacturers. The extra quality is worth $300, the cheapest grade $100.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, MAY 30, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, May 31.—South Carolina Annual Regatta, at Charleston Trotting: Point Breeze Park, Philadelphia; Pittsburgh, Pa.; Freeport, Ill.; Hudson, Mich; Delphos, O. Running meeting at Cincinnati, O. Base Ball: Tecumseh vs Rochester, at Rochester.

Saturday, June 1.—Cricket: Germantown vs Young America, at Nicetown; Dorian vs Philadelphia, at Haverford; Merion (vet.) vs Old Haverfordians, at Ardmore. Running meetings as above; at Jerome Park. Base ball: Chicago vs Boston, at Boston; Milwaukee vs Providence, at Providence; Indianapolis vs Cincinnati, at Cincinnati.

Tuesday, June 4.—Williamsburgh Yacht Club Annual Regatta; Queens County Yacht Club Regatta. Trotting: Lyons, N. Y.; Albany, N. Y.; Gouverneur, N. Y.; Londonville, O.; St. Petersburgh, Pa.; Dubuque, Ia.; Plainville, Conn; Milwaukee, Wis; Adrian, Mich. Running meetings: Jerome Park; Cincinnati, O; Gouverneur, N. Y.; St. Louis, Mo. Base ball: Chicago vs Providence, at Providence; Milwaukee vs Boston, at Boston; Cincinnati vs Indianapolis, at Indianapolis.

Wednesday, June 5.—Sixth Div. Rifle Match at Syracuse. Trotting as above; also at Dayton, O. Running meetings as above. Base ball.

Thursday, June 6.—Manhattan Yacht Club Regatta; Beverly, Mass., Yacht Club Regatta off Nahant. Championship Walks, New York. Sixth Division, at Syracuse, as above. Trotting as above. Running meetings as above. Base ball: Milwaukee vs Boston, at Boston; Chicago vs Providence, at Providence; Cincinnati vs Indianapolis at Indianapolis.

OUR FRONTIER READERS.—The soldiers at Spokan Falls, Washington Territory, preserve their numbers of the FOREST AND STREAM in bindings formed of old pasteboard boxes and the worn out drum heads, and when covers are scarce they drum all the harder. With the varied reading of the papers and the martial memories evoked by the unique covers, those must be interesting volumes.

☞ We go to press one day earlier than usual this week. Several events, which would otherwise appear, have for that reason been deferred.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

ARCHITECT AND GARDENER.

IN our issue of August 9, 1877, may be found some very interesting notes from the pen of Professor D. G. Eliot, of Paris, upon the bower birds of Australia and New Guinea. Much interest has been excited among naturalists by the discovery of a new bird of this species in New Guinea. This discovery by Prof. Beccari, a traveler and naturalist, was mentioned in Prof. Eliot's article, and has since attracted much attention, being discussed in magazines and newspapers, among them the *Gardener's Journal.*

Amblyornis inornata, as this new species is called, belongs to the group known as bower birds, a name given to them from their habit of building on the ground highly ornamented bowers; not, as might be imagined, for nesting purposes, for their nests are built in trees, but in which to carry on their courtships. Signor Beccari's narrative of the habits of the present species indicates that it is in many respects very peculiar, and indeed all the bower birds display an extraordinary high degree of aesthetic taste. Mr. Darwin says of the Australian species that the satin bower bird

"Collects gaily-colored articles, such as the blue tail feathers of the parakeets, bleached bones and shells, which it sticks between the twigs or arranges at the entrance. Mr. Gould found in one bower a neatly worked stone tomahawk and a slip of blue cotton, evidently procured from a native encampment. These objects are continually rearranged and carried about by the birds whilst at play. The bower of the spotted bower bird is 'beautifully lined with tall grasses, so disposed that the heads nearly meet, and the decorations are very profuse.' Round stones are used to keep the grass-stems in their proper places, and to make divergent paths leading to the bower. The stones and shells are often brought from a great distance. The regent bird, as described by Mr. Ramsay, ornaments its short bower with bleached land-shells belonging to five or six species, and with 'berries of various colors, blue, red and black, which give it, when fresh, a very pretty appearance. Besides these, there were several newly picked leaves and young shoots of a pinkish color, the whole showing a decided taste for the beautiful'"

The species to which we now refer far excels, however, those just mentioned in the adornment of its pleasure grounds, and it has besides some peculiarities which its Australian relatives are not known to possess. To all outward appearance *Amblyornis* is a very ordinary bird, in size about equal to a turtle dove, and sober brown in plumage, unrelieved by any dash of brighter color. The habits of the birds, however, show conclusively that they highly appreciate and enjoy brilliant colors, and that they use no little diligence in gratifying their tastes in this direction.

This species is also a most extraordinary mimic and can imitate most faithfully the cries and songs of other birds. In this way it is a continual thorn in the side of the ornithological collector, constantly deceiving him and causing him to lose time and patience. Signor Beccari says:

"It is a clever bird, called by the inhabitants *Buruk Gurca*, Master Bird, since it imitates the songs and screamings of numerous birds so well, that it brought my hunters to despair, who were but too often misled by the bird."

The most wonderful thing about *Amblyornis*, however, is its skill and taste in architecture and landscape gardening, and we are told that one of the native names of "the bird is *Tukan Robon*, which means a gardener." The bowers of these birds are like those of the Australian bower birds, built on the ground. A flat spot is selected at the foot of a small tree whose stem is no thicker than a walking stick, and on which the branches do not grow near the ground, and there, around the foot of the tree, a cone of moss is built up about four inches in height. The immediate object of this structure is not known, but it is suggested that it may serve as a cushion to protect the plumage of the bird from wear against the tree trunk. Their next proceeding is to collect the twigs of an epiphytic orchid and attach them to the stem of the tree about two feet from the ground, weaving them together and fastening them to the ground at a distance of about eighteen inches from the foot of the tree. The leaves and stalks of this plant remain fresh and green for a long time, rendering the arbor very attractive in appearance. Thus we see that the birds have a shelter, shaped something like a Sibley tent and furnished in a most charming manner. But this is not all. Signor Beccari tells us that—

"Before the cottage there is a meadow of moss. This is brought to the spot, and kept free from grass, stones, or anything which would offend the eye. On this green turf, flowers and fruits of pretty color are placed, so as to form an elegant little garden. The greater part of the decoration is collected round the entrance to the nest, and it would appear that the husband offers there his daily gifts to his wife. The objects are very various, but always of vivid color. There were some fruits of a Garcinia like a small-sized apple. Others were the fruits of Gardenias of a deep yellow color in the interior. I saw also small rosy fruits, probably of a Scitaminaceous plant, and beautiful rosy flowers of a splendid new Vaccinium (*Agapetes amblyornidis*). There were also fungi and mottled insects placed on the turf. As soon as the objects are faded they are moved to the back of the hut."

Our author grimly compares the human inhabitants of the island with *Amblyornis*, saying, "I discovered that the inhabitants of Arfax did not follow the example of *Amblyornis*. Their houses are quite inaccessible from dirt"

All this is certainly very wonderful, but what should most excite our surprise and admiration is the fact that these elaborate structures are built, as has been said, not for the more practical uses of domestic life, but as pleasure grounds in which the birds can carry on their wooings, and in the construction of which the amorous male can exercise all his taste and ingenuity to please the fair one of his choice. Does not the exhibition of such mental qualities as are indicated by these actions of *Amblyornis* warrant us in assuming for this bird reasoning powers of an order far above those usually attributed to birds?

THE BAROMETER.

The cruising season being near at hand, the folowing observations on the barometer will not be out of place: It is almost needless to say that a yacht pretending to anything like a proper outfit should not break anchor without a reliable instrument of the kind in her cabin. The most appropriate place to hang the barometer is in the companion or somewhere readily accessible at all times to the hand in charge of the deck.

The barometers in general use consist of two kinds—the mercurial and the aneroid. The former depends for its action upon the difference in pressure of the atmosphere on a column of mercury; the second upon the vibrations of metal diaphragms or springs, giving motion to an indicator around a face-plate divided into inches and decimals. In the first instrument, the level of the top of the mercury column referred to a scale and vernier at its side, gives the reading; while in the second, the position of the pointer on the graduated arc shows a similar condition of the atmosphere. The method of reading a barometer can best be learned by actual practice; explanations in print would be of little avail. A few minutes spent with an old hand will suffice to master the "vernier," and it then only remains to comprehend the interpretations to be put upon the fluctuations observed and to use a little judgment in the connection of consecutive readings.

The usual range of the barometer in our latitudes is between 29 and 30.5 inches, though in exceptional weather it may fall as low as 28 inches or less, and as high as 30.8. These figures apply to observations at about the sea level. In general the rising of the mercury presages fair weather, and its falling, on the contrary, indicates coming rain, snow, high winds and storms. This rule, however, is subject to the following limitations:

When foul weather happens soon after the fall of the barometer, it may be expected to be of short duration, and similarly fair weather setting in rapidly after a rise of the mercury will last but a short time. If during foul weather the mercury rises much and maintains its height before the foul weather has disappeared, a long continuation of fine weather may be expected. Likewise if during fair weather it falls and remains low before the fair weather has ceased, look out for a long spell of nasty weather accompanied with wet. The unsettled motions of the instrument, frequent rising and falling, indicate variable weather with no special prominence to either good or bad. Do not be guided by the wording on the scale or plate, but rather by the manner of the fluctuations. By observing the surface of the mercury it can be determined whether the barometer is in a rising or falling condition, thus detecting the impending changes. If the mercury shows round on the surface, it is in a rising condition; if it shows concave or hollow in the middle, it is falling; if level across, it is stationary. When about to take a reading, gently tap the instrument with the hand so as to liven it up, as sometimes the mercury will cling to the glass or the needle refuse to move on account of friction, if the changes are delicate.

MR. LORT.—Mr. Wm. Lort returned to England last Saturday in the Adriatic. The gentlemen of the kennel club have contributed to make his visit pleasant, notwithstanding the disagreeable and to a degree thankless duties of judging dogs at a bench show, which he came to America expressly to perform. We regret that we had not the pleasure of seeing Mr. Lort, or even receiving a call from him at our office. Twice we endeavored to present ourselves to him, but venturing without a previous notification, were disappointed.

While we unfortunately missed an interview with Mr. Lort, it is something of a coincidence that Capt. John M. Taylor, our kennel editor as long as five years ago, who first introduced field trials into America, should have been receiving substantial honors and courtesies from leading patrons in England for the services rendered here and in behalf of dog fanciers everywhere during and through his editorial connection with the FOREST AND STREAM.

TEMPLES NOT MADE WITH HANDS.—The Methodists of Michigan, having selected Bay View as their camping ground for summer praying, bathing, praising, fishing, exhorting, boating and all the kindred camp-meeting occupations and pleasures, and being most satisfied with their annual conventions at that place, have been joined by the Presbyterians and Methodists, who have camped over against them on the other side of the bay, and this summer Michigan woods and waters will resound with the praises of the multitude. All these good people will be carried via the Grand Rapids and Indiana Railroad, and according to its new summer schedule. As this line is already famous for its fishing and shooting resorts, we see now no new attraction which it can offer to the pleasure-seeking tourists.

MISS CORSON COMES TO THE SPORTSMAN'S AID—THE NEW CUISINE OF THE WOODS.—Miss Corson has kindly volunteered to shed her brilliant culinary light on benighted sportsmen. Say what you may, though men have all kinds of woodcraft at their fingers' ends, when it comes to preparing the food for camp most of them turn out to be miserable failures. Just read what Mr. Charles Dudley Warner says in the last *Atlantic Monthly* about the slap-jacks which were a solid piece of work, and did not go to pieces in a person's stomach

like a trivial bun. Think of it! We have seen, ourselves, a man, a human being, skin a quail and boil a woodcock in the field, because he knew no better. The only thing we are afraid of is that Miss Corson will have her hands full. Questions may be asked her as to how a beaver tail is to be cooked, how a saddle of Rocky Mountain sheep is to be roasted, or how an owl can be turned into a spring chicken, and many other incomprehensible things. We are certain, however, that the Superintendent of the New York Cooking School will be quite equal to the task:

NEW YORK, May 23, 1878.

EDITOR FOREST AND STREAM:

Please accept thanks for your pleasant report of my recent sportsmen's dinner. I am deeply interested in the *cuisine* of the woods, for I am an old "camp front." If your correspondents will do me the favor to send me a memorandum of the articles of food most frequently used by them, I shall take great pleasure in devising for them during the coming summer and fall some dishes which they may like to know of before another sporting season.

Very truly yours,

JULIET CORSON,
Supt. N. Y. Cooking School.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

National Sportsmen's Association, Wilkesbarro, Pa., June 11.

Illinois State Sportsmen's Association, Quincy, June 11; Secty., Geo. E. Wheeler.

The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dowance.

Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.

Tennessee State Sportsmen's Association, Nashville, Dec. 2; Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President.

Missouri State Sportsmen's Association.

PENNSYLVANIA STATE ASSOCIATION.—The officers of the Pennsylvania State Association for the Protection of Fish and Game are: Pres't, Robert Dalzell, Pittsburg, Allegheny County; First Vice-Pres't, D. W. Seiler, Harrisburg; Second Vice-Pres't, J. B. Reno, New Brighton; Third Vice-Pres't, B. W. Richards, Philadelphia; Fourth Vice-Pres't, F. S. Blunt, Sharon; Rec. Sec'y, B. F. Dorrance, Wilkesbarre; Cor. Sec'y, A. M. Whister, New Brighton; Treas., J. A. Harper, Pittsburg. Committee on Rules, Regulations and Game Laws: J. Ross Thompson, Erie; B. W. Richards, Philadelphia; Jno. C. Brown, Pittsburg; Adolph S. Ohl, Philadelphia. Committee on Fish Culture: D. W. Seiler, Harrisburg; W. F. Fundenburg, Pittsburg; W. H. Brooks, Greenville.

—Great efforts are going to be made, when the Legislature meets in January next, to get some stringent laws passed to protect fish in the waters of Tennessee. The wholesale manner in which the fish are caught and destroyed in every stream and lake in the State, in a short time will leave none worth speaking about.

J. D. H.

ILLINOIS STATE CONVENTION.—The Fifth Annual Convention of the Illinois State Sportsmen's Association, which is held at Quincy, June 11, promises to be very largely attended. The meeting continues four days.

NEBRASKA STATE CONVENTION.—The association met May 21 at Fremont, twenty-five members present. Addresses were read by Treasurer McBride and others. The following officers were elected: W. L. May, Fremont, Pres.; Daniel Long, Plattsmouth, Treas.; and D. F. Welty, Fremont, Sec.; Vice-Pres., J. M. Thurston, Omaha Club; S. C. Elliott, Lincoln Club; Wm. Clark, Omaha Field Club; E. G. St. John, Fremont Club; John O'Rourke, Plattsmouth Club; J. E. Winslade, Omaha Workingmen's Club. The next annual convention will be held at Omaha. Pigeon matches and a beneh show were features of the convention.

The Rifle.

BOSTON—*Walnut Hill, May* 22.—Sixth renewed competition, Shot-gun match, 800, 900 and 1,000 yards; wind, varying from nine to three o'clock, blew a perfect gale up the range directly in the faces of the shooters:

S Wilber.

800	2	3	4	5	4	5	3	5	3	5	5	5	5	4	—63
900	5	5	4	5	5	5	3	3	3	4	4	5	5	5	—66
1,000	4	0	5	4	4	5	3	5	3	5	3	4	5	4	3—58—178

Wm Poland.

800	2	4	5	3	3	4	5	3	5	5	5	5	3	4	5—61
900	4	4	3	3	4	3	5	5	4	5	4	0	2	5	4—54
1,000	5	5	5	5	3	5	3	5	5	5	5	4	4	3	—65—180

J S Sumner.

800	2	3	4	5	5	4	5	5	4	3	5	5	0	4	4—58
900	4	3	4	4	5	5	2	5	4	4	3	3	3	5	5—59
1,000	3	5	3	5	4	5	3	2	4	3	5	4	4	3	2—55—172

W Gerrish.

800	5	2	4	5	2	5	5	5	5	4	4	5	5	4	2—62
900	5	4	4	3	4	4	2	5	5	5	3	4	5	2	4—60
1,000	0	3	3	3	4	5	3	2	4	2	2	5	0	3	4—44—166

G H Thomas.

800	5	4	3	5	5	0	5	4	3	5	5	5	4	5	4—62
900	3	4	4	5	4	5	5	0	5	5	3	5	5	4	3—58
1,000	2	4	2	3	3	4	3	0	4	2	5	5	5	0	5—43—163

S Lewis.

800	5	5	5	0	4	2	3	5	4	4	5	3	5	3	—54
900	5	2	4	5	4	3	2	5	4	2	4	3	5	3	5—56
1,000	0	5	3	5	5	3	9	4	4	0	3	3	5	5	4—51—160

E Williams.

800	3	5	3	2	3	4	4	5	5	5	5	4	5	5	4—62
900	3	2	4	3	5	3	4	2	4	3	2	4	5	0	4—53
1,000	5	3	2	0	2	5	0	4	3	0	5	0	5	2	5—42—157

J F Brown.

800	2	0	3	4	3	2	5	4	5	5	5	3	4	3	5—55
900	5	4	4	3	3	5	2	0	5	2	0	5	5	4	0—45
1,000	4	4	3	5	4	4	5	4	4	4	4	0	3	2	3—53—153

J B Osborn.

800	4	4	3	2	3	2	5	3	4	3	5	5	5	4	5—56
900	4	3	2	5	3	5	2	5	3	3	5	4	5	2	2—52
1,000	Withdrew.														

CREEDMOOR SPRING MEETING.

Thursday, May 23.—With good weather, a well arranged programme, with the finest range probably in the world, with everything which could be done to render this leading rifle event of the N. R. A. conspicuous, we are forced to state that, as far as spectators went, these were remarkably few in numbers on the first day. General Woodward was early on the ground, assisted by Colonel Scott, range officer, and by Capt. Story, the statistical officer. It was some quarter after ten when the booming of the second gun announced the opening of the spring meeting, with the contest for the Leech cup. This cup, presented by Major Leech, is among the finest of the rifle trophies, and presented in 1875, has been won so far by Colonel Bodine in 1875, with 205; by Colonel Gildersleeve in 1876, with 204; and in 1877 by Major Jewell, with the brilliant score of 213. It fell yesterday to the skill of Mr. Hyde, with the very good score of 205. The following are the best scores;

	800 yards.	900 yards.	1,000 yards.	T'l.
Frank Hyde	69	67	69	205
B G Doughty	66	67	64	197
L L Hepburn	64	70	62	196
H S Jewell	72	65	59	196
W H Jackson	71	59	65	195
H J Rockwell	69	64	60	193
R H Sanford	65	67	58	190
W H Farron	68	64	58	190

The following are the total scores of the other marksmen:

N Washburn	189	John P Waters	175
H F Clark	188	G L Morse	167
John Bodine	186	A V Canfield, Jr.	167
Thomas Lamb	186	James S Conlin	166
J L Allen	185	J A Hairy	165
F Wesson	184	W W Deforest	152
L Weber	183	F F Sanders	149
R H Keene	180	N D Ward	145
A D Hodgeman	115		

At one o'clock the competition for the Frazier prizes of $100, $75, $50 and $20, took place; open to teams, two men from each company National Guards State of New York, in uniform; twenty shots, to be fired from cartridges in the cartridge box, one minute's time for firing. The following are the scores:

Company D, Seventy-first Regiment—W Robertson, 36; W F Edmundstone, 24, total 60.

Company B, Twelfth Regiment—A B Van Hensen, 32; J Ross, 24; total, 56.

Company G, Seventy-first Regiment—E Demmler, 24; A Steele, 26; total, 50.

Company H, Seventh Regiment—J L Price, 34; E W Price, 14; total, 49

Company H, Twelfth Regiment, made 46 points; Company I, Seventh Regiment, sent four teams, which made respectively 42, 31, 40, and 23, and the Separate Company, of Flushing, L. I., made 33 points.

In the Soldiers' match, for a bronze trophy, presented by Colonel R. Olyphant, four teams competed, making ten entries. The conditions were described as follows in the official programme:

Open to teams of eight (privates or corporals) from each company, troop or battery in the National Guard; each organization having the right to send as many teams as it sees fit; distance, 200 yards; position, standing; weapon, Remington rifle or carbine, State model. Third class target. Competitors to be in uniform (jacket, cap, waistbelt and cartridge box). The match to consist of two stages.

First—Firing by File.—Five rounds per man; time not to exceed two minutes from the command "Commence firing."

Second—Firing by Volleys.—Five volleys for each team. The firing in both stages to be conducted according to the tactics, each team being formed into a squad of four files and commanded by an officer of its own company, who will give the commands to load and fire in each stage. Cartridges to be taken from the cartridge box.

The prize to be shot for monthly, to be held during the month by the company whose team makes the highest score, and at the close of the season of 1878 to become the property of that company whose team may have won it the most times.

The following are the highest scores of each team:

	File.	Volley.	Total.
Company G, 71st Regiment	101	89	190
Company I, 7th Regiment	90	77	167
Company B, 7th Regiment	98	60	158
Company H, 12th Regiment	67	61	128

The members of the winning team were Corporals Demmler, Frazer, Huse and Jacot, and Privates Addison, Engel, McCahil and Morton.

The Skirmishers' Badge match, at four o'clock, concluded the day's programme. The following are the scores:

	Advance.	Retreat.	Total
W C Reddy	17	13	30
M M Maltby	16	10	26
A B Van Hensen	4	20	24
James Ross	8	15	23
J R Grohman	12	8	20
J Bulkowski	8	12	20
J J Simmons	4	14	18
G T Addison	3	14	17
J P Kenworthy	4	10	14
J Holder	5	7	13
M Eagle	4	8	12
W F Edmundstone	8	4	12
H T Rockwell	4	7	11
E Demmler	2	6	8
A Steele	3	—	3

Friday, May 24.—The attendance on the second day was not better than on the opening day. The weather was unfavorable, lights flashing at times, and cloudy at others, but without much wind. Shooting commenced at nine and concluded at four.

No. 2, Stated prizes, open to all comers; distance, 300 yards; weapon, any. No duplicate entries allowed. There were forty-one entries. The following are the highest scores:

R H Keene	31	F Alder	25
E B Souther	30	W Dunlap	25
W M Farron	20	J Grohman	21
W R Livermore, J W Todd	28	S Wickham	24
		J Finlayson	24
D F Davids	28	J S Conlin	21
J W Mangam	28	J Hubbard	24
G A Carman	28	H F Rockwell	24
F H Hulton, E A Perry	27	N O'Donnell	22
		F Hyde	21
H Fisher	27	C John	21
R W Day	27	E Litchfield	21
J M Cram	27	J S Case	21
E E Lewis	26	P McMorrow	20
C A Watson	26	M M Maltby	20
E H Sanford	26	A B Bauter	20
S J G Dudley	26	E Ackerman	20
S L Morse	25	F L Eames	20

No. 9 A, The "Oliver match," for a silver trophy, value $100; open to teams of four from the National Guard; distance, 300 yards. It was won last week by a team from C company, Twenty-third regiment, on a score of 50 out of a possible 140 points. This event will be decided at the field meeting, when the aggregate will be taken.

Sharps' "Military Team" match, No. 10; teams of four men from any military organization; distances, 800, 900, and 1,000 yards; position, any under the rules; weapon, military rifle. Prizes—To the team making the highest aggregate score, a Sharps' military rifle to each member. One-half the entrance money to be divided as follows: One-sixth to the team making highest score at 800 yards; two-sixths to the team making highest score at 900 yards; three-sixths to the team making highest score at 1,000 yards. The following were the scores:

	800 yards.	900 yds.	1000 yds.	T'l
Forty-eighth regiment	94	78	98	270
Eighth regiment	85	70	56	210
Seventh regiment	103	80	80	183
Fourteenth regiment	70	47	53	170
Co. D, Seventy-first regiment	50	53	39	142
Co. B, Seventh regiment	45	52	44	141

No. 12, Stated prizes; open to all comers; distance, 800 yards; position, any; weapon, any rifle. There were twenty-one entries, and the following were the scores:

J L Allen	31	W H Jackson	32
J Bodine	34	N Washburn	32
R Rathbone	34	H Fisher	31
L L Hepburn	34	A D Hodgeman	31
F Hyde	33	E H Sanford	30
H F Rockwell	32	F Wesson	30
G L Morse	33	J E Shepherd	29
A V Canfield	32	J O Burnside	28
W M Farron	32	J P Waters	27
H F Clark	32		

No. 18, Stated prize; open to all comers; distance, 900 yards; position, any; weapon, any rifle. There were twenty-two entries. The following are the best scores:

G L Morse	34	H F Clark	30
L L Hepburn	33	R Rathbone	30
A V Canfield	33	W H Jackson	29
H F Rockwell	33	J P Waters	29
J J Allen	33	E H Sanford	27
J G Burnside	32	J Bodine	27
F Hyde	32	A D Hodgeman	26
H Fisher	30	A Anderson	22

No. 22, Stated prizes; open to all comers; distance, 1,000 yards; position, any; weapon, any rifle. There were twenty-three entries. The following are the best scores:

J Bodine	33	H T Clark	27
H F Rockwell	31	J S Conlin	27
W M Farron	31	J P Waters	27
L L Hepburn	31	R Rathbone	25
N Washburn	29	J H Sanford	25
F Hyde	29	J A Hairy	22
J Burnside	28	H Fisher	22
R A Keene	28	G L Morse	29
A Canfield	28		

SUBSCRIPTION MATCHES.—The winners of the subscription matches were as follows; possible score 35: No. 1, at 300 yards, D. F. Davids, 28; J. W. Todd, 28; E. E. Lewis, 27. No. 6, at 300 yards, J. S. Case, 30; R. Solis, 28; W. M. Livermore, 26. No. 8, the Empire Club team, 103; the New York Rifle Club team, 99; the Company C, United States Engineers Corps team, 97. No. 9, Seventh Regiment team, 95; Twenty-third Regiment team, 88. No. 11, at 800 yards, W. H. Jackson, 34; O. Judd, 33; R. Rathbone, 32. No. 15, at 800 yards, C. H. Eagle, 17. No. 17, at 900 yards, F. Hyde, 35; H. Fisher, 33; W. H. Jackson, 32. No. 21, at 1,000 yards; O. Judd, 31: W. H. Jackson, 31; F. Hyde, 30.

Saturday, May 25.—With a much better attendance of spectators, but with by no means as large as might have been expected, the spring meeting was brought to a close on Saturday. Weather was close and dampish, and atmosphere slightly hazy; wind moderate.

No. 24. The Directors' Match, open only to directors and honorary directors of the N. R. A.; 200 yards; rounds, five; position, standing; weapon, any rifle; prize, the director's champion gold badge, shot for annually and held by the winner during the year. There were twelve entries. The following are the scores:

H Fulton	20	A Schaler	17
J G Story	19	D Scott	17
G W Wingate	19	J Bodine	16
E H Sanford	19	N P Stanton	15
G Schermerhorn	18	J Holland	15
D Wylie	17	J Woodward	10

No. 25. Stated prizes, and open to all comers. Distance, 200 yards; weapon, any rifle. There were sixty-seven entries. The following are the best scores:

W M Farrow	33	H J Quinn	28
R H Keene	32	N O'Donnell	28
E M Squier	32	C A Watson	28
D Fenney	31	D F Davids	28
F Alder	31	J H John	28
J W Todd	31	S T G Dudley	27
W Klein	31	J L Sheldon	27
H L Clark	30	A Steele	27
F H Hoxton	30	J R Grohman	27
H T Rockwell	30	M M Maltby	27
W S Elmendorf	31	J R Hubbard	27
E E Lewis	30	J L Paulding	27
A Anderson	30	J S Conlin	27
F W Leavitt	30	N P Stanton	26
G L Morse	30	L H Greve	26
J W Mangam	30	W W Dodge	26
P McMorrow	29	M Morris	26
F Hyde	29	G W Crittendon	26
I L Allen	29	E W Price	26
H Fulton	29	B Squier	25
J E Irwin	29	E H Sanford	26
E B Souther	29	C W Minor	26
J L Price	29	E A Perry	26
A W Dimock	28	T Lloyd	26
R W Day	28		

No. 26. Military team match; open to teams of five from any company, troop or battery of the National Guard of any State, or the regular army, navy or marine corps; distance, 200 yards; position, standing; teams to use the rifle their company is armed with. There were ten teams entered. The following are the scores of the three highest: Company E, United States Engineer Corps, 142; Company H, Seventh Regiment, 134; Company I, Seventh Regiment, 132.

No. 40. Stated prizes, open to all comers; distance, 600 yards; position, any; weapon, any rifle. There were twenty-five entries. The following gentlemen won the prizes:

A V Canfield, Jr.	35	H F Clark	33
R Rathbone	35	R H Keene	33
J O P Burnside	35	H J Quinn	33
W M Farrow	34	L C Bruce	33
F Hyde	34	I L Allen	33

The highest three pooled the prizes and tossed for places.

No. 50. Stated prizes, open to all comers; distance, 500 yards; position, any; weapon, any rifle. There were thirty entries. The prizes go to the following competitors:

F Hyde	35	R Rathbone	34
E H Sanford	35	A V Canfield, Jr.	34
W M Farrow	35	H G Clark	34
I L Allen	35	J O P Burnside	34
W H Jackson	35	R H Keene	33

The tie in this match was decided in the same manner as in No 40.

In the subscription matches we give the following as the winners: No. 27, at 200 yards—Empire Rifle Club, team 1,

119; Empire Rifle Club, team 2, 116; New York Rifle Club, 111. No. 29 at 200 yards—E. E. Lewis, 31; J. W. Mangam, 31; D. F. Davids and A. H. Wickham, 30 (tie). No. 30. at 200 yards—W. M. Farrow, 33; H. Fisher, 29; W. R. Livermore, 20. No. 3, at 200 yards—A. Steele, 29; O. C. Hoffman, 29; C. H. Eagle, 28. No. 34, at 200 yards—J. M. Robertson, 28; C. H. Eagle, 28; H. F. Clark, 27. No. 48, at 500 yards—J. M. Gardiner, 24; G. Gilfort, J. R. Washington, 16. In each of these matches the number of rounds was 7, and the individual possibility 35 points.

CREEDMOOR CONVENTION OF RIFLEMEN.—At this convention the following organizations were represented: The National Rifle Association by Messrs. N. P. Stanton, G. W. Wingate and G. S. Schermerhorn; the Amateur Rifle Club by Col. Sanford and Mr. G. P. Waters; the Stock Exchange Rifle Club by Messrs. J. Grant and R. W. Day; the New Jersey Rifle Association by Major H. Fulton; the Massachusetts Rifle Club by Messrs. Jackson, Shepard and Rockwell; the Maryland Rifle Club by Mr. A. Canfield, and the Columbia Rifle Club, of Washington, D. C., by Mr. J. O. Burnside. General Wingate was elected president and Messrs. Schermerhorn and Johnson, secretaries. A committee was appointed to decide upon a plan for future conventions and the manner of choosing representatives to them, as well as to define the powers of delegates in convention, who reported that the powers of this convention would only extend to the recommendation to the Directors of the National Rifle Association such measures as might seem beneficial to the interests of rifle shooting. They also recommended that all future international matches be shot in the vicinity of New York, and that facilities be afforded to riflemen in other States to obtain places on the American team. These resolutions were adopted, as was also one requesting the Directors of the National Rifle Association to obtain reduced rates of fare for delegates from distant cities to the next convention and competitors in the next fall meeting. It was also proposed that an annual convention should be held during the fall meeting of the N. R. A. Acting on this, the next convention will be held as designated.

NEW YORK, *May* 21.—Weekly shoot; Zettler Rifle Club; Creedmoor targets reduced to gallery distance; possible 50, ten shots.

M B Engel	47	M Dorrler	45
P Fenning	47	M W Farrow	45
B Zettler	47	W Wiegant	45
Theo Kleisrath	46	E Hanziger	45
H Ochl	46	M Miller	43
L Beatese	46	J Dutll	42
J Levy	46	R Zimmerman	42
C G Zettler	45	N D Ward	42
M L Riggs	45	D Calahane	42
C Judson	46	C Wallera	40

ZETTLAN RIFLE CLUB, *May* 25.—Shooting for places on the team to compete for the FOREST AND STREAM AND ROD AND GUN medal. 30 shots per man; 200 yds. off-hand; possible 750 points:

H Ochl	619	M L Riggs	550
M W Farrow	619	C Judson	536
P Fenning	619	L Beates	528
M Dorrler	617	G Scharman	522
D Miller	610	F Fabarius	487
Theo Kleisrath	595	R Zimmerman	471
B Zettler	578	M Ward	452
C G Zettler	575	J Jolner	435
J Dutll	563	W Calhane	402
M B Engel	552		

STATE CONVENTION.—Distance 100 yards; off-hand; string measure; any sights except telescope allowed, otherwise, according to the rules of the State Association. O. G. Jones, Syracuse, 20⅝ in; C. E. Rider, Rochester, 27¼ in.; O. P. Miller, Corning, 38¼ in.; E. S. Coombs, Rochester, 47⅝ in.

PISTOL SHOOTING.—Deliberate; 10 shot; string measure; distance 15 yards: John B. Sage, Buffalo, 19 in; E. Redmond, Rochester, 36 in.; E. S. Combs, Rochester, 10 in.; George J. Marsh, Buffalo, 19½ in.; J. H. Andrews, Rochester, 20½ in. Ties: Sage, 18 3-16; Combs, 27¾.

THE NATIONAL SCHUETZENFEST.—The arrangements for the great National Schuetzenfest at Union Hill, N. J., are rapidly approaching completion. Judge Gildersleeve will fill the vacancy caused by the death of Gen. Dakin. A convention of delegates from the various shooting societies in this country and abroad will be one of the features of the prize meeting, which is to take place at Union Hill on Wednesday, June 19. Additional prizes to be contested for at the "Targets of Honor" have been received, as follows: H. W. Cordts, cash, gold, $50; Lieut. W. Jose, cash, gold, $100; Zettler Rifle Club, a glass case containing fifty gold dollars, arranged so as to form the initials of the club; Baltimore Schuetzen Corps, gold watch valued at $1.25.

—At a meeting of the Schutzen Bund in this city last week, Judge Henry A. Gildersleeve was appointed as one of the Committee on Prizes and Honorary Members, in the place of General Dakin, deceased.

FIRST REGIMENT ALABAMA STATE TROOPS.—We take great pleasure in publishing the programme issued from Mobile, containing a general invitation to a rifle contest to be held on the 15th, 16th and 17th days of July next, under the auspices of the First Regiment Alabama State Troops. There will be three competitions. The following are the matches with the prizes:

Competition I.—Open to teams of five from each company, of the Organized and Uniformed Militia of the United States. Each member of the team must be an officer or a regularly enlisted member of the company he represents, and shall appear in uniform—full dress or fatigue. Distance, 200 and 500 yards, seven shots. First prize, to the team making the highest score, the Southern Company Trophy; second prize, to the highest individual score, a gold medal; third prize, to the team making the second best score, prize, or $50 gold.

Competition II.—Open to teams of eight from each State of the Union. Each member of the team must be an officer or a regularly enlisted member of the Organized Militia of the State he represents, and shall appear in uniform—full dress or fatigue. Distance, 200 and 500 yards, seven shots. First prize, to the team making the highest score, the Southern State trophy; second prize, to the highest individual score, gold medal; third prize, to the team making the second best score, prize, or $50 gold.

Competition III.—Open to all regularly enlisted members of the Organized and Uniformed Militia of the United States. Distance, 300 yards; position, standing; rounds, seven. First prize, to the highest score, 40 per cent of pool; second prize, the second best score, 25 per cent of pool; third prize, to the third best score, 10 per cent. of pool. All under the rules of the N. R. A.

Any ammunition may be used and must be provided by competitors. Captains of teams will address in person Major James M. Williams, Inspector of Rifle Practice, at Headquarters in Armory Hall, at 12 M., on the day preceding the match.

TELEGRAPHIC MATCH—CHICAGO AND WARREN TEAMS.—The return match was shot on Thursday, and resulted in a victory for Chicago. We give the scores:

Chicago Team.

B G Gleason	5	4	4	5	5	5	5	4	4	5—46
W H Chenoweth	4	5	5	5	4	5	3	5	5	5—46
S M Terrill	4	4	5	5	4	5	5	5	4	4—45
J C Borcherdt	4	5	4	5	4	4	4	4	5	5—44
F W Borcherdt	4	4	4	4	4	5	4	5	5	4—43
L R Drury	4	4	4	4	4	4	4	4	5	5—42
J K Evans	3	4	5	5	4	3	5	3	4	5—41—307

Warren Team.

J C Woodworth	4	5	4	4	5	5	4	4	4	5—44
A H Totten	4	5	5	5	4	3	4	4	4	5—43
F S Spafard	4	4	4	4	5	3	4	4	5	5—42
Geo D Wells	4	4	5	5	4	5	2	4	3	5—42
F H Cole	3	4	4	5	4	3	4	5	4	4—40
John Bird	5	3	3	4	5	3	4	4	4	5—40
H W Foss	5	4	4	3	4	4	3	4	4	4—39—290

MONTANA—*Helena, May* 12.—A rifle organization, with nearly fifty members, under the title of the Helena Rifle Club, has just been perfected here for the purpose of off-hand and long-range shooting. Many of the members are old riflemen, whose average is "way up" near the "possible," while others, as yet unknown to fame, manage to make the old hands mind their p's and q's. If Mr. Sitting Bull comes around this summer we will try long-range tactics on him, but we're not to say exceedingly anxious. The officers are: B. H. Tatem, Pres.; Col. W. B. Hendley, Vice-Pres., and Oranville Stuart, Sec. AMATEUR.

CANADA.—A meeting of the Council of the Ontario Rifle Association was held at the Drill Shed, Toronto, on Thursday, the 16th instant, when it was decided that a team should not be sent this year to compete in the military match at Creedmoor. SHOOTER.

NATURAL POINT BLANK.—Major Merrill, whose articles in our paper are considered as the best authority on all points regarding rifle matters, has very kindly placed at our disposal a letter of his addressed to Col. James G. Benton, U. S. A., commanding U. S. Arsenal at Springfield, and Col. Benton's reply. Colonel Benton's opinion, which may be considered as the soundest among professional ordnance officers, is likely to set at rest that ambiguity which has existed in regard to the terms "natural and artificial lines of sight." Communications of such a high character we appreciate very fully, and their value will be fully understood by riflemen. Colonel Benton is the author of the text book now used at West Point. Much credit is due to Major Merrill for having first defined in FOREST AND STREAM, the exact meaning of the various terms, and to have cut away a great deal of unnecessary verbiage which has hindered our riflemen:

NEW ROCHELLE, WESTCHESTER COUNTY, New York, May 7, 1878.

Col. James G. Benton, U. S. A., Commander U. S. Arsenal, Springfield, Mass:

Dear Colonel: I wish to assert, if it be true, and I think it is:

First. That the rifle has no "natural point" blank and range, because it has no "natural line of sight." It does not sight over or along its "metal" in rear, which is a condition of the natural line of sight and range. The cannon has both of these. They arise from the peculiarity of its construction, and are found convenient for records, etc., in field practice.

Second. That the rifle has no distinctive "artificial point blank range." The term "artificial," as used for the cannon, is in contradistinction to "natural," and if no "natural," then "artificial" falls with it. I see no use for either of these terms in reference to the rifle, and if they could be dragged into the subject, they would only serve to confuse the common reader, and hence would be decidedly objectionable.

Ergo: This leaves for us simply the "point blank and range" proper for the rifle. These, with moveable sights, vary with the distance, and are always found at the second cut of the trajectory by the line of sight. This definition is general, as will be seen, and at once grasps the facts and results of all point blank rifle shooting, whether it be over the level plain, up into the mountain, or down into the valley.

A definition at once so simple can be easily understood by the public, and this is just what we require for the rifle as a distinct weapon from the cannon.

I give, as an illustration, one example. No definition could be plainer for a "cross-road" than that it is the intersection of one road with another. So with the rifle point blank proper. It is the second intersection of the trajectory with the line of sight. It embraces the facts of the case, and stops there. Such a definition I have hitherto, with full explanations, put forth in FOREST AND STREAM. It is, I find, well understood and appreciated generally.

The same definition, however, is exactly true for the cannon, after leaving out the two distinctions peculiar to this arm—"natural" and "artificial"—which terms I purposely dropped, as clogs to a definition for rifle and small arms' practice. I know full well that we can compare and assimilate the points blank and ranges of those different arms, the one with the other, etc.; but this is confusing, and entirely unnecessary to the subject of rifle shooting and for a good, plain definition.

Third. When United States arms, such as rifles, carbines and pistols, come from the manufacturer, do they come sighted on a "level," that is, with the rear sight and front equidistant from the axis of the bore (and thus giving no point blank), or do they come, as I suppose, with the rear sight the highest (I mean the fixed standard sight), and so give a point blank and range at once without any elevation? If so, what is the fixed or standard range, and has it any special name? If so, what is it? I see it stated that small arms are issued with sights to the "level."

I hope you will pardon me for infringing upon your time and patience, and favor me with an authoritative answer, and all *pro bono publico*, you know. Yours truly, H. W. MERRILL.

P. S.—If you like it, or will permit me, I will have your reply published in the FOREST AND STREAM AND ROD AND GUN. It will be duly appreciated. Otherwise I will use private, of course.

NATIONAL ARMORY, SPRINGFIELD, MASS., May 14, 1878.

Major H. W. Merrill, New Rochelle, N. Y.

My Dear Major: Your note is received. The terms, "natural and artificial lines of sight," "point blank," etc., are now but little used in the military service, for the reason that aim is no longer taken along the line of the "metal" of the piece. In military rifles and carbines the lowest, or fixed line of sight, cuts the path of the bullet at 100 yards. In guns (cannon) and howitzers, the height of the front sight is made equal to that of the rear sight, and the lowest line of sight is parallel to the axis of the bore. In mortars the line of metal is parallel to the axis of the bore. Cannon, therefore, in our service, have no point blank in the usual significance of this word. I agree with you that the further use of the words "natural and artificial," as applied to the line of sight of a fire-arm, may be dispensed with. The term point blank may be retained, understanding by it that it is the point of intersection of the fixed or lowest line of sight with the trajectory. The term "point blank range" will, of course, mean the distance of this point from the gun. J. G. BENTON.

Sea and River Fishing.

FISH IN SEASON IN MAY.

Trout, *Salmo fontinalis.* Salmon Trout, *Salmo confinis.*
Salmon, *Salmo salar.* Shad, *Alosa.*
Grayling, *Thymmallus tricolor.* Land-locked Salmon, *Salmo gloveri.*

FLIES IN SEASON IN MAY.

BLACK MAY, No. 10.—Body, black; feet, black; wings, grayish hyaline.

COW DUNO, No. 10 AND 11.—Body and feet, brownish yellow; wings, yellow-gray.

GREAT DUN, No. 9 AND 8.—Body, purple brown; feet, gray brown; wings, dark gray hyaline; setæ, dark brown annulated with gray.

RED SPINNER, No. 10 AND 9.—Body, bright claret, ribbed with gold tinsel; feet, brick color; wings, gray hyal; setæ, pale ine brick, color

YELLOW MAY, No 10.—Body and feet, pale yellow; wings, pale yellow, mottled with brown; setæ, yellow.

COACHMAN.—Body, peacock herl; feet, dark red hackle; wings, white.

KING OF THE WATER.—Same as queen of the water, with scarlet body instead of orange.

GOLD SPINNER.—Body, orange, ribbed with gold tinsel; feet, pale red hackle; wings, bright gray.

CAPTAIN.—Body, posterior half, peacock herl, anterior half, gray; white feet; red hackle; wings gray; setæ, scarlet green and wood duck feathers mixed.

SOLDIER.—Body, crimson; feet, red hackle; wings, gray.

KINGDOM.—Body, white, ringed with green; feet, peacock herl, and red hackle; wings, gray, mottled with brown.

Black Palmer, Brown Palmer, Red Palmer and *Gray Palmer* are made respectively of the different colored hackles that distinguish them.

FISH IN MARKET—RETAIL PRICES.—Bass, 18 cents; blue fish, 12; salmon, 25; mackerel, 15; shad, 25; weakfish, 12; white perch, 15; Spanish mackerel, 50; green turtle, 15; halibut, 15; haddock, 6; king fish, 15; codfish, 6; black fish, 10; flounders, 8; porgies, 6; sea bass, 15; eels, 18; lobsters, 8; sheepshead, 15; Long Island brook trout, $1; pompano, 50; white bait, per pound, $1 hard crabs, per 100, $3; soft crabs, per dozen, $1.25.

Restigouche salmon arriving in very large quantity, fully two weeks earlier than usual. Market somewhat overstocked and salmon selling for 25 cents a pound. Receipts of Connecticut salmon in New York light, but the catch said to be increasing. Prices of salmon having been cut down by the advent of fish from the Dominion, better prices can be had in Connecticut in than New York. Bluefish plenty, weighing four pounds, caught on the Jersey coast and south side of Long Island. Fish much larger and in better condition than in former seasons. Very heavy hauls of striped bass have been taken in the vicinity of Westhampton and Freeport, L. I., averaging 45 pounds. Sheepshead are plenty from the Chesapeake and a few from Long Island.

We noticed on the slabs of Middleton, Carman & Co., the first two red salmon caught in the Restigouche River this season; they weighed 45½ lbs. A salmon from Port Monmouth, N. J., was the novelty.

CANADA—*Walkerton, Ont., May* 20.—On the 15th I got a basketful of trout, from 7 to 23 and 24 ounces. J. F. H. G.

Montreal, May 23.—Salmon have arrived in large quantities at Matepedia, in the Restigouche. Some 35-pounders have been taken. STANSTEAD.

MAINE—*Rangeley Lakes, May* 20.—On the 11th instant Fish Commissioner H. O. Stanley, on his return from Bema Stream, where he had been engaged in depositing fry, made a few casts of the fly at the Upper Dam, and speedily hooked and captured two magnificent trout, weighing four and five pounds respectively. I believe this is the earliest catch with the fly on record in these waters. Mr. Stanley is the champion fly fisherman in this section. He has visited the Rangely Lakes for thirty years, and has taken many hundred brook trout, weighing from three to nine and a half pounds. Probably half of these were returned to the water uninjured. He has superintended the hatching of 750,000 trout, to keep up the supply of these giants among the *Salmo fontinalis.* The first among the anglers who visited the Rangeley Lakes was Theodore L. Page, of Boston, the owner of the lovely Lake Point Cottage, at the outlet of Rangeley Lake. He arrived April 20, and will remain until October 1. Henry Lampson, of New York, is now there as his guest. Among the members of the Oquossoc Angling Association who will report at Camp Kennebago next week are J. H. Kimball, of Bath, Me., president; L. B. Reed, of New York, vice-president; James A. Williamson, of New York, secretary and treasurer; Hon. William P. Frye, M. C., of Lewiston, Me.; A. D. Lockwood, of Providence, R. I.; J. R. Payson, of Chicago; Dudley Alcott and Abraham Lansing, of Albany, and W. B. Wood, of Boston. Gentlemen and ladies desiring to be entertained at Camp Kennebago will be received during July and August without the necessity of obtaining a letter from a member. They will find excellent accommodations, good guides and boats, and very reasonable charges.

GEO. SHEPARD PAGE.

MASSACHUSETTS—*New Bedford, May* 21.—Our market is filled with an unusual variety of fish for this time of year; they are some three weeks earlier than usual. Bluefish are caught by the hundred. Striped bass are running up our fresh water rivers, and are caught plentifully from the bridges, etc. Sea bass, tautog, scup, etc., are for the season unusually fat and in good condition. CONCHA.

MOVEMENTS OF THE FISHING FLEET.—The news from the mackerel fleet is not favorable, and it begins to be feared that the schools slipped by while our vessels were seeking them at the south. Seven arrivals reported the present week, but the receipts will not exceed 100 bbls.; several vessels report damage to seines and seine-boats, and none have paid their way. A few mackerel have been taken at Cape Cod by weirs and drag-nets, and 11,000 fresh were sent to Boston Monday; large schools were reported off Cape Cod last week, but no vessels there to take them. Harwich reports four arrivals, one with 80 bbls., one with 40 bbls., and two with none. Nothing of consequence has been done on the Nova Scotia shore. The Georges fleet are meeting with rather better success, and the shore fishermen continue to do well so far as the catch is concerned. The number of Georges arrivals the past week has been 40, and the receipts 800,000 lbs. codfish. Twelve Bank arrivals have been reported, bringing 235,000 lbs. halibut. Whole number fishing arrivals for the week, 59.—*Cape Ann Advertiser, May 24.*

CONNECTICUT—*New Haven, May* 23.—Kingsley, the market man, opposite the Allyn House, exhibited yesterday, in front of his place, a striped bass that weighed 66½ pounds, measured four feet in length, and two feet eight inches in girth. It was caught by O. Hubbard at Haddam in a shad seine.

RHODE ISLAND—*Newport, May* 24.—Six thousand barrels of porgies were caught off this place to-day.

THE ADIRONDACKS—*Saranac Lake, May* 20.—Here again for the ninth year, and find many of the sportsmen here. We left New York May 11, arrived at Port Kent 5:10 A. M. on the 12th, stage to Keeseville, and after having breakfast at the Adirondacks we started with one of Harper's covered teams for Martin's, thence to Bartlett's Sportsmen's home at this place. And all the care which we could ask for is bestowed with a grace here that makes it a pleasure, almost, to be sick. This is undoubtedly the pleasantest house and location in the woods. And such trout as we caught in the upper Saranac Lake this year! I have seen three that would weigh 20 pounds each, one 26, and many 18, 16 and down to 10. Dr. Romeyn having caught one 15, 16, 20, 11½, 10 and a good many between 10 and 6 pounds each. Mr. John W. Mason caught, on May 15th, three trout, one 26, 20 and 8 pounds each. Cyrus Currier, of Newark, one 15 pounds; Mr. Seeley, of Scotch Plains, 12½, 10, and lost one that would weigh at least 20 pounds. Weather has been fine. Had season at least one month earlier. There is now at Bartlett's Cyrus Currier, of Newark; E. A. Seely, of Scotch Plains; Dr. J. R. Romeyn, of Keeseville, N. Y.; W. W. Winchester, of New Haven; Col. T. J. Hoyt, of New York; Geo. E. Hart, of Newark, N. J. Vice-President Wheeler will be here on Thursday of this week. H. E. G.

May 28, 1878.—Vice-President Wheeler, accompanied by Mrs. President Hayes and daughter, and Mrs. Dr. Woodford, of Washington, are at present at Bartlett's on the Upper Saranac. They reached the Woods via Meacham Lake and Paul Smith's. Already they have taken quite a number of trout, Mrs. Woodford taking one weighing 14 lbs. At Bartlett's I find also registered Col. T. J. Hoyt and Mr. Fred J. Phillips, of New York; Mr. W. W. Winchester, of New Haven; Dr. J. R. Romeyn, of Keeseville, N. Y.; Mr. G. E. Hart, of Newark, N. J., and the Smith party of Buffalo, N. Y. Trolling is excellent. Mr. Penfold, of New York, is at Second Pond. Romeyn-Hoyt party have been very successful in taking trout, trolling. The catch in large trout has never been equalled. Very few in the woods. Flies—the pest of the angler—have already commenced their blood sucking operations. The Upper Saranac is full of set lines and trout are taken from them in large quantities. D. B.

BUNKER FISHING AT SHELTER ISLAND.—*Shelter Island, May* 21.—The bunker fishing up to the 19th has been good, though not as successful as in the two or three weeks preceding. The steamers have done much better than the fishing vessels. One factory has been catching more fish than could be attended to, so on the 18th they gave away 60,000 to an adjoining factory. These factories employ at the work from fifteen to twenty-five men each, who have at times to work day and night at this labor, which is very severe. The fish, on the arrival of the vessel, are hoisted to the wharf, removed on a short railway to the works, and then placed in large vats, where the oil is boiled and pressed out of them into barrels to be sent to New York market. The present price is about thirty cents per gallon; and, as 1,000 fish will now produce four gallons of oil, you will perceive that the business is very remunerative, especially when one steamer can take some 700,000 per week. After the oil is pressed out the residue (called scraps) is placed on large platforms to dry, being turned over by a harrow to hasten the process. These scraps will sell for about $12 per ton, and are sold in large quantities for manure. Large quantities of them are sold to other factories, where they are ground to a fine powder and sold as an excellent fertilizer at the rate of about $30 per ton. This article is not considered equal in strength to the Peruvian guano, which is sold at about $50 per ton. Still it is a powerful fertilizer and is in very great demand. Each fish vessel has a gang of seven or eight men, with two large row boats in which the big seines for surrounding the fish are carried, being towed by the vessel. A man is always stationed in the rigging on the lookout for fish, and when a school is discovered the vessel is hove to. The two boats are hastily manned, the fish are taken, and the vessel returns at once to its factory. But the steamers have a great advantage, as they can push out to sea beyond Montauk, and even for miles along the south coast of Long Island, and return at any time, in any weather, to their factories. The steamers are built for this purpose, costing from $10,000 to $15,000 each. They have lately been taking besides the bunkers, large quantities of bluefish and large sea porgies, and one of them brought in a large lot of codfish. The men depend for pay upon their share of the fish taken, like the mode adopted in whale ships. ISAAC MCLELLAN.

FLY CASTING.—New York State Sportsmen's Association; C. C. Morse, of Rochester, and Geddes, of Syracuse, judges; J. Hoekstra, referee. Trout fly-casting—Seth Green, Rochester, 70ft.; R. Wood, Syracuse, 69ft.; Ira Wood, Syracuse, 65ft.; length of rod, 11 ft. Salmon fly-cast-ing—R. Wood, 83ft.; Ira Wood, 78ft.; length of rod, 16ft.

THE FLY CASTING AT BUFFALO.—The following is an echo of what is much talked of in angling circles:

EDITOR FOREST AND STREAM:

For several years, I do not know how many, the first prize for fly casting at the meetings of the New York State Sportsmen's Association has been won either by Seth Green or Reuben Wood, whom we may term professionals. This year the former took the first and the latter took the second prize. I should think that a sense of self-respect would forbid them to enter when they know that their entries keep out competitors. I heard that they were to be barred out, and myself and friend went to Buffalo to enter for the contest. Neither of us has cast over sixty feet, but when we found the same old ring there on hand we knew there was no chance. If the association wish to give them prizes every year, they should let us know; but if they wish to encourage fly-casting they go to work the wrong way. X.

NEW JERSEY—*Kinsey's Ashley House, May* 25.—Yesterday Noah Taylor, of Jersey City, took 18 bluefish. Blackfish and sea bass plenty and running large; someas high as 4 lbs. N. Middleton and Hon. John Lesering, of yacht *Sans Soucie*, took 115 in two slack waters. Sheepshead not hitin gyet. B.

DELAWARE SALMON.—Mr. B. W. Richards, of Philadelphia, writes that a 24½ pound salmon was caught in the Delaware off Billingsport, N. J., on the 17th inst., and another above Beverly, N. J., May 22, weighing 17 pounds.

MARYLAND—*Baltimore, May* 24.—Last week a party of five left Baltimore for a trout fishing expedition, via B. & O. R. R., to Webster, W. Va., where they embarked in wagons and proceeded overland to the head of the Elk River, in Pocahontas County. The road was extremely rough and muddy, necessitating a portion of the journey to be made on foot. At the Elk River an encampment was made. The party hooked 350 fine trout in one day's work; the second day was still better, 700 more of the princes of the finny tribe being captured. Many of the smaller fish were thrown back into the river After another day of the pleasant sport the total amount was aggregated and numbered 1,200, making one of the most successful fishing excursions ever known on this stream. The largest fish caught was nineteen inches long and weighing two and a quarter pounds; fully one hundred of the fish were fifteen inches in length; flies alone were used, and altogether the party, who are all experienced fishermen, pronounced it one of the most successful trout expeditions ever started. TRAYMORE.

TENNESSEE—*Nashville, May* 23.—Fish have begun biting again, and a number of fine ones have been caught. Three or four gentlemen took thirty pounds of bass in Crow Creek last Saturday, and some very nice black perch were caught in Mill Creek the same day. A small boy, with very poor tackle, succeeded in landing a bass in Mill Creek on Monday that weighed three and a half pounds. A gentleman from Clarksville reported to Col. Akers that last week his attention was called to a large school of fish in the Cumberland River near this place, that he believed upon close examination to be shad, and thinks that, were the fishermen provided with proper seines, a large number would have been taken this season. On last Saturday about one thousand pounds of fish from different parts were shipped from this place. J. D. H.

Huntington, May 24.—Ernest Hawkins and Bill Hurt, at Jenkins' Mill Pond on Crooked Creek, four miles north of town, Wednesday last, took 27 very fine fish, mostly trout and black and goggle-eye perch. They used live minnows for bait. FORESTER.

CODFISH ON THE SOUTHERN COAST.—We are indebted to Professor Spencer F. Baird for the following interesting communication recently received by the United States Commission Fish and Fisheries, at Washington. Mr. J. M. Whitson, writing from Stumpy Point, Dare County, N. C., under date of April 30, 1878, says:

The questions embraced in your circular do not very well apply to our part of the Atlantic coast. That part of the coast with which I am acquainted extends North and South from Cape Henry, Va., to Ocracok, N. C. On this part of the coast, so profusely washed by the waters of the Atlantic, we have never known a single codfish to be taken till the present spring. Our principal fishing in this vicinity is the white shad fishing in the waters of the Pimlico Sound during the months of February, March and April, and I think during the present spring about one dozen cod have been taken by our fishermen from their shad nets, averaging about 5½ in. mesh. The writer is not prepared to say much about the quality of the cod taken in these waters, though others say they are finely flavored, the flesh being white and of very fine texture. I had the pleasure of catching but one the whole season out in company with my associate fisherman, who claimed the right of capture and therefore appropriated the prize to his own palate. Enough of this new visitor to our waters has not yet been developed for us to give an accurate description of the time of its visitation, departure, size, etc. It would afford me great pleasure to be able to do so, but must decline trying to do this at present. There are no cod-fisheries either off or in shore along this part of the western coast, therefore we possess but very meagre ideas about this species of fish, but we may be able to approximate truthful statistics at some future time.

MISSISSIPPI—*Aberdeen, May* 20.—The fishing season has opened and is in full blast. We have some fine fishing places, as Twin, Horseshoe and Dead River lakes, and the Buttahatchie, Tipsey and Bull Mountain rivers. Those three latter are clear crystal water mountain streams, well adapted for fly and trolling fishing, and filled abundantly with trout, white perch, bream and other game fish. All the mentioned lakes and streams empty their waters into the rather muddy Tombigbee River. Bream abound in all adjacent lakes and rivers. White perch are plentiful in the rivers, and most abundant in the lakes. Dominick perch not so plentiful as the white perch, but frequently taken while fishing for white perch. Trout (black bass) in all our lakes and rivers; some reach as high as 10, 12 and 14 lbs. Channel cat found abundantly in our rivers. Drum are very abundant in the Tombigbee River; largest sizes from 10 to 20 lbs. Blue and yellow cat are taken both in lakes and rivers, and largest size caught here are 85 lbs. Shovel bill cat—Taken both in lakes and rivers in nets and traps; they rarely bite at hook on account of their long bill; from 10 to 50 lbs weight. Buffalo abounding in the rivers; largest weight 28 to 30 lbs. Sucker not numerous, but frequently taken from 6 to 8 lbs. Eel in great numbers in rivers and creeks, from 3 to 5ft. long. Redhorse in great schools during the spawning season (March, April and May); taken mostly with the gig; average weight 5 lbs. Sturgeon, though not especially sought for, are occasionally taken on the shoal trap a few miles above Aberdeen. The largest last season pulled down 400 lbs avoirdupois. Soft-shell turtle are caught chiefly in our rivers; average weight 10 to 20 lbs; largest size 40 to 50 lbs.

The seven fish first named are the finest and in the most demand in the market. All are caught with hook. The redhorse is generally harpooned, and the other larger fish are caught in wooden fish traps.

We have in our State no fish law; consequently every one has the right to seine, net or trap any fish without punishment; but all our honest and good fishermen are in strong favor that our next Legislature will make such a law, and prevent the wholesale slaughtering of fish, otherwise we will have no fish, or very few, in five years from now in these waters. W. KELLERMAN.

MICHIGAN—*Detroit, May* 25.—The Hon. Z. Chandler visited the Flats Thursday on the steam yacht Lillie, and caught the first bass of the season—a three pounder.

WISCONSIN.—The following letter is from Ashland, Wisconsin. Ashland lies on an arm or bay of Lake Superior, and it is around the bold rocky shores of this bay that the much-talked-of "rock fishing" is done and the immense trout are taken. The sandstone cliffs have been cut into by waves and riven by storms into all sorts of fantastic architectural forms; and it is under the natural caves and around the fragmentary rocks, which have become detatched and tumbled into the water at the base of the cliffs, that the angler finds abundant elbow room for casting and big trout to reward his effort. Nowhere else can a man fish with such absolute comfort and unconcern for his back line. The editor of the FOREST AND STREAM wrote letters from this part of Lake Superior last year, and the help to notoriety which those letters gave may have aided in swelling the unusual number of visitors which our correspondent tells us have already gathered there. It will be seen from his letter that the best season for trout fishing is from the present date until the end of June, though we have taken trout there at the end of August. Many of our readers will be glad to receive the information which his letter gives:

Ashland, May 17.—We had a very early spring—in fact, unprecedented, the rivers and bay opening the 11th of March, the usual time being the last of April. So far, very few trout have been taken, though the streams have been in good order for fishing the past three weeks. I tried Fish Creek this week and took about 20lbs. with minnows and flies, but am satisfied that the trout are up the streams, as they (in this vicinity) descend after the suckers have spawned—in fact, the trout follow the suckers down. I see quite a number of suckers in the streams, but am satisfied they have not spawned yet, which shows that an early opening of the streams does not affect the suckers.

I also tried the rock fishing, but with poor success, only taking five trout, the largest one pound. We had a strong south wind, which troubled the waters rather too much around and under the rocks to have good fishing. I think after the trout descend the streams they visit this rocky coast. Taking all things in consideration, the last of June, or from the 20th, would probably be a good time for fishing. If I am not mistaken, it was about the middle of June we had the best fishing last year, and the early season may change the time and make the 1st to the 15th the best this year. We have had quite a number of arrivals already, and some very fine trout taken from our streams and around the rocks. From all accounts we shall have a large number of tourists this season. Our hotel, the Chequamegon, has now a fine billiard hall, fishing boats, yachts and experienced men to run the same. We are expecting 200 editors to visit Ashland on the 27th of June. The Wisconsin Central R. R. run trains in here at 9 P. M.; leaves here at 7 A. M. E. F. P.

IDAHO—*Cœur D'Alene Lake, May* 2.—I am now at Cœur D'Alene Lake, Idaho, thirty-seven and a half miles northwest of Spokan Falls, and just over the Idaho line. The Spokan River is the outlet of the lake, and starts full grown one hundred yards wide at this season of high water, about ten feet deep, and with a very swift current. Cœur D'Alene Lake is about thirty miles long by two and a half broad, and is one of the most beautiful sheets of water I ever saw. Our camp is beautifully located on the shore of the lake, and I go to sleep every night lulled by the ripple on the sandy beach just back of my tent. The trout are beginning to jump, but they take the fly with reluctance. The season is much later here than at Spokan Falls, and we have ice almost every night. Three or four nights ago it froze an inch thick. I have been fishing two or three times, and had fair luck, getting mostly small fish. The big fellows are still out in the depths of the lake or the river, for one of our officers went down the river bank a few days ago and saw a fine one leap. He said it made as much noise and splash as it fell back into the water as if a baby had been thrown in.

May 8.—We also caught a trout which weighed exactly nine pounds, and so far as we could ascertain by hooks or recollect from personal experience—and there are several old trout fishers from Maine and New York here—he was a genuine *Salmo fontinalis*, or brook trout. The markings were perfect. I mention this as an item in the trout question on this coast. I thought the head a little more pointed and the nose sharper, but the others did not agree. MONMOUTH.

CALIFORNIA—*San Francisco, May* 18.—Have just returned from a fishing trip in Mendocino County. Found fishing superb, though running rather small on account of too much water. No end to trout in all the streams I fished. Caught over 600 in a trifle over three days' fishing, the largest weighing 1 lb. 6 oz., all taken with a yellow-jacket and coachman flies. E. T. D.

WHITEBAIT.—We stated that before long all the ichthyological facts in regard to whitebait would be determined. Dr. Bean, of the Smithsonian, writes the following as to the mixture of fish in whitebait:

"The whitebait are partly alewives and partly sea shad (*Pomolobus mediocris*). I thought there were some true shad among them, but they proved to be *P. mediocris*. You may readily separate *P. mediocris* from the alewives by noticing that they have the eye slightly smaller, the snout a little longer, and the number of abdominal scutes always greater. We have not before noticed the unmistakable young of *Pomolobus mediocris*.

A BEAUTIFUL TROUT PICTURE.—Mr. Robert Wiseman artist, of New Haven, Conn., has presented to us for exhibition a very creditable painting of a half-pound trout, life size. The fish is represented as resting on the folds of the landing net which has just lifted him from the water, surrounded by

ferns and mosses that grow on the bank beside his native element. We are constrained to say that a most merciless criticism fails to detect any real defect in this beautiful painting, which has been subjected to severe and protracted criticism by connoisseurs. The coloring and markings, natural sheen, firmness of texture, pose and technical characteristics, are all true to life and nature. The folds of the landing net, and the tension of that portion of it on which the fish rests, are most truthfully delineated. The surrounding ferns are a pretty embellishment.

The greatest obstacle to instant approval and impulsive admiration of any trout painting which has superior merit lies in the fact that trout are a hackneyed study. Every tyro makes his maiden effort on this particular fish. Trout are served in every possible attitude, with every degree of merit or default, and so many erudities meet the eye constantly in print shops, publications and studios, that the mind becomes formulated to adverse criticism before it has scarcely given a glance at the work. It is a triumph to an artist if his labor wins approval in spite of habit or prejudice, and can operate favorable upon a mind which has been negatived, so to speak. Novelty of subject or its treatment often so engages the interest of the examiner as to blind his eye to blemishes or defects; but there is no novelty, certainly, in paintings of trout. We commend Mr. Wiseman to the favorable consideration of gentlemen who may wish to test his capabilities in animal, fish or fruit portraiture. Mr. Wiseman makes a specialty of dog portraits. His studio is at New Haven, Conn., room 37, Hoadley's Building. Mr. Wiseman has on exhibition at the Academy of Design, in this city, a group of brook trout, with basket, etc., and also a group of young terriers, with a cat thrown in for variety and embellishment.

PRACTICAL LESSONS ON BASS FISHING—No 3.

[We are pleased to receive from our obliging correspondent a continuation of his series of letters on bass fishing. With the exception of this writer and Dr. Henshall, few gentlemen have attempted to instruct in the modes of angling for this species of fish. The school is altogether a new one, and there are hundreds of our readers who feel themselves under great obligations to them. We have received many letters begging for more light on the subject.—ED. F. AND S.]

CHICAGO, May 20, 1878.

EDITOR FOREST AND STREAM:

Now for that bass. I have hovered about him a long time; now inclined to rush in and finish him, and now held back by the pleasure of anticipation; but here is an end of dreaming. Now, boatman, row slowly along the windward of that sunken bar, and, my friend, cast your bait over it. Very well done for a beginner; you have got out about forty-six feet of line; let your bait sink. No bite? Well, reel in slowly for another cast. Ah! what's that? something has struck your hook. Don't pull your bait away from him; let him fumble with it a little. Now your line begins to walk off like a thing of life; let it go a little while. Now, strike him gently, not hard, but just enough to set the hook and let him know that somebody has got hold of your end of the line. Commence to reel in and find out what he is. Ah, there he goes with a rush, and the line cuts the water with a swish. That's a bass, sure; no pickerel blood in him. What are you clinging to the handle of that reel for? Drop it quick or something will break. Place your thumb upon the spool and make the pulling hard for him. The hard pulling tells on him and he turns back. Now reel him in while he is getting his breath. There he goes way off to the left; let him slide, but keep a tight rein on him with your thumb, and be quick with your reel if he turns in. Your line suddenly rises toward the surface of the water; be careful now, he is going to jump. There, he breaks the water seventy-five feet away and flings himself high into the air, and shakes his head angry at the hit. By Jove! he's a beauty, and we must have him. This is a critical moment. If the line slacks when he is in the air he will probably throw the hook from his mouth like a flash, and flap his tail at you as he goes down and away, but we will spoil that game. The moment he breaks the water, with a quick turn of the wrist bring the tip of the rod down near the water and back, keeping the line tight. This tips him over as he leaves the water, and stops the head shaking business. It also makes him ugly and he rushes viciously off, and now his blood is up and he means to break your line. What savage, short lunges! What are you about with your rod pointing straight at the fish and the strain of the line coming directly on the reel? Hold it up at once and give the line the benefit of the spring of the rod. Now, let your rod and line get into a straight line, or near it. See where your bass is going now! Straight for that stump. If he gets around it he'll get a purchase on your line and be off, sure. You've got to risk your line now. Don't try to stop him suddenly, but bring your rod round to the right, while you press heavily on the reel, and you will turn him to another direction. Now, Mr. Friend (who is along), you just keep still; I'm catching this fish, and you've confused my scholar enough already with your "Hold on to him," "Let him go," "Look out for him," "Stop him," "Give him the bat," etc. Where's your bass now, and what makes your line so slack? Think he's off, do you? He's running in on you. Throw your tip back as quick and far as you can, and reel in the best you know how, and find that fish. It is a miracle that he is not off already, and if I had not determined to catch him you would have lost him right here. Now you've caught up with him, and there he goes straight under the boat like a shot. Run your tip round the end of the boat, quick. There he is out of the water again, and with a slack line. What's the matter with your reel? Ah, I see. You've got the line all bunched on the centre of the spool, so that you can't work the reel. You should guide it back and forth with your left thumb when reeling so that it will wind evenly. Now you *have* done it. You've let the bass get among those rushes, and he has got your line wound and twisted all about among them. Boatman, row straight after him while we take up the line and drive or lead him out on the other side. Now he is pretty tired and we will take him in. Reel him in to within about eight feet of your tip (don't reel him plumb up to the tip as I've seen lots of young fishermen do), and hold him there. He makes short plunges this way and that and to the bottom, but his force is mostly spent, and you can control him with your rod without giving him more line. Lead him gently up to the boat while your friend stands ready with the landing net. What, in heaven's name, are you diving the net at him in that savage way for? Do you want to scare him to death? He nearly parted the line with that rush. Lower the net gently and take him in as he comes alongside. There now, confound you! did you expect to take him in by the tail? Give that net to the boatman. Now he walks right into the net as if he was happy to find a resting place, and he lies panting in the bottom of the boat. He has fought his last fight, and fought it well. Isn't he a beauty? What do I think he weighs? Well, say 4½ pounds. You haven't got one of those abominable fisherman's steel-yards along, have you? No? That's right; never take one, they are horribly deceptive. Now, here is your bass that weighs 4½ pounds to an ounce; you hang him to that thing and it will tell you that he only weighs three pounds and ten ounces. Throw the nuisance away for ever, and renounce all faith in scales. I wouldn't trust the finest "Fairbanks" where a fish is concerned. They may be good for weighing other things, but they were not made for fish, and are not adapted to weighing them correctly. If you are particular to know the weight of your fish, why just "heft" him, and you can tell at once. Don't ask your boatman; he is apt to be prejudiced, and likes to take the conceit out of you a little. At Green Lake, Wisconsin, if there is any doubt about the weight of a fish, they always refer the matter to Capt. Fitzgibbon, whose decision is always final. It isn't necessary for him even to "heft" him. The bass is laid down before him; he just looks at him and marks down his figure, and that is the end. I never knew any one to appeal from his decision but once. Will Greenway and Mr. Gee, of St. Louis, once brought in a whopping great green (Oswego) bass. (By the way, they had bought it from a pot-fisher, who took it on a set-line—boys, you are both my friends, but you well deserve this punishment.) The royal fish was laid upon the hotel piazza and submitted to the inspection of the captain, who measured with his eye his length and breadth and depth and the size of his mouth, and pronounced his weight to be five pounds and six ounces. Will was dissatisfied and appealed to the scales, and the scales sustained him. He turned the balance at exactly six pounds one ounce. The captain was crestfallen, and had nothing to say except that it was an almighty heavy fish for its size. His friends looked askance upon him, and for the first and last time in my life I doubted his infallibility.

Several champagne punches were necessary to dispel the captain's gloom, and several visits to the parlor to find a lady, for he was under a vow that year to drink nothing but wine, and that only in the presence of ladies. This naturally confined him pretty close to the hotel, and we could rarely get him out fishing. In the evening it began to be whispered about that something was the matter with that fish, and finally an investigation of the servant who dressed him developed the astonishing fact that the bass had in some unaccountable manner managed to swallow just eleven ounces of shot. A dark cloud of suspicion at once rested upon Will and Joe, which, notwithstanding their protestations, finally resolved itself into a settled conviction of guilt. The captain was triumphant, and his face remained wreathed with its usual smiles during the remainder of the season. My friend, we must part company here; I cannot be with you longer in your sport. I trust that you will be successful and carry home a goodly string of beauties; and I hope that at some time I may meet you in friendly competition on the water. Suffer me to offer a parting word of advice: In fishing, be patient, and never lose your temper. When your line gets tangled and snarled on the reel, as it will at times, don't get mad and swear at it; sit quietly down and pick it out. Don't fume when your hook gets snagged. If your boat leaks, and your feet, and the lunch which you put in the box under the stern, get soaked, be calm. If it comes on to rain and you get drenched and your sport is spoiled, be philosophical; and generally be good natured. We all growl enough in our working hours without indulging that side of our nature in our recreations. Now, good-bye. I have cut out a portion of this letter to gain space for a few quiet words to "Bass." Dear Sir: In chaste language you advise me to "take a tumble." Your intention doubtless was kind and praiseworthy. Prompted by the generous and genial soul of a true lover of the rod, you sought at once to purify the columns of the FOREST AND STREAM and to give me a little kindly admonition in a delicate way. It may please you to know that your shot has reached its mark and checked for the present all desire to pursue my subject. I wrote, partly, thinking that I might say something of value to the inexperienced, but principally for the pleasure it afforded me in recalling my own experiences. That pleasure has in great part given place to mortification at the result, and I have no heart for further writing, so that you and the "united several" may once more enjoy your sleep in peace. My mortification does not result from any respect for the opinion of an anonymous writer, but from the fact that it was deemed worthy of publication. I do not propose to defend my letters, at least until I know the nature of the complaint against them. If it goes to their general nature or style, I am dumb. If the objection is to the expression of individual opinion in this valuable paper as to the comparative merits of different varieties of rod, reel, hook or line, *et id omne genus*, I have nothing to say, as that is a matter exclusively within the province of the editor. If fault is found with the opinions themselves, I might feel at liberty to support them. I venture to hope that the subscription list of the FOREST AND STREAM has not been materially cut down, or its reputation as a first-class gazetteer badly damaged, and that it may in time recover its lost prestige in your eyes and in those of the "several" who "united," etc.

G. C.

National Pastimes.

HARVARD ATHLETICS.—The spring meeting of the Harvard Athletic Association took place at Beacon Park, May 24. The contests were as follows:

One hundred yard dash—The final heat was won by Mr. Bacon, class '80, in 10¾s. The one mile walk—Mr. Huidekoper, '80, in 8m. The running broad jump—Mr. Keene, '79. 14 feet 8 in. The one mile run—Mr. Hanks, '79, 5m. 2½s. A hurdle race of 120 yards, over 10 hurdles, 3 feet 6in. high—Mr. Condin '79, in 20½s. The quarter mile run—Mr. Bacon, '80, in 54s. The potato race—Mr. Austin, '80. The three-legged race, 100 yards—Messrs. Otis and Holden, '81, in 14½s. The bicycle race, two miles, five starters—Mr. Parker, '80, by four feet, in 12m. 27s.

THE YALE-HARVARD GAME.—The result of the game played at Cambridge on Saturday last was a surprise to almost every one, for in the previous game at New Haven the score was a close one, and the game up to the end was anybody's. About 4,000 spectators were present on Saturday, almost all of whom sported the Crimson, but it is said that during the eighth inning a very large majority of the Harvard sympathizers, seeing that their nine had no chance of winning, left the ground. Strong batting won for the Yales on Saturday last, two home runs being made by Downer and one by Brown, while the total number of base hits was 27. The Harvard catcher was disabled by a broken thumb, and his place was filled by a substitute, who, although new to the position, stopped the balls manfully and well.

This victory places Yale at the top of the list of contestants for the college championship, and if the nine do as well in the coming contests as they have in those already played, the Blue stands a very good chance of coming out ahead at the end of the season. Score, Yale 11; Harvard 5.

TRINITY COLLEGE GAMES.—The games at Hartford, May 25, resulted as follows:

One Hundred Yards Dash—Cheever, 10⅝s.
Putting the Shot—Appleton 31ft 2in.
One Mile Walk—Webster, 8m 46¼s.
Running Broad Jump—Campbell, 20ft 11in.
Half-Mile Run—Russell, 2m 33⅛s.
Three-Legged Race—Campbell and Wilcox, 16⅛s, distance 100 yards.
Four Hundred and Forty Yards Dash—Appleton, 2m 58s.
Running High Jump—Russell, 5ft.
Three Mile Walk—Webster, 36m ⅛s.
Throwing the Hammer—McBride, 68ft 8in.
Hurdle Race—100 yards, Wilcox, 18⅜s.
Standing Long Jump—Nelson, 9ft 5½in.
Wheelbarrow Race—Blindfolded, Kneeland.
One Mile Run—Nelson, 5m 57⅛s.
Pole Vaulting—Parsons, 8ft 10½in.
Sack Race—100 yards, Campbell, 24s.
Two Hundred and Twenty Yards Dash—Cheever, 25⅛s.

NEW YORK COLLEGE ATHLETIC CLUB.—At the annual field day, Jones' Wood, last Saturday, the contests were as follows:

One Hundred Yards Dash—First heat, three entries, Emmons won in 11⅛s. Second heat, three entries, Stuart won in 10⅝s. Third heat, three entries, Parker won in 10⅛s. Final heat, Stuart 10⅛s.
One Mile Walk—Nine entries, D Smith, Jr, won in 8m 57s.
Quarter Mile Run—First heat, three entries, Balcomb, 60s. Second heat, four entries, Callister, 65s. Third heat, two entries, Webster, 57s. Final heat, Callister, 1m 2s.
Running Long Jump—Won by Stuart, 17ft 11½in.
Five Miles Walk—Watson won in 41m 4⅛s.
Half-Mile Run—Won by Bomeisler in 2m 22s.
Tug of War—Freshmen vanquished Seniors.
Two Hundred and Twenty Yards Run—Parker won in 25s.

MYSTIC BOAT CLUB GAMES:—The games at Waverly Park, N. J., last Saturday, were well attended, the results being as follows:

One Hundred Yards Dash—First heat, three entries, A F Moore, Jr, and C W Thomas made a dead heat in 10¾s. Second heat, five entries, J B Value, 10½s. Third heat, three entries, R Zobner, 11⅛s. Fourth heat, three entries, E Bouesard, 10¾s. Fifth heat, three entries, W M Littell, 11s. Final heat, Value, 10s.
Running High Jump—Five entries, won by H E Ficken, N Y A C, 5ft 6in.
Four Hundred and Forty Yards Run—Four entries, W Smith handicapped eighteen yards, won in 1m 53s.
Hurdle Race—220 yards, won by J Lafon. Not timed.
One Mile Walk—O D Parmly won in 8m 45s.
Two Hundred and Twenty Yards Club Race—Wm C Casper won.
One Mile Run—A Noel won in 5m 5s.
"Special" One Hundred and Fifty Yards Run—W C Wilmer won in 15⅛s.
Half-Mile Run—J Stewart, of Princeton, handicapped twenty-eight yards, won in 2m ⅛s.
Two Mile Relay Race—The New York Lacrosse Club had a walk-over, Princeton College and the Mystic Boat Club failing to come to time.

UNIVERSITY OF PENNSYLVANIA.—The annual spring meeting at the Germantown Cricket Grounds, last Saturday, had seventeen events, with the following successful competitors:

One Mile Walk—W N Johnson, '78, 9m 23s.
Running High Jump—O L Heins, '81, 5ft 1¼in.
Four Hundred and Forty Yards Run—B Hughes, '80, 1m 10¾s.
One Hundred Yards Dash—B Hughes, '80, 11s.
Putting the Shot (17 lbs)—W F Johnson, '78, 30ft 2½in.
Running Broad Jump—O Thayer, '81, 19ft 3in.
Half-Mile Run—E A White, '81, 2m 27⅞s.
Pole Vaulting—F Harrah, '80, 8ft 8in.
Two Hundred and Twenty Yards Dash—B Hughes, '80, 33⅛s.
Graduates One Hundred Yards Run—H T Geyian, 11⅛s.
Graduates One Mile Walk—James Bond, 10m 53s.
Throwing the 16-pound Hammer—E S McIlvaine, 59ft 6in.
Two Mile Walk—E S McIlvaine. No time.
Hurdle Race, 120 yards—B Hughes, 19⅛s.
One Mile Run—O Thayer, '81, 5m 43s.
Strangers One Hundred Yards Race—Eight entries, Horace H Lee, P C C, 10s, over a grass course, up hill and against the wind. This is the fastest amateur record in the world.
The tug of war between teams from the University of Pennsylvania and from the Young America Cricket Club was won by the latter in 35s.

ORIONS.—The Orion Rowing and Athletic Association of Jersey City, will hold their second annual spring games at the West Side Driving Park, June 15, at 4 P.M. Gold and silver medals are offered for the usual athletic contests. Entries close June 8, and should be made to O. H. Taylor, Box 452, New York.

PENNISULAR CRICKET CLUB.—A game played by the Peninsulars, of Detroit, Mich., and the London, Ont., Club, at Detroit, May 24, resulted in a score of 93 for the former, and 82 for the latter.

AMERICAN ATHLETIC CLUB.—The inaugural games will be held at the St. George's Cricket Grounds, Hoboken, June 8. Entries should be sent to S. W. Hong, P. O. Box 205, N. Y.

COACHING PARADE.—The annual spring parade of the New York Coaching Club was participated in by eleven coaches. The parade attracted great multitudes of interested spectators, and the occasion was in every way a successful one.

How to Drown.—Drowning has always been thought well of by the suicidally inclined. As a form of death it is perhaps the least painful of the more common forms with which we are familiar. "Drowning persons," Dr. R. S. Tracy, in the last *Popular Science Monthly*, tells us, "die in three different ways: 1. By syncope and asphyxia while unconscious. Some of these die instantly. 2 By apoplexy (usually congestive), common in plethoric and aged persons, followed by asphyxia while unconscious. 3. By asphyxia pure and simple. It is believed that the rapidity and painlessness of death by drowning are due chiefly to the speedy obstruction of the circulation of the blood through the lungs. In ordinary asphyxia, by the simple deprivation of air the blood throughout the body becomes charged with carbonic acid, and the arteries as well as the veins become filled with venous blood. Now, venous blood does not pass readily through the capillary vessels, and, when the accumulation of impurities has become so great as to prevent its passing at all, the circulation comes to a standstill. But the dreadful distress of suffocation comes on long before this point is reached. Now, when cold water is sucked into the lungs and comes in contact with their delicate and sensitive mucous membrane, it must cause an instant and powerful contraction of the capillaries, and obstruct the current of blood from the right side of the heart, thus indirectly damming back the venous blood in the brain. This state of things brings on unconsciousness rapidly, preceded by the pleasurable tingling sensations, rapid succession of ideas, and flashes of light and color, so often described by persons who have been rescued from drowning.

"If death by drowning be inevitable, as in a shipwreck, the easiest way to die would be to suck water into the lungs by a powerful inspiration as soon as one went beneath the surface. A person who had the courage to do this would probably become almost immediately unconscious, and never rise to the surface. As soon as the fluid filled his lungs all feelings of chilliness and pain would cease, the indescribable semi-delirium that accompanies anæsthesia would come on, with ringing in the ears and delightful visions of color and light, while he would seem to himself to be gently sinking to rest on the softest of beds and with the most delightful of dreams."

A Conscientious Judge.—Clinton Loyd, Esq., for many years Chief Clerk of the House of Representatives at Washington, and withal an enthusiastic trout fisherman, tells the following story of the late Hon. Robert C. Grier, whose example, a correspondent suggests, is worthy the imitation of all who are clothed in the sacred ermine:

"The Judge had an utter repugnance to any method of catching a trout other than with an artificial fly. On one occasion he went to Youngwoman's town on a fishing excursion. Arriving late in the afternoon he inquired of the landlord if he could give them trout for supper. 'Oh, yes,' was the reply. When supper was announced the Judge's eyes were greeted with the sight of a dish of splendid trout, cooked to a turn, and calculated to tempt the appetite of a gourmand. 'How did you catch these fellows?' asked the Judge in an excited tone. 'With a grab.' 'And what is a grab?' It was explained that it consisted of a stiff pole, on the end of which were fastened three hooks, with which the operator leaned over a deep hole where the trout lay quietly, and hooked them out by catching them under the belly. 'Take them away, take them away,' screamed the Judge. 'I wouldn't eat a trout caught that way if I was starving to death, and if I could get the scoundrel that caught them into my court in any way I would send him to the penitentiary for life.'"

Holtum the Strong Man.—They are opening their eyes in London at a Dane whose performances in the Westminster Aquarium are simply wonderful exhibitions of wonderful strength:

Holtum stretches himself along a ladder on his face, his feet against one of the rungs, and his hands clasping another. Round his wrists are bands fastened to the ladder to assist his grip. Over his shoulders and round his waist is a well-padded harness, fitting closely, with a tail, to which is attached a hook in which the chains of the traces are placed. Two good-sized van horses are fastened on, and strive their utmost to move him, but in vain; the tackle may give way but he doesn't. The strain seems to be distributed over his whole frame, and the tension, particularly in the muscles of the neck and arms, is most marked. Holtum has another feat. It consists in holding, with arms outstretched, two horses pulling opposite ways. Holtum's measurement is as follows: Chest, 41in.; neck, 16½in.; waist, 32¾in.; forearm, 13in.; upper arm, 15½in.; thigh, 24¼in.; calf, 15¼in.; height, 5ft. 9in.; weight, 14st.3lbs.; age, 82½ years.

The idea of catching a cannon ball, another of his wonderful feats, which he exhibits daily at the Westminster Aquarium, was first suggested to him in a dream. He draws a salary of about £40 per week. He has shown that the body supine can stand a direct tension of over five tons.

Another Pedestrian Started West.—The *Hartford Times*, May 21, has this story of a tramp who has started on a long journey:

Mr. D. H. Willard, No. 51 Capital avenue, says that in the year 1838, on the east farm, half a mile south of the Newington railroad junction, he came across a very large and beautiful spotted box or hinge tortoise (so called from its power to close its upper and under shells firmly together). Turning it upside down he inscribed on it his own initials, and the date, letting him free. In 1862 he found the same fellow again half a mile west. He had crossed two bridges or forded the streams, and three railroad tracks. The new date was then added, the first inscription being very distinct. He has not seen him since until last Saturday, 18th, when he espied him on his west farm, near the New Britain line, about one and one-half miles from the first point named, looking as hale and hearty as ever, but not increased in size perceptibly. He was duly marked 1878 and sent on his way with this query: "At this rate of travel, when will you reach the Pacific coast?"

According to H-oyle.—This is the way the Rod and Gun editor of the *Bucks County Gazette* nobely comes to the front as a representative of Eastern fish story mongers:

A Western paper says: "Fish from the Allegheny river taste of coal." Perhaps the lantern at the end of the net was upset, or the cork might have dropped out of the bottle of benzine, which many fisherman carry in order to keep from catching cold. That editor ought to know that they make light houses along the streams of Pennsylvania by unrolling a ball of candle wick, immersing one end in the stream and carrying the other to the top of a long pole, where it is made fast; once lighted it never goes out until the stream dries up in summer.

An Eccentric War Horse.—The New York *World* chronicles the death of "Old Bill," the roan battle-horse of Major General W. B. Tibbits, of the Second New York Cavalry, which has died at Hoosick Falls. He was probably the only horse that served through the whole war and wound up his campaign with a visit on duty to the plains. He was a great pet of the men of the Griswold cavalry and an animal of peculiar ways. In camp or on the march he was sluggish, would not allow a pistol to be fired from his back, and if turned loose defied the efforts of a whole company to catch him, but once under fire he obeyed the slightest touch of the rein, would jump anything, paid no heed to pistol-firing from his back, and could be turned loose with the certainty that he would not stray away. In his twenty odd engagements "Old Bill" was only wounded once.

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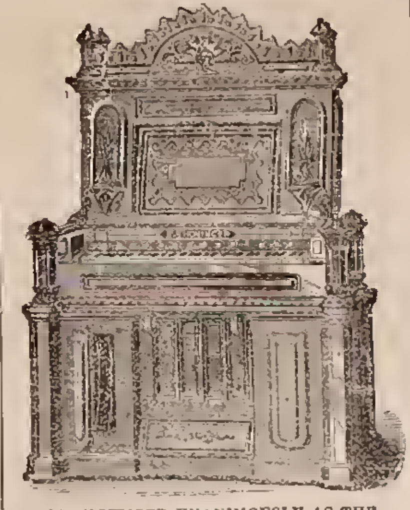

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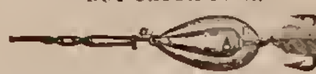

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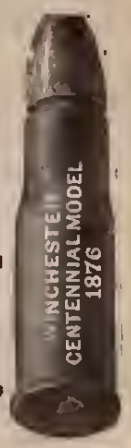

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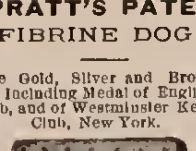

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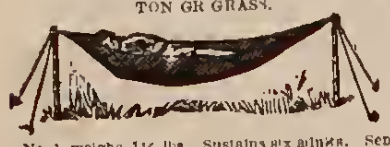

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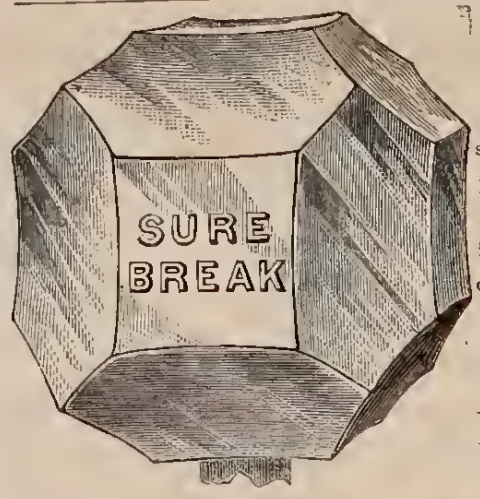
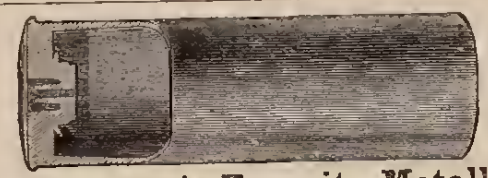


This is the only ball upon which shot will not glance. This ball, always presenting a flat surface to the shooter, broken when the shot strikes it. Price lower than any other first-class ball.

LIBERAL DISCOUNT TO DEALERS.

Patent Applied for.

HENRY C. SQUIRES,
1 Cortlandt St., N. Y.



Hart's Sportsman's Favorite Metallic Shells.
FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

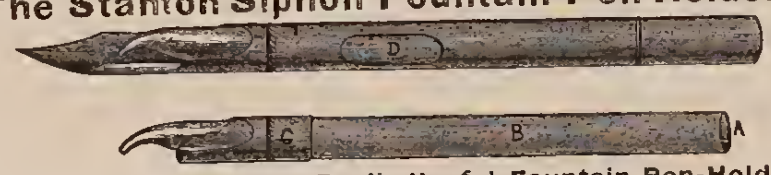
Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country.

HART & SLOAN, Newark, N. J.

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

The Stanton Siphon Fountain Pen Holder.



The Only Practical and Really Useful Fountain Pen-Holder Ever Manufactured.

The only Fountain Pen-holder with a FLEXIBLE SIPHON, so that any size or make of Pen can be used. The only Fountain Pen-holder in which the INK does not come in contact with oxidizable metal, and therefore cannot decompose or coagulate. No spilling of ink can occur in filling, as the tube is filled by suction from any vessel containing writing fluid.

No Inkstand or Special Ink Required.

ALWAYS READY FOR USE.

Is a very handsome and convenient pocket article; is made of strong metal, heavily nickel-plated and polished. Contains sufficient ink to closely write *twenty pages of foolscap*; will feed to the point of the pen until the last drop of ink is exhausted, and being air-tight the ink can neither evaporate nor mould. Is easily replenished, *always perfectly clean* and any steel or gold pen can be substituted for the handsome *Esterbrook Indestructible Golden Pen* furnished with each holder.

Sportsmen will find it a most Convenient Companion when away from home.

Will carry sufficient ink for TEN DAYS' ordinary use. Especially adapted to the use of Doctors, Lawyers, Commercial Travelers, Collectors, Government Officers, Railway Officials, Tourists, and all who can appreciate the immense comfort in always having their own pen and ink with them.

Sent by mail on receipt of 25 cents, with full directions.

STENT & CO., Manufacturers' Agents,
P. O. Box 2,997. **132 Nassau St., New York.**
The Trade Supplied. Send for Catalogue of Useful Novelties.

TATHAM'S
IMPROVED CHILLED SHOT.

American Standard Diameters.

(RED LABEL.)

Gives **greater penetration** and **better pattern** than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found **free from shrinkage, more spherical, more uniform in size, harder, heavier** and of **brighter** and **cleaner** finish than any other. SEND FOR CIRCULAR.

TATHAM & BROS., 82 Beekman St.,
NEW YORK.

Also manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

Amusements, Etc.

THE GREAT NEW YORK AQUARIUM,
Broadway and 35th st.

Tropical Fishes and Anemones, Angel Fishes, Grunts, Crayfishes, etc., etc.; beautiful Living Coral; thousands of other curious creatures; Chimpanzees and Orang Outang.

Performances daily at 2:30 and 8 o'clock P. M.

Miss ANGIE SCHOIT in "Masks and Faces" and "The Green-eyed Monster." Mr. J. D. GRIFFIN, Irish Specialties and Recitations.

Admission, 50 cents; children, half price; no extra charges. Coney Island Aquarium open on Wednesday, with troupe of Broncho Horses.

AMERICAN INSTITUTE BUILDING.
Third Avenue, 63d and 64th Streets,
THURSDAY, FRIDAY and SATURDAY, JUNE 6, 7 and 8, 1878.

For the Championship of America.

Amateur 25-Mile Walk, commencing Thursday, June 6, at 6 P. M.

Professional 48-Hour Walk, commencing Thursday, June 6, at 12 P. M.

General Admission, 50 cts. Reserved Seats, 75 cts. Season tickets, $2. For sale at Hudnut's, Broadway; P. Donovan's, Broad street; all the principal hotels, or at the American Institute Building. Prizes on exhibition at Hudnut's. All information can be obtained of E. PLUMMER, at the *N. Y. Sportsman*, 14 Warren street. May30 1t

Sportsmen's Routes.

Chesapeake & Ohio RR.

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
ap Richmond, Va.

The Route of the Tourist,
Sportsman and Pleasure Seeker.

TAKE THE

People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, except Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.
EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the office on the pier, at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. R. MAYO, Gen'l Passenger Agent.

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

HENRY PRATT, G. T. A.
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SALMON, CURLEW, TROUT.

An opportunity will be given *sportsmen* to visit the seat of LABRADOR the coming summer. Address M. CHICK, 41 Franklin street, Boston.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING NOVEMBER 26, 1877.

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 11:30 A. M., 1:30, 3:30, 5:30, 12 P. M., and at 4 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 12:05 7:30, 9:30, 11:30 A. M., 1:30, 3:30, 5:30 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:35, 8:05, 10:20 A. M., 12:15, 2:15, 4:10, 6:15 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 3:30, P. M. trains from New York and to the 7:30, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:30 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 10:20 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sep13 1y H. P. BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Information given at office, 197 Greenwich St., New York. sep28 1y

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TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
FRANK THOMSON, Gen'l Manager. feb17-tf

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 38 North River, foot Jay St, at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

PROVIDENCE LINE.

Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

L. W. FILKINS, O. P. Agent, D. S. BABCOCK, Pres.

ST. AUGUSTINE, FLA., NASSAU, N. P., HAVANA, CUBA.

From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

FOR NASSAU DIRECT,

Steamship Caroline, February 6 and March 9, and monthly thereafter from Pier 16, East River, New York.

For all particulars, illustrated guide, &c., apply to

HURRAY, FERRIS & CO.,
No. 62 South St.

HUNTING

FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad.

FISHING

FOR PIKE, PICKEREL, BASS, ETC.,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

Shooting season expires December 15. For information as to routes, ratio and best points for the various kinds of game, etc. Apply to

A. B. LEET, Gen. Pass Agent,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.
Nov22 tf

NEW HAVEN, HARTFORD, SPRINGFIELD, AND THE NORTH

The first-class steamer ELM CITY leaves Pier 25, East River, daily (Sundays excepted) at 3 P. M. Passengers to North and East at 12 P. M.

NIGHT LINE—The CONTINENTAL leaves New York at 11 P. M., arriving in New Haven in time for the early morning trains

Merchandise forwarded by daily express freight train from New Haven through to Massachusetts, Vermont, Western New Hampshire, Northern New York and Canada. Freight received until 5 P. M.

RICHARD PECK, General Agent.

Sportsmen's Routes.

Fall River Line

—FOR—

BOSTON.

And all Points East, via Newport and Fall River. Mammoth Palace Steamers, BRISTOL and PROVIDENCE, leave New York daily from foot of Murray street.

5 P. M. {SUNDAY TRIPS, June 23 to Sept. 8, inclusive.} FROM PIER 28, N. R.

Leave Brooklyn via "Annex" boat at 4:30 P. M.

Tickets and State Rooms secured at all principal hotels and ticket offices, at the pier and on steamers.

BORDEN & LOVELL, Agent's. OEO L. CONNOR, General Pass. Agent.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 22 South Delaware Avenue, Phila.

Dec14-1y

St. Louis, Minneapolis AND ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Brington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids.

E. F. WINSLOW, General Manager. C. J. IVES, Gen. Passenger Agent. tf

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CHICAGO & ALTON RAILROAD.

THE ONLY DIRECT RAILROAD from Chicago to St. Louis, and Chicago to Kansas City,

WITHOUT CHANGE OF CARS.

FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

JAMES CHARLTON,
General Passenger Agent,
Chicago, Ills

"THE FISHING LINE."

Brook Trout, Grayling and Black Bass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound.

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds send to

A. B. LEET, G. P. A.,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.
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Hotels and Resorts for Sportsmen.

ORDWAY HOUSE.

BLUE MOUNTAIN LAKE,

HAMILTON COUNTY, N. Y.

Route via Saratoga and Adirondack Railroad to North Creek.

Daily Stage to House.

Quickest and Cheapest Route to the Adirondacks.

Address JAMES M. ORDWAY,
Indian Lake P. O., Hamilton Co., N. Y.

☞ Guides, Boats, Camp-Kits, etc., furnished.

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C. M. BRENNAN,

OLD KENTUCKY BOURBON & MONONGAHELA

40 South Clark Street, Chicago.

Ashland House,

Fourth Avenue, corner of Twenty-fourth

NEW YORK CITY

Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class central. One block from Madison square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

H. N. BROCKWAY, PROPRIETOR.
Mar7 tf

Sportsmen's Headquarters.

Bromfield House,

AND

LADIES' AND GENTS' DINING ROOMS,

55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER, Proprietor.
april tf

Wild Fowl Shooting.

SPRINGVILLE HOUSE OR SPORTSMEN'S RETREAT, SHINNECOCK BAY, L. I.,

By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wind-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM N. LANE, Good Ground, L. I. Nov8 tf

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Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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St. George Hotel,

Cooper, Greenwood Lake, N. J.

S. W. GEORGE, Proprietor.

P. O address, Greenwood Lake, Orange Co., N. Y.
may2 3m

CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

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BRANDON HOUSE, GREENWOOD LAKE. Orange County, N. Y., is now open for the reception of guests. Splendid fishing for bass; good boating and bathing. Telegraph and express office in house. Take Montclair and Greenwood Lake Railway from Cortlandt or Desbrosses street. May30 3m

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A. MEYER,

IMPORTER OF AND DEALER IN

California, Rhine, Hungarian Wines,

AMERICAN CHAMPAGNES.

392, BOWERY 392,

Near Fourth avenue, NEW YORK.

BOWLING AND BILLIARD HALL.
The longest Rifle Range in the city, for Sharpshooters only.

Feb28

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address True & Co., Augusta, Maine.

Sportsmen's Goods.

Eaton's Rust Preventer.

For Guns, Cutlery and Surgical Instruments. Safe to handle, WILL NOT GUM, and will keep in any climate. Sportsmen everywhere in the United States pronounce it the best gun oil in the market. Judge Holmes, of Bay City, Mich., writes: "It is the best preparation I have found in thirty-five years of active and frequent use of guns."

The trade supplied by sole manufacturer, GEO B. EATON, 510 Pavonia Avenue, Jersey City Heights, N. J.

Sold by principal New York dealers, and by Wm Read & Sons, Boston, Mass; B. Kittredge & Co., Cincinnati, Ohio; E. E. Eaton, Chicago, Ill.; Blowe & Hidden, St. Louis, Mo.

CANNOT BE SENT BY MAIL.

Sportsmen's Goods.

A

WHITE RIBBON,

Blue Ribbon AND SILVER MEDAL

Were awarded to Messrs. G. W. SIMMONS & SON, of Boston, Mass., Through their agents and exhibitors Messrs. Brown & Hilder, of St. Louis, Mo., at the Exhibition of the "St. Louis Bench Show and Sportsmen's Association," for an unusually fine display of Duck, Moleskin and Leather

HUNTING SUITS,

which attracted great attention and were much admired by all Sportsmen.

THE BOSTON

SHOOTING SUIT.

Manufactured only by

G. W. SIMMONS & SON,

BOSTON, MASS.

NEW YORK AGENTS:

Fowler & Fulton,

300 BROADWAY,

The Best in Use.

ONLY ONE QUALITY MADE, AND THAT IS THE VERY BEST.

Flexible Waterproof, Tan-Color Duck,

Each article—coat, trousers, vest and hat cap—has the name and manufacturers' address stamped upon it, and no suit is genuine without it bears this imprint.

We make no discount except to the trade. The price of the suit complete is $13.

The material is of the best quality of duck, waterproofed by a patent process. The color is that known as "dead grass shade."

The seams and pocket corners are copper-riveted, and nothing is neglected to make the whole suit complete in every way.

This is what one of our best sportsmen says of it, writing from camp: "Although I had been nearly eight hours under incessant rain, laboring and striving along under adverse circumstances, yet I found myself comparatively dry, and my clothes without a tear. For the benefit of our brother sportsmen, let me advise one of Messrs Simmons' (of Boston, Mass.) Waterproof Suits. Oh! what a relief it was to find one's tobacco was dry, and that one could light a pipe; that you could laugh at your miserable friend, who stood shivering and shaking as if he had the palsy; and then, next morning, oh! what fun it was to see him mending his clothes, while I had not a tear to complain of! Ventilation, that great bugbear of waterproof suits, is legislated for in the most ingenious manner. No sportsman should fail to supply himself with a suit which is at once cheap, practical, and will last an almost indefinite time."

Our Flexible Tan-Colored Water-Proof Leather Coats, Breeches, Vest, Leggings and Caps are considered the finest things ever made.

PRICE LIST.

BOSTON SHOOTING SUITS.

Made Only by G. W. SIMMONS & SON.

Oak Hall, Boston, Mass.

WATERPROOF DUCK.

Suits, $13 — Coat.... $6 50; Pants.... 3 50; Vest.... 3 00; Cap or Hat.... 1 50

CORDUROY, Black or Brown.

Suits, $22 — Coat.... $12 00; Pants.... 5 00; Vest.... 3 00; Cap.... 2 00

MOLESKIN.

Suits, $25 — Coat.... $14 00; Pants.... 6 00; Vest.... 3 00; Cap.... 2 00

TAN LEATHER.

Suits, $60 — Coat.... $22 00; Pants.... 15 00; Vest.... 12 00; Cap.... 5 00; Leggings.... 6 00

An illustrated circular, containing full description of each garment, with sample of the material from which made, will be sent free on application.

OUR HUNTER'S TENTS made of tan-colored duck; light; easily transported. Size, 7 ft. x 7 ft. Price, $10, complete. Made on the umbrella principle, folding into a neat roll, 4 ft. long.

OUR PATENT DECOYS have entirely superseded the old-fashioned, cumbersome, wooden decoys. The birds are hollow, and six of them occupy about the space of one wooden decoy.

Address,

G. W. SIMMONS & SON,
OAK HALL, BOSTON, MASS

Sportsmen's Goods.

GOOD'S OIL TANNED MOCCASINS.

The best thing in the market for hunting, fishing, canoeing, snow shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN & HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

PRINCIPAL AGENTS—W. Huberson & Co., 117 Fulton street, New York; Jos. C. Grubb & Co., 712 Market street, Philadelphia, Pa.; Bradford & Anthony, 374 Washington street, Boston, Mass.

Cheap and Elegant Colored Pictures.

FIELD SPORTS, FISHING & GAME.

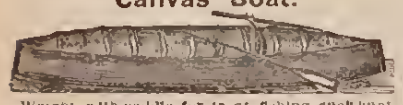
PRICE 20 cents each, or SIX for $1.

Irish Red Setter, Rover; A Staunch Pointer; A Well-bred Setter; The Champions of the Field; Grouse Shooting; Rail Shooting; Quail Shooting; Snipe Shooting; Partridge Shooting; Woodcock Shooting; Deer Shooting; Shooting on the Prairies; Hunting on the Plains; Wild Turkey Shooting; English Snipe; Quail; Woodcock; Prairie Hens; Ruffed Grouse; Canvas-back Ducks; Wood Duck; Shooting on the Beach; Squirrel Hunting; Duck Shooting; Fishing s Woodcock; Dead Game—Quail; Dead Game—Woodcock; Setter and Woodcock; Brook Trout Fishing; Salmon Fishing; Pickerel Fishing Through the Ice; Blue Fishing; Bass Fishing; Just Caught (a string of Trout); Tempted; Hooked; Group of Trout; Pickerel; Striped Bass; The Trout Pool; Hunting in the Northern Woods; Going Out, Camping Out; Returning to Camp.

Size of paper, 13½x17¾. Price, 20 cents each; six for $1. Sent per mail, post-paid, on receipt of price.

Address CURRIER & IVES,
Mar14 tf 115 Nassau street, N. Y.

Osgood's Portable Folding Canvas Boat.



Weight, with paddle for trout fishing, duck hunting, exploring, etc., 20 lbs; weight, with bottom board, oars, paddle, etc., everything complete, 40 lbs. Manufactured by OSGOOD & CHAPIN, Battle Creek, Mich. Send for illustrated circular.

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SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union take pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 10 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must be one to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 10, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 100 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. AERY, President.

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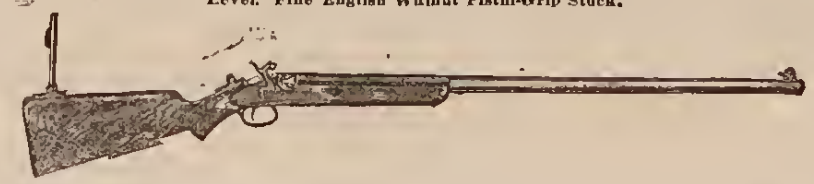

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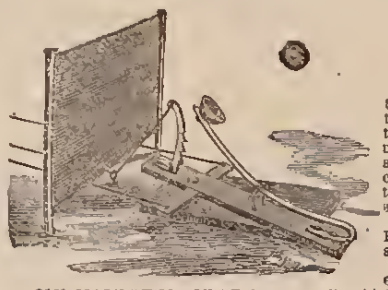

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, JUNE 6, 1878.

Volume 10.—No. 18. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

THE KING-FISH OR BARB—(Umbrina nebulosa).

OFT where the slender lighthouse soars,
Like sheeted ghost above the surge,
Casting its warning flames at night,
Far to the dim horizon's verge;
Round sunken reef and hidden rock,
Where shells and sands inlay the floor
Of ocean, hungry king-fish glide,
And the deep's mysteries explore.

Resplendent with their russet head,
Their silvery and azure sides,
They dart like meteoric shafts
Across the salt, tempestuous tides;
There anchor'd, when the tides are low,
When first the young flood bubbling flows,
The fisher far his spinning line,
Deep down with hopeful ardor throws.

Seek them where roars the tumbling surf,
Along the inlets of the shore;
Where swift between the sandy banks
The tides thro' deepen'd channels pour;
Go where Fire Island opes its gate,
To let the flooding currents in;
Or where the surf at Barnegat
Mingles its hoarse, incessant din;
And there within the Inlet jaws,
Where deep and darkest flows the tide,
Feeding in vast schools, numberless,
The greedy king-fish gleam and glide.

When upland pastures swoon with heat,
And red midsummer fires the air;
When breezeless is the city street,
And dome and spire are all a-glare;
How pleasant to pass forth and taste
The salt airs of the watery waste,
And in the sparkling ocean brine
To dip the hook and cast the line!

ISAAC McLELLAN.

For Forest and Stream and Rod and Gun.

Canoe Life.

EXPLORATION OF THE UPPER PASSAIC.

HAVING previously forwarded our canoes to Chatham, Morris County, N. J., as the most convenient point along the line of the D. L. & W. R. R. from which to reach the head-waters of the Passaic River, my companion and I took cars early on a bright October morning, and within the hour were inspecting our pets. Rejoiced to find them uninjured by the journey, we busily pursued our preparations for the trip. Paddles, sails, aprons, cordage, etc., were overhauled, and our provisions, blankets, waterproof coats, cartridges, cooking utensils, together with white lead, putty, tacks, screws, tin and nails for the repairing of any damage our canoes might sustain, were snugly stowed away below decks.

A rustic genius named Miller, who happily possessed a wagon, not over large, and an apology for a horse, agreed, for a consideration, to transport our boats across country to a place on the map where a road from Meyersville crossed Great Brook. The canoes being properly loaded and securely lashed, we started. Chatham and its wondering inhabitants were soon left behind. Up the not very moderate slope of Long Hill we crawled, our caravan presenting this appearance: Miller pulling the horse; the horse dragging the wagon; Fred and I, gun on shoulder, occasionally lending assistance. In this manner, at a funereal pace, enlivened now and then by a trot, where a fair slope and a pressure behind encouraged the sleepy quadruped, we proceeded, till at 4 P. M. the long-wished-for stream was reached. The talkative countryman was a beaver at work. We had the canoes unlashed and on the bank in a twinkling, and presently afloat. The native wagoner, much astonished at the behavior of the little craft, followed, in rattle-headed admiration, along the shore. It was sport to see him stare, as we, purposely, after receiving his noisy admonition, would dash upon a stone. Being unable comfortably to keep pace with us along the bank, he would dash along the bends and halloo as we passed in childish delight. At length he reluctantly bade us farewell, evidently determined to be charmed no further. Great Brook, some twenty feet broad where we launched and rifted, soon narrowed to a five foot channel, and serpentinely threaded its way through a broad expanse of low meadow, till it joined the equally sinuous but more rapid Passaic.

An hour and a half after our launch we entered the river, and shortly passed under a substantial-looking, whitewashed arrangement, spanning the stream, labeled in huge black letters, "White Bridge." We could not satisfactorily determine whether this glaring announcement of the structure's hue was intended as a work of art or a stupendous joke on the traveling public. To state that the affair was a bridge was all well enough. A traveler familiar with modern architecture and engineering would certainly never have arrived at that conclusion unaided unless possessed of a strong desire to cross the stream. But to declare the color of a thing so manifestly white, to us, seemed quite unnecessary.

A half mile further down, the sky having become overcast and darkness gaining rapidly, we drew out at a hickory grove, and soon our bright camp-fire lit up the sombre woods and threw a glare over the darkening river. A hearty supper over, we arranged our canoes and blankets for the night, then comfortably settled ourselves by the fire for a talk. While engaged in conversation we caught the sound of footsteps on the opposite bank, and presently an angry bass voice commanded:

"Git out of them hickory nuts!"

Having received the assurance that we were not marauders, but innocent canoeists, our unwelcome visitor withdrew; and we, after a look at our breech-loaders, turned into our canoe beds to sleep quietly till morning.

Daylight awakened us to a gloomy prospect of rain and dripping woods. At six o'clock, after a hot breakfast, we started. Obstructions in the river, such as fallen trees, wire cables, cattle fences and jams of assorted debris, bothered us outrageously. Several times we were obliged to carry round or use the ax, not an over pleasant exercise in wet weather. About noon we reached the cut, where the river parts Long Hill. Here we landed, and with some difficulty gained the summit of the bluff. The magnificent view obtained amply repaid us for our hard climb. The N. J. West Line R. R. bridged the river within a half mile of us, and two stations were in full sight. The valley was blocked off in squares of brown-green grass and browner stubble, separated by stone walls. Further down the white houses of the village of Millington could be seen. Great red farm barns and more cosy white houses dotted, at intervals, the landscape. Under a sunny sky we could have enjoyed the view for hours; as it was, the rain soon drove us riverward.

Relaunching, we proceeded down. The stream here was a succession of rapids, and every few minutes we were obliged to wade over some unusually awkward and rocky rift. Fred shot a gray squirrel and went ashore to secure him, while I entered a mill race and soon effected a landing at Millington. The inhabitants, as usual, turned out, and I had quite a talk with one old rustic, who, among other things equally queer, spoke of hearing that "muskrats were plenty down to Staten Island," and said he intended going down in his dugout on a trapping expedition. The old fellow evidently had no idea of the distance or obstacles in the way of his proposed excursion.

Portaging around the mill we put into the race again, while the rosy faced miller in the proverbial white hat goodnaturedly started the wheel to give us water. On reaching the river we were troubled much by shallows, and often obliged to wade. After a little pleasurable excitement in the shape of a duck chase, which resulted only in the wetting of our guns, we settled down to a steady, swinging stroke.

Faster and faster came the rain, and more and more cheerless grew our situation, as we wound through, mile after mile of reeking, gloomy swamp. A half hour after passing the mouth of Dead River—appropriately named—we drew out at a pin-oak wood, amid the deafening caws of thousands of disturbed crows. The wind being strong, we were careful to place our canoe bows to it, and see that they were firmly lashed. With the help of a sapling and rubber blanket, I rigged a tight tent over my well. An armful of straw from a friendly stack furnished us with very good beds. They might have been a little damp, but they were certainly very comfortable. After a fair supper we turned in, and I, for my part, was soon asleep.

Twice during the night I got up to feed the fire, and at four A. M. we turned out into the darkness and same dismal rain. After a light breakfast, we arranged things so as to keep dry as possible, then pushed off and commenced our day's journey. Until noon we continued on our wet and weary way without incident, nothing occurring to disturb the unceasing dip of our double-bladers. About mid-day, feeling hungry, I ran my canoe alongside of Fred's, and thrusting my hand in aft succeeded in extracting from the provision box a score or so of crackers. Placing these upon our aprons till completely soaked, we lunched on cracker and water.

About two P. M. we arrived at a dam. After a little reconnoitering we debarked on the right bank of the pond, and portaged forty yards to the river below. We launched just above a bridge, and in spite of the storm had some curious spectators.

Some four miles farther down we came to another dam. Here we made a portage from the left across a road, and put into the race.

Half an hour after we reached another mill, and our third dam. In all the rain we unloaded the canoes. Carrying them up a steep bank, and across a rough, stony place, we put them down a stone wall, six feet high, into a raceway, a short distance above where a turbine wheel discharged an eighteen inch stream across from the left.

At last we were loaded, and Fred, leading, made toward the boiling discharge, which, at a right angle, impetuously dashed across, and piled up white against the opposing masonry. The whirling foam, a foot high, regurgitated madly for a second, then sped away down channel. The venture was an awkward one, and, to add to the difficulties, we were directly under a mill, and double paddles were useless. I watched Fred carefully, in order to turn his experience to my benefit. Just as his bow entered the first foam it struck a stone, and he was forced to take the hazard at an angle. In a twinkling the bow of his canoe was lifted and dashed to starboard. A paddle stroke, and the stern felt the water's force; another, and he was safe in the open rapid.

Then I urged my light craft forward, and with a strong half shove, half stroke, sent her flying into the midst of the seething mass. Quick as a flash the bow was tossed in air and hurled to the right. But I was ready for it, and with two quick, sharp strokes averted the danger and forced the canoe ahead. Then the stern lifted, and before I could change my paddle, or at least before I could take a stroke the rushing water had thrown it violently against the wall. As I felt the jar I sent all my strength into that paddle stroke, and shot out from under the mill, when, having the current squarely astern, I was all right. Resuming my double paddle I soon overtook Fred, who continued to use his single.

That mill race was long and swift, carrying the whole volume of the stream, which it resembled at its most rapid points. As we rounded the last bend I was appaled to see how far the river channel was below us. An exclamation from Fred reached me, and, looking forward, I beheld the worst rapid we had yet encountered.

"Can you do it?" I roared.

"I'll try," came the response.

With all my force I hacked water, but my utmost exertion failed to keep the canoe from advancing.

The water of the race converged to some ten feet of rock-flanked channel, leaped with a smooth curve at the head of the decline, then, torn and fretted into angry whiteness, rushed wildly down to join the river.

Fred took the fall, and I held my breath. When he had made some twenty yards I stopped backing, and was hurried on my irremediable way.

There is something exhilarating in rapid running. Once fairly in the rush, I really enjoyed it. The wild jumps of my canoe just suited me, requiring, as they did, prompt action, a steady hand and a quick eye. Half down the rift, and used to the motion, I looked for Fred. His single paddle was flashing spitefully as he endeavored to pass to the right of a small island upon which the rapid divided. Suddenly, while I looked, his canoe struck a submerged rock with a violence that obliged him, with a rolling jump, to take to the water. Exerting all my strength, I passed to the left of the island and gained the open and quiet river in safety. Fred soon joined me.

Two miles more and we arrived at Chatham dam. Here we completely unloaded, carried our baggage and then our canoes across a grassy place, over a plank, and in at what had once been the cellar window of an old mill. From the window in the stone foundation there was a steep slope to the other side of the cellar, where the race was situated. The ground was hard, wet, slippery clay, with a few half buried stones lying around; just enough to crack a man's skull on in case he should be so unfortunate as to fall. When half the things had been transported to the water's edge, the ill luck began. Fred brought his gun and the coffee-pot containing my cartridges, which had been stowed there to keep dry, and deposited them at the window in such a manner that when he walked away the jarring of the plank shook them down. I made a bound half way up the slippery slope, and caught the gun as it was sliding toward the water. The coffee-pot flew open, and my cartridges rolled about in all directions, coating themselves with clayey mud, and some taking water.

At last, with many slips and some bruises, we succeeded in getting the canoes fairly into the shallow race, and were proceeding as fast as possible with our loading when the contemptible miller lowered the gates, stopped the mill, and then came out upon the bridge to enjoy our discomfiture. We knew if we delayed it would be impossible to get away; so, heaping silent anathemas upon the pusillanimous corn-grinder, we tumbled our effects confusedly into the canoes and pushed forward. With not a little trouble, owing to the rapidly shoaling water, we reached the river. Once there we had clear running, save that the stream was a little inclined to be rocky and rapid, to the house of a farmer-naturalist with whom we were acquainted.

It was dark when we debarked at the foot of the lane, and two more weary, wet and hungry explorers never sought shelter of house more thankfully than we. Received with a warm grasp of the hand and a hearty hunter's welcome, dried by a hot fire and invigorated by a bountiful supper, we passed a pleasant evening in the inspection of a fine collection of birds' eggs and stuffed birds. At an early hour we turned into a white spread bed, which, to our tired frames, seemed luxury sufficient. It was a fearful night. The rain had ceased, but the wind was up, fierce and cold. We were not sorry to be within doors.

The following forenoon was spent in drying and arranging our cargo. At noon, in the warm sunlight, we started. At

the mouth of Black Brook we separated, and in different directions penetrated the flooded woods in search of ducks. For a quiet half hour I proceeded through alternate patches of meadow and wooded freshet, then debouched upon a broad expanse of shallow, wind-ruffled water, conspicuous in the bright sun. In the dim distance I spied the figure of a solitary duck under the lee of a reedy point. With single paddle I approached. The distance narrowed to some fifty yards, a charge of No. 6 did the work, and I had the satisfaction of boating a dusky duck. Some twenty minutes later a pin-tail passed on wing, and I heard quacks just ahead. Noiselessly I moved forward. Suddenly a pair of mallards flushed scarce twenty yards away. Both barrels spoke. The first bird dropped dead. The second towered high in air, then, setting his wings, shot with the speed of light to water. Both were dead when I retrieved them. After two ineffectual shots at long range, I joined Fred on the river. He had been as fortunate as myself, having secured one black and two wood-ducks.

Our little diversion over, we paddled hard, passing Colombia, Hanover and Swinefield, and reaching a known camp-site at dusk. The canoes again provided us with couch and shelter, and we spent the night in refreshing sleep.

The first peep of dawn found our camp fire slight and breakfast in preparation. The sun had not yet put in an appearance when we left the bank. About seven o'clock we passed Pine Brook. The sudden appearance of two canoes at his very elbow rather astonished an old duck-shooter ensconced on a reedy island. At noon we partook of a good dinner, garnished with apples from a neighboring orchard. During the afternoon we fired several shots, bagging a black duck, a teal, an owl, four snipe, and a dozen of blackbirds. At six o'clock we encamped at Little Falls. After a hot supper we lay down on our blankets, feet to the fire, and slept, first agreeing that we should move on at the rising of the moon. Shortly after eleven, Fred awoke me, and twenty minutes later we were afloat. A moonlight paddle of some seven miles and we passed through sleeping Paterson. Then a long, monotonous stretch of canal seemed to mock our sleepy efforts to put its weary miles behind us. At last we arrived at Stonehouse Plane and portaged to its foot. At daylight we had just cleared from Bloomfield lock. At seven o'clock we carried from the canal to a pond. A few minutes of paddling and we drew out for the last time at the house of a friend. Depositing the canoes in his barn, we shouldered our guns and game and proceeded homeward. Satisfied with the trip, we undoubtedly were; but could we have had cloudless skies and favoring, gentle breezes, instead of beating rain and northerly gales, the pleasure of the excursion would certainly have been greatly enhanced. MAGUA.

TROUTING IN THE BOARDMAN RIVER, MICHIGAN.—A Grand Rapids correspondent, H. B. W., relates the experiences of himself and a friend, who put a skiff into the Boardman River about eight miles below Kalkaska, early last June, and fished down toward Traverse City. The first morning they took 33 trout to one rod and 44 to another, and the like success continued throughout. The first portion of the route was much obstructed by fallen timber, but the fish were in great abundance, rising to the fly readily, so that it took no effort to kill them. Many large fish were taken with angle worms and flies. On the morning of the second day the timber completely barricaded their farther passage by boat, and so they abandoned her. They found the stream filled with a mass of felled timber for several miles; nevertheless they found many eligible fishing places. At one place where the water had been set back by a beaver dam, the pond seemed alive with trout jumping at flies, and they took two and even three fish at a cast. In one pool a trout was caught which measured 16½ inches, and in another a single rod took 16 fish in as many minutes. We conclude our correspondent's narrative in his own words:

Having decided to reach the R. R. at Mayfield that day, and being in an unknown country and wilderness, we took our course by the compass and traveled along steadily, passing many beautiful small lakes abounding in pickerel and bass, and the woods with deer. By noon we looked down the Valley of the Boardman four or five miles, and saw a clearing which we concluded must be where the Traverse State road; crossed the river, and hastened on toward the first sign of civilization we had seen since leaving Kalkaska. At one o'clock we reached the house we had seen, and, after partaking of a hearty dinner, including desert of strawberries and cream, we again entered the stream and fished down to Mayfield. Here we stopped with Mr. Dowdy, a genuine sportsman, who keeps a comfortable hotel for the convenience of those wishing to spend their time in fishing and hunting in season, and who is not only thoroughly posted regarding the best localities for trout, bass and pickerel fishing, but who keeps a full kennel of deer and foxhounds, and knows where they can be used within an hour's tramp. When we made our appearance in the evening he was taking care of a large bear skin that had been worn by old bruin only the day before. Mr. Dowdy at once gave directions to have our trout taken care of and packed in ice and have them in readiness for the next morning's express to send them to our homes. The next morning we took the train for home. We often think of that trip and promise to again visit the Boardman River this summer, but not go as far up as we did last year.

Grand Rapids, Mich. H. B. W.

Fish Culture.

Report of the Fish Commissioners of New Hampshire, June Session, 1878.

THE Fish Commission reports are changing in character. For a series of years we have had statements of the work done in different States. Now, pages of these valuable and interesting public documents are being filled with reports of the rich results of these labors. The time of sowing and waiting has given place to the happy harvest home, and as we have ever expressed our interest in the work as it proceeded, we now take especial pleasure in adding our compliments and congratulations to those States which are receiving the benefit of intelligent activity in this division of their economic interests.

The appearance of the salmon in the Merrimack, the Connecticut, the Housatonic, the Delaware, the Susquehanna, the Hudson and the Mississippi, are facts full of significance, and, as we have before remarked, the most effective possible arguments for the increased united efforts of State and Government fish-culturists.

In the gratification at this general promise of effort rewarded, the New Hampshire Commissioners have every reason to participate, and it is therefore with great pleasure that they herald in this last report the return of salmon to the Merrimack. The long-needed and finally accomplished alterations in the Lawrence (Mass.) Fishway have allowed the unobstructed ascent of these fish, and they have been seen in the upper waters of the Merrimack and in the Pemigewassett in large numbers. This event has already been recorded in this journal, and was referred to not long since in the abstract of the Massachusetts Report, where the observations of the Superintendent of the Lawrence Fishway in May, June and July, and the subsequent observations of other parties, confirmed the passage of these fish in quantities sufficient to insure their regular appearance in the future.

As to other fish, the commissioners have procured during the past season from the Holyoke, Mass., hatchery, 200,000 young shad, which were evenly divided between the Winnepesaukee River at Tilton, and the Contoocook at Contoocookville. Of California salmon 100,000 eggs were hatched at Livermore Falls, and distributed to Baker's, Contoocook and Pemigewassett rivers. Twenty thousand land-locked salmon eggs, 15,000 Rangeley Lake trout and 5,000 California trout were hatched for the State at the Massachusetts Hatching House, and have been distributed to the waters best adapted to their growth. A large number of ponds have been stocked with black bass, and the report states that these fish are distributing themselves much faster than the efforts of the Commissioners could accomplish it. *Apropos* of the pugnacity of this fish we extract a page of the report:

"The writer of this report spent the first week in March at Fishkill Landing, on the Hudson River, where he made the acquaintance of Mr. W. G. Van Buskirk, the master mechanic of the Dutchess & Columbia railroad, who has paid a great deal of attention to the habits of the bass and who fully confirms our previous ideas as to their voracity and pugnacity. Mr. Van Buskirk told the writer that he had repeatedly seen them 'drive' pickerel of twice their size, and says they will whip any fish of their weight that swims.

"He also stated, that, to the best of his knowledge, the female bass would not take the hook during the spawning season, and said he had himself experimented on them by tempting a large bass, who was hovering over her spawning-bed, successively with live bait and grub-worms, the only result being that the bass took the bait gently in her mouth and carried it outside of the nest, where she dropped it. He then dropped a bare hook and sinker into the nest, and she quietly took up the sinker and carried them out and dropped them as before.

"He stated that the bass attacked the pickerel by cutting their throats, a statement which is in some measure confirmed by the observation of a son of the writer, who, while boating on Connecticut River last summer, in the neighborhood of a long, rocky ledge which forms the Vermont bank for some distance and seems to be a favorite haunt of the bass, saw two quite good sized pike floating down stream with their throats torn open by some unknown enemy. It may not be generally known that the Connecticut River has been stocked to some extent, for a long time, with the Lake Champlain pike, or northern pickerel (not the muskalonge), which escaped from a pond at Northfield, Vt., stocked by the late Gov. Paine, in a heavy freshet in 1840; and these fish have been caught in the eddy below the fall at Bellows Falls, weighing as high as seventeen pounds. These pike had, to a great extent, exterminated all the smaller fish in the river, but have now got to contest their claim to sovereignty of the waters with the bass, whose accidental advent is so far desirable, though it remains to be seen what the result will be when we succeed in getting salmon and shad again into the upper waters of the Connecticut."

The New Hampshire Commissioners refer to the favorable character of the various reports of different States and Territories (of which twenty-seven are now engaged in this work) as generally encouraging, FOREST AND STREAM AND ROD AND GUN being more than once cited, as indeed it is in nearly every report now upon our table.

ONE MILLION PER DAY.—Advices from Washington, May 31, say that over 1,000,000 shad eggs are hatched at Havre de Grace, Md., daily. These eggs are shipped each night to streams in the South and Southwest and Missouri. Professor Baird says that twelve to fifteen million of young shad will have been distributed before the season closes. The salmon hatching season begins at the end of July.

VIRGINIA.—Five hundred thousand shad fry are to be placed in the Rivanna at Charlottesville, and in the south branch of the Shenandoah at Waynesboro. At Tahago Bay, on the Rappahannock, the agent has had very fair success. He has already hatched 1,200,000 shad, and is still at work—the cold weather in May prolonging the spawning season.

TENNESSEE.—Fifty thousand shad have been put into a stream near Huntington. A singular fact in connection with the shad taken in the Cumberland River is that out of the thirteen or fourteen fish examined by the State Fish Commissioner not one was found to have any eggs in them.

MISSISSIPPI.—One hundred thousand shad have been deposited in the Pascagoula River at Meridian.

WISCONSIN—*Madison, May* 25.—Thirty-five thousand Mackinac trout have just been placed in Lake Kegonsa, not far from this city. One hundred and fifty thousand lake trout were also placed in the Nashota lakes this week and the same number were shipped to Oconomowoc to be distributed in the small lakes in the vicinity. The fish were from the Milwaukee hatching house. ROVER.

—We had the pleasure of a visit from B. F. Shaw, Esq., of Anamosa, Fish Commissioner of Iowa. Mr. Shaw is on his way to Havre de Grace, Maryland, to obtain shad for the waters of his State. We may state that the amount of work done by the Fish Commissioners of Iowa has been of the most remarkable character, and that they are most zealous in their labors.

Natural History.

THE RED SNAPPER.

[*Lutjanus Blackfordii*—GOODE AND BEAN.]

[An interesting account of red snapper fishing on the east coast of Florida may be found in FOREST AND STREAM for May 25, 1876; another article on snapper fishing in the Gulf of Mexico was published in the same paper for Aug. 30, 1877.]

By a singular oversight the well-known red snapper of our Southern waters has never been described, and is without a scientific name. This is due to an erroneous identification of this species with an allied form occurring in the West Indies, the *Lutjanus ayo*, from which, however, it differs in several important respects. Its closest affinity is with the *Lutjanus torridus*, described by Professor Cope, from St. Kitts, which is separated clearly enough however from *L. Blackfordii*, though suspiciously similar to Professor Poey's *L. Campechanus*.

It is needless to describe at length the habits of this most beautiful fish. It is the most voracious and the pluckiest of the Southern fish, and is entitled to a prominent place on the list of American game fishes. It attains the weight of forty or fifty pounds, and by reason of its brilliant scarlet is the most conspicuous fish of our coast. I knew ninety of them to be caught in two hours by six men in April, 1878. This was on the snapper bank off the mouth of the St. Johns River, Fla., in about 13 fathoms of water. These fish weighed upon an average 20 pounds, and were sold at Mayport for $1 each, packed in ice and shipped to New York.

The species is named in honor of Mr. E. G. Blackford, of New York City, a gentleman whose enthusiastic pursuit of natural history and public spirited support of all worthy enterprises need no commendation in the columns of a New York newspaper, assuredly not in those of FOREST AND STREAM. The U. S. National Museum is indebted to him for many hundreds of specimens of rare fishes. The Fish Commission has found in him one of its staunchest friends. Ichthylogy owes to him the addition of several species to the fauna of the United States.

A full account of this new species will soon be published. A brief synopsis of the differential characters is given here:

DIAGNOSIS.—*A. Lutjanus* with profile ascending from snout, with slight concavity in front of eye, to origin of dorsal, thence in a long curve to base of caudal; under profile much less arched. Upper and lower jaw of even extent. Height of body equal to length of head, least height of caudal peduncle equal to one-third the distance from snout to pectoral. Maxillary falling short of vertical from anterior margin of orbit, the mandibular, of that from middle of orbit. Eye circular; its diameter 6 to 7½ times in length of head. Distance of dorsal from snout 3 times length of snout. Longest dorsal ray equals first anal ray, which is from 2-3 to 6-7 of longest anal ray. Pectoral inserted at 1-3, anal at 2-3 of the distance from snout to base of caudal rays. Caudal crescent shaped, its median rays 2-3 of external rays in length. Length of pectoral twice that of upper jaw. Distance of ventral from snout equals height of body, its length three times that of a second anal spine. Radial formula—D. X., 14; A, III., 9; C. x. 17 x.; P. I., 16; V. I., 5. Scales, 50 in longitudinal series, 8 above and 15 below the lateral line. Color, uniform scarlet, except the throat which is silvery.

A CORRECTION.—In writing in our last issue about a load of red-snappers coming from Florida, we were made to say "the first" instead of "the finest." The *Lutjanus blackfordii* has been seen in the market for quite a number of years, though without having had any scientific name given to it.

DEER SINKING AND FLOATING.

NEW WESTMINSTER, British Columbia, March 20, 1878.

EDITOR FOREST AND STREAM:

In an answer in a late issue to one of your numerous correspondents, I see you attribute the sinking of the deer when shot in the water while in the red coat, and the floating of the deer when in the blue coat, to the condition of the animal, and not to the buoyancy of the hair. After a series of observations and a good deal of inquiry, my experience is that the deer in the red coat sinks, while that in the blue coat floats without regard to the fatness or leanness of the animal in question, and in every case falling within my scope this has held good. I have seen deer shot while in the red coat sink like a stone, and when recovered have found them to have an inch of fat on the brisket, and others shot while in the blue and so lean as to be almost worthless as food, float like a cork.

This subject has been of considerable interest to me, and I have formed the opinion, and hold to it, that the floating or sinking of the deer is due entirely to the greater buoyancy of the blue coat over the red; and perhaps I have been in a position to better judge of this than many others. In the locality where I have been hunting for the past fifteen years, in addition to what deer I have had a hand in killing or killed myself, nearly all the deer secured by still hunting were killed in a tract traversed by a large mill flume and ditch, which was made the medium of transport, and the invariable custom when killing a deer was to make for this ditch, alongside of which was the only path or trail leading out of the woods. If the deer was in the blue coat it was thrown in the ditch and floated to the mill. The hunter, walking along the trail, was thus saved from the labor of carrying his game, and it made no matter whether the deer was fat or lean, entrails in or out, if in the blue coat it floated, but if in the red the converse was the case, and if put into the ditch it sank to the bottom.

The hair is much longer and more of it on the deer while in the blue coat, and as the hairs are hollow inclosing a certain amount of air resembling in a small degree the tube of a feather, it follows as a natural consequence that the longer these tubes are and the greater their number, so in proportion

is the buoyancy of the animal increased. My opinion in regard to this is further strengthened by the statement of practical tanners who inform me that it is impossible to keep a deer skin submerged in a tan vat except by placing heavy weights upon it. Other hides, such as ox or horse hides, placed on top, will not answer the purpose. No matter how many of these you place on top in a few hours the deer skin will work out from under them and float at the top.

I read an article in your paper last year in which the statement was made that a deer in the red coat, if not killed too quickly after taking water and allowed to become blown, would not sink; and following this idea, more with a view to test its truthfulness than otherwise (for it was contrary to my own convictions), one day last August I drove a buck twice across a lake and then to the middle, where I shot him, and he immediately sank, and in trying to grasp him I upset rather a cranky canoe, and after about an hour's work paddling said canoe to shore, sitting astride the bottom with my legs dangling in the water and my body as wet as a drowned rat, mourning the loss of a fine double-barreled breech-loader and some other hunting implements, had I then met the writer of that article I am somewhat afraid my remarks to him would have been the reverse of complimentary.

I write this in a spirit of friendly caution to brother sportsmen who may not have many opportunities of killing a deer, and to whom the loss of a fine buck by sinking would be perhaps a matter of more regret than the loss of my gun was to me, and advise them that the only rule safe to be followed is this: If a deer is in the blue coat, kill him whenever you please; but if in the red, drive him ashore and kill him when he is landing.

It is due to others, holding contrary opinions to mine, to say that the deer I speak of are the black-tailed deer of the Pacific Coast, as my experience is principally confined to them; but I may mention that many hunters of my acquaintance agree in this theory as applicable to the white-tailed deer east of the Rocky Mountains.

Yours truly, MOWITCH.

[We must acknowledge that the views advanced by our correspondent are new to us, and also that they seem very plausible.—ED.]

MORE ABOUT DEER.

THEIR HORNS AND HABITS.

WILLIS, Texas, April 16, 1878.

EDITOR FOREST AND STREAM:

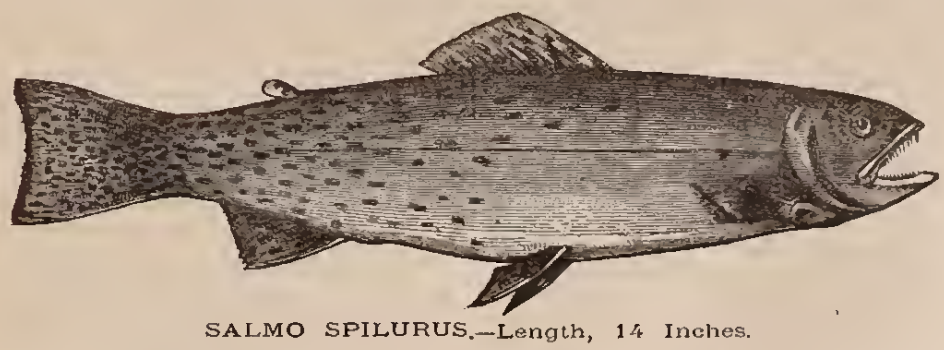
"Do deer bury their horns?" I say emphatically they do not. I mean the red deer of this county. Of what tame deer may do in confinement I can say nothing; but wild deer do not make a funeral of their antlers after shedding, nor do they knock, butt or rub them off against trees, nor do they crawl into some secret cavern or cross-barred jungle to drop them, but drop them, when ready to come off, at any place and at any time. Generally they are dropped off as the animal is lying down quietly, ruminating his food, which is usually in a nearly open space on a dry hill or knoll, the kind of places old bucks prefer lying when in an undisturbed locality, or when the weather is warm and pleasant; but when it is cool or cold, he repairs to a thicket for protection from cold and may drop his horns there; but he does not seek such places to hide, shed, or bury his horns. It is only a matter of chance about that. When the horn is about to turn loose from the head there ensues an itching process at the base of the horn, just as in the gums of a child, when its teeth are becoming loose, and this itching often causes the buck to rub the place against a tree on that account, and during the operation the horns sometimes fall off, then the place bleeds a few drops, and a scab forms over the wound, which itself scales off in a week or two, and in the course of a month or six weeks the new or young horn begins to peep out, which, in this climate, is about March 1. The bucks shed their horns here from Christmas Day to the middle of February. They then drop them, sometimes one, and sometimes both together. I have found them both ways. They drop them on the top of the ground or leaves, and pay no further attention to them, except to give a farewell look, smell or lick. The buck is now quite poor and shabby, and cowardly in his gray or drab suit, and is apt to seek the company of a lot of does and yearlings, and with them remain until say 15th April or along in May, when the does begin to have their fawns. Now the old bucks begin to grow their horns, shed off their old gray winter clothes, and put on a thin coat of beautiful red or bay, and then get themselves together in herds of from two to ten or more, and thus remain until the horns are full grown, the velvet shed off, and the running or rutting season begins. This takes place the last of September in this region, and extends through to October and November. Then they quarrel and fight, and separate as though entire strangers to each other. The old bucks, of course, receive about all the attention of the does at this time, but the spike, or forked horn, insists on standing in sight, pawing the ground, rubbing the saplings and looking "lonesome" and mad. And as to the spike buck doing all the rubbing of the bark off saplings, that's all bosh. All bucks do the rubbing and barking of saplings, and twisting their overhanging branches into withes with their horns; all paw and dig up the earth; all chase the does, and all fight. We call the places where they wound the trees "rubs," and the places dug and pawed "scrapes."

They visit their scrapes nearly every day, and paw and stamp and cut up all sorts of antics. But the "scrape" is not confined to the visits of one deer. The bucks, does and all, go to them, and paw and prance, and drop their excrement, and especially urine, in and around these scrapes, and others come along and do the same; this is kept up during the running season, and from persons seeing these scrapes or the deer pawing at them, has no doubt sprung the idea that "deer bury their horns," and these are the places where the funeral obsequies take place.

This rubbing of the horns is done during the running season alone, and not, as many think, that the buck does it to get the velvet off. Deer do not rub the velvet off. The velvet is simply a delicate skin, covered with a soft dove-colored bristle or hair. This skin possesses nerves and blood vessels, and has all the functions and vitality of any other skin of the body until the antlers are fully developed, then this skin dies around the base of the horn, and, all vitality and circulation being cut off, the "velvet skin" splits up and peels off in strips and shreds and falls off itself, the deer having nothing to do with rubbing it off, for at that time the antler has lost all sensibility from base to point. If you think the old buck does not rub the bark off saplings, you examine any old buck's horns two weeks after the running season has begun, and you will find the *rougar* or rough parts about the front of the base of the horns all filled with particles of green bark. Many a time have I sat near these scrapes at daybreak with rifle awaiting an old buck, and seldom failed to get him between the dawn of day and sun-up—and have killed three or four in one morning in this way. Some would be chasing a doe, some playing, some walking moodily along as though they had been keeping late hours last night.

Now, about the "fawn and his spots." A fawn does not lose his spots as long as he is a fawn, which time is from the birth until he sheds entirely his red spotted coat, and then puts on his blue winter goods. He then becomes a "yearling" deer. The spots are confined to the original or fawn-colored coat that he wears first, and are never lost until that whole coat is entirely removed, although become very pale toward shedding time. The "Pawnee chief" is nearer right than any of you, though he is modest in what he says; and in conclusion, I trust that my brother sportsmen will not blame me too severely for differing so widely from them. But if there is any merit in an experience of years in the woods, day and night, in all seasons of the year, and hunting these splendid animals with all the eagerness and zeal of the sportsman, and quietly and dispassionately watching all their characteristics, movements and actions, with all the anxiety of a naturalist, then it appears that I should know whereof I speak.

O. L. J.



SALMO SPILURUS.—Length, 14 Inches.

THE SALMONIDÆ OF TEXAS.

HOUSTON, Texas, May 18, 1878.

EDITOR FOREST AND STREAM:

I am much disappointed at not getting the continuation in this number, May 2, of the letters on bass fishing. What objection your anonymous correspondent has to urge against them I cannot possibly see. At any rate, we here who get your journal, were not only interested in, but exceedingly anxious for, the continuation of these letters. Recent railroad extensions from the City of Houston have opened up facilities for pursuing the piscatory art which has given a new and vigorous impulse to this noble sport. Bass and trout are the principal fish taken at these new places, and any practical information in regard to the method of capturing them would be thankfully received. It is new sport to the most of us, our fishing having been confined heretofore, for the most part, to the streams adjacent to the city, and the fish taken being those common to these streams—the buffalo, the cat, an occasional trout, but principally perch. By the way, I see a communication from Mr. N. A. Taylor, in this number, in regard to the *Salmo fontinalis* in Texas. During my student life in New Haven, Conn., I invariably spent the summer vacation in pedestrian tours through the country. Angling was our chief source of amusement. On these trips I have lifted many of the speckled beauties from the sparkling element, and hence know them well when I see them. During the late war I was assistant surgeon of the Second Texas Rifles, and accompanied an expedition through the northwestern portion of Texas and New Mexico. If my recollection serves me at this distance of time, that being 1861, I think I have taken the *Salmo fontinalis* from the San Felipe Springs, twenty-five miles above Fort Clark. Of this, however I will not be positive. I was stationed at Fort Hudson, on the Devil's River, and have a distinct recollection of having taken the speckled trout from this stream. At Fort Davis I remained several months, during which time I caught many trout from the Limpia. This was in Texas, and covers my fishing experience in that portion of the State. After crossing the line, however, into New Mexico, I have seen many fine specimens of spockled trout taken from the Rio Benito at Fort Stanton, and from other mountain streams in the Territory. I add this simply to establish a fact which seems to be in dispute, and which I can do by positive knowledge and actual experience. There may be some little difference in regard to the size and color of the spots on the fish, but the variation is so slight from their New England cousins as not to make it remarkable. Hoping to see a continuation of the "Practical Lessons on Bass Fishing," I remain,

Yours respectfully, J. W. DANIEL, M. D.

[The origin of the question whether speckled trout of the family of Salmonidæ existed in Texas, arose from a disputed statement made in "Hallock's Gazetteer." Ample testimony has been printed in FOREST AND STREAM, from army officers and others, supporting the assertions of the Gazetteer, and what is now added above is a valued substantiation for which we feel very grateful. The Gazetteer is exceptionally accurate and can generally be relied on with perfect faith. In further confirmation we print herewith a portrait of the fish itself: Color, yellowish brown above, spotted with black; a red band on each side of the chin.—ED.]

MIGRATIONS OF THE CRAPPIE.—In your last number I noticed an article from "Yell," headed "What a Crappie Is," which evidently describes with accuracy a fish well known here. Our river, the Big Barren, is a tributary of Green, and it of the Ohio. These fish appeared here about thirty or thirty-five years ago, and are generally believed to be a lake fish, reaching the Ohio and tributaries through the Erie Canal. They also appearing simultaneously with the Alexander Campbell reformation in the West, were, according to the varying designation of this movement in different localities, called Campbellites, Newlights, Reformers, Christians, etc. In some localities on Green River they are also known as calico perch, bachelor, lin mouth, etc. They are a fine pan fish, gregarious, nearly always in schools, and love deep still water.

Bowling Green, Ky., May 26, 1878. S. W. C.

A GROUSE'S FAMILY.—An Albany, N. Y., correspondent writes that a grouse at Tribe's Hill, near that city, having appropriated a hen's nest full of eggs, has hatched out a brood of chickens, and is now caring for them. We have chronicled several cases of a similar nature before.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDENS FOR WEEK ENDING TUESDAY, MAY 28.—One broad-winged buzzard, *Buteo pennsylvanicum*, presented; one hog-nosed snake, *Heterodon platyrhinus*, presented; one pine snake, *Pituophis melanoleucus*, presented; one glass snake, *Ophesaurus ventralis*, presented; one opossum and seven young, *Didelphys virginiana*, presented; one scarlet ibis, *Ibis rubra*, presented; two copperheads, *Agkistrodon contortrix*, presented; one Gt. horned owl, *Bubo virginianus*, presented.

ARTHUR E. BROWN, Gen. Supt.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING MAY 25.—One black-eared marmoset, *Hapale jacchus*, presented by Mr. G. S. McWatters, N. Y. City; one opossum and five young, *Didelphys virginiana*, presented by Mr. Frank F. Kinney, N. Y. City; two Sebastopol geese, *Anser domesticus*, presented by Mr. William Simpson, Jr., N. Y. City; one Angora goat and young, *Capra hircus*; six black swans, *Cynus atratus*, bred in the menagerie.

W. A. CONKLIN, Director.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

THE DOG CAREFULLY CONSIDERED.

HOW MANY SHEEP DOES HE KILL? HOW MANY PERSONS DIE OF HYDROPHOBIA?

To confess to an affection for the dog—

"Man's faithful friend,
The first to welcome, the foremost to defend,"

is to do more than to acknowledge the influence of a feeling common to all. The boy who grows up without experiencing the delight of canine proprietorship has had no childhood to boast of. Although Tray has his faults, his virtues so greatly overbalance them that he will always retains his old place in the affections of man. He was made for man, and has come to stay.

Dr. Alexander Hadden, of this city, is a discreet admirer of the race. In a paper read by him at a recent meeting of a section of the American Institute, the doctor traced the dog's history, and extolled the brute's fidelity to his human master, his intelligence, and his usefulness. The paper is an interesting one, but of too great length to warrant its publication in full in these columns. Dr. Hadden has a theory, as will be seen by that part of his address reproduced below.

The principal cause which seems to lower the dog in the esteem of many is hydrophobia. To show how little this was to be feared, Dr. Hadden gives abundant statistics. In the year ending June 30, 1870, there were 333,169 deaths from all causes in the United States. Of these 63 are attributed to hydrophobia; thus in a population of over 40,000,000, out of 28,729 deaths in this city during 1874, only five are credited as due to hydrophobia. In 1875 there were 30,709 deaths, none from hydrophobia. In 1876, out of 29,123 deaths but five are set down to hydrophobia. During the twenty-five years ending in 1872 there were in England and Wales 11,220,724 deaths, 373 of which were credited to hydrophobia. How many of these reported deaths from hydrophobia were from other diseases simulating that malady cannot be estimated. The cat, the fox and the wolf should be credited with causing some of these deaths. "Surely," adds the doctor, "this statistical review must convince any reasonable mind that the persecution now carried on against this noble, sensitive and loving servant of mankind is almost senseless and highly unjust."

The agricultural reports are not so favorable to this animal. The U. S. Commission of Agriculture gives, in his report of 1865, a shocking statement of the ravages of this brute among the flocks. He gives the return from 373 counties of twenty-three States of the number of sheep killed by him during that year as follows—77,851; and estimates the whole number killed in the United States during the same period to be about 500,000, and the loss to the growers to be about $2,000,000.

Since 1865 no report of these facts has been made, but

there are ample reasons to believe that the ravages are no less. This offence is about the only one of importance that can be charged to this animal. This propensity seems to be the sole remaining vice of his wild state, from which he has doubtless been so far reclaimed by domestication. He is never stimulated to this act by hunger, but does it in wild mischief. The male canine only is given to this evil, the female never, unless in the wild state or gathering food for young. It is also a remarkable fact that this animal never goes alone on these raids, but always with a companion dog at least—sometimes in packs. Although one only may be in the chase, the other is near. It is always remarkable that these raids are always preceded by an intimate association of neighboring dogs. It is doubtless out of these associations the mischief springs. To break up this disposition should be our aim, and this is most effectually done by castration. By this he is so changed that his attachments are for his home and his master only and not for those of his kind. I suggested and put this in practice about four years ago. The animal was only a mongrel, but has made a very fine and handsome watch dog and has no disposition to run with those of his kind. He has not grown fat or sluggish, as some authors state they do, but has remained bright, active and very docile. One of my friends who owns a very fine, well-trained shepherd dog, which he raised, had him castrated by my advice when he was about a year old, for the purpose of breaking up his tendency to run with other dogs. Its owner reports that the operation proved successful, and further, that the dog has retained all his useful qualities as a farm dog. He is now four years old. Dr. Burdue, a veterinary surgeon, stated to me that one of the best rat terriers he ever knew was castrated. I have like testimony from others which it is unnecessary to quote. They would only further illustrate the same fact. It is my belief that should this operation be performed on all dogs that are allowed to run at large, the ravages on the flocks of sheep would cease entirely.

The effect of this operation on the bull, horse and sheep, etc., is good, and that it increases their docility, usefulness and intelligence all will admit. If the operation is delayed until the animal becomes old, when habits are formed, it certainly does produce sluggishness and uselessness, unless the animal is intended for food. It has other advantages. He becomes a less objectionable house-pet, and far superior to the bitch. He is not as likely to be decoyed away by another dog when left to watch premises, a stratagem that thieves and burglars often use. He will also, like the castrated cat, live and be useful to a greater age. That he would be less likely to develop hydrophobia is also probable, for he would be less exposed to inoculation by his association with those of his kind. I may also add that the frequent street scenes of a disgusting character would be by this prevented, an advantage which all good citizens would recognize. There is a law to prevent stallions or rams going at large; let it be extended to the dog.

From the foregoing facts Dr. Hadden is led to make the following deductions:

That the long association of the dog with human society renders the possibility of his being cast out highly improbable. That there is a mutual love existing between mankind and this animal is an incontrovertible fact. That he has become a necessity in many of the pleasures and vocations of the human family no one can reasonably doubt. That he sometimes communicates a very fatal disease to human beings, and is frequently the destroyer of valuable property and interest is well supported by statistics. That it is our duty to prevent this destruction of life and property, and yet retain the animal in all his usefulness, is unquestionable. That castration is a step in the right direction will be doubtless proven by a fair trial.

THE GRAY FOX HOUND AND RED FOX HOUND.—The question having been asked as to the difference between the dog to be used for the gray fox or his red brother, at our request a gentleman, whose acquaintance with hounds has no superior, writes us as follows;

WASHINGTON, D. C., May 18.

EDITOR FOREST AND STREAM:

I believe it is the accepted idea that the gray fox dog should be a light, wiry animal with some beagle blood in him, a close trailer, and never inclined to run except by the nose. In Maryland and Virginia these dogs are sometimes as light as thirty-one or two pounds. The red fox dog is often as heavy as sixty pounds, being essentially different in size, and in requirements for a long, straight run, not essentially a close trailer, but with the intelligence to take short cuts and keep as close to the fox as possible. The gray fox circles, doubles and uses all sorts of tricks rather than trust to his speed; the red goes straight off for a long run, and, therefore, the dog, to catch him, must never loiter for a second, for if the trail gets cold there is no chance to find it by the close and careful beating of the field and cover as would do in case of the gray.

Along the Potomac River the best dogs are from the Northern Neck, the ancient domain of Lord Fairfax, who was a famous huntsman and taught Gen. Washington the noble sport. From his day down to the present a fine breed of dogs has been kept in that country. I think the best imported blood was from Kildare, Ireland. P. McC.

A NEW KIND OF DOG MURDER.—A scamp in Franklin, N. H., has conceived and put into practice a most diabolically ingenious method of killing valuable dogs in his neighborhood. His method is simply to prepare a—we desist. It would only be teaching other scamps how to do it too.

PHILADELPHIA KENNEL CLUB.—We are in receipt of the constitution and by-laws of this club, which seem to us to be formed with great good judgment. The officers of the club are: Pres., John C. Johnson; Cor. Sec., James N. Wheeler; Sec. and Treas., P. C. De Sauque.

MINNESOTA KENNEL CLUB.—The President is B. Beaupre, and the officers are gentlemen from Minnesota. In a late issue the name of Mr. Beaupre was mispelled.

PEDIGREE.—Mr. C. N. Whitman, of Leavenworth, Kansas, gives us the following information as to Pedigree. He was bred by Edward Laverack in 1875, and imported by Mr. C. S. Westcott, of Philadelphia, and purchased by Mr. Whitman last summer. Pedigree has won several first prizes, but has not been exhibited of late.

—Two dogs paraded in the New York Decoration Day procession. One belonged to the cavalry and the other to the fire department.

—A dog sat in front of a restaurant window near this office, last Saturday afternoon, and eyed a beefsteak and licked his chops for just two hours.

NAME CLAIMED.—Mr. William Shaw, of Rouse's Point, May 17th, claims the name of Flusher for his liver colored cocker spaniel, from Mr. P. McKoon's kennel, whelped April 6th, 1878.

VISITS.—*Columbia, Tenn., May* 25.—Mr. Joe Dew's Fannie was visited by Bryson's Gladstone, winner 1st at St. Louis and Baltimore. VAL.

HUDSON RIVER TRAVEL.—The Popular and favorite *People's Line* of Albany steamers have decided to send one of their boats to Albany every day in the week, leaving their dock at 6 o'clock P. M. This is an accommodation that will be appreciated by travelers and tourists.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
June 7	4	00	0	44	0	08
June 8	4	57	1	37	1	03
June 9	5	56	2	31	2	01
June 10	6	58	3	31	3	01
June 11	8	00	4	35	4	03
June 12	9	02	5	36	5	03
June 13	10	03	6	31	6	00

YACHTING NEWS.

ATLANTIC YACHT CLUB.—The opening cruise of the Atlantic Yacht Club, despite bad weather, must be set down a decided success. The morning of May 30th broke with the sky overcast and a wet, chilly breeze from the East. The fleet, which included about twenty-five sail, had assembled in Gowanus Bay and lay at anchor with lower sails and topsails set, a few venturing to hoist their clubs, a questionable piece of seamanship under ordinary circumstances, but as the day was to include something like a race, skippers were a little more free with their muslin. At 10:30 the fleet went away promptly at the second gun fire from the Commodore. Jibs were hoisted and all hands wore short round, shaping a course directly down the bay with booms over the starboard quarter The smaller yachts feeling the breeze the quickest, led the way with *Atalanta*, *Meta*, *Peerless* and *Triton* close astern with the larger sloops, including the new *Imperia*, led by the *Orion*. The wind hauled to the Southward and freshened, putting lee rails under, and it was not long before kites were handed and fore-topsails slewed down. *Tidal Wave* had joined the fleet in the meantime, proposing to give her new rig and centre-board a test alongside of Mr. Astor's smart schooner. *Tidal* has been in the hands of Mr. A. Carey Smith for alterations for some time past, and the very satisfactory manner in which she worked is much to that gentleman's credit, and another illustration of the value of scientific design in securing desired ends at the outset without the fearful "botching" too often witnessed in changing a yacht's rig. Her board has been lengthened 7ft., a new set of sticks 5ft. longer than her old ones stepped, and new canvas supplied all round. She now carries a lug-foresail and staysail supplied by Sawyer, whose name is a guarantee for as snugly fitting canvas as any maker can turn out on either side of the Atlantic. Off Owl's Head *Triton*, *Meta* and *Peerless* had a little brush, *Meta* doing well, but *Triton* rapidly gaining on the other two. Through the Narrows sheets were trimmed in flat, the wind having gone round more to the Eastward. The big schooners drew out ahead in the stiffening breeze while the sloops were left in a bunch astern, *Orion*, however, having a long lead in her class. Indeed, this sloop's sailing must have been gratifying to her owner, for though always known as a fast one, the way she showed up to-day with a free sheet and on the wind proves her to be in finer trim than ever before, and we predict for her a season of wonderful success. Her power in a sea and the neat way she has of screwing out to windward were demonstrated during this opening cruise to a high degree. Buoy 8½ on the S. W. Spit was rounded as follows:

SCHOONERS.

Name.	Time. H.	M.	S.	Name.	Time. H.	M.	S.
Atalanta	11	48	00	Triton	11	50	30
Tidal Wave	11	50	00	Peerless	11	51	00
Meta	11	50	30				

SLOOPS.

Orion	11	56	00	Imperia	12	03	00
Sadie	12	00	00	Kaiser	12	03	30
Dolphin	12	02	00				

The rest were not timed, *Imperia*, Mr. Pearce's new sloop, did very well considering that she is only afloat a short time, and has not yet had opportunity to get her best trim or to stretch her canvas properly. From the buoy the fleet made for Gravesend Bay, where the scrub race was to end, with a free wind, the strong ebb tide compelling them to put their helms up a bit and point to leeward of their true course. *Atalanta* was the first to come-to after a spirited tussel with the Californian's big schooner, the time of the fleet being:

SCHOONERS.

Name.	Time. H.	M.	S.	Name.	Time. H.	M.	S.
Atalanta	12	37	30	Meta	12	46	50
Tidal Wave	12	39	20	Peerless	12	48	20
Triton	12	45	25				

SLOOPS.

Orion	12	54	40	Hope	1	14	28
Sadie	1	00	30	Intrepid	1	20	40
Dolphin	1	07	08	Stella	1	22	19
Imperia	1	12	40	Genis	1	24	12
Kaiser	1	18	45				

The smaller craft put in at Stillwell's landing. *Pilot* was the only one of the open boats to round the S. W. Spit. After dinner, at 2:35 P. M., the gun from the Commodore, aboard his schooner *Triton*, brought all hands on deck again, and chains hove short. At 2:40 the second gun sent the fleet away homeward bound. *Meta* took the lead with *Orion*, *Sadie*, *Peerless* and *Triton* following. It was a best home up the bay, the wind having backed more to the northward, and now was the time for *Orion* to show the stuff she was made of. One by one she picked up the leading schooners and dropped them under her lee with the exception of the flag officers' schooner which led clear up to the anchorage at Gowanus, letting go her mud hook a scant half minute ahead of the weatherly sloop at 3:35½ P. M.

As the yachts came to anchor the leaders were timed as under:

SCHOONERS. Name.	Time. H.	M.	S.	SLOOPS. Name.	Time. H.	M.	S.
Atalanta	3	35	30	Orion	3	36	00
Peerless	3	38	00	Sadie	3	40	30
Meta	3	39	00				

The rest came in straggling. The Atlantic Yacht Club must be congratulated upon so successful an opening cruise, one which was spiritedly sailed and brought to a satisfactory conclusion without anything to mar the event.

MASSACHUSETTS YACHTING—*Boston, May* 27.—Commodore Peabody's new cutter-sloop was out yesterday in the harbor. She excites various comments among yachting men here, and has been likened to an Irish "moss boat" magnified three or four times. She seems to move easily through the water, but might be improved by an increased area of canvas, unless Com. Peabody intends to go to sea or sail through the winter months. By the way, not content with an English rig, he has got an idea—borrowed from whom or where no one knows—and that is of having his coat of arms painted in his gig—*Chacun a son gout*. Commodore Grant has been out in his new cat *Fancy*, and appears very well satisfied with her, though we understand that he thinks of increasing her sail. The *Fancy* has fine, graceful lines, a good deal of beam, and promises to be speedy. From what we have seen of her she sails close and is fast off the wind. The *Brenda*, Capt. Little, arrived Saturday afternoon. She has been coppered and has rattlines on her rigging, and, her captain says, is to be used for cruising only. The rattlines do not show till one is close aboard of her, being made of wire. They are an experiment, and would seem to be a success as far as the judgment and opinion of her sailing-master is concerned. CRUISER.

QUAKER CITY YACHT CLUB—*Philadelphia*.—With a fine day and a good wind from the Northwest, the regatta of the Quaker City Yacht Club passed off last week to the satisfaction of all concerned. The course was from Laurel street wharf to and around Chester Buoy and return, a distance of thirty-two miles. There were eleven yachts at the start—the *Coquette*, *Clara*, *Minerva*, *Phantom*, *N. Spering* and *White Wing*, of the first class; the *Stella*, *Chris Gallagher* and *Lillie*, of the second class; and the *Post* and *Bianca*, of the third. The *Columbia*, of the first class, was high and dry in her dock, and was impossible to get her off in time; the *Gypsy*, of the second class, withdrew the night before. The start was made at 10:32 A. M. *Lillie* fouled *Stella's* boom, and carried away her topmast. She kept on her course, however, and managed to come in a good second. *Minerva* took the lead, with *Bianca* close astern. By the time Glocester was reached, *Clara* had the best of it, with some distance between herself and the next yacht, when suddenly, off the Horseshoe Buoy, snap went her mast, and with it her chances for the prize. The accident gave the lead again to *Minerva*, with *Bianca* not far astern. Off Red Bank *Phantom* split her jib, but the crew were not slow in rigging out the flying jib in its place. The Chester Buoy was rounded in the following manner: *Minerva* at 12:17 P. M.; *Lillie*, 12:19¾; *Spering*, 12:21; *Coquette*, 12:25¾; *White Wing*, 12:28; *Stella*, 12:28¼; *Phantom*, 12:33; *Post*, 12:35; *Bianca*, 12:35¾; and the *Gallagher* at 12:43. The return home was made pretty much in the same order. Off Red Bank *Spering* set her jib topsail; but it was too much for her topmast to carry, and away it went to leeward. *Minerva* passed the stakeboat off Laurel street at 3:18 P. M.; *Lillie* at 3:25; *Spering*, 3:26¼; *Post*, 3:33¼; *Bianca*, 3:33½; *Stella*, 3:35¼; *Phantom*, 3:56¼; *White Wing*, 3:57; *Gallagher*, 3:59½; and *Coquette* at 4 P. M. The race throughout was a very spirited one, and the number of large yachts it brought together speaks well for the future of the sport in the Quaker City. *Minerva* was declared winner in the first class and *Spering* second; *Lillie* first in the second class and *Stella* second; and in the third class *Post* took the first prize and *Bianca* second. The Geo. W. Barrow Challenge Cup, to be awarded to the yacht of any class making best time over the course, went to *Minerva*, making this the second year that sloop has enjoyed the honor.

DELAWARE YACHT CLUB.—The spring regatta of the Delaware River Yacht Club, comprising open yachts between 22 and 26 feet in length, took place on Monday, May 20. The course sailed was from Starr's wharf, Camden, to Chester buoy and return. The following yachts participated in the regatta: *Bianca*, *Adelphi*, *Sappho*, *Minerva*, *Fashion* and *Camden*. The start was made at 10:25 A. M., with a stiff breeze blowing from the southeast and a heavy rain falling. Off Tinicum on the return the *Minerva*, which was fourth boat, sprung her mast and was taken in tow by a tug, this was a particularly unfortunate accident, as she has recently been sold to parties in Trenton, N. J., and had come from there a distance of 40 miles to participate in the regatta. On her return home on Sunday afternoon they met with another misfortune by capsizing in a squall when off Bridesburg, Pa. They rounded the home stake boat in the following order: *Adelphi*, 1:40½; *Bianca*, 1:48¼; *Sappho*, 1:48¾; *Fashion*, 1:49; Camden, 1:53½. The judges were Frank Kleinz and William Post; referee, Captain William Hall.

MISSISSIPPI VALLEY REGATTA.—Arrangements are almost complete for the regatta to be held in Peoria on June 19 and 20. The Peoria Boat Club have several crews in active training, and from present appearances the attendence from abroad will be very large. It is expected that more boats will start in the four-oared race then were ever in a field before, while at least thirty single sculls will compete for prizes. A grand stand, capable of accommodating four thousand people, is in course of erection on the levee. Great interest is taken in the forthcoming regatta. ROVER.

WILLIAMSBURG YACHT CLUB.—The regatta of this club, which was to have taken place June 4, has been indefinitely postponed.

NEW YORK YACHT CLUB.—Thursday, the 13th inst., the regular regatta of the club will take place over the usual course, and under the by-laws governing sailing matches. Yachts will be divided into one class for keel schooners, one for schooners over 7,000 cubic feet and a second for those

under that. Also two classes for sloops, the first for those over 2,000ft. and the second for those under 2,000ft. The Bennett Cup will also be sailed for, regardless of classification. The Regatta Committee consists of Messrs. Stebbins, Taylor and Krebs.

QUEENS COUNTY YACHT CLUB.—This organization held its regular annual regatta Tuesday, June 4.

CHARLESTOWN, S. C., REGATTA.—We have a full report of this event from our regular correspondent, which we are obliged to postpone until next week.

BROOKLYN YACHT CLUB REGATTA.—The Brooklyn Club has issued the programme for its Twenty-first Annual Regatta, fixed for June 18. Being a union match, yachts of any recognized club will be admitted. They will be sailed in five classes—one for schooners; the second for sloops 45ft. long and over on water line; the third for sloops under 45ft. long; the fourth for open boats 25ft on water line or over; the fifth a special class for catamarans. Club prizes will go to yachts belonging to the club, on time allowance; but the Flag Officer's prize will be open to all yachts, and goes to the second one in all classes, while union prizes will be given to the first yachts in of any club, provided that the Flag Officer's prize cannot be awarded to any yacht winning the regular club prize. Time allowance will be granted in all classes, also for catamarans. Two yachts to start, or no race. Course, for schooners and first class sloops, from stakeboat off Bay Ridge, turning stakeboat at Buoy 8½, on S. W. Spit, on port hand, thence to Sandy Hook Lightship, leaving same on starboard hand, and return. For second class sloops, from stakeboat off Bay Ridge, round S. W. Spit, to stakeboat in Gedney's Channel, leaving it on starboard hand, and return. Third class sloops and catamarans, from Bay Ridge to S. W. Spit and return.

CHANGE OF DATES.—Newburgh Bay Regatta has been fixed for July 10 instead of July 4, so as not to conflict with the New York Bay Regatta, and the Manhattan Club has postponed their match until fall. For the former event there will be five classes, 26 feet and over, 23 to 26 feet, 20 to 23 feet, and 20 feet and under, also one for catamarans. No restriction as to ballast or crew. Entrance free. Allowance of time, 2m. to the foot on waterlines. Entries to be sent to the secretary, James T. Sloan, before July 8.

SEAWANHAKA OCEAN RACE.—The ocean match under the auspices of the Seawanhaka Club will be sailed June 22, for both sloops and schooners. The match is open to yachts of any recognized club. There will be two classes for schooners; first, those whose area exceeds 1,950 square feet; second class, those whose area is 1,950 square feet or less. For sloop, first class, whose area exceeds 900 square feet; second class, whose area is 900 square feet, or less, and over 550 square feet. The area is obtained by multiplying beam by mean length on water-line and over all. The course will be from Buoy No. 5, off Sandy Hook, twenty miles to windward and return if wind permits, otherwise to leeward and return. The start will be a flying one. Fifteen minutes will be allowed for crossing the line, after which yachts time will be counted from the expiration of that period. Entries should be sent to M. Roosevelt Schuyler, 32 Pine street, before noon, June 21. Judge's steamer leaves barge office at 7 A. M. on the day of the race.

CENTRAL HUDSON YACHT CLUB.—At a meeting held May 22, the annual regatta was fixed for June 18. The following officers for the current year were elected: Commodore, Irving Grinnell, New Hamburg; Vice Commodore, Frank Brown, Newburgh; Rear Commodore, J. R. Roosevelt, Hyde Park; Secretary, F. Newbold, Hyde Park; Treasurer, J. Van Wyck, New Hamburg; Measurer, P. A. Van Wyck, New Hamburg; Regatta Committee and Committee on prizes the same as last year.

FROM ABROAD.—Thursday, May 30, there arrived in this port the British schooner yacht *Oneagh*, from Campbelltown, Scotland. She dropped her anchor off the Battery, where she now lies. The run across was made in twenty days, winds light and variable until Thursday morning, when she ran into the N. E. storm which has for several days been raging on the coast. The *Oneagh* was scudded along before it, and on Thursday evening picked up a pilot who, a few hours afterward, brought her "to" off Lower Quarantine. She flies the pennant of the Royal St. George Yacht Club of Kingstown, Ireland, and the blue ensign. Her owner, Mr. C. R. Cope, has not yet decided upon his future movements, but will not race his schooner in American waters. She is a fairly handsome and solid looking craft, one that can stand plenty of work at sea, but is not fast compared with American yachts. She was built by Hansen of Cowes in 1876, and is 103 feet long on deck, 20 feet 3 inches beam, draft aft 9 feet 6 inches, and measures 188 tons according to the Thames rule, though in reality she is much larger.

NEW YORK BAY REGATTA.—A list of the yachts already entered will soon be published by the committee in charge, but it is desired that all contemplating coming to the starting line send in their names as soon as possible. *Thistle* and *Nettle*, both from Wallin's shops, are among the smart ones of their class. It will be remembered that *Thistle*, upon more than one occasion, gave *Pluck* and *Luck* a pretty close race, and as she has had a longer stick stepped this spring, a hollow one, we believe, she will probably hurry up the best of them. *Nettle* will be sailed by David Snedicor of Gravesend.

FINGET-VICTORIA MATCH.—Commodore Grinnell's famous flyer *Fidget* and Mr. Roosevelt's *Victoria* will not sail their match as appointed, it having been postponed to June 6. *Fidget*, built by Pat McGilhan, who never seems to touch timber but what it sails like lightning, has been overhauled this spring, and has received a jib and mainsail rig with a 24 bowsprit. It is probable that she will sail the *Victoria* in her old cat rig, however; it was under this rig that she did so well in the Newport races last year, and though we should prefer to see her take *Victoria* under jib and mainsail, she may give the sloop a lively chase as it is, should there be a stiff breeze or a little sea on at the time.

A NEW CUTTER.—Under the directions of Mr. Pepgrass (formerly with Steers, of Greenpoint), Mr. Stillman, of the schooner *Wanderer*, is having a full-fledged cutter built. The design was furnished by Mr. A. C. Smith. On deck the cutter will measure 46ft., beam 9ft. and water 7ft. Spars, mast deck to hounds, 21ft. topmast, 28ft. 10in., and mast-head, 4ft. 6in.; bowsprit outboard, 18ft. 3in.; boom, 33ft. 9in.; gaff, 19ft. 3in.; hoist of mainsail, 21ft. 3in. From these dimensions it will be seen that the new boat is to be a genuine cutter throughout. She will be built in response to the growing desire for genuine sea-going craft of moderate dimensions noticeable among many yachtsmen. Though Mr. Stillman does not propose to race his new boat, she will certainly be able to give the go-by to her shallow sisters out at sea, which is her proper element. We do not think this cutter will be the last of the kind by any means. Besides her we have down East the *Saxon*, imported from abroad, and nearer home the *Volante* and *Petrel*, all of the cutter class.

TAKE NOTICE.—*Pacific Life*, ahoy! The Commodore is wanted on deck. Your "first luff" has laid violent hands on a column of steam yachting from the FOREST AND STREAM, and failed to enter on the log where he raised it from.

To Regatta Committees.—The various committees having races and matches under their management, and desiring to have them ably and correctly reported are requested to send their prospectus and tickets to this office at as early a date as convenient. The FOREST AND STREAM is the only journal the yachting columns of which are edited by a professionally competent person.

YACHTING DRIFT.

Commodore Baker will change his craft's name from *Emma T.* to *Evangeline*.....The pretty *Arrow*, Mr. Winan's, will hail from Newport.....In the match between the *A. Varian* and *Mattie M.*, of the Empire Club on the Harlem, May 30, the *Varian* capsized, leaving *Mattie* a walk-over under her jib. *Varian* was sailed by Alonzo Gibson, and *Mattie* by L. Wright.....Schooner *Intrepid* is cruising to the Eastward .....*Madeline*, *Viking* and *Vision* are lying in ordinary at Essex, Conn.....Alonzo Smith is building a sloop 56ft. long for New York parties.....*Tarolinta*, *Josephine* and *Egeria* will be sold at auction shortly; there is a good chance for some one to get a bargain. *Egeria* is a handsome and handy sloop, and a size of craft at present much sought after..... *Niantic*, Mr. Huntly, will not race this season; her spars will be cut down.....Saucelita property has split the San Francisco Yacht Club, and the offshoot will form a new organization, the chief object of which appears to be the ownership of a grand club house. Come, gentlemen, it's less club houses and more boats you want.....Wonder what *Ariel* was doing the last six months trying to get out to California. Well, she was a small boat and had to pick her weather.....*Petrel*, Commodore Hyslop, of the Manhattan Club, has gone into commission.....*Imperia* went down the Bay Sunday last; her mainsail wants stretching along the foot.....Several yachts at Gowanus have their jacks cock hilled; square them up.

THE OAR AND PADDLE.

THE WATKINS REGATTA.—The races at Watkins, Seneca Lake, were opened May 28 with the pair-oared match. It was not until twenty minutes to seven that the preparatory gun was fired, owing to the rough state of the water during the earlier part of the day. The four pairs were started in a breast race, Courtney preferring to start them this way in order to save time. The course was one and a half mile down the lake, from above Coal Point to the finish, off the grand stand, near the village. The Detroit pair won the inside; next Emerson and Jerome, of the Northwesterns; then Eustice and Downs, of the Atalantas; and outside Havens and Curtis, also of the Northwesterns. At 6h. 55m. 20s. they were sent off by Courtney. Atalantas immediately went to the fore, and then settled down to steady work, regardless, apparently, of the doings of the other crews. Havens slipped his seat off the slides, and from that moment the famous Curtis and his partner were virtually out of the race. Atalantas retained their lead until the finish, making the distance in 8m. 5s.; Detroits next in 8m. 15s.; Jerome's pair in 8m. 17s.; and Curtis and Havens in 8m. 30s. Eustice and Downs, therefore, go to Europe as the representative American pair. The junior singles were next got into line, and the four of them sent off as rapidly as possible. McLafferty, of Watkins, took the lead; McMullen, of Pittsburgh, went over to the westward on his own hook, pulling a quick arm stroke of forty-one. Larmon, of Union Springs, and Gaisel, of the Gramercy's, kept to work at a steady stroke. A minute out and Gaisel went to the front, McLafferty second, and some ten feet astern of him comes Larmon, with the Pittsburg man beginning to show signs of weakening. McLafferty spurted near the turning stake and caught up even with Gaisel, the buoy being turned in 7m. 15s. Gaisel soon met with a misfortune, the Pittsburg man running into him and staving in the bow of Gaisel's shell so badly that the latter had to be rescued from sinking by a boat from shore. With a steady 30-stroke, McLafferty kept on his way, crossing the line in 15m. 41s., an easy winner, Larmon next in 16m. 16s., for he had beaten McMullen, though considerately staying for a while by Gaisel in his misfortune. The Pittsburger was distanced. No races came off on the 29th, owing to the high wind and sea on the lake. On the morning of the 30th, however, the three crews to pull in the first heat of four-oared shells were got in line and sent away in spite of a drizzling rain and threatening sky. The Carman crew were on the outside, the Atalantas on the inside, with the Northwesterns between. The crow from Washington Heights took the lead, the Atalantas hugging the shore and pulling at the rate of thirty-four against the Carman's forty-two. The Northwesterns somehow did not seem to make their boat jump, as Courtney expressed it; the crew was wrong-end-to. Carmans led all the way down until near the finish, when Eustice called on his crew for a spurt, which sent them ahead and first over the line in the remarkably quick time of 7m. 22s., Carmans half a second later, and the Chicago crew bringing up the rear in 7m. 30s.

Friday, May 31, opened again stormy and unfavorable. The second heat of the four-oared shells was to be pulled, but the prospects being poor, the Zephy crew of Detroit took their departure by an early train, business affairs requiring their return home. They had hardly left when the wind went down and the lake became smooth enough to pull. Courtney lost no time in sending off the second heat of fours, the Shoe-wae-cae-mettes, Floral City and Watkins crew being the only ones in line. Floral Citys soon went to the front with a very rapid stroke, Watkins pulling nondescript, and the Shoes showing what practice and training can do for a raw set of men in bringing them down to style and finish. The Florals gave out before long, and the western crew went to the front, when one of the Watkins' caught an undisguised crab on account of the rough state of the water. The Shoes went across the line winners by three-quarters of a length in 7m. 36½s. Watkins two seconds later with the Floral City high pressure crew several lengths astern. Mr. Rathbone, who was the favorite among the senior singles, returned home leaving Mr. Lee the principal man for one of the events the next day. Saturday, June 1, the final race between the Atalantas and Shoe-wae-cae-mettes took place at an early hour. At 6h. 24m. A. M. they went away, the Shoes taking the lead, pulling 41; the Atalantas 36. At the half-mile race their positions remained unchanged, when the Western crew spurted up to 48, making a wonderful burst of speed, and passed the line in 7m. 17½s., with their opponents a length behind. The names of the successful four who go to Europe are: S. S. Dusear, J. Nadeau, W. H. Durrell and M. Nadeau. They propose going to Henley and Paris. At the close of this race the single scullers were immediately called and took up the following positions: Gaisel, of New York, first; then Robinson, of Union Springs; Lee, of Newark; Hall, of Perth Amboy, and McLafferty, of Watkins, fifth. The latter caught the water first with 34 strokes; Gaisel next with 40; Robinson, 34; Lee, 36, and Hall, of a former Yale crew, with 32. Lee, pulling a long, powerful stroke of 28, soon went to the front. Near the close Guisel passed McLafferty, taking second place, and two lengths behind Lee, who won the race in 8m. 36½s., and who will consequently be sent to Europe as our representative oarsman in the senior single sculls at Henley. The double scull race was called at half-past nine, only two boats coming to the line. After an uneventful contest the Watkins crew beat the Hudsons, of Pittsburg, in 14m. 34s. For the four-oared three-mile race, the last of the matches at Watkins, the Floral Citys, Shoe-wae-cae-mettes and North Westerns came to the line. At eight minutes to ten Courtney gave the word "Go," the Shoes at once taking the lead with a stroke of 40. At the turning stake the Northwesterns fell behind and the Floral Citys brought up the rear. The latter weakened considerably on their way home, and abandoned the contest. The Shoes had a safe thing of it, and with a wonderful stroke of 50 crossed the winning line in 18m. 44½s.

SILVER LAKE REGATTA.—The great event of the year, which has been agitating Boston rowing circles, took place on Silver Lake, near that city, May 30, as per programme. The chief interest centered in the single scull race of the professionals, which had brought out no less than thirteen entries. Eight, however, only came to the line, as follows: Jeremiah Driscoll, of Brookline; Frenchy A. Johnson, P. H. Driscoll, and M. J. Mahoney, of Boston; James H. Riley, of Saratoga; James A. Ten Eyck, of Peekskill; Daniel F. Sullivan and David Kennedy, of Lowell. As a matter of course Riley was the favorite, and the way the colored knight of the oar polished him off was a surprise to many. Johnson, known as Frenchy, at once took the lead, with Riley second. The three-mile course, including turn, was rowed by Johnson in 21m. 30½s.; Riley, second, in 21m. 44s; Sullivan, third, in 22m. 2½s., and Ten Eyck fourth. The latter was allowed third money on a claim of a foul. In the four-oared race for working boats there were also eight starters. The Lakemans were the favorites, but again the knowing ones were doomed to disappointment, for the race was won by the Chelseas in 19m. 55½s., the West Ends second, Riversides third and Lakemans fourth. For the pair-oared race four boats were started. It was won by the Longshore crew, of Portland, in 21m. 14s.; the Goodkins next in 21m. 23½s., and the Connolly brothers third in 21m. 56s. Seven crews came to the line in the amateur single scull race for a distance of two miles. Mr. F. E. Holmes won in 14m. 13½s.; Mr. Isaac Houghton, of the Union Club, second, and Mr. W. R. Goddard, of Harvard, third.

PATAPSCO RACING.—The four-oared shell race between the Analostans, of Washington, and the Undines, of Baltimore, as previously announced in the FOREST AND STREAM, took place on Tuesday afternoon, May 28. It will be remembered that last year the Baltimore crew went to the Potomac and were defeated by the men of the capital. The course was at Ferry Bar, one and a half mile and return. Washingtonians naturally were prepared to back the victorious men of last year, especially as the Baltimore crew were the same, with one exception, whom they had defeated. Among the many steamers in attendance was Winan's cigar boat, from which a large number of spectators viewed the race. The judges were Mr. Geo. S. Brown for the Undines, and Major Bailey for the Analostans, and W. T. Frick, of the Ariels, at the finish. Rules of the N. A. of A. O. were observed. The crew of the Washington Club was composed of J. R. White, stroke, 163 lbs.; J. O. Campbell, No. 3, 160 lbs.; P. W. Page, No. 2, 155 lbs.; C. L. Burdette, bow, 145 lbs. The Undines were composed of J. H. C. Watts, stroke, 160 lbs.; Dr. J. D. Inglebart, No. 3, 152 lbs.; Irvine Cross, No. 2, 156 lbs.; R. K. Cross, bow, 151 lbs. The word "Go" was given at 6:14 P. M., when the Analostans shot ahead, pulling 37 strokes, and soon gained a lead of two lengths. About half way to Long Bridge the Undines, who had been doing steady work, began to pick up, and drew even at the turn. The Washingtonians, however, owing to a little wild steering on the part of their opponents, again went to the front and looked like winners for a time. At the last half mile Baltimore spurted over 40 strokes and managed to cross the line several seconds ahead of the Analostans in 20m. 54½s.

CANOEING.—Rushton, of Canton, N. Y., has made some improvements in his *Rob Roy*. He has added a little more depth of keel and one and a half inch to the top streaks, also more crown to the deck. This gives his canoe ample room for sleeping in, the depth being 13in., and also renders his boat more seaworthy. He finishes his decks by "rough stuffing," which consists of the application of a dozen or more coats of paint, which are each rubbed down, ending with color and varnish. This method, well known to carriage painters, is very effectual in doing away with the annoying splitting of canoes' decks when much exposed to the sun, and keeps them always tight. The width of his *Rob Roy* model is 22in. inside, at a height of one inch above the floor, so that this model has ample bearings and stability. It is extensively used on our rivers and by hunting parties, and has from them universally received hearty indorsement. The canoe is supplied with a single lug-sail and with Lyman's Patent Bow-facing Rowing Gear when desired, so that it may be paddled or pulled according to preference. Considering the amount of work and finish put on his boats, Mr. Rushton certainly supplies them at very reasonable figures—so low, in fact, that it would be difficult for any one to compete with him in the same class of work.

ROWING RIPPLES.

Empire Navy Regatta, June 18.....Palisades mustered nine boats at their review last Saturday.....The four-oared shell *Keyser* beat the eight-oared barge *Resolute*, both of the Palisade Club, on that day.....The crew of the gig *Blonde* also beat the crew of the *Brunette*.....Peoria will have a great time with the Mississippi Valley Rowing Association June 19 and 20.....Five boat-houses in a row on Oakland Creek, San Francisco.....Neptune Club of that city has ceased to live.

—The perfect horse-shoe, so highly recommended in our advertising columns, and concerning which pamphlets are sent free, is evidently worthy the attention of all who think economy an object, and likewise have regard for the comfort of the noblest of all animals.

—Trains for Meriden, Hartford, Springfield, White Mountains, etc, connecting with the New Haven steamers, which leave pier 25 E. R. at 3 and 11 P. M., began running June 3. The steamers of this line have been thoroughly overhauled and refitted for summer travel.

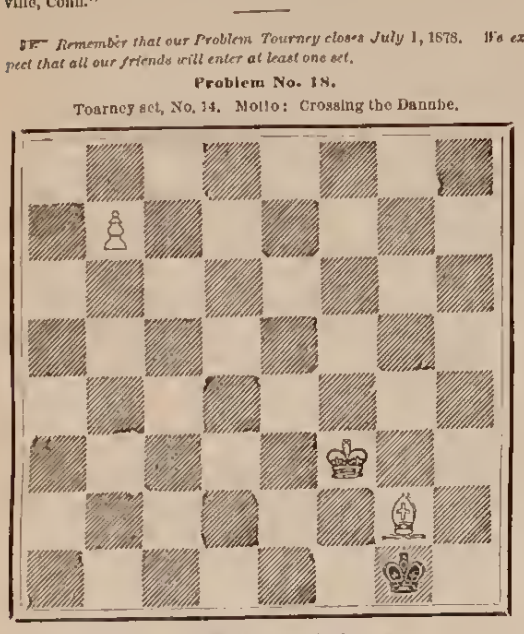
The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

☞ *Remember that our Problem Tourney closes July 1, 1878. We expect that all our friends will enter at least one set.*

Problem No. 18.

Tourney set, No. 14. Motto: Crossing the Danube.



White to play and give mate in three moves.

Game No. 63.—PETROFF DEFENCE.

White. Stein.	Black. Cordel.	White. Stein.	Black. Cordel.
1—P-K4	1—P-K4	18—K1 tks P	18—B-Q B4
2—Kt-K B3	2—Kt-K B3	19—B-K3	19—Kt-B2
3—Kt tks P	3—P-Q3	20—P-Q Kt4	20—B-Q3
4—Kt-K B3	4—Kt tks P	21—Kt-K B3	21—B tks Kt
5—P-Q4	5—P-Q4	22—Kt tks B	22—Q-Q3
6—B-Q4	6—B-K2	23—R-Q	23—K R-Q
7—Q-K2	7—Kt-Q3	24—P-K Kt4	24—Q-K3
8—Kt-Q B3	8—P-Q B3	25—P tks B P	25—Q tks B P
9—Kt-K5	9—B-K B4	26—P tks P	26—Kt tks P
10—P-K B4	10—B tks B	27—Q-Q B4	27—Kt-K B3
11—Q tks B	11—P-K B3	28—R-Q3	28—Q R-Q B
12—Kt-K B3	12—P-K B4	29—Q-K3	29—P-Q Kt3
13—Castles	13—Castles	30—K R-Q	30—Q-K3
14—Kt-K5	14—Kt-K5	31—B-B2	31—K-Q3
15—Kt-K2	15—Kt-Q R3	32—P-B5	32—Q tks Kt
16—P-Q K3	16—P-Q B4	33—B-Kt3	33—Q tks P
17—P-Q B4	17—P tks Q P	34—B tks R	Black lost

Game No. 64.—FRENCH DEFENCE.

Played by telegraph between the Jackson and Ann Arbor chess clubs:

White. Jackson.	Black. Ann Arbor.	White. Jackson.	Black. Ann Arbor.
1—P-K4	1—P-K3	30—B-K4	30—R-B1
2—P-Q4	2—P-Q4	31—K-B2	31—P-Q S3
3—P-K5 (a)	3—S-Q B3 (b)	32—Q-K3	32—R-S1
4—S-K B3	4—B S5!	33—B-Q2	33—P-Q R4
5—B-Q2	5—B tks B!	34—P tks P	34—P tks P
6—S tks B	6—S-R3	35—R-Q B2	35—Q-Q1
7—P-Q B4 (c)	7—P tks P	36—R-Q2	36—Q-K2
8—Q-R4	8—S-K B4	37—R-Q6	37—B-Q S4
9—B tks P	9—S tks P	38—R S6	38—Q-R2
10—Castles K R (d)	10—S tks S	39—R tks R!	39—Q tks R
11—S tks S	11—B-Q2	40—Q-Q B5	40—P-R5
12—Q-R3	12—Q K2	41—K-K3	41—S-K1
13—Q-K3	13—Castles K R	42—B B4	42—Q-R1
14—P-Q R3	14—P-Q Kt3	43—B K4	43—Q-B3
15—P-Q S4	15—S-K2	44—B-Q3	44—Q-Q B3 (f)
16—K R Q1	16—B-Q B3	45—Q tks Q	45—B tks Q
17—S-Q1	17—Q-R5	46—K-Q3	46—P-R6
18—B-B4	18—R R-Q1	47—K-B3	47—B-Q4
19—R-Q2	19—R-Q4	48—B-B2	48—K-B1
20—Q R-Q1	20—S B3	49—B-R4	49—K-K2
21—P-K B4	21—S tks S	50—B-S5	50—P-B3
22—R tks S	22—B-B3	51—B-Q3	51—P tks P
23—P-K S3	23—Q-K2	52—P tks P	52—K-B2
24—P K R4	24—R tks R	53—B-B2	53—P-S3
25—R tks R	25—P-K R4 (e)	54—B-Q3	54—K-S2
26—Q-Q2	26—B-K1	55—B-B2	55—K-R3
27—B-Q3	27—P-Q B4	56—B-Q3	56—P-S4 (g)
28—R-Q6	28—P tks P	Drawn game	
29—P tks P	29—Q-Q B2		

NOTES BY "ANN ARBOR."

(a) P tks P is preferable.

(b) P-Q R4 is the correct move here, and gives the defence the best game.

(c) This move is not to be commended.

(d) Castles Q R would have been better, and the game would then have had some life in it.

(e) Black should have moved P-K R3, with a winning position.

(f) A blunder.

(g) At this stage the game was agreed to be called a draw.

Game No. 65.—SICILIAN OPENING.

Played by telegraph between the Ann Arbor and Jackson, Mich., chess clubs:

White. Ann Arbor.	Black. Jackson.	White. Ann Arbor.	Black. Jackson.
1—P-K4	1—P-Q B4	16—Q tks Q	16—K tks Q
2—P-Q4	2—P tks P	17—Castles (c)	17—S K B3
3—S-K B3	3—P-K4	18—S-Q2 (f)	18—S-S5
4—K-B B4	4—P-K R3 (a)	19—S-B4	19—P-Q S1
5—P-B3	5—Q-B2	20—P-K R3	20—S tks B
6—Q-S3	6—P-Q3	21—S tks S	21—B Q B4
7—P tks P	7—S-Q B3	22—S-Q5	22—K-R3
8—B-K3 (b)	8—S-R4	23—Q R Q1	23—R-Q B3
9—B-S5	9—B Q3	24—P-Q R4	24—P tks P
10—B tks B!	10—Q tks B	25—P tks P	25—K R Q B1 (i)
11—Q-B3 (c)	11—P-Q S3	26—P Q R5	26—R-Q S1 (g)
12—P tks P	12—R B1 (d)	27—Q R-Q S1	27—R tks R
13—Q-Q3	13—S-B5	28—R tks R	28—B-Q3 (h)
14—P-Q S3	14—S tks K P	29—R S7	29—B-B4 (i)
15—S tks S	15—P tks S	Drawn game	

NOTES.

(a) An unusual move, but a good one, we think.

(b) Much preferable is 8—P-Q5, blocking up the Black K's side for a long time. His replying by 8—Kt-R4 would have been harmless: 8—P-Q5, 8—Kt-R4; 9—B-Kt5, 9—B-Q2; 10—Q-B3, with the better game.

(c) Why not 11—Q-Q5?

(d) Well played. Black now gets the advantage, and ought to have kept it.

(e) A mistake. The K will be wanted as a fighting piece, and should have gone at once to K2.

(f) Better have played P-K B3.

(g) Move, undoing the advantage of their doubled Rooks. They should have played B-Q5, threatening to advance P-K B4, and presently, to win the Q R P.

(h) Too late now; the B should have retreated to Q3.

(i) Rather than have thus drawn the game we would have run the chances of P-K B4.

(i) Up to this stage the game was played by telegraph; the conclusion is by postal card.

Game No. 66.

Mr. Thornton, of Buffalo, gives Tyro the odds of Q R and the two Springers:

White. Mr. Thornton.	Black. Tyro.	White. Mr. Thornton.	Black. Tyro.
1—P K4	1—P-K4	8—R tks Q P	8—B-Q2
2—B-B4	2—S-K B3	9—Q-R5 !	9—P-S3
3—Castles	3—S tks K P	10—Q-R6	10—P-B3
4—R-K1	4—P-K B4	11—R-Q4	11—Q S3
5—P-Q3	5—P-Q4	12—Q-S7	12—S-K B3
6—B-S3	6—S-S4	White mates in four moves	
7—R tks P	7—B-K2		

CURSORY JOTTINGS.

☞ *Our Problem Tourney closes July 1, 1878. One and all respond to this call.*

—A fine chess column has been added to the *Argus and Express*, of Ayr, Scotland. It is edited by Mr. Norton, we believe.

—MacKenzie and Mason will represent America in the Players' International Tourney at Paris. Loyd will also participate in the problem tourney.

—Again we call the attention of our readers to our photographic problem tourney. Friends, do not fail to send us a two-move problem and a photograph, together with a tourney set.

—The annual inter-university chess match, between Oxford and Cambridge Universities, took place at the rooms of the St. George Chess Club, London, Eng., and resulted in a victory for the Cambridge representatives by a score of 10 to 2.

—The Detroit *Free Press* Problem Tourney No. 3 is a decided success. Thirty-five sets, containing one hundred and five problems, have been entered. Mr. Bull's problem department is the best that appears in any newspaper that reaches our table.

—The *Chess Players' Chronicle* is now published by W. W. Morgan, 67 Barbican, E. C., London, Eng. This chess magazine is ably edited by Rev. C. E. Ranken, with the co-operation of G. B. Fraser, Esq., Rev. A. B. Skipworth, Rev. Professor Wayte and J. Crum, Esq. The terms of subscription are six shillings and postage per annum.

—Connecticut friends request that we call upon resident players to form a State Chess Association and solicit subscriptions for a State Challenge Championship Cup. This we willingly do, and in a way that insures the success of such an undertaking. Bro. Belden, of the *Times*, we request you to take this matter in hand. "Do not fail in this."

—Belden and success are synonyms in Connecticut chess.

—The chess department in the Hartford *Globe* has made its reappearance under the management of Mr. A. N. Cunningham, one of the strongest players in Connecticut. Mr. Cunningham's predecessor and our successor, Mr. Max Peller, discontinued this column on account of ill health. We congratulate the proprietors that they have obtained so able and competent a chess editor.

—The *American Chess Journal* (March and April) has made its appearance under the metropolitan management. The editors are Dr. C. C. Moore, Samuel Loyd, G. H. MacKenzie and James Mason. This publication has been improved in every respect, and should be in the hands of every lover of chess. It is not necessary that we give space to an extended notice of this magazine, as it "speaks for itself." We, however, advise our chess readers to subscribe for it without further delay. The price is only $3 per annum. Address Dr. C. C. Moore, No. 63 Courtland st., New York.

—Thompson, of the Derbyshire *Advertiser and Journal*, of Derby, Eng., occasionally gives the Chess Editor of the Cleveland *Voice* a hard hit, and above the belt, too. The latter, of course, responds in his usual manner. We admire Thompson's spirit of independence and fearless expression of his opinions. Mr. McKim will, sooner or later find out that men of independence and opinions are respected by the chess public, and are entitled to decent treatment by contemporaries.

—The International Tourney is no longer one-sided. Honors are now easy, the score standing 4 to 4. Belden has been coaching "our side:"

"Friend K., of the FOREST AND STREAM, spurs us up to do a little coaching in the International Tourney. We take the hint, friend, and we will begin with you. Now, Mr. Kunkel, America expects *you* to win a majority of the games from your antagonist. Nothing less than three out of four will satisfy us. Do not fail in this."

Friend Belden, we *shall* fail in this, as our opponent is too slow in transmitting moves. Thus far, we have received and answered *five* letters. If the games are continued at this rate you will, at the expiration of the two years, be called upon, as the American umpire, to end them; consequently, there is no necessity that you begin coaching in this quarter. Belden very sensibly paragraphed us as follows last week:

"In FOREST AND STREAM Mr. Kunkel has resumed, or at least intimates that he will resume very soon, his "Cursory Jottings," or gossipy notes, which promised to make his column so interesting when it first started. Dropping this feature, friend K., was a mistake."

This opinion of the leading paragrapher of the world is but too true, notwithstanding several chess editors are of a contrary opinion. However, we are not altogether in the fault, as this week's "jottings" have long been crowded out by the demand for space by other departments of this paper. In fact this ¶ is interpolated in order to impart a "fresh ened flavor" to the balance of the "Cursory." That we so often, especially this week, quote from the Hartford *Times*, may appear inexplicable to many of our readers, and we therefore state, by way of explanation and justification, that "for good things we are always truly grateful," and are not slow to avail ourselves of them.

—One of the most interesting features of the *Times* chess column is the correspondence department, which the chess editor has long neglected until quite recently. We extract from a recent issue the following, which, we do not doubt, will interest and amuse our readers: Here is a "chat" with John Gardner, of Boston Mass.:

"You will observe that Mr. Luster acknowledges the corn in a manly way, but look out, bye and bye 'de 'tater may have de floah.'"

With Luster, of Elizabeth, N. J., the "chat" runs:

"Of course. That's all right. A man must step up occasionally. Remember dat

'De big sunflower may rise above
De modest 'taler vine,
An' brag about its Sunday clothes,
An' put on airs so fine;
But when de winter howls around,
An' de snow lies at de doalt,
De big sunflower—oh! whar am he?
De 'tater hez de floah!'

—The *Westminster Papers* is, if we may be allowed the expression, not only the chess classical magazine of the day, but its editor possesses a vein of sarcasm, combined with a felicitous manner of communicating it to a reader. The following is a part of an answer to a speech of Mr. Minchin, at the dinner given the Oxford and Cambridge teams by the St. George Chess Club, upon the conclusion of the recent annual chess match between these "'varsities:"

"* * * And thereat, a singular exhibition of bad taste took place, in the shape of a wild and virulent attack, made by Mr. J. J. Minchin, upon this and other journals, comprising, in use his own words, 'the greater portion of the metropolitan chess press.' It may be objected that Mr. Minchin did not mention names, and, in fact, that objection has been put forward by persons of a Corioianus turn of mind, save that to do the turn-coat Roman justice, he did not abjectly worship while assisting his country's foe. However, such evasions are nothing to us. Mr. Minchin's meaning was well understood, and were he of any authority in the chess world, we might condescend to answer him. However, he has never shone either as a player or a writer, or in any other way. He is simply the Secretary of the St. George Chess Club, and we take it upon ourselves to disavow that old and respectable association from the action of their official in this matter, and we do not consider them responsible in any way. In putting Mr. Minchin aside, we may just demur from any assertion of his. He claimed to make his ill-mannered attack in the character of an 'English gentleman.' It would be as easy to eat a mutton chop in the character of a vegetarian."

—*We expect at least one tourney set from each reader. Oblige.*

—W. A. Shenkman, the famous American problemist, has composed 1,200 chess problems. As a two-move problem composer Mr. Shenkman is probably the finest and most successful in the world, and a book containing his beautiful and charming two-move ideas, will meet with a favorable reception.

—We hope that all of our problem friends will not forget to contribute a set to our problem tourney. We are especially anxious that our foreign friends compete, and as an inducement, guarantee the fairness and impartiality of the umpire. One and all should bear in mind that the tourney closes the world over July 1, 1878. Do not delay your sets

—The *Schach Zeitung* has failed to reach our new address thus far, but we nevertheless live in hope. Will Dr. Schwede give the matter his attention, as well as call Dr. Gold's attention to the fact that he is equally negligent? *Es ish nicht sehr schwer!*

—Mr. Reichelm, of the *Chess Record*, is one of the "big gun" problemists. His last elaboration is a 121-move problem, which, he asserts is sound, and that Waterbury, the great solver, is wrong in his solution in a less number of moves.

—The Cleveland *Voice* gives Loyd's Centennial two-mover, for the third or fourth time, the benefit of a diagram. This time, Mr. Carpenter's analysis are published, which, we believe, is the first time that the *Voice* has presented the merits of this problem in that light. The *Voice* should now give space to a live issue, and let the past alone for awhile, as "variety is the spice of life."

Game Bag and Gun.

JUNE IS A CLOSE MONTH FOR GAME

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game.—Wilson Snipe, $3 per dozen; plover, $3 per dozen; bay birds, large, $2.50 per dozen; small do, 50 cents; wild pigeons, flights, $1; stall fed do, $1.50; Philadelphia squabs, $2.50; wild do, $1.

Poultry.—Philadelphia and Bucks County dry picked chickens, 25 cents per pound; do fowls, 16 cents; do turkeys, 16 cents; State and Western chickens, 16 cents; do turkeys, 14 cents; do fowls, 13 cents; spring chickens 20 to 35 cents.

ADIRONDACKS.—Deer prospects are good at Rainbow, Big Clear and Little Clear Ponds. C. C. M.

HOW NEW YORK SPORTSMEN SHOOT.—That was good work of Mr. P. Heinz, of the Buffalo Audubon Club, at the State shoot for the Pierce Diamond Badge—a clean score of fifteen straight birds; five clean on ties at twenty-six yards, and the same number at thirty-one yards! Contest No. 4, with ten ties on fourteen birds, was good work also. We might afford to chance that team in a match with our Western friends.

OHIO—*Ashtabula, May* 31.—Quail, partridge and woodcock more abundant than for several years past. Good outlook for sport this fall. J. G.

MINNESOTA—*Leroy, May* 30.—We have every indication of having plenty of pinnated grouse this season, as they are very plenty this spring. No ducks or geese stop here. V. G. N,

KANSAS—*Ellsworth, May* 27.—Quite a large number of flocks (covies, I should say,) of young chickens have been seen of late, and we anticipate some very fine shooting in August. We have some very good dogs here, all setters, but I have made up my mind to have a "Sensation" pup as soon as I can afford to get one, as the pointer is the dog for this section. G. E. A.

CARRIER PIGEONS.—Mr. L. Waefelaer, of Hoboken, N. J., complains that three of his Antwerp carrier pigeons, which were set free at Manch Chunk, Pa., May, 29, returned home badly wounded by shot. We do not suppose that the man or boy who committed the outrage ever reads this journal; it would therefore be useless to call attention to the fact that carrier pigeons are not generally trained for the purpose of affording sport to thoughtless shooters.

TO WILKESBARRE.—The following table of routes and times, for which we are indebted to the courtesy of Mr. L. P. Farmer, Gen. Pass. Agt. Pa. R. R., will be valuable to delegates to the National Sportsmen's Convention at Wilkesbarre:

Leave Pittsburg, Penn. R. R.	8 25 P. M.	3 15 A. M.	8 45 A. M.
Arrive at Harrisburg, Penn. R.R.	3 50 A. M.	11 45 "	8 55 P. M.
Leave Harrisburg, N. C. R.	4 25 "	....	....
Arrive at Sunbury "	6 25 "	....	....
Leave Sunbury, D. H. & W.	6 50 "	....	....
Arrive at Wilkesbarre, D. H. & W.	1 55 P. M.	....	....
Leave Harrisburg, N. C. R.	5 25 A. M.	3 35 P. M.	10 50 A. M.
Arrive at Northumberland, N.C.R.	6 40 "	6 00 "	12 50 P. M.
Leave Northumberland, D.L. & W.	6 45 "	6 00 "	12 55 "
Arrive at Kingston, D. L. & W., opposite Wilkesbarre	9 04 "	8 40 "	3 16 "

A DANGEROUS SHELL.—We have no hesitation in pronouncing a peculiar kind of shell—with a screw top—as a dangerous one. A correspondent has sent us a shell which, exploding in a person's hand, inflicted a bad wound. The defect lies in the tightening of the head of the shell by means of a cover which fits into the screw of the shell case itself. A little over tension in screwing on this top explodes the cap.

FOREST AND STREAM AND ROD AND GUN MEDAL.—The medal presented by S. H. Turrill, our Western business manager, to the Illinois State Sportsman's Convention, is of a very

chaste and elegant character. The medallion is of gold, with a dog's head retrieving a pigeon in silver, the head standing out in bold relief from the gold. Two crossed guns, with a ribbon, are below the brooch; the guns are silver, the brooch gold.

It is to be won by the individual making the best score in match No. 6, which is a team shoot of two members from any organized club in the United States. The elegant design and execution of this medal are due to Mr. N. M. Shepard.

SNIPE MAKING TO COVER.—*Folsom, Cal., May* 22.—I see Capt. Bogardus in his book says that snipe never cover in trees. Three times in my sporting experience have I seen them so cover. Some two miles from this place is a large reservoir which has become filled with sediment from the mining operations above, which has become covered with a thick growth of tule, wire grass and other aquatic plants, and furnishes good cover and feed for snipe. On their first appearance in the fall, a friend and myself keep an eye on the place, and at the proper time are duly rewarded with a couple of dozen birds each. Three times we have pressed them so hard as to drive them into the scrub oak on the borders of the pond, from whence when flushed they would return to their first quarters, seeming loth to leave altogether, as, although there are a number of similar places within a few miles, this is the only one that snipe ever frequent. Season is very late; have seen no young quail yet; saw them last year about the 1st of May. W. F. J.

LIEGE.—A correspondent kindly sets us to rights as to Luttech. We knew of Liege in Brussels, but not of its German appellation. Our correspondent writes:

"Luttich, called Liege in English, is the leading gun manufacturing city of Europe. A great many English guns have barrels manufactured in Liege. Many of the English gunmakers obtain their barrels from Liege, but, strange to say, although it is the leading manufacturing place of Europe, people in this country have not any confidence in the guns coming from Liege. A great many cheap guns are sold here for English guns, when they are actually manufactured in Liege. Liege is particularly noted for its manufacture of very fine Damascus, called flowered Damascus, a specimen of which I have seen lately in the store of Mr. Squires, of this city. Twenty-eight dollars will buy, in Liege, a very good breech-loader. Twenty years ago I purchased the best muzzle-loading gun made in that city, flowered Damascus barrels, for forty-eight dollars. Lubeck, a German city, is not noted for the manufacture of guns; in fact, I doubt if any are made there. English guns are so perfectly imitated in Liege that it requires an expert to distinguish one from the other. Most barrels of American shot-guns are manufactured in Liege and imported to this country in an unfinished state."

D. M.

THE DITTMAR POWDER.

AN INTERESTING SERIES OF EXPERIMENTS.

Binghamton is a charming city in Southern New York, just near the Pennsylvania borders, and to the Parlor City, as Binghamton is called (because, possibly, everything looked so neat and tidy) the Erie Rail Road takes the traveler in some seven hours. It is at Binghamton that, on Friday last, a representative of the FOREST AND STREAM AND ROD AND GUN went to see the new factory established by the Dittmar Powder Company, in order to witness a series of experiments with the Dittmar powder.

In the briefest way, suppose we cite some of the characteristics of what is good gunpowder. Of course as the result of the decomposition of any solid or fluid substance into gaseous form, an enormous power is generated. Such explosive force must, however, be kept under control. There are innumerable substances having explosive properties, which are useless for fire-arms. The fulminates are all of this character. The reasons why they are useless for fire arms, is because their ignition and consequent decomposition are too rapid. If placed in a gun-barrel, the shock being instantaneous, the effects are felt, not only on the projectile, but on the breech and sides of the arm. With a sufficient charge of a fulminate, not only would the ball be discharged, but at the same time the breech of the piece would be driven out. The first necessity then, of an explosive substance, should be a graduated or moderate force. The effect to overcome the *vis-inertia* of the ball or load of shot should be rather a push than a sudden blow. Then again, the powder should be of such a material, or so manufactured, that it should be unalterable, and not affected by time, by moisture, or by any chemical reactions possible within the substance itself. Another most important point is that it should be safe from explosion, caused by friction or concussion. Again, the explosive material should be so compounded that it must not act on metal, whether in its solid or gaseous condition, nor should it have any residuum after explosion.

With this slight preface, which may be considerably expanded, we will endeavor to describe the works of the Dittmar Powder Company, the process of manufacture and the experiments. A powder factory, from the character of the dangerous material, must never be in an extensive building—isolation of the material as it goes through various stage, is a *sine qua non*. If an accident takes place, one single factory may be destroyed, but the whole is not. The Dittmar Powder Company have three buildings quite a distance apart. In the first building the raw material, poplar pulp, is cleansed and disintegrated; in a second, the acid treatment takes place; and in a third, the pulp and the finished powder is sieved and dried. A fourth building is in erection for the manufacture of blasting powder.

Now as to the details of the process. The basis of the composition is cellulose. Cellulose is nothing more than pure wood fibre. Formerly Mr. Dittmar used paper as the base, but finds it more advantageous to purchase from paper manufacturers poplar pulp. This pulp is taken and washed thoroughly, until it is nearly chemically pure. It is pressed, then dried, then ground into a uniformly flocculous form, all the lengths of fibre being destroyed. It is now mixed with sugar and starch, then again dried. Now it goes through what is called "the parchment process." When paper, under certain circumstances, is treated with sulphuric acid it takes a peculiar dense form resembling parchment. The material is now again washed and dried, and sieved. It is now subjected to a mixture of sulphuric and nitric acids, again washed and dried, to be treated further with an alkaline base, saltpetre being employed. Now, after again being cleansed and dried, the last process is to treat the grains of Dittmar powder with a coating of soluble glass. This last substance not only protects the powder from absorbing moisture, making it harder and denser, but diminishes very much any rapid explosiveness. A final very gradual drying completes this process. Of course there are a good many bits of practical work in the manufacture of the powder, in order to make it perfect, which depend on the chemical skill of the superintendent, Mr. Dittmar. Now as to the experiments made with a breech-loader, we append the following:

Greener B. L., No. 19,058; 12-gauge; weight, 7lbs.; charge, 3 drachms powder, Dixon's measure; 1½ oz. shot; No. 8 Tatham; Eley's brown shell and P. E. wads; 40 measured yards:

1st round—Left bbl., Dittmar powder; pattern, 274; penetration 12 sheets.

2d round—Right bbl; pattern, 230; penetration, 10 sheets.

1st round—Left bbl., Orange Lightning powder No. 5; pattern, 183; penetration, 10 sheets.

2d round—Right bbl.; pattern, 164; penetration, 9 sheets.

W. R. Schaeffer B. L.; 12-gauge; weight, 8½ lbs.; charge, 3 drachms; 1⅛ oz. shot; No. 8 Tatham; Dixon measure:

1st round—Left bbl., Dittmar powder; pattern, 241; penetration, 11 sheets.

2d round—Right bbl.; pattern, 188; penetration, 11 sheets.

1st round—Left bbl., Orange Lightning No. 5 powder; pattern, 214; penetration, 11 sheets.

2d round—Right bbl.; pattern, 157; penetration, 10 sheets. An O'Neil patent tester was used.

With a Scott 12-bore, using the Dittmar and No. 8 shot. Captain Bogardus made a target of 350 at 30 yards. It will be seen at once what a very good pattern is made with the Dittmar powder, and how the penetration was all that could be desired. As to the remarkable safety of the Dittmar powder, the following quite conclusive experiments were made: A pound of Dittmar sporting powder was put in a tin can, and to a fuse was placed a strong exploder, such as are used for nitro-glycerine. The effect was to simply blow out the grains of the Dittmar unexploded at all, the ground for ten feet around being covered with the grains of unfired powder. With a half pound of black powder, tried in the same way, the can was burst into fragments. With the Dittmar blasting powder, under exactly the same circumstances, this powder being made purposely to produce the greatest rending effects, the explosion was of a deafening character, and two stones, in which the charge was placed, were ground into fine atoms. When the same blasting powder was fired with a fuse, only without an exploder, the effect of the ignition was simply like that made by a squib. These experiments were quite convincing to a number of railroad officials present, that the blasting powder could be carried without danger, while under the precise circumstances necessary for its ignition the effects produced were of the most positive character. In fact, this Dittmar powder can be handled with less danger than ordinary explosive substances.

It is, of course, with guns that we have most to do, and it is to the sportsman that the Dittmar powder will be of the greatest interest. Captain Bogardus, commencing to experiment with this powder in his exhibitions, its excellent effects as to strength commending it to his notice, now uses the Dittmar exclusively for all purposes. The smoke is very much diminished, the recoil is lessened, and no fouling takes place. We have been at the trouble of asking Mr. Dittmar all the particulars as to the load requisite and the method of filling the cartridge. For a 10-bore he recommends from 3½ to 4 drachms, struck measure in a Dixon's charger; for a 12-bore, 3 to 3½ drachms. It makes no difference whether the charge of powder be rammed hard or not. When Mr. Dittmar loaded his shells before us, he exerted about the same pressure as is used for black powder. In an 8-bore Mr. Dittmar has used as a test 9 drachms of his powder, and confesses that "although it didn't hurt his gun, it almost knocked his head off." The Company believe that with the new improvement the powder is now perfect. Such imperfections as to manufactures, which may have existed before, have been removed. With ample capital and special machinery there is no reason why the Dittmar powder cannot be made with uniformity. There is no chemical nor mechanical process which cannot be repeated. In England the Schultze wood powder is coming rapidly into use. As the Dittmar is certainly a better explosive material, we see no reason why, if it be carefully and systematically produced, it should not find favor with sportsmen. The producing capacity of the company is at present some 600 pounds of sporting powder per diem, with two tons of blasting powder. Mr. H. C. Squires, of No. 1 Courtlandt street, New York, is the general agent for the Dittmar Powder Company, and it does not seem likely that this well-known furnisher of arms and sportsman's material would enter the market unless pretty well assured of both the excellence and safety of the powder he is now about selling.

DITTMAR AND BLACK POWDER.

As a good many questions are asked of us as to the mixture of Dittmar and black powder, we think our Florida correspondent's letter will give some needed information on this subject. He says:

"For a long time I have taken a lively interest in the Dittmar powder, published in the FOREST AND STREAM, from the time it was brought out. Now comes the trial of the mixed black and Dittmar. The Dittmar alone could not be depended upon; then, again, it would do some remarkable good shooting. In all of the experiments and trial tests it was put through to find out where the difficulty was it failed to bring out that want of uniformity and to utilize the strength it certainly possesses to action. Just at this moment comes your correspondent "Yell's" trials of the mixed powders and their proportions. I have just got through finding out what my gun required. We came out nearly if not the same, only he has a 9 lb. gun and takes a 2¾ shell, and would stand a large charge in the same proportion for whatever purpose he wished to put it to. I have also given the C. Dittmar the same trials. It is nearly as good as the B. With the rifle, Dittmar F. and F. F., in the same gun, mixed in various proportions with the black, I failed to get as good satisfaction as I did with the B. powder. In brief, I give you below the result. A Tolly No. 10 breech-loader, laminated steel barrel, modified choke, first class gun: 8½ lb., 28 in. barrel; Eley Bros., brown, 2¾ shell; 1 drachm No. 6 Curtis & Harvey powder; 3 drachms B Dittmar powder; 2 pink edge wads; 1¼ oz. No. 7 chilled shot; 1 Baldwin wad; at 40 and 50 yards measurement. Target, penetration, pattern. Got all that could be desired—good uniformity in action, just enough recoil, less smoke, report and clean barrels. It is now out of season for game. Owls and hawks after chickens give a good test and distance, too, to bite the sand. At 60 yards, same charge, with No. 2 and 4 shot, and at 70 yards, with buckshot, the same good result. I got still better with the St. Louis shell, with one pink edge, one cardboard over powder, one Baldwin over shot, which is all the wads this 2¾ shell will take in and allow for turning in, less recoil and still cleaner barrels. The St. Louis shell is a shade smaller or a trifle looser fit than the Eley shell; they get sadly demoralized after one firing, not fit to load over again. These are some of the first shells the company made that I had on hand. Since that, I understand, they have made improvements. In loading have a one drachm measure for the black and a three drachm measure for the Dittmar; mix in the shell; that gives the exact proportions of each powder; shake and stir with a stick. The black powder is so much heavier it is apt to separate and settle down too much in the shaking only. Then the same objection in mixing the powder together before loading and using only one measure, you cannot get fair equal proportions. Then the pink edge and a fair ram, then the shot shaken to settle down even, a Baldwin with pressure enough to put the wad down snug to its place and turn in. I have given up using the felt wads or any other greased wad; the fault is they do not hold the charge back long enough for the powder to get thoroughly ignited as near as possible to have its full effect upon the shot before it leaves the cartridge, excepting the pink edge, which must have some wax in its composition. I am not certain, but the dry wads are better; when the barrels are cleaned and oiled, should be sufficient for the wads going out. I have a 20-bore that I use the dry Dixon over powder and black edge over shot; it never fails to do its duty. N. P. W.

Palatka, Florida.

THE AMERICAN ARMS CO.—THE "FOX" GUN MODEL OF 1877.—We have been for a long time cognizant of that excellent arm. Shown to us in 1871, it then contained a leading idea in the adjustment of the barrel, which had decided merit. Since that time, by dint of hard work and thought, the Fox gun has been so much improved that it may be said to be a representative American breech loader. We often return in one way or another to our first conceptions, but the differences which exist between the original Le Faucheux gun and the Fox gun are immense, as much as between a Hall patent breech-loading arm of 1855 and the modern breech-loading rifles of 1878. The movement of the barrel in the Fox gun is the most important and novel point. The up and down movement, the breaking of the line of the gun, does not take place in the guns made by the American Arms Co. There is no hinge movement, consequently that single pin, which must run through the hinge, finds no longer a place. There are no bolts which set into the wood work or iron part of the stocking. A forward spring is pushed, a side motion is given to the barrels, and these barrels move off laterally in the same plane. As to the securing of the barrels to stock, there are two good broad surfaces which are in contact. On the bevelled breech face, by means of locks, the barrels, after being slid smoothly into place, are made thoroughly tight and secure. Now there are great advantages, other than those of mechanism, in this side movement. In taking out the cartridges in the up and down breech-loading, either automatically or otherwise, there is always a certain proportion of powder crust, or dirt, which drops perpendicularly into the portion of the mechanism below it. In the Fox gun, the barrels being on one side when cartridges are withdrawn, no dirt or grit can find its way into the parts. The method of attaching and detaching the barrels is most readily accomplished. As to the fastening of barrels, there are no less than four grips or locks between the barrel and breech piece, all having broad bearings. These guns seem to combine simplicity with durability, and we see no reason why in use they should ever be loose or shaky. With an extractor having a positive movement there can be no clogging of cartridges. Now if special mechanism was all one wanted, the Fox gun would be alone a marvel of good sense applied to gun-making, but in addition to this peculiar claim, it is the general execution of the locks, the good material used in the barrels, and their finish which make the work of the American Arms Co. so remarkable. This company manufacture many grades of arms, from very good $55 guns up to the very finest, worth $300. Two sizes are made of 10 and 12 gauge, the ten weighing from 8½ to 10 lbs, the twelve from 7½ to 9½ lbs. We can recommend these arms as among the best of American-made arms.

PIGEON MATCHES.

CONNECTICUT—*Stamford, May* 30.—Bogardus trap, 18 yards rise:

Weed, Jr.	0 0 1 1 0 1 1 1 1 1—7	Grain	0 1 0 1 1 1 1 1 1 1—8
Oothout, Jr.	1 1 1 0 0 1 0 1 1 1—7	Scofield	1 1 0 1 1 0 1 1 1 1—8
Sibley	0 1 1 1 0 0 1 1 0 1—6		

Ties on eight.

Grain	1 1 1—3	Scofield	1 1 0—2

Second match:

Weed	1 1 1 1 0 0 0 1 0 1—6	Grain	1 1 1 0 1 1 1 1 1 1—9
Pitt	1 1 0 1 1 1 1 1 1 1—9	Scofield	1 1 1 1 1 1 0 1 0 1—8
Oothout	1 1 1 1 1 1 0 1 1 1—9		

Ties on nine.

Pitt	1 0 1 1—3	Grain	1 0 1 0—2
Oothout	0 w		

NEW YORK STATE CONVENTION.—The following is the score of the double bird shoot at ten double rises, open to members of clubs belonging to State Association:

C Russell	11	00	10	01	10	11	01	11	10	10—12
E Wakeman	11	10	10	10	10	10	11	11	11	10—10
R P Flower	10	10	10	11	10	10	10	10	01	11—12
H Walzer	11	10	11	01	01	11	11	01	10	01—14
W Crouch	10	10	01	11	11	10	10	10	00	10—11
A F Compson	00	11	11	10	11	11	11	11	10	00—14
A Eversned	11	11	01	01	11	11	11	10	10	11—16
H Silsby	10	11	11	10	10	11	11	11	10	11—16
John Cook, Jr.	10	11	00	10	10	11	10	11	11	11—14
F J Johnson	01	10	10	11	11	11	01	10	10	10—13
W S Babcock	10	10	11	01	10	00	10	10	11	00—10
J F Lawrence	10	11	11	11	10	11	10	01	10	10—14
W K White	11	10	10	11	11	11	10	01	10	00—12
Jacob Fischer	11	11	11	01	11	11	11	11	10	10—17
Chas Suckow	11	10	11	11	11	10	00	10	11	10—14
Peter Heinz	10	10	01	11	10	10	00	11	10	10—11
C J Heinold	10	10	00	10	00	01	00	01	00	00— 5
R V Pierce	10	10	11	10	10	11	10	10	11	10—13
W W Sloan	10	11	00	00	11	10	11	10	10	01—11
H C French	00	10	10	10	11	10	11	11	01	10—12
H E Griffith	01	11	00	10	10	10	00	00	11	10— 9
M L Forsyth	01	10	11	11	10	11	01	11	10	10—14
F M Thompson	11	11	10	11	01	11	11	10	10	10—15
F P Dennison	00	11	10	11	11	11	01	01	11	00—13
J W Witmer	11	10	11	11	01	11	11	10	11	11—17
S A Tucker	11	10	11	10	11	11	10	01	10	10—14
C Gerber	00	11	00	11	10	01	10	10	01	11—11
G Smith	11	10	00	11	10	11	11	11	11	11—16
J H Andrews	10	11	01	10	10	11	10	10	11	11—14
E Hudson	10	10	11	10	11	11	10	00	11	10—12
J Manning	11	11	11	11	10	10	10	11	10	11—16
H Soule	11	11	10	11	11	10	11	10	11	10—16
W Christian	01	11	11	10	11	10	11	10	11	11—16
J D Burroughs	10	10	11	11	00	11	11	11	10	11—15
F Truman	01	10	10	01	11	10	10	11	01	11—13
A H Sheridan	11	11	11	11	11	01	10	01	11	11—17

P Tompkins..........10 11 11 10 10 11 11 11 11 11—17
H G Hotchkiss..........10 10 11 11 11 11 10 10 11 11—16
C J Elliott..........00 10 10 10 11 00 11 10 10 10—10
B Schultz..........00 10 10 10 11 00 11 10 10 10—12
Geo J Marsh..........11 11 11 10 01 10 11 11 11 11—17
F Franklin, Jr..........10 10 11 01 11 10 10 00 11 11—13
John Nichols..........11 11 11 11 10 00 11 10 10 11—15
J E Pierce..........11 10 10 11 11 01 11 11 10 10—15
Geo Meister..........11 11 11 11 10 1. 11 10 11 10—17
J G Stacy..........10 11 11 11 11 10 11 10 11 10—16
James Holloway..........11 11 11 11 10 11 11 10 00 11—16
C E Fink..........11 11 11 10 10 11 10 11 11 11—17
Greene Smith..........11 00 10 11 01 00 11 11 11 11—14
Tom Collins..........00 01 10 11 10 10 01 10 10 00— 9
W C Jacns..........11 11 01 10 11 11 10 00 11 11—15
J Beler, Jr..........00 10 10 00 10 00 w
F Frazer..........11 11 00 10 10 01 10 00 00 00— 9
H F Purdy..........10 11 11 11 10 10 11 01 11 00—14
R Wa d..........11 11 11 11 10 11 11 11 10 11—18
G H Van Vleck..........11 11 11 01 11 11 10 11 01 11—17
E C Rosencrantz..........01 11 10 10 11 11 11 11 11 11—17
J Niven..........11 10 11 10 00 10 w
Robt Newell..........11 10 11 11 11 11 11 10 11 11—18
H R Jones..........10 00 10 11 11 10 10 11 11 10—13
H B Hooker..........11 11 10 11 10 11 11 11 00 01—15
W H Crittenden..........11 01 10 11 11 10 10 11 11 11—16
Geo C Stillson..........10 10 11 10 11 11 11 00 10 11—14
M M Hollister..........11 11 11 10 10 10 11 11 11 11—17

Ties on eighteen.

Newell.......... 11 10 11 11 11—9 Ward..........10 10 11 11 11—8

Mr. Robert Nowell, of the Forester Club, of Buffalo, first prize.

Ties on seventeen.

Fisher..........11 11 11 11 10—9 Meister..........11 11 11 11 10—9
Witmer..........11 10 01 00 10—5 Link..........10 10 00 w
Sheridan..........11 11 11 00 11—8 Van Vleck..........11 00 11 11 11—8
Tompkins..........11 01 11 11 01—8 Rosencranz..........11 11 11 00 11—8
Marsh..........01 11 11 11 11—9 Hollister..........10 10 01 11 10—6

Second tie.

Fisher..........00 11 10 10 11—6 Meister..........11 10 11 11 11—9
Marsh.......... 01 11 11 11 11—9

Third tie.

Marsh..........11 11 10 10 11—8 Meister..........11 10 11 00 11—7

G. J. Marsh, Forester Club, second prize.

Ties on sixteen.

Wakeman..........10 01 10 w Christian..........11 11 01 01 w
Evershed..........11 11 11 11 10—9 Hotchkiss..........11 01 11 10 11—8
Silsby..........11 01 11 11 11—9 Stacey..........10 10 11 10 w
Smith G..........10 10 10 11 w Holloway..........01 11 10 w
Manning..........01 11 11 10 w Crittenden..........00 11 11 w
Soule..........11 11 11 11 01—9

Second tie.

Evershed..........11 11 10 11 w Soule..........11 11 11 11 11—10
Silsby..........10 11 10 11 w

H Soule, Central City Club, Syracuse, third prize.

Ties on fifteen.

Thompson..........10 00 w Pierce..........11 01 01 11 w
Burroughs..........10 11 10 11 11—8 Jacus..........00 11 11 10 w
Nichols..........11 11 10 10 00—6 Hooker..........01 10 11 11 11—8

Second tie.

Burroughs..........10 10 10 10 w Hooker..........11 01 11 10 01—7

H B Hooker, Monroe County Sportsmen's Club, Rochester, fourth prize.

Ties on fourteen.

H Walzer..........00 10 11 00 00—3 J H Andrews.......... 00 01 01 11 00—4
A F Compson..........10 11 01 11 00—6 Greene Smith..........00 w
J Cook, Jr..........10 10 10 10 11—8 H F Purdy..........00 w
M L Forsyth..........01 01 00 00 w G T Stillson..........11 10 00 w
S A Tucker..........11 10 10 w

Second tie.

A F Compson..........10 11 10 01 10—6 J Cook, Jr..........10 10 00 10 10—4

A F Compson, of the Phœnix Club of Seneca Falls, fifth prize.

Best Averages—The best averages of the clubs in contests Nos. 1, 4 and 5 were as follows:

Forester Club of Buffalo—Average of one man, 40; average of two men, 40; average of three men, 39; average of four men, 38¾; average of five men, 37 2-5th; average of six men, 37 1-6th.

Central City Club of Syracuse—Average of one man, 38; average of two men, 37; average of three men, 36; average of four men, 34¼; average of five men, 33.

Audubon Club of Buffalo—Average of one man, 27; average of two men, 36½; average of three men, 33 2-3d; average of four men, 25¼; average of five men, 25 2-5th; average of six men, 24 2-3d.

Seneca Gun Club of Seneca Falls—Average of one man, 38 1-3d; average of two men, 36½; average of three men, 35 2-3d.

Nassau Gun Club.—*Dexter Park, L. I., May* 28.—Regular monthly contest at twenty single birds from ground traps, and five pairs from plunge traps. Handicapped rise, 60 yards boundary for singles, 100 yards boundary for doubles.

J H Smith—22 yds..........1 0 1 0 * 1 1 1 1 1 0 1 0 1 0 1 1 1 1 1 0 0—14
J Miller—21 yds..........1 0 0 1 1 1 1 1 1 1 1 1 * 0 1 1 0 0 0 —13

Smith—22 yds....11 11 11 11 10—9 Miller—21 yds....11 11 10 11 11—9

Totals—Smith, 23; Miller, 22.

Same Day—Sweepstakes, 15 yards rise, 80 yards boundary.

*Dunham..........1 1 1 1 1—5 Watson..........1 1 1 0 w
*Smith..........1 1 1 1 1—5 Van Wicklen..........1 1 0 w
*Wyckoff..........1 1 1 1 1—5 Garrett..........0 1 w
*Selover..........1 1 1 1 1—5 Bergen..........0 1 w

* Divided money.

Same Day—Monthly contest for club championship badge; 80 yards boundary, competitors chosen in teams.

Winners. Losers.

Dunham (Capt)....27..1 1 1 1 1—5 Wyckoff (Capt)..25....0 0 0 1 1—2
Smith..........27..1 1 1 1 1—5 D Van Wicklen..25....0 1 1 1 1—4
Selover..........25..1 1 1 1 1—5 W Garrett..........25....0 1 1 1 1—4
J K Powell..........25..1 1 1 1 1—5 J Van Wicklen..25....1 * 1 1 1—4
G Bergen..........25..0 0 1 1 1—3 W Watson..........25....0 1 0 1 0—2
J V Bergen..........25..0 1 1 1 1—4 J Van Wicklen..25....0 0 1 1 0—2

Total..........33 Total..........18

Tie on five, won by Dunham.

Bogardus' Parting Salute.—At Deerfoot Park, May 29, Capt. A. H. Bogardus gave an exhibition of his skill prior to his departure for Europe. The captain goes abroad to the Paris Exposition, and to meet at the trap the supposed best amateur pigeon shot of England. The match will be at 100 single birds, at thirty yards rise, from five traps, under English rules, either on the grounds of the London Gun Club, at Notting Hill, or on the grounds of the Hurlingham Gun Club, at Hurlingham, against Captain H. Cholmondeley Pennell, the winner of the Grand Prix du Casino at Monaco, last January, from a field of sixty-six of the best shots in Europe, and who, on the 17th inst., for the third time won the Gun Club's Champion Cup at seven birds, 28 yards rise. Last week there were only sixty-two birds on hand, and thirty-eight glass balls were substituted to make up the 100. Bogardus used a Scott & Sons' double barrelled breech-loader, 12-bore, using one ounce and a half of shot and five drachms of powder, and it is with this gun he intends to shoot against Mr. Pennell. Five traps were used, at thirty yards distance, using both barrels at the birds, but only one at the balls. Following is the score:

Bogardus....1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 0 1
1 1 0 0 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1—88.

Time—One hour and ten minutes.

—At a pigeon shoot in the rain last Thursday, Mr. James, of the Fountain Gun Club, Brooklyn, carried off the new "Decoration Badge," with a score of seven birds straight.

Forest and Stream Club—*Akron, N. Y., June* 1.—Pigeons; H. T. plunge traps; 21 yds:

Altenbury....1 0 1 0 1 0 1 0 1 1—6 Weckwise...0 0 1 0 1 1 1 1 1 1—7
Parker..........0 1 0 1 0 0 1 0 0 1—4 Tyler..........0 1 1 0 1 1 1 1 1 1—8
Dunnett..........0 0 1 0 0 1 0 0 1 1—4 Partrick..........1 0 1 0 1 1 0 1 1 1—7
Taber..........0 1 0 1 0 1 0 1 1 1—6 Dell Morgan.0 1 1 1 1 1 1 1 1 1—9

Newark Gun Club—*Newark, May* 25.—Weekly shoot for gold badge.

Hobart, 20 yds..........0 1 0 1 0 0 1 0 1 1 1 1 1 1 1 1 0 0 1 0 1 1 1 1 1 1—18
Duston, 16 yds..........1 1 0 1 1 1 0 0 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 0—18
Kay, 20 yds..........0 0 1 1 1 1 1 0 0 1 0 1 1 0 1 1 1 1 0 1 0 1 1 1 1—1
Cooler, 16 yds..........1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 0 1 0 1 1—1
Leroy, 20 yds..........1 0 0 0 0 0 0 0 0 1 1 0 1 0 0 1 1 1 0 1 1 1 1 0—1
Brentnall, 16 yds...1 0 0 1 1 1 1 0 0 1 1 1 1 0 1 1 0 1 1 0 1 1 1 0 0—1
Volkenburgh, 16 yds 0 0 1 1 1 0 1 1 1 1 0 0 0 1 0 1 1 0 0 0 1 0 1 0 1—1
Decker, 18 yds..........1 1 0 1 0 1 0 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 0 0 1—1

Ties shot off at twenty yards—Duston won with three.

Palisade Gun Club.—The opening day last week at Hoboken was well attended, despite the weather. The club propose a grand tournament for the Fourth of July, at which there will be sweepstakes for amateurs. The scores last week were as follows—sweepstakes, 3 traps, 21 yards, Bogardus rules:

O Hesse..........1 1 1 1 1 1 1 0 0 1—8 McKane..........0 1 0 0 1 0 0 0 0 0—2
E L Post..........0 1 0 1 0 1 1 1 1 1—7 J M Gill..........1 0 1 0 0 0 1 0 0 1—4
Lengerke..........1 1 1 1 1 1 1 1 1 0—9 P Bercley..........0 0 0 1 0 1 0 0 1 1—4
W Payne..........0 0 0 0 0 0 0 0 0 1—1 A Anderson..0 0 0 0 0 1 1 0 1 0—3
J Corbet..........0 0 1 0 1 1 1 1 0 0—5

Second match.

O Hesse..........1 0 0 1 0—2 P Bercley..........0 1 0 1 0—2
H V Lengerke..........0 0 1 1 1—3 F V Lengerke..........1 1 1 1 0—4
J Corbett..........0 0 1 1 0—2 W Sigler..........1 1 0 1 0—3
McKane..........0 1 0 0 0—1 W P Hughes..........1 1 1 0 1—4
E L Post..........1 1 1 1 1—5 W Payne..........1 0 0 1 0—2
A Anderson..........1 0 0 0 1—2 J M Gill..........1 1 1 0 1—4

Third match.

J M Gill..........1 1 1 1 0—4 O Hesse..........0 1 1 0 1—3
F V Lengerke..........0 1 1 0 1—5 E Collins..........1 1 1 1 0—4
W P Hughes..........1 1 1 1 0—4 B Payne..........1 1 0 0 1—3
E L Post..........1 1 1 0 1—4 W Sigler..........1 1 1 1 0—4
J Corbett..........0 1 0 0 0—1 A Anderson..........0 0 1 0 1—2
McKane..........1 1 1 0 1—4

Ties on four won by Post, with three birds; ties on three divided.

Fourth match.

Hughes..........1 1 1 1 0 1 1 0 1 1—8 J Young..........1 1 1 1 1 1 1 1 1 1—10
W Sigler..........0 1 1 0 0 1 0 1 0 1—5 E Post..........1 1 1 0 1 0 1 0 1 1 —7
W Hughes..........0 1 1 0 1 1 0 1 0 1—6 B Payne..........1 1 0 1 1 1 1 1 1 1 —9
Zillner..........0 1 1 1 0 1 0 0 1 1—6 H Lengerke.0 1 1 1 1 0 0 1 1 1 —7
Sheppard..........0 1 1 0 1 1 1 0 1 1—7 J Corbett..........0 1 0 1 1 1 1 1 0 1 —7
E Collins..........1 1 1 1 1 0 0 1 1 1—8 McKane..........0 0 1 1 1 0 1 1 1 1 —7
W Sheppard.1 1 1 0 1 1 1 1 0 0—7 O Hesse..........1 1 1 1 1 1 0 0 1 1 —8

Ties on eight divided money; ties on seven won by Post.

Fifth match.

E Collins..........1 0 0 1 1—3 B L Payne..........0 0 0 0 1—1
E L Post..........1 1 1 0 1—4 F V Lengerke..........0 1 0 0 1—2
J M Gill..........1 1 1 0 1—4 W Zellner..........0 1 0 1 1—3
W P Hughes..........0 0 1 0 0—2 A McCool..........1 0 0 1 1—3
E Sheppard..........0 1 1 1 1—4 O Hesse..........1 1 1 0 1—4
J M Young..........1 0 0 1 1—3 J B Bordett..........0 1 0 0 1—2
McKane..........1 1 1 1 1—5 G H Hope..........1 1 1 1 0—4
W Sheppard..........0 1 1 1 0—3 O T Heine..........1 0 1 1 1—4
W Sigler..........1 0 1 1 1—4 W Hughes..........0 0 0 1 0—1

‡ Ties on four won by Hess‡ on three won by Zellner; on two by Von Lengerke.

Sixth match.

W Zellner..........0 1 1 1 1 1 0—5 B L Payne..........1 1 1 1 1 0 0—5
J B Burdett..........0 0 1 1 1 1 1—5 W Hepsley..........1 1 0 0 1 1 1—5
W P Hughes..........0 1 1 1 1 1 1—6 H V Lengerke..........0 1 1 1 1 0 1—5
E Sheppard..........1 1 1 1 1 1 0—6 E Collins..........0 1 0 0 0 1 0—2
J M Young..........1 0 0 0 1 1 1—4 J Corbett..........1 0 0 0 0 1 1—3
W Hughes..........1 0 1 1 0 0 1—4 G H Hope..........0 1 0 1 1 1 0—4
W Johnson..........1 1 0 1 0 0 0—3 O T Heine..........1 0 1 1 0 0 0—3
W Sigler..........1 0 0 1 1 1 0—4 W Sheppard..........0 1 0 1 1 1 0—4
E L Post..........0 1 1 1 1 1 1—6 O Hesse..........1 1 1 1 1 1 1—7
McKane..........1 1 1 1 1 1 0—6 A McCool..........1 1 1 0 1 1 1—6

Ties on six won by Sheppard; on five won by Zellner; on four won by Young.

Seventh match, double rises:

W Zellner..........10 11 11 01 11—8 A McCool..........11 11 00 11 11— 8
F V Lengerke..........10 01 11 01 01—6 B S Payne..........01 11 00 01 11— 6
McKane..........01 10 01 11 10—6 W Payne..........11 11 11 11 11 | 10
E Sheppard..........00 11 11 11 11—8

Ties on eight won by Sheppard; on seven won by Kane.

Bergen Point Amateur Gun Club.—Match May 30 for gold medal:

10 giros, 21 yards. 10 glass balls, 15 yards.

Geo P Mellick..........7 Geo P Mellick..........4—11
F Day Voorhees..........5 F Day Voorhees..........4— 9
S L Davis..........8 S L Davis..........7—15
C H Davis..........7 C H Davis..........6—13
F G Moore..........9 F G Moore..........8—17
A C Wilmerding..........9 A C Wilmerding..........6—15

Semper Felix Club—*Philadelphia, Pa., May* 30.—18 yds. rise; screened trap; balls thrown at option of trap-puller:

Dr C T Smith, Capt.
1 1 0 1 1 1 0 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1—25
Young....1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1—25
Write....0 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 0 1 0 1 1 1 0 1 1 1 1 1 0 1—23
Wood....1 0 1 0 1 1 1 0 1 1 1 1 0 0 1 1 0 1 0 1 0 1 1 1 1 1 0 1 —20
Summers.0 1 1 0 0 1 1 1 1 1 1 0 1 1 1 0 0 0 0 0 1 1 1 0 1 1 0 0 0 0—16

Ties on 25:

Smith..........1 1 1—3 Young..........1 1 0—2

We hereby challenge any club of four in the city of Philadelphia to shoot a match subject to the above. Decision of referee to be final. All challenges address to the Captain of Semper Felix Gun Club, care of Mr. John Krider, 2d and Walnut sts., Phila., Pa. G. H. S.

Tennessee—*Columbia, May* 25.—Messrs. Campbell & Dew broke 29 out of 31 balls thrown by the hand at 21 yards, missing two balls each. Val.

Ohio—*Cincinnati, May* 27.—Clifton Shooting Club; Bogardus traps; 21 yds.:

John Koehler..........0 1 1 1 1 1 1 0 1 1 0 0 1 1 1 1 0 1 0 1—14
Wm Helwig..........1 0 1 0 1 1 1 1 1 0 0 1 1 1 1 1 0 1 0 0—13
H F Finke..........1 0 0 0 1 0 1 0 1 1 1 0 1 0 1 0 0 1 1 1—11
Chas Finke..........1 0 0 0 0 1 0 1 1 1 1 0 0 1 0 0 1 1 0 1—10
Wm Limberg..........0 0 1 0 0 0 0 0 1 1 1 1 1 0 1 0 0 0 1 0— 8

The other five balls were left quartering shots:

H F Finke..........1 0 1 1 1—4 Wm Limberg..........0 1 0 0 0—1
John Koehler..........1 0 1 0 0—2 Chas Finke..........0 0 1 0 0—1
Wm Helwig..........0 0 1 0 0—1

Buckeye Gun Club, Sandusky.—Monthly shoot, May 85; mole trap smooth balls; 18 yards rise; Bogardus rules.

W Hilton..........1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1—18
W Dewitt..........1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1—18
Chas Hart..........0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1—17
E W Dewitt..........0 0 0 1 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1 1—14
Geo Hart..........0 0 1 1 0 1 1 1 0 1 1 1 1 1 1 0 1 0 1 1—14
A Harris..........0 1 0 1 1 1 1 1 1 1 1 1 0 0 0 1 0 1 1 0—13
Will Marshall..........0 0 0 1 1 1 1 1 0 1 1 1 0 0 0 1 0 1 1 0—11
Lee Weed..........0 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 0 1—12
F Pritchard..........1 1 1 1 0 0 1 0 1 1 1 0 1 1 1 0 1 0 0 1—13
L P Baird..........1 1 1 1 1 0 1 1 0 0 1 1 0 0 0 0 1 1 1 1—13
J Galloway..........1 0 1 0 1 1 1 1 1 1 0 1 0 1 1 1 1 1 0 1—15
H Hopkins..........1 1 1 1 1 1 1 1 0 0 0 0 1 0 0 0 0 0 1 0—10
S M White, Jr..........0 1 1 1 1 0 0 1 0 0 0 1 0 0 1 0 0 0 1 0— 9
J J Covell..........0 1 0 0 0 1 1 1 1 0 0 1 1 1 1 0 0 0 1 0—10
T B Taylor..........1 0 1 1 0 0 1 0 1 1 w

Joe.

Illinois—*Warsau, May* 25.—Second match between J. N. Welsh, of Keokuk, Ia., and John Worthen, of this city; 50 pigeons each; 31 yds; 80 yds boundary; Gate City Shooting Club rules to govern. The last match Welsh won by 45 to 42:

Worthen..........1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 0 1 1 1 0 0 1 1 1 0
0 0 1 1 1 0 0 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 0 1—35
Welsh..........1 0 0 0 1 1 1 0 1 1 0 0 1 1 1 1 1 1 1 1 1 0 0 0 1
0 1 1 1 0 1 0 0 1 0 1 1 1 1 1 0 0 1 1 0 1 0 1 1 0—31

Iowa State Sportsmen's Association.—We give below the scores at the Des Moines (Iowa) Tournament of the Association, May 28, 29, 30 and 31. The Champion Team Trophy, presented to the champion club in the Tournament, is of a most graceful design, entirely unique and tasteful. Class shooting throughout. H and T plunge traps, 1¼ ozs. shot. Match No. 1—Ten birds each, 21 yards rise, 80 yards boundary:

Phelps..........0 0 1 1 1 1 0 1 1 1— 7 Harris..........1 1 1 0 0 1 0 0 1 1— 6
Dodds..........0 1 0 0 0 1 1 1 0 1— 5 Williams..........1 0 0 1 1 1 1 1 1 0— 7
Henry..........1 1 1 1 0 0 1 1 1 1— 8 McArthur..0 0 1 0 0 0 0 1 1 1— 4
Eason..........0 0 1 1 1 0 1 1 1 1— 7 Blixt..........1 1 1 1 0 1 0 1 1 1— 9
McCain..........1 1 1 1 1 1 1 1 1 1—10 Watts..........0 1 1 1 0 1 1 1 1 1— 8
Beltford..........1 1 1 1 1 0 1 1 1 0— 8 Hills..........1 1 1 1 1 1 0 1 1 1— 9
Morgan..........1 1 1 0 1 1 1 0 1 1— 8 Brenner..........1 0 1 1 1 1 0 1 1 1— 8
Montg'mery1 1 1 1 1 1 1 1 0 1— 9 Fairall..........1 1 1 0 1 1 1 1 1 1— 9
Ellis..........1 1 1 1 0 1 1 1 0 1— 8 Miller, L C..1 1 1 0 1 1 1 1 0 1— 8
Thornton..........1 0 1 1 0 1 1 0 1 1— 7 Welsh..........0 1 0 0 1 1 0 1 0 0— 4
Stuart..........1 1 1 1 0 1 1 1 0 1— 8 Johnson, P.0 1 0 0 1 1 1 0 0 1— 6
Boardman..1 1 1 1 1 1 1 0 1 1— 9 Kiraher..........0 1 0 0 1 1 1 1 0 0— 5
Harris..........1 1 1 1 0 1 1 0 0 0— 6 Young..........1 1 1 1 1 1 0 1 1 1— 9
Bird..........1 0 0 1 0 1 1 1 1 1— 7 Bond..........0 1 1 1 1 0 1 1 1 1— 8
Miller..........0 1 1 0 0 1 1 1 1 1— 7 Doxey..........1 1 1 1 1 1 1 0 1 1— 9

Smythe..........1 0 0 1 0 1 1 0 1 1— 0 Griffy..........1 0 1 1 1 1 1 1 1 0— 8
James..........0 0 1 1 0 1 0 1 0 1— 5 Bailey..........0 1 0 0 1 0 0 0 1 1— 4
Lowe..........1 1 1 1 1 0 1 1 1 1— 9 Abbott..........1 0 1 0 1 0 1 1 1 0— 6
Champlin..........1 1 1 0 1 1 1 1 1 1— 9 Beaman..........1 0 0 1 0 1 0 1 1 1— 6
Delano..........1 0 0 1 1 0 1 0 1 1— 6 Bleakmore.0 0 1 0 0 1 0 1 0 0— 3
Wells..........0 1 1 1 1 0 1 1 0 1— 7 Chapin, E..1 0 1 0 0 1 0 0 0 1— 4
Cartwright.1 1 1 1 1 0 0 1 0 1— 7

Ties on nine—26 yards.

Blixt..........0 1 0 0 1—2 Montgomery..........0 1 1 0 1—3
Hills..........1 1 1 0 0—3 Boardman..........1 1 1 1 1—5
Fairall..........0 0 0 1 0—1 Lowe..........1 1 1 1 1—5
Young..........1 1 0 0 0—2 Champlin..........1 1 1 0 1—4
Doxy..........1 0 1 0 1—3

Second tie—31 yards.

Boardman..........0 1 0 0—1 Lowe..........1 0 1 1—3

Ties on eight—26 yards.

Watts..........0 1 0 1 0—2 Bestford..........1 0 0 1 0—2
Buner..........1 1 0 1 1—4 Morgan..........1 0 0 1 0—2
Miller, L C..........0 0 1 1 0—2 Ellis..........0 1 1 1 1—4
Griffy..........1 1 0 0 0—2 Stewart..........1 0 0 1 0—2
Bond..........0 1 1 1 0—3 Henry..........1 0 1 1 0—3

Buner and Ellis divided third money.

Ties on seven—26 yards.

Williams..........1 0 0 0 0—1 Bird..........1 1 0 1 1—4
Phelps..........1 1 1 0 1—4 Miller, H..........1 1 1 1 0—4
Eason..........0 1 0 0 0—1 Wells..........1 1 1 1 1—5
Thornton..........1 0 1 1 1—4 Cartwright..........0 1 0 0 0—1

Match No. 2—Ten birds, 21 yards rise, 80 yards boundary:

Blixt..........1 1 0 1 1 1 1 0 1 1— 8 Dodds..........0 0 0 0 0 0 0 1 0 1— 2
Welch..........0 0 1 1 0 1 1 1 0 0— 5 Williams..........1 1 1 1 1 0 1 0 1 1— 9
Johnson..........0 0 1 0 0 1 1 1 1 1— 6 Wells..........1 1 1 1 1 0 1 1 1 1— 9
Doxey..........1 1 1 1 1 1 1 1 1 1—10 Westcott..........1 1 1 1 0 1 1 1 1 1— 9
Beaman..........0 1 0 1 1 0 1 1 1 1— 7 Abbott..........0 0 1 1 0 1 1 1 1 1— 6
Griffey..........1 0 0 1 1 1 0 0 1 1— 6 Miller, H..........1 1 0 1 1 1 0 0 1 0— 6
Youngs..........0 1 1 1 1 1 1 1 1 1— 9 Smythe..........0 1 1 1 1 1 0 1 1 1— 8
McKisson..........1 0 1 0 1 1 1 1 1 1— 8 Bond..........1 1 1 0 1 0 1 1 1 0— 7
Hills..........1 0 1 1 0 1 0 1 0 1— 6 Brewer..........1 1 1 0 1 1 0 1 1 0— 7
Phelps..........0 0 1 1 0 1 1 1 1 1— 7 Thornton..........1 1 1 1 1 0 0 1 1 1— 8
Champlin..........0 1 1 1 1 1 1 0 1 1— 8 Bird..........1 1 1 1 1 0 1 0 1 1— 8
McArthur..........0 1 1 1 1 0 0 1 1 0— 6 McHarris..........1 0 1 0 0 1 1 0 1 1— 6
Waddington1 1 1 1 1 1 1 1 1 1—10 Delano..........0 1 1 1 1 1 1 1 1 1— 9
Harris, D..........1 1 1 1 1 0 1 1 0 1— 8 Botford..........1 1 1 0 1 1 0 1 1 1— 8
Montg'mery1 1 1 1 1 1 0 1 1 0— 8 Miller, L C..1 0 1 1 1 1 1 1 1 1— 9
Ellis..........1 1 0 1 0 1 1 1 1 0— 7 Hart..........0 0 1 0 1 1 1 1 0 1— 6
Henry..........1 1 0 1 0 1 1 1 1 1— 8 Reinig..........1 0 1 0 1 0 1 1 0 1— 5
Parks..........0 1 1 0 1 1 0 0 1 0— 5 Wath..........1 1 0 1 1 0 0 1 1 0— 6
Chapman..........1 0 1 0 1 1 0 1 1 1— 7 Badd..........1 1 0 0 0 1 1 0 0 1— 5
Fairall..........1 0 1 1 0 1 0 0 1 1— 6 Lowe..........1 1 1 1 0 1 1 1 1 1— 9
McCain..........1 1 0 0 0 1 1 0 0 0— 4 Waldon..........0 1 1 1 1 1 1 1 1 0— 8
Wilde..........0 1 0 0 1 0 1 0 0 1— 4 Blackman..0 0 1 0 0 0 1 0 1 0— 3

Ties on ten—26 yards.

Doxey..........1 1 1 1 1—5 Waddington..........1 1 1 1 0—4

Doxey and Waddington divided $90, and Doxey won balance of first money.

Ties on nine—26 yards.

Lorings..........1 0 0 1 0—2 Delano..........1 0 1 0 1—3
Wells..........0 0 0 1 1—2 Miller, L C..........0 0 0 0 0—0
Westcott..........1 1 0 1 1—4 Lowe..........1 1 1 0 1—4

Second tie—31 yards.

Westcott..........0 1 1 1 0—3 Lowe..........1 1 1 0 1—4

Ties on eight—26 yards.

Blixt..........0 1 1 1 0—3 Williams..........1 1 1 1 0—4
McKisson..........1 0 0 1 1—3 Smythe..........1 1 1 1 1—5
Champlin..........1 1 1 1 0—4 Thornton..........0 1 0 0 0—1
Harris, D..........1 1 1 1 0—4 Bestford..........0 0 0 1 0—1
Montgomery..........1 0 0 1 1—3 Waldon..........1 0 1 1 1—4
Henry..........1 1 1 1 1—5 Bird..........0 0 1 1 0—2

Second tie—31 yards.

Henry..........1 1 0 1 1—4 Smythe..........1 1 0 0 1—3

Ties on seven—26 yards.

Beeman..........1 1 0 1 1—4 Champlin..........1 1 0 0 1—3
Phelps..........1 1 1 1 1—5 Bond..........1 1 1 0 1—4
Ellis..........1 0 0 1 0—2 Bruner..........1 1 1 1 1—5

Second tie—31 yards.

Phelps..........1 1 1 1—4 Bruner..........1 1 0 0—2

Match No. 3—Glass balls, sixteen entries. Waldon won first, Hills and Miller tied for second; third divided.

Match No. 4—Ten single birds.

Phelps..........1 1 1 1 1 1 1 1 0 1— 9 Hoffmayer.1 1 1 1 1 1 1 1 1 1—10
Tuttle..........1 1 1 0 1 0 1 0 0 1— 6 Miller, H..........1 1 1 1 1 1 1 1 1 1—10
Waddington1 1 0 1 1 0 1 0 1 1— 7 Johnson, P.1 1 1 0 1 1 1 1 0 0— 7
Williams..........1 1 1 1 1 1 1 1 1 1—10 Mullis..........1 1 1 1 1 1 0 1— 8
Harris, D..........1 1 1 0 1 1 0 1 1 1— 8 Hills..........1 1 1 1 1 1 1 1 0 1— 9
Bestford..........1 0 1 1 1 1 1 1 1 0— 8 Lowe..........1 1 1 1 1 1 1 1 1 1—10
Pratt..........0 1 1 1 1 0 1 1 0 1— 8 Campbell..........0 1 1 1 1 1 1 1 1 1— 9
McArthur..........1 1 1 1 1 1 1 1 1 1—10 Sheldon..........1 1 1 0 1 1 1 1 1 1— 9
Young..........0 1 1 1 1 1 1 0 1 1— 8 Oliver..........1 1 0 1 1 1 1 1 0 1— 8
Champlin..........1 1 1 1 1 1 1 1 0 1— 9 Bond..........1 1 0 1 1 1 0 1 1 1— 8
Westcott..........1 1 1 1 1 1 1 1 1 0— 9 Bailey..........1 1 0 1 1 1 1 0 1 0— 7
Bodeman..........1 1 0 0 0 0 0 1 1 1— 5 Ellis..........0 1 1 0 0 1 0 1 1 1— 6
McCain..........0 1 1 1 1 1 1 1 1 0— 8 Thornton..........1 1 1 0 1 1 1 1 0 1— 8
Henry..........1 1 1 0 1 0 1 1 1 1— 8 Smythe..........1 1 1 1 1 1 1 1 1 0— 9
Waldon..........0 0 0 1 1 1 1 0 1 1— 6 Hart..........1 1 1 1 1 1 1 1 1 1—10
Abbott..........1 1 0 0 1 0 1 1 1 1— 7 Harris, M..........0 1 1 1 1 1 1 0 1 0— 7
Beaman..........1 1 1 1 1 1 0 1 0 0— 7 Williams, H 0 0 0 0 0 1 1 1 1 0— 4
Bruner..........1 1 0 1 1 1 1 0 1 1— 8 Welsh..........1 0 0 1 1 1 1 1 1 1— 8
Griffey..........0 1 1 1 0 0 1 0 0 1— 5 Chapman..........1 1 0 1 1 0 1 1 1 1— 8
Morgan..........1 1 0 0 1 0 1 1 1 1— 7 Montgom'ry1 1 0 0 1 1 0 1 1 1— 7

Ties on ten—26 yards.

Williams, J L..........1 1 1 1 0—4 Hoffmayer..........1 1 0 1 1—4
McArthur..........1 0 1 1 1—4 Lowe..........1 1 1 1 1—5
Miller, L C..........0 1 0 1 1—3 Hart..........0 0 0 1 1—2

Ties on nine—26 yards.

Phelps..........0 1 1 1 1—4 Campboll..........1 0 1 0 1—3
Champlin..........1 1 1 1 1—5 Sheldon..........1 1 1 1 1—5
Wescott..........1 1 0 0 1—3 Smythe..........0 0 1 0 0—1
Hills..........1 1 1 1 0—4

Ties on eight—26 yards.

Harris, D..........0 0 1 0 0—1 Mullis..........1 1 0 1 0—3
Bestford..........0 1 1 1 0—3 Oliver..........0 1 1 1 0—3
Pratt..........1 1 1 1 1—5 Bond..........0 0 1 0 1—2
Young..........1 0 1 1 0—3 Thornton..........1 1 1 1 1—5
McCain..........1 0 1 1 1—4 Welsh..........1 1 0 0 1—3
Henry..........1 1 1 0 1—4 Chapman..........0 1 1 1 1—4
Bruner..........1 1 0 1 1—4

Second tie—31 yards.

Pratt..........1 1 0 0 0—2 Thornton..........0 1 0 1 1—3

Ties on seven—25 yards.

Waddington..........1 0 1 1 1—4 Johnson..........1 0 1 0 1—3
Abbott..........1 1 1 0 1—4 Bailey..........1 0 1 1 0—3
Beaman..........1 1 1 0 1—4 Harris M..........1 1 1 1 1—5
Morgan..........0 1 1 0 1—3 Montgomery..........1 1 0 1 0—3

Ties on six—26 yards.

Tuttle..........1 1 0 1 0—3 Ellis..........1 1 1 1 1—5
Walden..........1 1 1 1 1—5

Second tie—31 yards.

Walden..........1 1 1 0 1—4 Ellis..........0 1 1 0 0—2

A match at glass balls followed; Walling first, Hoffmayer second, Perkins third, Young fourth.

Match No. 5—For silver trophy; open to teams of three from any organized club belonging to the association; 20 single birds.

Centennial Club, Keokuk—J N Welch, 17; Geo W Griffey, 15; Perry Johnson, 19. Total, 48.

Marshalltown Shooting Club, Marshalltown—E A Abbott, 12; J H Bruner, 18; J L Williams, 13. Total, 43.

Missouri Valley Gun Club, Missouri Valley—H C Champlin, 16; Matt Harris, 17; W C Ellis, 18. Total, 51.

Gate City Shooting Club, Keokuk—H A Kinnaman, 10; J R Schuler, J B Worthen, 14. Total, 40.

Council Bluffs Shooting Club, Council Bluffs—J C Hoffmayer, 18; J T Oliver, 18; Robt Mullis, 17. Total, 53.

Keosauqua Sportsmen's Club, Keosauqua—Al Beaman, 15; Francis Johnston, 13; W H Bleakmore, 12. Total, 40.

Des Moines Sportsmen's Club, Des Moines—F D Booth, 17; Sam Lowe, 19; G L Eason, 16. Total, 52.

Burlington Sportsmen's Association, Burlington—Geo C Henry, 15; C W Bodeman, 17; W H Phelps, 14. Total, 46.

Franklin Audubon Club, Hampton—Geo Waddington, 19; K S Cole, 17; Wm Parks, 12. Total, 48.

Atlantic Gun Club, Atlantic—Al Westcott, 15; D S Ford, 12; L C Miller, 12. Total, 30.

Match No. 7—For Association gold medal; ten single rises, 21 yards:

Waddington1 0 1 1 1 1 0 1 0 1— 7 Welch..........0 1 0 1 0 1 0 0 1 1— 5
Blixt..........1 1 1 1 1 1 1 1 0 1— 9 Johnson..........1 0 1 1 1 1 0 0 1 1— 7
Bryan..........1 1 0 0 0 1 0 1 1 0— 5 Thornton..........0 0 1 1 1 0 1 1 1 1— 6
Williams..........1 1 1 1 1 1 1 1 0 1— 9 Griffey..........1 1 0 0 1 0 1 1 1 1— 8
Wistron..........1 0 1 1 0 1 1 1 0 1— 7 Phelps..........1 0 1 1 0 0 1 1 0 1— 6
Vincent..........0 1 1 1 0 1 1 1 1 0— 7 Henry..........1 1 1 1 1 1 1 1 1 1—10

McCain	1 0 0 0 1 1 1 0 1 1—6	Chadman	1 1 1 1 1 1 1 1 1 1—10
Eason	0 1 0 1 1 1 1 1 1 1—8	Hoffmayer	0 0 0 0 1 1 1 1 1 1—6
Ellis	0 1 0 1 1 1 0 1 0 1—6	Oliver	1 1 1 1 0 1 1 1 1 1—9
Champlin	1 1 1 1 1 1 0 1 1—9	Mullis	0 0 1 1 1 1 1 1 1 0—7
Beeman	1 0 1 1 0 1 0 1 1 0—6	Campbell	1 1 1 1 1 1 1 1 1 0—9
Johnston	1 0 1 1 1 0 1 0 1—7	Roinig	1 1 1 0 1 1 1 1 1 1—9
Parks	1 0 1 1 1 1 0 1 0 0—6	Ogilvie	1 0 1 0 0 0 1 1 1 1—6
Percival	1 1 1 0 0 0 0 0 0—5	Bleakmore	0 0 0 0 1 1 1 0 0 0—3
Deisne	1 1 1 1 0 1 1 0 1 1—8	Ford	1 1 1 1 1 0 1 0 1 1—8
Lowe	1 1 1 0 1 1 1 1 1—9	Tuttle	1 1 1 0 1 0 0 1 1 1—7
Morison	1 0 0 1 0 0 0 0 0 1—3	Boyle	1 0 0 1 1 0 0 0 0 0—3

Ties on ten—26 yards.

Henry	0 1 1 1 1—4	Chapman	1 1 0 1 1—4

Second tie—31 yards.

Henry	0 1 0 1 1—3	Chapman	1 0 0 1 1—3

Third tie—31 yards.

Henry	1 0 0 0 1—2	Chapman	1 0 0 0 1—2

Fourth tie—31 yards.

Henry	0 0 0 0—0	Chapman	1 1 0 1—3

Match No. 8—Five single rises, 18 yards, 26 yards boundary:

Duncomb	1 1 2 1 1—6	Blixt	1 2 1 2 1—7
Williams	2 2 2 1 2—9	Champlin	2 2 1 1 1—7
Bryan	2 1 2 1 1—7	Waddington	1 2 1 1 0—4
McCain	2 1 1 1 1—6	Lowe, S.	1 2 1 2 2—8
Stewart	1 2 2 2 1—8	Miller, H.	1 2 2 1 2—8
Griffey	2 0 1 1 1—5	Henry	1 1 2 1 2—7
Welch	2 1 1 2 1—8	McArthur	2 1 2 1 1—7
Westcott	2 1 1 1 1—6	Chapman	2 2 2 2 1—9
Thornton	2 2 1 1 2—8	Youngs	0 1 1 1 1—4
Hoffmayer	0 2 1 1 2—6	Walling	2 2 1 0 1—6
Hoare	1 1 1 2 2—8	Ogilvie	1 2 0 1 1—5
Hills	1 1 1 1 0—4	Ellis	1 2 1 2 1—7
Mullis	1 1 1 2 1—6	Oliver	1 2 2 0 1—6
Campbell	0 1 2 1 0—4	Harris	1 0 1 0 1—3
Lowe, J.	1 1 2 0 0—4		

Ties on nine—three double rises, 18 yards.

Williams	1 1 2—4	Chapman	2 1 1—4
Thornton	0 1 0—1		

Williams and Chapman divided first.

Ties on eight, three double rises, 18 yards.

Stowart	1 1 1—3	Lowe, S.	1 2 1—4
Welch	2 1 2—5	Miller, H.	1 1 1—3

Ties on seven—18 yards.

Bryan	2 1 2—5	Henry	2 2 0—4
Hoare	1 2 1—4	Hoare	1 2 1—4
Blixt	1 2 2—5	Ellis	1 2 2—5

Second ties—21 yards.

Bryan	2 2 2—6	Blixt	2 2 1—5

Ties on six—two double rises, 18 yards.

Duncomb	2 2—4	Champlin	2 2—4
Delano	0 0—0	Walling	1 0—1

Match No. 9—Ten single birds; 18 to 25 yards, optional handicap:

Johnston	0 1 1 1 1 1 1 0 1—8	Percival	0 0 0 1 0 0 1 0 0 0—2
Hoare	1 1 1 1 1 1 1 1 0—9	Thornton	1 1 1 0 0 1 1 0 0 0—5
McCain	0 1 0 1 1 0 1 1 1—7	Chapman	0 1 1 1 0 1 1 0 0 0—7
Henry	0 1 0 1 1 1 0 0 1 1—6	Campbell	0 0 0 1 1 1 1 1 1 1—7
Hills	1 1 0 1 1 1 1 1 1—8	Beaman	1 1 0 0 1 1 1 0 1 1—7
Miller, H.	0 1 1 1 1 1 0 0 1—7	Griffey	1 0 0 1 0 0 0 0 1 1—4
Bryan	1 1 1 0 1 1 1 1 1—9	O'Brien	0 1 0 0 1 0 1 1 1 1—6
Fagan	1 0 0 0 0 1 1 1 1 0—6	Youngs	1 0 0 0 1 0 W
Lowe, S.	1 1 0 1 1 1 1 1 1—9	Reiotg	0 0 1 1 1 0 1 1 1 0—6
Ogilvie	0 1 0 0 1 1 0 1 1 1—6	Butler	1 1 0 0 1 0 1 1 1 1—7
Walling	1 0 0 1 1 1 1 1 1—8	Gown	0 1 0 1 0 1 1 0 0 0—4
Williams	0 0 1 0 1 1 1 0 1 1—6	Harris	0 1 1 0 0 1 1 1 1 0—6
Champlin	1 1 1 1 1 1 1 1 1—10	Blixt	1 1 0 1 0 1 1 0 1 0—6
Mcarthur	0 1 1 0 0 1 1 1 0 0—5	Vincent	0 1 1 1 1 1 1 0 0 0—6
Phelps	0 1 1 1 1 1 0 1 1 1—8	Miller, L.	0 1 0 1 0 0 0 0 0 1—3
Emerson	1 1 0 1 1 1 1 1 0 1—8	Lowe, J.	1 0 1 1 1 1 0 0 0 1—6
James	0 0 1 0 1 0 0 0 0 0—2		

Ties on nine, each man 5 yards back, five single rises.

Hoare	1 1 0 0 0—2	Lowe, S.	1 1 1 0 0—3
Bryan	0 1 0 0 1—2		

Ties on eight—5 single rises.

Hills	1 1 1 1 1—5	Phelps	1 1 1 1 1—5
Johnson	0 1 0 1 0—2	Emerson	1 0 0 1 1—3
Walling	1 1 0 1 0—3		

Ties on seven, 5 yards back.

Chapman	1 1 1 1 1—5	Campbell	1 0 1 0 1—3
Miller, H.	0 1 1 1 1—4	Beaman	0 1 1 1 1—4
McCain	0 0 0 1 1—2	Butler	1 0 1 1 0—3

CANADA—*Albro Craig, May* 24.—Regular practice of Albro Craig Gun Club; Bogardus trap; guns balls; first seven balls 21 yards rise straight from shooter; last eight 30 yards rise at right angle with shooter; 2½ oz. shot.

Stewart, Colin	1	0	1	1	1	1	1	1	0	0	0	0	1	0	1—9
Drooght, W.	0	1	1	1	1	1	1	1	0	1	1	1	0	1	1—12
Allen, James	1	1	0	0	1	1	1	0	1	1	0	0	1	0	1—9
Allen Walter	1	0	0	0	1	0	0	0	0	1	1	0	1	1	0—6
Smith, E B.	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1—13

TYRO.;

TORONTO GUN CLUB.—Match at Woodbine Park, May 29; 15 pigeons, 21 yards rise, 100 yards boundary. 3 traps:

President's Side.

B Moore, Pres.	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1—13
J Barrett	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0—11
J Farrell	0	1	0	1	1	1	1	0	0	1	0	0	0	0	0—6
W Kennedy	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1—12
R Boswell	1	0	1	1	1	1	1	1	1	0	1	0	1	0	1—11
J Villiers	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1—12
B Pearsall	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1—12
G Smith	0	1	1	0	1	1	1	0	1	1	0	1	1	1	0—10
J Young	1	1	0	0	1	1	1	1	0	1	0	1	0	1	1—10
G Monroe	1	1	1	0	1	0	0	0	1	0	1	1	1	0	1—9
Total															125

Vice-President's Side.

E Perryman, Vice Pres.	0	1	0	1	1	1	1	1	0	1	0	1	1	0	1—10
J Kennedy	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1—13
R Miller	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
R Morrison	0	0	1	0	1	0	0	1	0	1	0	0	0	1	1— 6
C C Small	1	1	1	1	0	1	1	1	1	1	0	1	0	1	1—12
R Wilson	0	1	1	0	0	1	0	1	0	1	1	1	1	1	1—10
J Taylor	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0—12
T Wingfield	1	1	0	1	0	0	0	0	0	1	0	0	1	1	1— 7
J James	1	1	1	0	1	0	1	1	0	1	1	1	1	1	1—12
S Staneland	1	1	0	0	1	0	1	0	0	1	0	1	1	1	1— 9
S Berron	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1— 4
J Mangbah	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0—14
Total															124

AN ARTIST AT WORK.—Mr. S. A. Kilbourne, whose clever paintings and sketches of fish have been so favorably commented upon, is now hard at work completing a series of careful studies on the game fish of the United States.

It is in Fulton Market, at Mr. E. G. Blackford's, that the artist has his temporary *atelier*, and each day new and beautiful models are brought before Mr. Kilbourne. It is not easy to paint a fish glowing with wonderful colors. The obvious reason is that with every moment out of the water the colors of the subject fade. There are, however, some curious divergences from this. When a cod is just captured he bleaches sometimes in an albinesque manner, recovering to a darker shade afterward. Nothing can equal the intensity of the color of the red snapper (*Lutjanus blackfordii*) when first captured. It is intensely carmine, with red hot gleams. In a short time, though it pales, it is still beautiful, taking on rose-leaf tints, until, at last, the glow all fades out like a sunset. In painting, then, many of his subjects, the cry of Mr. Kilbourne is always "Fresh Fish!" The shape—the contour of a fish—is not so hard to get, but sometimes the dripping paints on the palet seem to be taxed to their utmost to match the colors of a fish.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

I. L. C., Boston.—No special value to white pigeons.

E. D., Washington.—A first-class target, and hard to make better.

R. H. D., Warranton, Va.—A very excellent target for the cheaper gun.

CONSTANT READER.—Train your spits pup to retrieve your neighbors' spring chickens.

W. H. C., Winchester, Mass.—No close season specified for sandpipers in your State.

J. B. T., Boston.—We knew nothing about it, but have written to Chicago for information.

J. C. M., Hastings, Minn.—It may take some days before we can find P's. standing. Will probably write you.

C. A. G., Condersport, Pa.—An advertisement in this paper would probably find a sale for your young trout.

ASHANTEE, Sing Sing.—You will find trout fishing in Jessup River, Hamilton Co., N. Y. You will receive the rod all right.

W. B. F., Rochester.—Jas. Campbell & Son, 26 Yonge street, Toronto, Canada, will supply you with maps of the Ottawa district.

G. N. B., Delphos, Kansas.—Write to Gonpil, Fifth av., or to Schanz, Broadway—both print sellers—for photographs of Landseer's works.

W. K. O., City.—Will you please let me know in your next issue what is your opinion of —— best guns? Ans. There are no makers in higher repute.

C. T. J., Salem, Mass.—Is there any person at Rice Lake, Canada, from whom wild rice may be obtained? Ans. A. V. Denio, Harwood, Rice Lake, Ontario, Canada.

HAVILAND, Minnesota.—We will shortly illuminate the cat's eye question philosophically, though we are not responsible for the rhapsodies of writers. See kennel column for correction.

R. B. C., Paducah, Ky.—We could not recommend a gun to you, such is our invariable rule; nor with whom you could effect a barter. You can use areca nut with impunity, providing you use castor oil after it.

F. F., Columbus, Ohio.—The Chesapeake Bay dog can be better purchased in Baltimore than elsewhere. Could not tell you price. Address R. M. Taylor, Perrymanville, Md., or S. A. Camp, Langford, Kent Co., Md.

F. McK., Erie, Pa.—Can you put us in communication with the manufacturers or general agents of the Dittmar powder? We find it highly spoken of by sportsmen. Ans. H. C. Squires, No. 1 Cortlandt st., New York.

H. G. L., Bangor, Maine.—Not a good target. From the high character of the maker of your gun you must have been at fault some way. Repeat your experiments more carefully. Possibly you overloaded and shot wild.

R. M. C., Spottsylvania.—Would have published your note, but want of space prevented. *Fetch* is Miltonian, Spencerian and Biblical. In good old English it is said—just as we use it—that "the sudden trip fetches a man to the ground."

J. E. M., Saco.—1. What make of rifle would you recommend to a person wishing to pay $20 or $25? 2. Do you know anything about the —— rifles? Ans. 1. You can get most of the leading rifles now at short your figure. 2. A fair rifle.

H. C., West Philadelphia.—About Cheyenne, Wyoming Territory, are deer, elk, antelope, mountain sheep, bears and mountain lions; and excellent trout fishing. Buy a dog there. Take heavier clothing than a dock suit. Do not want a vernier sight.

J. K., Lake Co., Ill.—A 10 bore is used where four-footed game is found; a 12 for all other purposes. It all depends very much on the kind of gun and the strength of the man. See former numbers of F. and S., where this question was fully discussed.

H. C. P., Brooklyn.—Do not know where you can get Babitt patent bronze blocks in this neighborhood. You had better inquire of Mallory & Co., 50 South st., N. Y., or of Whitlock, 57 South st., who will be able to procure them for you, if they are in the market.

E. W. S., Sandy Spring, Maryland.—Your questions are so interesting that we have requested the ablest rifle expert in the country to answer them. This reply may take some space. Are you very sure you right? If so, detail to us briefly your experiments.

V. A. N.—Best book on fly-tying is Halloch's "Gazetteer," price $3. There is no publication containing the lines of a Nautilus canoe, but we can procure a set for you if wanted. The "dandy" is a small sail set near the stern of the canoe, generally of triangular shape.

SNIPE, Port Richmond, N. Y.—Where may I obtain good shooting on Long Island, both bay and inland, and also fresh and salt water fishing? Ans. Go to Good Ground, or anywhere along that shore. You will find bay birds and snipe there if you wish to go in July or August.

W. F. J., Richmond, Va.—1. Which do you consider best for off-hand shooting, the shot-gun or rifle stock? 2. How much powder should be used in shooting a 200 grain bullet at 200 yards? 3. Should the bullet be dipped in the lubricant after it is in the shell? Ans. 1. The gun stock is the better. 2. 40 grains. 3. Before it is in the shell.

C. G. N., Oakland, Cal.—"The Upland Game Birds" is published by subscription (Scribner & Co.), ten parts, $2.50 per part. Twenty-six numbers of FOREST AND STREAM constitute a volume. The first issue was Aug. 14, 1873. Price of back volumes unbound, $2.50 each for first four, $3 each for subsequent volumes. Both guns mentioned are very fair.

REMSE, East Templeton, Mass.—You can procure a license for collecting birds and their eggs of any organized Natural History Society. You will need to send them proper credentials. Gray's Botany will give you the scientific names of plants, Jordan's Manual of Vertebrates those of vertebrates. For insects consult Packard's "Our Common Insects."

MIKRON, Sloatsburg.—Please inform me if there is any other process than Banting's for reducing obesity by a system of diet and training? Ans. We have recently seen much commendation made of a remedy mentioned as perfectly harmless. It is a vegetable compound and is called macerare. Address T. G. Hull, P. O. Box 247, New York City.

DOCTOR, Delaware City.—The first show of dogs ever held in England, and we believe anywhere, was in 1859. It was confined to sporting dogs only. Mr. Walsh, of *The London Field*, was one of the judges. The next show was in 1863, when the surprisingly large number of entries was 1,600. These have always resulted in dissatisfaction of exhibitors and disputed award.

J. S. C., New York.—At Creedmoor on Friday last in match No. 6, open to military rifles only, at 200 yards off-hand, the score of 30 out of a possible 35 was made by the winner. Is there any record of a higher score at this distance with a military gun offhand, open sights? Score in detail was 4 3 4 4 5 5 5—30. Ans. It is the best we know of in 7 shots. Mr. John made 33 in 10 shots this spring.

WOODHILL GUN.—In regard to the name of a maker Mr. Greener, of England, writes from Birmingham, May 16, 1874: "We have made all inquiries we can about Alfred Woodhill, but cannot hear of any gunmaker or dealer of that name in town or country. Messrs. Eley Bros., who are supposed to know all concerned in the gun trade, have never done business or heard of any one by the name of Alfred Woodhill."

W. A. P., New Haven.—Would it be within the Creedmoor rules to admit the Shelton auxiliary rifle and breech-loading shot-guns to compete in all-comers' match, 200 yards, for prizes? If so a party will march to the front to compete with other rifles at any time that such trial takes place. Ans. The rule as to "any rifle" will admit the auxiliary if gun and all do not weigh ten pounds. Trigger pull, etc., must be according to rule of N. R. A.

J. W. C., Bowling Green, Ky.—1. What is the price of an auxiliary barrel adapted to 12 bore? 2. Have a Ballard breech-loading rifle 40 cal., 30 inch barrel and 8 pounds weight. The best gun I ever saw at 200 yards, but the sights are coarse, as it was manufactured for military purposes. What changes, if any, would you suggest to adapt to sporting uses? Ans. 1. $12, we believe. 2. Have an adjustable peep-sight and a Beach globe-sight put on the rifle.

M. M., Reading, Me.—The gun you mention is considered excellent. You can get a good one for the price named. To fish for black bass with live bait use either click or balance reel, price $4 60 to $5; 100 yards line. To rid your setters of flea anoint with mercurial ointment, muzzling the dog so that he cannot lick it. After it has been thoroughly rubbed on let it remain three or four hours. Then wash off with soap and warm water. Or use Persian insect powder.

NEMO, Catskill.—We have wasted a good deal of powder and paper in replying by mail to assumed correspondents who have addressed their inquires to us relative to specified guns, gunmakers, etc., asking an answer through the Correspondents' Column; but as these letters are invariably returned by the post office as uncalled for we conclude that there is "no such feller" as "Chas. A. Kobb, Pittsburg," *et al.* There may be *corn* on that cobb, but we can't see it. It is too fresh.

F. N. N., Concord, N. H.—1. Some glass ball clubs use sheets to catch the broken glass. The size depends upon trap and manner of throwing balls. Should be at least 20 feet square. 2. For prices of balls see our advertising columns. 3. Size of shot used is No. 8. 4. The laws of Massachusetts require mill owners to provide suitable fishways. 5. There are fishways at the Lowell and Billerica dams. 6. The State Fish Commissioners are the parties to apply to in these matters.

F. S., Aberdeen.—1. I have a fine —— muzzle-loading shot-gun, known here as the best penetration and shooting gun. Laminated steel barrels, 12 bore, 32 inches. What is the proper charge to shoot at glass balls and what No. of shot? 2. Where can I obtain a correct pocket map of the States of Florida, Louisiana and Texas, and what is the price of each of them? Ans. 1. Three and a half drachms powder, one and a quarter oz. of No. 8. 2. Of M. Dripps, No. 111 Fulton st. Florida costs 50 cents, Louisiana 50 cents and Texas $1.25.

S. J. S., Sandy Spring, Md.—Where can I procure bass fry, or could I propagate them? If so, how? Ans. You had better write to your State Fish Commissioner for fry or spawners. If the State has not got them we will tell you where to procure some. Milton P. Pierce, of Wenonah, New Jersey, used to propagate black bass for market, but we are not sure that he does now. Your best plan is to catch some old spawners right away in the nearest water and turn them into your pond. Do not forget to turn loose a lot of minnows for the bass to eat.

TYRO, Richmond, Va.—1. Do you consider the No. 2 Remington rifle perfectly safe with an extra long .38 cartridge (37 grains powder and 176 grains lead)? 2. Can the extra long .38 cartridge be used in a rifle chambered for the long .38? 3. Will the extra long .38 give better results in target shooting at 200 yards than the long? 4. Taking into consideration original cost of gun and expense of ammunition what rifle and cartridge would you advise for target shooting up to 300 yards? 5. Are the .32 and .38 central-fire cartridges better than the rim-fire? Ans. 1. Yes. 2. No. 3. No. 4. .40 calibre, 50 grains. 5. Yes.

SUBSCRIBER.—1. What is the chicken law in Nebraska and Iowa? 2. I have a setter bitch three years old that does not "shed her coat;" only shed about one half of her old hair last year. She is strong and well, but very fat. 3. Please give me the address of the owner of the champion setter Lark. 4. Do you think the use of the "auxiliary rifle barrel" will injure a shot-gun barrel for shooting shot? Ans. 1. In Iowa, close season from January 1 to September 1; in Nebraska, from January 1 to August 1. 2. Nothing but regular feeding and plenty of exercise will do it. A little purgative might bring up condition, if she is too gross. 3. P. H. Morris, Esq. 72 Doane st., New York. 4. Not in the least.

MEMBER OF STATE ASSOCIATION.—1. Under what conditions was the R. V. Pierce badge shot for this year, and where did the entrance money go? 2. Under what conditions was the Greene Smith badge shot for last year, and where is the entrance money? Ans. 1. Fifteen birds, twenty-one yards rise. Open only to members of clubs belonging to the State Association. To be held by the winner each year in trust, and to be accounted for to the State Association. Said winner to receive the entrance fees from the next annual contest. Entrance fee, $10. 2. Open to all organized clubs which were members of Association. To become property of club winning it. English rules, 5 traps, 30 yards. Entrance fee, $50.

AVIS, Jersey City.—In our badge shooting one rule states that no member can change his handicap without permission of the committee. Another rule is that the member winning the badge shall be handicapped three yards from the winning score. A member is handicapped under the rules at 13 yards, but he claims that he can shoot from any distance providing he does not go ahead of his handicap; takes his position at 16 yards and wins the badge. At the next shoot he claims he has the right to shoot again at 16 yards as his handicap is fixed by the committee. Ans. According to the first rule mentioned, unless the committee give their permission, the man must shoot at 13 yards or may be ruled out. If, with permission, he shoots at 16 yards, he must, at the next match, take his position at 19 yards.

TAXIDERMISTS.—In response to several inquiries we give this list of works upon taxidermy: Coues' "Manual of Ornithology," a manual of taxidermy and field work, price $2.50, published by Govt. printing office; C. J. Maynard's "Naturalist's Guide," price $2, Naturalist's Agency, Salem, Mass.; Brown's "Taxidermist's Manual," price $1 Orange Judd & Co., New York; "Taxidermist's Manual," published by Jesse Hanley & Co., 112 Nassau st., N. Y.; J. B. Davies' "Naturalist's Guide" and R. Avis' "Bird Preserving" are English books and can be obtained of Sabin & Sons, Nassau st., N. Y. In addition to these works especially devoted to the subject, Halloch's "Sportsman's Gazetteer" has several pages of practical instruction. "Wrinkles and Receipts," published by Munn & Co., N. Y., also treats of the subject. Please cut this out this time and don't ask the same question so often.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, JUNE 6, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Western Manager, Chicago.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, June 7.—Championship Walk at the Rink, N. Y. Base Ball: Buffalo vs. Allegheny, at Allegheny. Trotting: Plainville, Conn.; Milwaukee, Wis.; Adrian, Mich.; Dayton, O. Running Meeting at St. Louis, Mo.

Saturday, June 8.—Championship Walk as above. American Athletic Club Opening Games, at Hoboken. Montreal Lacrosse Club Annual Spring Games. Mystic Boat Club Regatta, at Newark, N. J.; Schuylkill Navy Open Amateur Regatta. Rossmore Rifle Club, at Staten Island; Regimental Rifle Match, at Creedmoor. Cricket: St. Timothy vs. St. George, at Roxborough; Dorian vs. University of Pa., at Haverford; Belmont vs. Merion, at West Philadelphia; Philadelphia (2d) vs. Young America, at Nicetown. Base Ball: Milwaukee vs. Boston, at Boston; Chicago vs. Providence, at Providence; Cincinnati vs. Indianapolis, at Indianapolis; Star vs. Springfield, at Springfield; Buffalo vs. Allegheny at Allegheny. Running Meeting as above.

Monday, June 10.—Quaker City Club (Phila.) Annual Regatta. Base ball: Rochester vs Tecumseh, at London, Can.; Hornell vs Allegheny, at Allegheny; Hartford vs Springfield, at Hartford.

Tuesday, June 11.—Illinois Sportsmen's Convention at Quincy. Base ball: Rochesters, as above; Hornells; as above; Milwaukee vs Chicago at Chicago; Indianapolis vs Boston, at Boston. Trotting: Edenburgh, Pa; Watertown, N. Y.; Providence, R. I.; Fleetwood Park, N. Y.; Jackson, Mich; Peru, Ind.; Cedar Rapids, Ia; Kalamazoo, Mich.

Wednesday, June 12.—Illinois State Association as above. Upper Hudson Regatta Ass. Spring Regatta. Base ball: Rochester vs. Buffalo, at Buffalo; Hartford vs Lowell, at Lowell. Trotting as above and at Massillon, O. Running Meeting at Columbus, O.

Thursday, June 13.—Illinois Convention as above. New York Yacht Club Annual Regatta; New Jersey (Hoboken) Yacht Club Annual Regatta. Boston Yacht Club Excursion; Upper Hudson Regatta Ass. as above; Leyberger-Feisinger Match, at Pittsburgh, Pa. Base ball: Hornell vs Tecumseh, at London, Can.; Hartford vs Manchester, at Manchester; Indianapolis vs. Boston, at Boston; Milwaukee vs Chicago, at Chicago. Trotting as above. Running Meeting as above.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

THE WATKINS REGATTA.

THE test races at Watkins have come to an end. The importance naturally attaching to this event, which was to be nominally of international reputation and results, renders a brief survey of the contests a paramount necessity in view of the weight likely to be attached by uninformed parties to the victories on Seneca Lake, and the position among amateur oarsmen, the fortunate few may claim as per programme. The original intention of the promoters of the event was to select by fair and open competition among American oarsmen those whom the fates at Watkins would justly declare the champions of this continent. They were to pull under such enviable distinction in the various races open to them, both in England and France, and it was hoped, with some show of reason, that they might prove victorious across the ocean and bring back with them to the West fresh proofs of the prowess of our country in friendly rivalry with the Old World.

Had the regatta in question been a success, in other words, had it been carried out in the spirit at first announced, there can be little doubt but that the races at Watkins would have really been regarded as actual tests and the winners would in all fairness have represented the championship of America. Under such circumstances the public would have abided by whatever they might possibly have done ahead. Defeat would have been acquiesced in without complaint, and our oarsmen would have profited by the lesson and set to work with renewed vigor and hope of wresting from their British friends the coveted laurel wreath of victory some future season. As it is, however, the test races of Watkins can only be looked upon as decided failures. In place of having led to some final and mutually satisfactory ending, the fates and circumstances have been unpropitious. Not that we refer to the overrunning of the town of Watkins with a crowd of strangers, many of whom were not of the most reputable sort, nor to the apparent shortcomings of the committees directly in charge of the arrangements, but to the inexcusable apathy of our best clubs throughout the country in general. That a small county town should have been the centre of attraction for a handful of bad characters, and that the rustic constables were not equal to coping with such an unlooked for invasion is comparatively a matter of small moment. Concerning the operations of the landsharks present in the picturesque little village on the lake it is not necessary here to digress, save, perhaps, to remark that they were by no means either so numerous or prominent as the cavilings of certain fault-finders by nature would have the public believe. It is quite safe to say that Watkins was no more forced to contribute to the wily machinations of blacklegs or humbugs than is any other meeting of a like kind where the victims to the gamblers' spoils congregate in large numbers. That the Regatta Committee could in any sense be held responsible for the town authorities, and their derelictions or incapacity, for the clerk of the weather, or for the rulings of the N. A. of A. O. is equally ridiculous, and the attempts made to saddle Gen. Magee or Mr. Gano with the failure to provide smooth water and comfortable accommodations for certain privileged parties will fail in their object.

The responsibility for the shortcomings of the races themselves rest largely with our amateur oarsmen, and much as we regret the fact, it cannot be denied that the results of the Watkins trials have fallen far below the estimate the public has looked for. The entries were meagre, and remarkable for the absence of our best known clubs and scullers of reputation. The list was still further clipped of representative men when Messrs. Walsh and Levein were set aside by disqualification in accord with a silly rule of the N. A. of A. O. That the committee were compelled to disqualify the pair is not a reflection upon either the authorities of the regatta or upon the two gentlemen who suffered under the ruling: it is simply a comment upon the assininity of one of the rules of the only and the universally recognized boating association of national standing in America. We opine that when the cast-iron rule under which the Nautilus pair have technically been put under a cloud was first devised, its progenitors were not aware of the future havoc it would create, and it is not much to the credit of the association that the rule has not yet been modified in such a manner as to admit of retional application to different cases and circumstances. It is probable that the relief into which it has been brought through the action forced upon the Watkins Regatta Commitee, will cause a review of some of the inelastic and harsh axioms of the N. A. of A. O., if not, the organization may set down its popularity as on the wane.

What with the mixed nature of the races, some in heats, others abreast, the paucity of entrances from our best men, the rough water, and the inflexible rules concerning amateurs, we must enter our decided protest against the claims of any oarsmen that finally do reach European shores to represent the championship of America. The public has been sadly disappointed in the Seneca Lake races, and is in no mood to be charged with the fresh defeats that await the traveling crews abroad; for it would be idle speculation to close our eyes to the fact that there is not the ghost of a chance for the men from Watkins either at Henley or on the Seine.

DOG LORE IN AMERICA.

CAPT. John M. Taylor, the first Kennel Editor of FOREST AND STREAM, and at present its special correspondent in England, has recently been made an honorary member of the Kennel Club of England, in consideration of his signal services during the past twenty-two years in improving the character and breed of dogs, and educating sportsmen to their proper care and use. This period of twenty-two years Capt. Taylor has passed in America, with the exception of occasional trips to Europe; and, of course, his efforts and usefulness have applied directly and immediately to dogs and their fanciers in America, and correlatively to promoting friendly intercourse and intelligent investigation between gentlemen sportsmen on both sides of the Atlantic. The reciprocal acquaintance and knowledge thus obtained through Capt. Taylor's instrumentality have enabled them to co-operate intelligibly in various ways to improve canine stock, and to create and establish thoroughbred dogs of all classes as nearly perfect as possible in physical points and their adaptation to the different kinds of field work required of them. The results, so far as America is concerned, are abundantly obvious in our Bench Shows and Field Trial Exhibitions. Whether England has drawn equal material benefit from the comparative study is not so apparent.

Capt. Taylor's efforts first became conspicuous through the medium of the FOREST AND STREAM. The establishment of its Kennel Department, under his management, afforded the opportunity. This was nearly five years ago. The United States had never previously possessed a journal to advocate the betterments of dogs. Papers which have since sought a front place as "dog organs" had no existence then, nor were they projected until long afterward. The whole field of study and investigation was unoccupied and comparatively new. Very little had been written about dogs in America before FOREST AND STREAM was started. What we learned of ourselves was gathered from the contributions to London *Field* and *Fancier's Gazette* of casual correspondents like "Podgers," "Forest Aisle," and other well-known writers, many of whom are now on our own list of contributers. Very little consideration was paid in those days to the comforts, rights and belongings of dogs or their owners. Fine breeds were not recognized by the uneducated eye; they were hardly more respected than curs, because the public were unable to distinguish their points of difference or superiority. The whole canine race, once a notable factor in America, especially among the "hard-goers" of Virginia and the Carolinas, had deteriorated, through neglect and unexpected vicissitudes, into a mongrel pack worthy of Constantinople. Scarcely a trace of the aristocratic kennels of the old southern States survived the rebellion, and the strains which were preserved came by the interposition of appreciative northern soldiers of genteel education, into whose hands the old stock passed as contraband of war.

Precisely what Capt. Taylor has done to restore and revive; and how systematically he went to work at the outset to develop and adapt the course of instruction which he intended those who matriculated should pursue, can be ascertained by referring to the early files of FOREST AND STREAM. His opening sentence in the first number touches the fountain source, viz., *man's instinctive love for the dog*, the possession of which alone enables him to analyze and estimate the canine character. He treats the animal as a sentient creature, and not as a brute.

In the third number of the paper (1873) the distinguishing excellencies and points of difference of the pointer and setter are given; and all that has since been written in books and papers merely amplifies what is there said about color, strains, management, nose, staunchness, etc., etc., of the several crosses of Gordon, red Irish, English and American setters. In one paragraph Capt. Taylor, with the positivity of one who is master of what he knows, states that "a pure blood English setter, crossed with an American, will be a far more useful animal than the high-priced imported English setter, as 'high-priced dogs are only valuable to get the best strains from.'" Crucial tests have since proved the truth of this assertion. In subsequent numbers of the paper there follow descriptions of beagles, spaniels, Scotch deerhounds, foxhounds, retrievers, greyhounds, Chesapeake dogs, mastiffs, harriers, and all other varieties of sporting dogs, with their characteristics, relative degrees of intelligence, ills and humors, methods of feeding and breaking, and other knowledge necessary to prepare the sportsmen for their employment in their respective fields of service. In October, 1873, field trials and their importance were first brought to notice, and illustrated by a full account of the trials at Ipswich, England. In the same month (Oct 1873) we have an account of the Nottingham Dog Shows. To most dog owners in this country the written information thus imparted was as novel as Gospel to an unconverted sinner. It was a new literature and a new revelation. The first fruits of Capt. Taylor's efforts came sooner than might naturally have been hoped for in written congratulations from leading celebrities abroad, who were encouraged by the interest so unexpectedly manifested here. Direct overtures came from English gentlemen, recognized as authorities and competent to act, who hastened to foster the impulse engendered by giving Americans an opportunity to see how the thing was done at home. The letter appended is in evidence. It is sufficiently assuring. The writer, Mr. Price, is the owner of "Belle," whose portrait we printed April 9, 1874:

GREAT WESTERN HOTEL, Birmingham, Eng., November 29th, 1873.

EDITOR FOREST AND STREAM:

We are pleased to hear that our respected cousins on the other side of the Atlantic are beginning to take an interest in field trials on game for pointers and setters, the newest, and by many thought the most interesting of all our British sports, and in order to give these sportsmen in America, who have taken up shooting dogs, an opportunity of seeing the best animals perform that England can produce, Mr. Macdona and myself will be glad to make a friendly match against any pointers or setters now in America; not English dogs, imported for the purpose—these we can run at home—but *bona fide* American animals. If the

owners of the American team consent to run in England, we will gladly pay expenses, and in this case a well known sportsman and master of fox hounds, Sir Watkin Wm. Wynn, of Wynnstay, will lend the requisite ground and game. I should propose that a double match, brace against brace, should first be run off, then two single matches to follow. I would suggest as the English judge the name of Viscount Combermere, a well known arbitrator at field trials, and a renowned sportsman. Also, the 13th and 14th of August next as the date for running off the match, and, if preferred, two brace from each country can take part in it. Your obedient servant, R. L. Price.

Following the publication of this letter, and pending the acceptance of the international challenge, all means were employed by Capt. Taylor to acquaint our sportsmen with the rules governing field trials in England, and to inform them of the qualifications of dogs and the requisites for performance in the field; scales of points were published by which their merits could be rated, here or there, (in America or England;) and preliminary details were arranged with greatest care. Finally, he sketched the English Kennel Club, defining its objects and duties, and urged (Feb. 5, 1874, F. & S., Vol. I., p. 409) the sportsmen of America to form in New York an organization similar to it. The article referred to says: "We have been in correspondence with several prominent gentlemen, owners of sportsmen's dogs, as to making the preliminary arrangements, and we have their entire support as to the founding of just such a kennel club in this country."

From what has been stated it will be seen that Forest and Stream, through its kennel editor, not only introduced Field Trials and Bench Shows into America, but laid the foundation of its first Kennel Club. We respectfully refer owners and trainers of dogs to these editorial articles for many valuable suggestions.

Unfortunately the International Field Trial never took place, although it was everywhere regarded with the greatest interest, many entries being conditionally made, and passages actually provided for two brace of dogs by the Williams & Orion steamship line, either way; it failed, simply because it was impossible to reconcile the English rules of merit with our own ideas of a dog's field qualities—they allowing no points whatever for retrieving, while we claimed fifteen. The whole difficulty of adjustment arose from the fact of the character of the ground hunted over in the two countries requiring different qualities; the English also making a great point of "dropping," while we consider it of no account, preferring to see our dogs and know where they are, which would be impossible in our tall prairie grass and native cover if they practiced the habit.

Meanwhile, before it became conclusive that there was to be no international field trial, Capt. Taylor published (April 9th, 1874) a code of regulations to govern Field Trials in America, which he submitted, through the columns of Forest and Stream, to the various State Sportsmen's Associations whose Conventions were announced to occur in the following months of May and June, hoping that they would order a preliminary trial in the fall and so designate the times of holding their conventions of the year following, as to permit of field trials being held at such times under their auspices. He also prepared a scale of points to suit American bred setters, (the value of which is apparent,) and began (June 4) to republish from English authority a series of articles giving the points by which every variety of dog is judged on the Show Bench in England. This important work accomplished, he devoted himself through the columns of this paper to bettering the blood of dogs. The best native strains, like the Webster and Gildersleeve (northern and southern), were traced out; and it was believed that by engrafting and crossing these with the best imported blood the desideratum would be secured. Then followed discussion of the merits of all breeds, Irish, Gordon, Laverack, English, etc., by writers on both sides of the Atlantic. On June 14, 1874, Capt. Taylor imported for Chas. H. Raymond, Esq., the two celebrated Laveracks, the first ever brought to America with the exception of Dr. Gautier's dog imported two years previously. About the same time the Macdona dogs, Kirby and Milo, came over to Dr. Rowe, through Capt. Taylor, and also the Ranger pup Venus and the bitch Brosna, in whelp by Ranger, to the same gentleman. Other valued stock succeeded. Then pedigrees began to be asked for and scrutinized, and purchasers gradually became more particular, until now a dog without a record is no dog at all. A stuffed defunct dog will bring more money at a sale.

We have made this cursory sketch of what may be called the "Dog's Rise and Progress" in America for several reasons. 1st. Because it is news to three-fourths of our readers; 2d. To show what an important part the Forest and Stream and its whilom Kennel Editor have played in bringing the dog to its present reputation; and 3d. To preserve this instrumentality from oblivion, and hold our claim good against denials of what became a matter of record so long ago that priority and precedence are looked upon by unprincipled men as merely a lease expired and not a right guaranteed. On May 7, 1874, we predicted that field trials would eventually become as popular in this country as they were abroad at that time, and we believe that they will, although the initiatory step taken by Tennessee in October, 1874, has not been so frequently repeated as to amount to a complete fulfillment of the prophecy. The same cannot be said of bench shows. The first American bench show was held at Chiesgo, June 2, 1874, under the auspices of the Illinois State Sportsman's Association. Those at Memphis and Mineola, L. I., followed in October, and since then they have multiplied until their name is a noun of multitude. The first plan of awards ever devised for bench shows in America was published in the Forest and Stream in January, 1875.

In the fall of 1874, while on a tour through the West with the Irish Team, the desirability of establishing a mileage system of dog transportation on railroads was advocated by us, and in the January following (1875), the Missouri, Kansas and Texas road took the initiative.

Keeping pace with the requirements of sportsmen as they developed, we instituted a Kennel Register, in February, 1876, for the registration of pedigrees. Subsequently (1) the Chicago *Field* opened a competitive register. Then (2) a National Kennel Club, of seven self-appointed delegates, was formed, of which the editor of the *Field* was made President. Next (3), in February, 1877, a year afterward, the National Kennel Club announced that it was "about to take immediate steps toward publishing a Kennel Club Stud Book;" that (4) it was prejudicial to the interests of dogs to publish two stud books; and (5) as the N. K. C. stud book would necessarily be considered the authority, ours (6) would make confusion and dissatisfaction; therefore (7), for the sake of harmony, it was desirable that the Forest and Stream and the Chicago paper should both turn over their lists to the clubs to manipulate, possess and publish. We needed—for the simple reason that our Register would not be perfect, if any portion of the pedigrees entered in the Chicago *Field* should be withheld, and we knew that they would be. Having turned over and dispossessed ourselves of our hard-earned and accumulated property, the loss of which has placed us at a great disadvantage ever since, the Kennel Club placed the work in the hands of Mr. Arnold Burges (the kennel editor of the Chicago *Field!*) to edit. This was the final move on the board. The confidence game worked to a charm, and Dr. Rowe euchered us with a natural point in our hand! Jockeys will admire the smartness. The fraternity of sportsmen ought to deprecate a measure which has already kept the *Register* from publication and delivery for more than a year.

Had this book been issued within a reasonable time we would have kept silent and swallowed our chagrin; as it is, we take this opportunity to show the cause of our apparent delinquency, in hope that any who may have judged us blameworthy will acquit us. In the main, our efforts in behalf of sportsmen have been successful. If they have ever failed, it has been because they have been defeated by direct instrumentalities like this, prompted by jealousy or business rivalry. Prestige or honor, we verily believe, do not attach to such methods of circumvention.

Since Capt. Taylor took up his residence in Virginia, he has sent to Forest and Stream many useful suggestions. His last one was, to have a series of Eastern Field Trials in the fall. It has been taken up by the Baltimore Kennel Club, and the event will come off soon after Capt. Taylor's return from England. No doubt the Captain will make the information which he gains abroad most useful in its practical application here. By comparative analysis he will be able to eliminate what is bad and add what is desirable to our own category.

TRIBUTE TO FRANK FORESTER.

In the last issue of Forest and Stream I observed and read with much interest a fine tribute to the worth of that inspired genius, "Frank Forester," now, alas! gone to the "shadow land," and wish to thank "Gellert" for the melancholy pleasure I have taken in the perusal of his reminiscences of one endeared by tenderest ties to every true American sportsman. There is, however, one slight error in the kindly tribute of "Gellert" which I desire to correct. In his last touching and plaintive letter to the press of America, written just previous to his tragic death, (and with which, I think, most of our native sportsmen are familiar, as it is embodied in the later editions of Forester's incomparable "Field Sports," in a beautiful memoir by a personal friend of the lamented author), Herbert did not, as misquoted by "Gellert," remark: "You will miss me when I am gone." Ah, no! his mood was too melancholy, too hopeless and forlorn to pen such a remark. There is indeed but a change of one word in that sentence, but what a wide difference that slight error gives to the sense of the remark. Poor Herbert remarked: "*Few will miss me when I am gone; probably none lament me—so be it, only I implore you do not misrepresent and malign me.*" (The italics are my own.) This will serve to show how utterly crushed and broken was the naturally proud spirit of "our Frank," as he is still lovingly and tenderly known, in memory, by the fraternity of which he was, while living, the acknowledged leader. There is little doubt that poor Herbert had become upon the subject of his domestic woes, a monomaniac, otherwise he could never have rashly destroyed his own life. His deep and pitiful despair speaks out in mute but touching language through every sentence in the few last letters to those dear friends, I. Anson, Kinney, Anthon, as well as in his epistle to the press and note to the coroner. All bespeak a spirit wholly and irrevocably crushed by overwhelming sorrow, whence he was plunged from the very pinnacle of happiness, as it were, having three months previously wedded a young and beautiful wife, the cause (unintentional, let us hope, on her part) of his premature death.

To leave a melancholy topic: it may not be generally known that Frank Forester's genius as a poet was deemed by many equal, if not superior, to his brilliancy as a prose writer. The three stanzas quoted in the department of "Field Sports" devoted to Autumn Shooting, wherein he alludes to the season as "the time of year the poor balladmonger (Herbert), above quoted, has, perhaps, labored to depict," is a fine specimen of the author's genius in poetry; though, in truth, all the productions of his pen, whether prose or verse, have the true ring and sentiment of real poetry, not cramped or trammeled by mere jingling rhimes and measure, but genuine soul-stirring poetry in the actual sense of that term, and this quotation, referred to in his "Field Sports" occurs originally in his beautiful poem, "Jane McRhea," one of a series written by Herbert under the running title of "Ballads of the American Revolution." A very fine poem, entitled "The Hawk Ing Party," is worthy in dash and spirit to be the production of the grand sportsman-bard—Sir Walter Scott—was published from the pen of Herbert, in an early number of "Graham's Magazine." I might, perhaps, did space permit, quote a few verses from his more pretentious poetic productions, but having drawn my humble jottings out to a greater length than anticipated, will close for the time, and beg leave to subscribe myself as ever, Thine fraternally, Will Wildwood.

J. O. Whitney.—We regret to announce the death, at the early age of twenty-five years, of Mr. J. O. Whitney, the editor of the St. Augustine *Florida Press*. As a newspaper man Mr. Whitney was widely known in Florida and the Southern States. He was a frequent and valued contributor to this journal, and to his uniform courtesy we have been in past years indebted for many substantial services at the South.

Excursion to Labrador.—The summer excursion to Labrador, under the care of Mr. M. M. Chick, 41 Franklin st., Boston, leaves that city about the 6th of July. The party sail in a fast clipper schooner, and are to be absent during the heated term. The scenery, cool climate and the rare sport offer strong inducements to recreation seekers. Mr. Chick has conducted similar excursions before, the one of last year proving a most pleasant trip. Naturalists, photographers, sportsmen and pleasure seekers make up the present party. There is room for a few more, as the number is not quite full.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

National Sportsmen's Association, Wilkesbarre, Pa., June 11.

Illinois State Sportsmen's Association, Quincy, June 11; Secty. Geo. E. Wheeler.

The Pennsylvania State Association for the Protection of Game and Fish, Wilkesbarre, June 11; Secty., Benj. F. Dorrance.

Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.

Tennessee State Sportsmen's Association, Nashville, Dec. 2 Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

National Sportsman's Association.—*The Beginning.*—We have before us a rather soiled sheet of printing paper, written with lead pencil, which recalls to mind the origin of the National Sportsman's Association. This paper is the first rough draft, in the handwriting of T. C. Banks, Esq., now the efficient business manager of Forest and Stream and Rod and Gun. The annual convention of this important body will take place at Wilkesbarre, Pa., on the 11th instant. It is most essential that its working forces should be strengthened and its vitality stimulated. State Associations which are to meet this month, and those to follow, should not fail to appoint delegates to the next National Convention who will pledge themselves to attend and promote its praiseworthy objects. Its usefulness will be commensurate with the efforts to make it useful.

Moose in the Adirondacks.—A two-years-old bull-moose has been received at the park of the Adirondacks Hunting and Fishing Club, in Essex County.

Iowa State Association.—The last annual convention met at Des Moines, May 28, and three days following. The following clubs were represented: Des Moines Sportsmen Club, Marshalltown Shooting Club, Atlantic Gun Club, Missouri Valley Gun Club, Keosauqua Sportsmen Club, Franklin County Audubon Club, Council Bluffs Sportsmen Club, Centennial Sportsmen Club, Gate City Sporting Club, Burlington Sportsmen Association and Creston Sportsmen Association. Several interesting papers were read before the association, among them one by Mr. Miller on the Iowa Game Law. The officers for the ensuing year are: Pres., L. L. De Lano; First Vice-Pres., H. W. Smythe; Second Vice-Pres., W. C. Ellis; Rec. Sec., D. C. Beaman; Cor. Sec., Samuel Lowe; Treas., G. W. Ogilvie. Board of Directors—J. C. Hoffmayer, E. A. Abbott, R. H. Taylor, Geo. C. Henry and Geo. Waddington. As Law Committee—J. L. Williams, E. J. Ingersoll and B. F. Montgomery. The next convention will be held at Marshalltown, on the third Tuesday of May, 1879.

The Rifle.

Massachusetts—*Boston, May* 31.—Rifle gallery, 655 Washington street. Three best scores for three prizes; eight shots per man:

J E Harris.....5 5 5 5 5 5 4 5—39 J Cowan .....5 5 4 4 4 4 4 5—35
F Hollis.....4 5 5 4 5 5 4 5—37 E B.

Connecticut—*Willowbrook, May* 25, 1878.—The first fortnightly competition for prizes offered by the Connecticut Rifle Association. The attendance was good, though on account of a shower of rain in the midst of the shooting, several withdrew before finishing their scores. C. O. Case, New Britain, was the winner of the long-range match; W. H. Binns, Hartford, of the mid-range, Remington prize; Jas. Johnson, New Britain, of the all-comers' match, 200

yards; Lieut. Osgood, New Britain, of the military match, 200 and 500 yards. The scores are as follows:

Long-Range Match.

C O Case, New Britain.

800	5	5	5	5	4	3	5	5	4	5	—46
900	4	3	5	5	5	4	2	5	3	5	—41
1,000	3	5	4	3	5	4	5	3	3	5	—40—127

W H Binns, Hartford.

800	3	3	2	3	4	2	5	2	5	5	—34
900	0	5	5	5	0	5	5	4	5	5	—39
1,000	2	5	5	3	5	4	4	4	5	3	—40—113

I N Camp, Middletown.

800	4	3	4	5	5	5	4	3	5	4	—42
900	5	3	4	4	3	5	5	4	3	3	—40
1,000	3	2	3	0	5	0	5	5	5	0	—28—110

O V Coffin, Middletown.

800	4	4	5	4	4	3	5	5	5	5	—44
900	3	2	2	2	3	3	2	5	3	5	—30
1,000	5	0	4	4	4	0	3	4	4	2	—30—104

Mid-Range Match, Remington prize, 500 yards.

W H Binns, Hartford	3	5	5	5	5	4	4	5	5	5	—46
F Wessell, New Britain	3	5	4	5	5	5	3	5	5	5	—45

All-Comers' Match, 200 yards, any rifle.

Jas Johnson, New Britain	4	4	4	5	5	5	5	—32
J D Marks, Collinsville	5	4	4	5	5	4	4	—31
O E Pillard, New Britain	5	4	4	4	4	5	4	—30
J B Atkinson	4	5	4	5	4	4	4	—30
O H Hall, New Britain	4	4	4	4	5	4	4	—29
J W Carlton, New Britain	4	5	4	4	4	4	4	—29
C H Faughran	4	4	4	4	4	4	4	—28
Azro Spaulding, New Britain	3	5	4	4	5	3	4	—28
Dudley Seymour, Hartford	4	3	3	4	4	4	4	—26
L A Barbour, Hartford	4	3	4	3	4	4	3	—25
J Hetterich	4	3	0	3	4	5	3	—22
W I Fielding, New Britain	3	4	3	2	3	3	3	—21
F E Watkins	4	4	0	3	3	3	4	—21
Julius Pease, New Britain	3	4	3	0	3	3	4	—20

Military Match, 200 and 500 yards.

Lieut J S Osgood, New Britain	200	5	4	4	4	4	5	4—30
	500	5	4	4	5	3	3	5—29—59
Lieut Wm Clark, Hartford	200	4	4	4	3	4	4	4—27
	500	4	4	5	5	3	5	5—31—58
Corp F V Chapin, Hartford	200	3	4	4	4	4	5	3—27
	500	4	3	4	0	3	3	2—19—46
G A Cornell, Hartford	200	3	4	4	3	3	4	3—24
	500	4	3	5	4	4	4	0—21—45
Lieut-Col Barbour, Hartford	200	0	2	4	0	2	4	3—15
	500	3	3	4	4	3	3	3—23—38

NEW YORK—*Willink, May* 21.—Grand prize shoot at North Collins, N. Y. The shoot at Collins was well attended. The first prize was an organ, the second a Maynard rifle, the third a watch and chain. The rifles used were breech-loaders, Remingtons, Maynards and others. There were three muzzle-loaders in the match. Dr. Moyer, of Lockport, N. Y., was the winner of the first prize with a Remington Creedmoor breech-loader, making a string of one inch in three consecutive shots. H. V. Perry, of Jamestown, N. Y., gunsmith, winning second and third prizes with a muzzle-loader of his own make, his strings being 1 5-16 and 2 5-16. For good, steady average shooting, the best shooting in this match was done by J. F. Champlin, of Willink, N. Y., with a muzzle-loader made by J. O. Robson, of Buffalo, twenty years ago. Mr. Champlin used the old style common peep and bead sights, as also the common home-made bullet without swaging. The following is the average score of the three gentlemen named as reported to me by H. H. Wihirt, secretary North Collins prize shoot:

Dr. Moyer, of Lockport, N. Y.—Target No. 16, 5 11-16th in.; target No. 27, 6 5-8th in.; target No. 32, 1 in. Average, 4 81.48.

H. V. Perry, of Jamestown, N. Y.—Target No. 24, 3 in.; target No. 46, 1 5 16th in.; target No. 55, 6 3-16th in.; target No. 91, 2 5-15th in.; target No. 93, 2 11-16th in. Average, 3 1-10.

J. F. Champlin, of Willink, N. Y.—Target No. 52, 2 1-2 in.; target No. 58, 2 7-8th in.; target No. 65, 3 1-16th in. Average, 2 13-16.

Rules and Regulations—Distance, 165 yards; any rifle; any sights except telescope; targets of any pattern; four shots for a string. J. W. P.

NEW YORK—*Ogdensburg.*—The Ogdensburg Rifle Club have been practicing of late on their new range, called the Oswegatchie. On May 18, 73 at 900 yards; May 28, 22 consecutive bull's-eyes at 800 yards were made by James Ives, and May 30, 70 points at 900 yards by A. Callaghan. On the 30th the following scores were made: James Ives, 800 yds., 73; 900, 69; 1,000, 68; total, 210. A. Callaghan, 900, 70; 1,000, 64. M. S. See, 900, 65; 1,000, 62. R. B. Pickup, 1,000, 68.

RIFLE PRACTICE IN NEW YORK.—The amendments to the military code by the last legislature has placed the rifle practice of the National Guard in a separate department instead of having it, as heretofore, a bureau in the Inspector-General's office. Colonel Geo. W. Wingate has been commissioned by Governor Robinson as its chief, with the rank of Brigadier-General, but retaining his former title of General-Inspector of Rifle Practice. He has appointed as his assistant (with the rank of Colonel) Major T. Howard Cowperthwait, formerly Inspector of Rifle Practice of the First Brigade. Colonel Cowperthwait has been one of the most efficient Brigade Inspectors in the National Guard, and his appointment is a well-deserved promotion.

ZETTLER RIFLE CLUB—*Guttenberg, June* 1.—Ring target, 200 yards, off-hand; 10 shots, possible 250:

W M Farrow	221	B Zettler	203
M Dorrler	217	H Oehl	196
F Fenning	212	F Broadway	195
D Miller	209	C Zettler	192

June 3—Competition for Zettler badge; conditions as above:

P Fenning	214	H Oehl	192
M Dorrler	208	G A Shurman	188
M W Farrow	205	N D Ward	185
C Judson	205	F Farbarus	189
B Zettler	196	C G Zettler	182
R Zimmerman	199	M L Riggs	178
D Miller	192	T Broadway	170
M B Engel	190	J Dutli	159

CREEDMOOR, *May* 29.—Fifth competition, Wylie badge. Conditions—Military rifle, 300 and 500 yards; seven rounds, off-hand; score:

W R Livermore	20	30	50	J W Mangam	21	8	29
W M Farrow	27	23	50	M M Maltby	16	11	27
F Hyde	22	27	49	A M Miller	16	8	24
J R Grobman	24	18	42	P McMorrow	16	7	23
J L Paulding	19	18	37	W W Gray	10	2	12
A B Van Hensen	25	8	33				

Amateur Rifle Club match at 200 yards; 15 scoring shots, any rifle, for badge:

F H Holton	68	N D Ward	60
W M Farrow	67	H Fisher	60
F Hyde	66	P G Sandford	60
R H Keene	63	T Lamb	58
M M Maltby	61	J A Hatry	50
C E Blydenburgh	61		

TURNER CADETS.—First team shoot, Zettler's gallery, New York, May 29; 200 yds; Creedmoor reduced targets:

Hilwitzer Team.		Recht Team.	
G Hilwitzer	39	H Spriesser	42
T Schmager	37	C J Recht	39
C Binsh	33	F Sauter	34
H Sparmer	30	L Bischoff	30
F Hayck Jr	30	G Banzer	27
L Denis	28	J Rosenbaum	26
A Litterst	27	J Gewundt	22
H Niebing	25	Wm Eisinger	19
	249		239

YORKVILLE RIFLE CLUB.—At the weekly contest for I. R. Grohman's 2d challenge badge, Mr. E. Gielfuss won for the third successive time. The badge became his property. J. R. G.

CREEDMOOR.—On Monday last, notwithstanding rain and fog, the competition for the marksmen's badge of the National Guard took place. Distance, 300 and 500 yards; five rounds at each range, with no sighting shots. To secure a badge 25 in a possible 50 was necessary. Of the Thirteenth Regiment, 24 men; of the Fourteenth, 13 men; of the Fifteenth Batallion, four were qualified; of the Twenty-third Regiment, 43 men; of the Twenty-second Regiment, 20 men, and of the Forty-second Regiment 20 men won badges.

ARMS AND AMMUNITION AT CREEDMOOR.—By an arrangement made with Mr. Homer Fisher and the National Rifle Association, Mr. Fisher will have the exclusive sale of rifles and ammunition on the range at Creedmoor. This measure will allow riflemen to obtain all the supplies necessary for rifle shooting, and will save a great deal of trouble. A very full and complete supply of every kind of ammuntion will be kept on hand, and rifles of the best makers will be on sale. Purchasers will be enabled to try their arms at once; also any rifle purchased can be fully tested as to elevation, etc., and the targets made, as in shot-guns, can accompany the arms. Shot-guns will also be targeted, and pattern and penetration shown. We consider that Mr. Homer Fisher's arrangement is an excellent one, and from his method of conducting business we feel quite certain that he will be well patronized.

Gold and Stock Rifle Club and Western Union Telegraph. Distance, 100 yards with Ballard rifles. Gold and Stock won with 241. Western Union, 231.

MOUNTAIN VIEW—*New Jersey, May* 28.—We are honored with a number of distinguished guests at this place to-day. Mr. Bliss, President, and Mr. Olds, Superintendent of the Schaghticoke Powder Works, are looking over the extensive works, while Captain Jackson is trying his best to make ten consecutive bull's-eyes. With a fickle wind, Mr. Greene, Treasurer of the L. & R. P. Co., coaches and scores. A. T. H.

MATCH BY MAIL.—Match between the Montgomery Rifle Club, of Sandy Spring, Md., and the Maynard Rifle Club, of Wheeling, W. Va., on May 24, 1878. Distances, 200 and 500 yards; teams of four, fifteen shots at each distance:

Montgomery Rifle Club.

200 yards.

S S Scott	4	0	5	4	4	5	4	4	4	4	4	4	0	0	—50
S B Wetherald	2	3	2	3	4	3	4	3	4	3	3	4	5	4	5—52
E W Scott	5	4	4	4	2	2	4	3	3	4	3	4	3	4	4—53
W Scott	4	3	3	4	3	5	4	3	5	4	3	3	4	4	4—56—211

500 yards.

S I Scott	5	5	5	4	4	4	5	5	5	5	4	5	5	5	—71
Wetherald	5	4	5	0	4	4	4	5	3	2	0	4	4	5	4—53
E W Scott	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5—74
W Scott	4	5	5	4	5	5	5	5	5	5	5	4	5	5	5—72—270
Total															481

The 200-yard score was shot in a pouring rain, and many of the cartridges hung fire badly.

Maynard Rifle Club.

200 yards.

C B Dwight	3	4	4	4	4	5	4	4	3	3	4	4	4	4	—58
Stanton	3	4	2	5	4	4	4	4	4	4	4	4	4	4	—53
E B Worthen	3	4	3	3	4	4	3	4	4	3	3	4	3	4	5—54
S K Wallace	4	3	4	4	4	4	3	4	4	4	3	3	5	5	—56—226

500 yards.

C E Dwight	5	5	4	4	5	5	4	5	5	4	5	5	5	4	5—70
J D Stanton	3	4	5	5	5	5	5	4	5	4	3	4	5	4	5—67
E E Worthen	4	5	5	2	0	5	3	4	5	5	4	4	5	5	5—61
S K Wallace	4	2	3	5	5	4	0	2	4	2	4	4	3	4	5—51—249
Total, 200 and 500 yards															475

Weather threatening, with a very strong wind. E. S.

A NEW SIGHT.—A rifleman in Richmond, Va. (and it may be well to mention that in Richmond rifle shooting both practically and theoretically is admirably well understood) has been experimenting with a novel sight, made of a crystal, so cut as to prevent the refraction of the rays of light. This new sight has been sent to some of our leading riflemen, and we expect to hear good results derived from its use.

DUDLEY SELPH.—We regret to hear through the public prints that an accident has happened to Mr. Dudley Selph, the well-known New Orleans rifleman. We forbear mentioning further particulars, until we have the fullest statement of the nature of the accident—if any accident there is—and the arm used on the occasion.

DR. W. F. CARVER.—Dr. W. F. Carver paid us a visit on Monday last, and we were glad to welcome this remarkable rifleman. The Doctor stands six feet two inches, and is as handsome a specimen of a man as we would like to look at. The theory that all riflemen should have gray eyes is at fault in the present instance, as Dr. Carver's eyes are hazel. There is a peculiarity, however, in these eyes which are remarkable. They are very mobile, lustrous, full and large, though soft and winning. Perhaps the constant watchfulness of these eyes may have arisen from Indian habits, the Doctor having lived among the savages for many years. The Doctor is some thirty-eight years of age and in the prime of life, and total abstinence from spirits and tobacco has given him robust strength, with a most shapely form. On asking the Doctor how he learned to shoot, he said "There was no time when he could not shoot." He mentioned his skill with the bow and arrow in the Indian fashion, and declared that if he set at it, in two months' time, when his arms and fingers were toughened, that he thought he could shoot with the bow as well as ever. Our readers have been already informed of the Doctor's performances. With a Winchester rifle, he can break glass balls just as does Captain Bogardus. In some of his fancy shots, the objects being stationary, the Doctor shoots from his hip. He cuts five-cent pieces, nickels, half-dollars or dollars while in the air. The great match Doctor Carver proposes to accomplish is to break 5,500 glass balls in 500 minutes. Perfectly conscious of the great tax on the strength of any one endeavoring to perform this feat, the Doctor, nevertheless, believes he can accomplish it. The place and time when this match is to take place will be duly announced in our columns. The Doctor is the recipient of some very superb gold medals and badges, presented to him by his numerous California admirers. On Monday night this champion rifleman left for New Haven, in order to give an exhibition of his skill to the employees of the Winchester Repeating Fire-Arms Company. While in New York Dr. Carver's headquarters will be at the office of the Winchester Rifle Company. Though speaking with proper pride of his achievements with the rifle, Dr. Carver is no boaster, and is sure to make numerous friends from his retiring and quiet manner. We shall keep our readers fully informed of Dr. Carver's movements, and will give the details of his matches. He remains in New Haven until the end of the week, the guest of the Winchester Arms Co., and will give an exhibition there to-morrow.

RECOIL.

The FOREST AND STREAM AND ROD AND GUN has perhaps given the fullest ventilation to the subject of recoil It is surprising when a topic of this character is discussed how many different views are promulgated. Of course we by no means indorse some of the very extraordinary views which were published. Still, from the miscellaneous character of the many papers we have printed on recoil, we have no doubt a great many novel points have been presented. At our request, Mr. C. T. Stokes wrote to Col. Scott Ship, of the Virginia Military Institute, requesting him to give in full the subject of recoil. This communication, of an exhaustive character, we now take great pleasure in publishing. We beg also to state that, until further notice, the recoil matter may be considered as closed:

VIRGINIA MILITARY INSTITUTE,
Lexington, Va. May 5, 1878.

C. T. STOKES, Esq., Richmond, Va.:

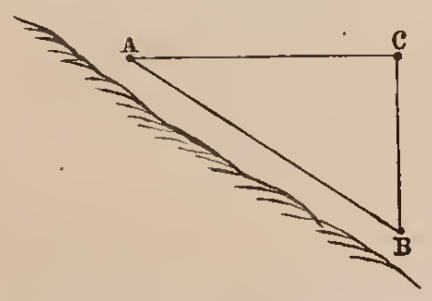
My Dear Sir—Recoil is the retrograde motion impressed upon a piece by the pressure resulting from the expansive force of the gases generated by the explosion of the charge of powder. Gunpowder is a mechanical mixture of certain definite proportions of nitre, charcoal and sulphur. In its normal condition it is an inert solid, occupying comparatively little space, but possessed of rare potential energy. By the application of the requisite degree of heat, about 572 deg. Fahr., combustion is produced; the ingredients combine according to the law of their chemical affinities. The state of aggregation of the particles of the ingredients is altered, the solid is converted into gas, the volume of which vastly exceeds that of the solid. This conversion is attended with the evolution of great heat, by which the volume and expansive force of the gas is still further increased. Now, it is a property of confined gas that it presses with equal force in all directions, and this pressure varies with gunpowder gases according to circumstances, from 10,000 to 200,000 lbs. per square inch of surface. Here, then, we have the force which imparts its energy to the projectile; but every force must have a *point d'appui* from which to act. Archimedes asserted that if provided with a fulcrum he could construct a lever which would be capable of moving the earth. In the case of a fire-arm, the bottom of the bore is the *point d'appui*, the fulcrum, of the powder. It is a fundamental principle of mechanics that action and reaction are equal in intensity and opposite in direction. The powder then acts upon the projectile, and the column of air in front of the projectile; it reacts upon the bottom of the bore, and this action and reaction are equal and opposite. The action moves the ball to the front with a certain velocity, the reaction moves the piece to the rear; that is, causes it to recoil. Now, the velocity imparted by the same force to unequal masses will be in the inverse ratio of the masses. If the gun weighs 150 times as much as the ball its mass is 150 times as great, and the velocity of recoil of the gun will be the 150th of that imparted by the same force to the projectile; that is, if the projectile has an initial velocity of 1,500 feet, the retrograde velocity of the gun will be ten feet. The momentum being the product of the mass by the velocity, will be the same for both, since action and reaction must be equal. You see I speak merely of the action of the powder upon the projectile, but it acts also upon the column of air in front of the projectile, and this action must increase the reaction, so that in the case supposed the velocity of recoil would be more than ten feet. Within certain limits the force of powder increases with the resistance it encounters. Hence, the heavier the ball the greater its resistance to motion; the greater will be the force of the powder; the action being greater, the reaction will be greater; that is, the force of the recoil will be greater. It is a very common error to suppose that the whole of the powder is instantaneously converted into gas. The combustion of powder is not instantaneous, but progressive; and its velocity depends upon the size, shape, density of grain, upon the proportion and purity of the ingredients, upon the mode of manufacture, upon the hygrometric character of the powder, etc. It is true that much the greater part of the charge is converted into gas in the first moments of combustion; and it is further true that the time required for the combustion of the whole charge is so brief as to be inappreciable to the senses; but it is very appreciable to calculation, and by varying the conditions mentioned above the velocity of combustion of powder can be varied at will. So we see that the combustion being progressive, the gas will continue to act upon the piece after the bullet has left the piece, still further increasing the recoil; but this effect is comparatively small; the principal reaction upon the piece results from the action upon the projectile. Now, remembering that velocities are in the inverse ratio of masses, let us suppose a rifle weighing ten pounds and a bullet weighing 400 grains. There are 7,000 grains in a pound avoirdupois, so the gun will weigh 70,000 grains, and will be 175 times the weight of the ball. Suppose the ball has an initial velocity of 1,750 feet per second; then the gun should have a velocity of ten feet. Suppose the barrel of the rifle thirty inches long; then when the bullet leaves the muzzle, having traversed the length of the barrel, the gun will have moved only 17-100ths of an

inch; its motion will be directly opposite to that of the ball, and so can produce no effect upon the aim. If the gun weighs ten pounds and has a velocity of recoil of ten feet, its momentum will be 100 pounds, and the "kick," as it is called, would seem a serious matter. But the piece is closely pressed against the shoulder, and the mass of the marksmen is, as it were, incorporated with that of the piece, so that the velocity of recoil is proportionally reduced. Again, the stock of the piece being a broken line, the whole force of the recoil is not directly transmitted to the shoulder. It is resolved into two components, one of which is expended in producing or tending to produce rotation around the point of contact with the shoulder. Hence, if the stock be too much bent there is a tendency of the butt to strike the marksman in the face. From all this, it follows that if the gun were of the same weight as the ball, and if its shape were such that it would encounter a resistance from the air only equal to that encountered by the ball, it would move to the rear more rapidly than the ball would move to the front, for the pressure continues to act upon the piece after the ball has left the muzzle; and the reaction resulting from the force of the powder expended in overcoming the resistance of the air would also make the quantity of motion of the gun greater than that of the ball. Suppose a three-inch rifled cannon, loaded with one pound of powder and a ten-pound shot; let this gun be fired. How will the force of the charge be expended? The gas generated will exert equal pressure in all directions; its force will be expended in overcoming the inertia and friction of the shot, in changing the shape of the shot, in setting in motion, or, what amounts to the same thing, in overcoming the resistance of a column of air, of which the cross section is equal to the cross section of the shot, and the height of which column will be proportional to the square of the velocity of the shot, plus a constant, representing the increased resistance due to increased density of the air; it will be expended in straining and altering the shape of the piece—this effect only appreciable to calculation—in overcoming the inertia and friction of the gun carriage, and in imparting motion to the gun and carriage. In this manner will the force of the charge be expended, whether fired from a cannon or a small arm. From what has gone before, it follows that the recoil is increased by increasing the weight of the charge or of the projectile, the gun remaining the same, and *vice versa*. The recoil is diminished by increasing the weight of the gun, charge and projectile remaining the same, and *vice versa*; that the recoil is inappreciable before the projectile leaves the muzzle, and hence does not affect the aim. Of course the time required for the projectile to traverse the length of the bore is inappreciable to the senses, and the recoil appears to be instantaneous. Krupp has recently exhibited an experiment with his armored gun in the presence of the Emperor of Germany and the representatives of foreign governments, attended with perfect success and with great applause. I refer to this because one of his objects was to neutralize the effect of recoil. The gun was protected by a turret of steel half a metre thick. In the wall of the turret was fitted, in a spherical socket, a spherical ball, perforated along its diameter; the threads of a screw were cut in this perforation, and corresponding threads were cut on the muzzle-end of the gun. The gun was then screwed into the sphere of metal, and thus the mass of the turret was, as it were, combined with the mass of the gun; the sum of these two masses vastly exceeded the mass of the projectile fired from the gun, and thus the recoil was practically neutralized. I have only seen a very imperfect account of the experiment, and have given such explanation as the facts seem to warrant. Hoping this may prove satisfactory, I remain, SCOTT SHIP.

HOW TO AIM.

A PROBLEM IN MOUNTAIN HUNTING.

There is no problem which has so vexed the brain of the hunter, and is still so little understood, as to know how to aim with a rifle at game, either much above you or much below you, on a mountain and steep hill-side. The old rule was: "If above, aim high; if below, aim low." This is not correct. For want of a proper understanding of this problem I missed a half-dozen good shots when hunting black-tail last winter among deep and precipitous coulees, where they are at that season, and determined, after going into winter quarters, to solve it. I at first applied the calculus, but soon found myself so rusty in that science, and the known and unknown quantities became so mixed, that I threw up the sponge and determined to work it out by "rule of thumb." I accordingly made careful experiments at distances from 116 to 200 yards (on the horizontal line) from the target, and on mountain sides having an inclination of twenty to twenty-five degrees, and arrived at, I think, substantially a correct solution, which can be explained in fewer words by reference to the accompanying diagram:



Let A be the position of the hunter, B the position of the animal aimed at on mountain side. The solution is: In aiming be governed by the horizontal distance A, C, or distance to a point perpendicularly over the animal. Reversing the positions, with the hunter at B and animal at A, in aiming he still governed by the horizontal distance A, C. In other words, take no account of the height (C, B) you may be above the animal, or the air-line distance A, B, but be governed entirely by the horizontal distance, A, C, which is much more easily estimated than the distance A, B, generally thought to control the aim. In afterward bringing these principles into practice I never failed to hit my game. The last time they were used were upon two bull-elk, at least 200 yards down a mountain side, which was estimated to be much farther. From an over estimate of distance the two first shots missed. Taking new reckoning of distance, and making use of above principles, the elk standing apparently dazed from the unexpected reports, the next eight consecutive shots were put through the two elk before getting out of reach. If Col. Ship or any other expert in the calculus will put the above solution into a mathematical formula, or if found incorrect will demonstrate it, he will oblige W. D. P.

Sea and River Fishing.

FISH IN SEASON IN JUNE.

FRESH WATER.

Trout, *Salmo fontinalis.*
Salmon, *Salmo salar.*
Salmon Trout, *Salmo confinis.*
Land-locked Salmon, *Salmo gloveri.*
Black Bass, *Micropterus salmoides; M. nigricans.*
Muskalonge, *Esox nobilior.*
Pike or Pickerel, *Esox lucius.*
Yellow Perch, *Perca flavescens.*

SALT WATER.

Sea Bass, *Centropristris atrarius.*
Sheepshead, *Archosargus probatocephalus.*
Striped Bass, *Roccus lineatus.*
White Perch, *Morone americana.*
Weakfish, *Cynoscion regalis.*
Bluefish, *Pomatomus saltatrix.*
Spanish Mackerel, *Cybium maculatum*
Cero, *Cybium regale.*
Bonito, *Sarda pelamys.*
Kingfish, *Menticirrus nebulosus.*

FLIES IN SEASON IN JUNE.

Hawthorn, No. 11.—Body, shining black; feet and head, black; wings, bright hyaline.

Shoemaker, No. 10.—Body, ringed alternately with light and gray salmon; feet, dark ginger; wings, the mottled gray of the mallard and the mottled of the woodcock mixed; setæ, mottled woodcock.

Black June, No. 10.—Body, peacock's herl; feet and wings black.

Dark Stone, Nos. 8 *and* 9.—Body, dark brown; feet, yellow brown; wings, luteous.

Governor, No. 10.—Body, peacock's herl; feet, dark red hackle; wings, made of the darkest part of the bittern's wing or brown hen.

Green Drake, No. 7.—Body, white posterior, half ribbed with black, green yellow, mottled with brown; setæ, dark brown.

Brown Drake, No. 7.—Body, feet and wings, a golden yellow brown; setæ, dark brown.

Raven, No. 11.—Body, feet and wings, black.

Wren Fly, No. 9.—Body, clay yellow; feet, made from the scapulary feathers of the English wren or quail; wings and setæ, mottled widgeon.

FISH IN MARKET—RETAIL PRICES.—Bass, 10 to 18 cents; blue fish, 10; salmon, 15; mackerel, 20; shad, 50; weakfish, 10; Spanish mackerel, 30; green turtle, 12½; halibut, 15; haddock, 6; king fish, 15; codfish, 6; black fish, 10; flounders, 8; porgies, 6; sea bass, 15; eels, 18; lobsters, 8; sheepshead, 18; frogs, 40; Canada brook trout, 30; Long Island brook trout, $1; white bait, per pound, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.50.

General sea fish very scarce, owing to the storms of last week. Salmon, however, is in the most wonderful abundance. Larger quantities, taking the early season into account, have been forwarded to New York from the Restigouche than in former years. Wholesale, they have been disposed of at ten cents a pound; average weight, thirty pounds.

MAINE—*Solon, Somerset Co.*—We have some good hunting in this country. The best way to come is via North Anson by Railroad. There is a daily stage to Solon, and there is some talk of putting on a daily stage from Solon to the Forks—thirty-one miles; the Forks to Moose River, thirty miles. In Solon are some fine trout brooks, and five miles from the village is a good trout pond. One mile from the village, at Carritunk Falls, on Kennebec River, we get magnificent trout. Some caught there last summer tipped four pounds, and I shot one that tipped three pounds. I was watching for ducks with my rifle. Where I was lying there was a spring, and the trout came up in shallow water, and I thought he was as good as a duck, so I took him. In Carrying-place Town there are three good ponds. In the first pond they get trout that weigh about half a pound. A Mr. Ellis has a camp there and keeps a kind of a hotel, where he has a good deal of company in the summer. This pond is three miles from the river and four miles from J. Carney's Hotel in Moscow. In Carritunk is Pleasant Pond, where you have to fish at night. The water is so clear you can see the bottom of the pond, where there is fifty or sixty feet of water, as plain as if there were no more than five or six feet. It is fringy around the pond and very cold water. From The Forks, five miles, is Moxie Pond, with very good fishing. There is a road to the Moxie. Some very good trout streams are in the vicinity of The Forks, and from here to Moose River one will find partridges. I have shot seventeen partridges from The Forks to Parlin Pond, fourteen miles, and shot them all from a wagon in and on the side of the road. Parlin Pond is one of the best places that I find to go a-fishing, as it is right by a hotel and on the stage road. The boats in the pond are not as good as they should be, but I think Mr. Bean, the landlord, will get some new ones this season. A stranger can go to Parlin Pond and get all the fish he wants in the summer and fall, and he does not need a guide. This is a good place for partridge. Fifteen miles from Parlin Pond we come to Moose River settlement; two hotels. Here is fishing enough. Six miles southwest is Long Pond; east from Moose River is Wood Pond, with three wood ponds. South is Attian Pond. East from Attian Pond is Holeb Pond. Moose River flows through all these ponds, and it is good boating from the Attian Pond to Holeb Pond. It is twelve or fourteen miles by river, with a carry about half a mile. I see in FOREST AND STREAM, March 21, your answer to "L. H., Waltham," that the Kennebec River is navigable from Augusta to Moosehead Lake with a portable boat. They go up the river in canoe to the Forks, and if they want to go to Moosehead Lake they have the boats carried to Moose River settlement and go down Moose River. From The Forks to Moosehead Lake it is very rough water; from The Forks up the Kennebec River there are ten miles that you can go with a boat, then nine miles that a boat never ran and never will unless it goes to pieces. From Indian Pond you can go to Moosehead Lake with a boat, but it is rough water part of the way. Two years ago there were two men coming down in a birch canoe; their birch was swamped and they were drowned. I generally go up river a-fishing in July. The flies are mostly gone then. Few sportsmen come up here. E. G.

Our readers may obtain fuller information by writing to Mr. E. Gordon at the above address.

Rangeley Lakes, May 27.—The large Rangeley Lakes are still so cold that no fly fishing has been had on them, and the unusually large party of forty persons at the Upper Dam had no use for their leaders and flies except for hat ornaments. We found the water of some small lakes or ponds, a few miles through the woods, north of the main chain of lakes, quite warm, and trout of a pound and a pound and a half rose freely to the fly, and those of us who went there had good sport for two days. My biggest pull was a four and a half pounder, although I saw two killed by other parties that weighed five and three-quarters and six respectively. Parties visiting this region, whether making a circuit of the lakes from Farmington to Andover, or visiting any particular point, will find the keepers of hotels and camps prepared, and fair accommodations all along the line. A new house will accommodate forty at the Middle Dam. A steamboat landing is a need here that will, no doubt, be soon supplied. The logs will soon be out of the way of the anglers. Two booms reached the Upper Dam Thursday night, having made the run of the entire length of the Mooselucmaguntic in one day, something never before accomplished in the era of log driving. M.

MASSACHUSETTS—*Adams, June* 1.—E. D. Jencks, Jas. A. Osborne, R. B. Deane, A. E. Maynard and J. Howland caught 500 brook trout in a stream a few miles from here Decoration Day.

New Bedford, May 29.—An abundant supply reported of striped bass. Mr. W. T. Grant, of Fall River, caught one at Westport Point weighing 49½ pounds, and nine host of the Parker House served up one to-day weighing 48 pounds, caught in our lower harbor. The specimens weighing from one to ten pounds are too numerous to mention. CONOHA.

MOVEMENTS OF THE FISHING FLEET.—Only two Bank arrivals have been reported the past week, bringing 15,000 lbs. fresh halibut. The mackerel fleet are working this way, and 28 arrivals have been reported for the week. The catch has been small and the quality inferior. The receipts for the week have been about 500 bbls. The number of Georges arrivals reported has been 41, bringing 800,000 lbs. codfish. Two herring vessels have arrived the past week, one from Newfoundland via Boston, and one from the Magdalen Islands, reporting the fishery at the latter place a failure. Whole number of fishing arrivals for the week, 73.—*Cape Ann Advertiser, May* 31.

CONNECTICUT—*Walcottville.*—Trout fishing in this section is unusually good. Of course one should first know just where to go. The American House of this place had a two-days' supply donated them by Mr. Dolbey of Baltimore, Md., who is indulging in a little fishing hereabouts. In company with a resident he had a good day's trout fishing last week, and succeeded in filling a large soap box with fine brook trout averaging about 8¾ to the pound. The entire number caught by them on that day exceeded 400. A brother of mine also caught 196 in one day about the same time, but in an opposite direction from this place than that taken by Mr. Dolbey. The average of trout to the pound in his case was still better—about 7½. Black bass fishing is also very good in West Hill pond in this neighborhood. This pond is located beautifully both as regards bass and scenery, and is, I maintain, the best water in the State in which to find black bass. From 20 to 70 is a day's catch for a *fisherman*. The last legislature (1878) removed all restrictions against black bass in the Farmington, Housatonic and Connecticut rivers and rivers emptying into the Connecticut; and this law, it is claimed by some, includes this pond as it empties into the Farmington river, and the latter into the Connecticut river. This, however, is extending and construing the Statute amazingly liberally. I do not think any one would be prosecuted and fined even if this view of the case is not sustained, as every one is of the opinion that they are too plenty in this pond, and should be caught. The restriction on black bass in Connecticut exists only in the month of June as the law now stands. K.

NEW YORK—*Albany, June* 1.—We were on the Mohawk, May 30th, in hopes of securing a few black bass. Weather very unfavorable, cold rain all day, with light northwest winds, water clear but covered with small black flies. Fish would not take the fly, spoon or bait. Secured one bass, weighing fourteen ounces. On opening found stomach empty of food, but fish filled with spawn, which is more evidence to show the close season expires too soon. Last fall many bass were taken weighing about ten or twelve ounces. They are lighter than the old residents of the Mohawk, and do not have the dark bars on the side after being caught. It is supposed they are some of the fish put in a short time ago. DAXTER.

ADIRONDACKS.—A Brooklyn correspondent, Mr. C. C. Markham, the artist, is in receipt of letters from Rainbow Pond, which report that trolling and brook trout fishing there just now is very fine. Wardner, of the Rainbow Park Hotel, is building an immense dam at the inlet of the lake, so that his guests may have boating and trout fishing at all times. A letter from Big Clear Pond reports excellent fishing there.

Greenwood Lake, June 1.—There is no truth whatever in the report that the fish are dying in Greenwood Lake. This report originated from the fact that some parties are supposed to have used nitro-glycerine in the "Little Long Pond" near Monroe, as many dead fish are seen there, and the original name of Greenwood Lake was Long Pond. We would suggest to anglers to return to the water such fish as their judgment and sportsmanlike spirit pronounces unfit for capture. G.

Lakeport, June 1.—A piscatorial lady and gentleman went out on Oneida Lake with Mr. Coss, fisherman of the "Avon House," and caught 50 lbs. of bass and pike on Friday 31st of May. Fish are now biting very well, and large quantities are being taken. J. J. D.

NEW JERSEY—*Kinsey's Ashley House, Barnegat Inlet, June* 1.—A few parties took some seven to eight bluefish per boat on Wednesday, but the run is only about 1½ to 2lbs. The natives, who know where to drop their anchor, still catch plenty of black and sea-bass running large. No sheepshead yet. They generally commence biting about the second week of June; last year first caught was June 12. B.

BLOOMING GROVE PARK.—Since the year began very important accessions of members and means have been made to this association, and most of the long contemplated improvements have been made:

The new road to the park via Millville is nearly completed and will be very attractive. All the vacant rooms at the club house will be furnished, and from present indications all will be filled with members and their guests during the season. A new road has been opened to Lake Laura. Boats will be placed on the lake and a gamekeeper stationed there during the black bass fishing. The trout fishing is better than usual this season in the Shohola and Blooming Grove streams.

PENNSYLVANIA—*Johnstown, May* 30.—Quite a number of trout and jack-salmon of good weight caught here. ICE.

TENNESSEE—*Nashville, May* 29.—The season for squirrel shooting is now open, and game very abundant. A friend of mine residing three miles from the city bagged eighteen one day last week in about two hours. J. D. H.

Columbia, May 35.—Recently Mr. Joe Dew and Joseph Bailey, fishing at Arnold's Dam, Rutherford Creek, caught several salmon or Jack, weighing about half a pound each. These are the first we have heard of being caught in Rutherford. VAL.

Nashville, June 1.—A great many drum and buffalo are being caught in the Cumberland River. On Saturday I saw a catfish which measured over four feet in length. Minnows are used exclusively for fishing for game fish in our waters, and there is no difficulty in procuring them, but the great trouble is to preserve them alive and transport them from place to place. It invariably happens that the fishing grounds are some distance from where the minnows are taken, and no means has yet been devised by which the tiny fish can be kept alive. J. D. H.

We have found this to be a very satisfactory method for transporting minnows: In a large bucket, holding, say four gallons, place a smaller vessel which will have plenty of play and is thoroughly perforated. Keep ice constantly on the top of the inner bucket and move the bucket up and down to aerate the water. If the inside bucket has an oval bottom the motion of the wagon or boat will keep it in motion.

FLORIDA.—*Lake Grandin, via Putnam Hall, Putnam Co, —Editor Forest and Stream and Rod and Gun:* This section of Florida is one of the most delightful fishing and hunting grounds under the sun. It abounds with numerous lakes of beautiful, clear water, filled with fish, fowl and flesh of nearly every aquatic variety. Wild ducks, geese, crane, and many other water fowls, the names of which I do not know, almost cover the water in winter, and many wild ducks and other fowls remain here the year round. Fish, trout, salmon, jack, bass, bream, perch, and many others too numerous to mention, are in great abundance in all of the lakes. The other day I caught a bass that weighed 8 pounds net dressed ready for the pot, and a jack that weighed 6 pounds net. Many bass have been caught which weighed as high as 13 and 14 pounds net. Wild turkeys, deer, squirrels, rabbits or hares, quails, etc., are very numerous. The climate is perfectly delightful, thermometer rarely ever gets up into the nineties during the hottest period of summer, and only once in a great while does it get down to a frost basis during our coldest winters. If any of your very many intelligent readers wish to know more as to game, fish, fowl or flesh, or soil and other productions, I will cheerfully answer if they will enclose stamps for return postage. AMOS L. GRIFFITH.

WISCONSIN—*Ashland, May* 26.—Trouting is now excellent at Fish Creek, Whittlesey's Creek, Trout Brook, Brunsweiler and Marengo. One gentleman brought to basket ninety fine trout in one day's fishing on Fish Creek, and the following day caught one hundred in the same stream. Still finer sport is anticipated when the larger trout, now at the headwaters of the stream, turn their course downward to the bay. In June the trout of this section rise readily to the fly, but are most frequently taken by resident sportsmen and anglers with small minnows and with angle-worms. Excellent sport is anticipated at "The Rocks," about ten miles from Ashland, across Chequamegan Bay, during June. For bass fishing there is in all probability no finer resort in Wisconsin than that near Chippewa, where lies a beautiful lake abounding with black bass of the finest game qualities. This wood-embowered lakelet was discovered only last autumn, and has as yet received no name. Lying, as it does, only two miles from the railroad, with a fine trout stream upon each side, it is a most desirable spot for the angler. The fishing at Butternut Lake is still as delightful as formerly, and several large muscalonge have been taken there during the present month (May). The fishing here is considered best during June. Then the muscalonge bite more readily, and larger fish are taken than at any other season of the year. Butternut Lake is probably the finest in all our Northern States for this species of fishing, and larger fish (muscalonge) are taken here than at any other resort in Wisconsin. He who desires a taste of wild life, and superb trout-fishing should visit the Nepigon, easily reached from Ashland, and the unexcelled trouting of that far-famed stream would repay the tourist tenfold. W. W.

CALIFORNIA SALMON.—The salmon arrivals from Canada show an unusually early season, and from the Pacific Slope comes the same report. The salmon in the McCloud and Sacramento rivers have already passed up to the spawning grounds at the headwaters, in the middle part of May, giving the fishermen the slip, and completely putting at fault the wisest prognostications of the *Sal. Doctores* by appearing a month ahead of time.

CANADA—*Milltown, St. Stephen, May* 29.—The salmon fishing at Grand Lake Stream is very good. One lady caught twenty in a day. They run much larger than usual; some four and five pounders are taken, and fishermen kill a large number every day. G. A. B.

THE SALMON SEASON.—Advices from the salmon rivers show that the season this year is at least three weeks earlier than that of last year. The water is generally low. Those who contemplate a salmon campaign should be early in the field this year. Do not make a mistake by going too late.

KILL YOUR FISH AS SOON AS CAUGHT.—Our recent suggestion has met with general approval. The numerous responses it has elicited indicate that anglers are both sensible and humane. The innate goodness which is in them is easily evolved by proper advice and direction, and all that is needed is, to put them in the way they should go, and they will go it. There is no doubt that both the flavor and quality of the flesh of fish is improved and preserved by killing the fish at once instead of permitting them to linger. We suggested as the most expeditious methods, that the angler should tap his fish on the head with a stick, or insert the blade of a knife to the cervical column back of the head. If fishing from a boat, the most convenient way is to knock the head against the gunwale or thwart. J. S. M., of Newark, advises to cut the throat, to sever the part where the gills join the belly. The fish will thereby not only die quickly, but bleed, leaving the flesh perfectly white, and "enabling it to keep much longer than when the blood is allowed to remain and settle all through the flesh." There is common sense in this. R. T. M. says he has always practiced kibing his fish. His habit is to carry a little heavy cudgel in his pocket for the purpose. "Rap them on the nose, or just over the eyes." By wrapping each fish separately in a dock or hellebore leaf, as soon as taken from the water, their beautiful colors and shape are preserved. He says, moreover:

"If I am off for a two or three days' trip I find it advisable to dress the fish as soon as convenient. This may be very neatly done by pulling open one of the gill covers, slipping the blade of a knife under the gills, and carrying it forward; severing them with one cut at their ventral attachment. The gills should be then seized with the fingers and torn loose, and with them will be removed almost the entire viscera. If your fish lose their color somewhat, as they probably will if kept two or three days, lay them between two damp towels on reaching home, and after a couple of hours they will be found much more distinctly colored."

A PLEASANT ENDORSEMENT.—Bro. George Dawson, of the Albany *Journal*, has seen fit to print a portion of a private letter of ours, which possibly containing some observations instructive, or otherwise worthy of interest, we may be pardoned for reproducing in our columns. We quote from his paper of May 22:

WHAT AN EXPERT THINKS AND SAYS ABOUT THE HABITS OF FISH, AND-SO-FORTH.—Charles Hallock, editor of FOREST AND STREAM, has written more, and more wisely, on Fish and Fishing than any of his contemporaries. Here is a pleasant specimen of his graceful style when discoursing upon his favorite theme:

NEW YORK, May 18, 1878.

Dear Mr. D.: I took your last sketch into my garden this morning after finishing my breakfast, and have just now (7:45) finished it. I perceive that you are a close student, and that you will soon be able to tell the old salmon fishers more than they ever knew. It does seem strange that most men become so dazed the moment they contemplate the subjects of fish and fishing! They seem bewildered by the glare of the multiplied lights which fill the chamber of their investigations. Men do not consider, examine, analyze, compare, reason, or adopt any of the common mental processes which they employ in considering other subjects with which they oftener come in contact. There are analogies all through nature, and I never could understand why there should not be some variations and peculiarities in the same variety of fish as there are in the same family of beasts or human beings, in respect to manner, complexion, shape, habit, etc. I would as soon puzzle my brain to discover why active fish do certain things as to explain why Deacon So-and-So blows his nose with a snort, while the Elder quietly sops his. A fellow in the market the other day was perplexed with the discolorations on the bodies of trout. I told him the vendor had depreciated their value by not properly bestowing them in his wagon or basket. In an hour or two the color would be uniform, but the brighter hue would fade down to the pale, and not the paler up to the brightness.

I do not marvel why trout do not uninterruptedly feed; nor why they change their location; or why they prefer some kind of food to others; or why they vary in appearance. If the mystified student will apply these queries to his fellow men, he will wonder why he considered them worthy of attention. The great point is to discover the causes which make the fish do certain a thing at certain times. Well, as to food: it is easy to trace the cause of surfeit or change of diet, by careful observation of the weather, whether it has been warm or cold, bright or rainy, a long drought or a deluge; and you must apply to these observations a positive knowledge of certain branches of botany and entomology. Rough, unlettered men have this knowledge in a crude state, but it serves them just as well as crude petroleum does the manufacturer who uses its light in refining the more merchantable article for others. The food question as to fishes depends as much on meteorology as the questions of famine or abundance do in respect to men.

When we have found out the habits of creatures, we have only to study what artifices to use to engage a damsel, bumbug a green horn, or entice a fish. You may lose all three, after fastening to them, by bungling in the manipulation.

As to salmon, the study is as much a higher branch as the differential calculus grades above vulgar fractions; but what we learn in the primary trout stream will serve us well in the normal school.

I have ceased to consider the journeys of salmon to fresh water as anything worth mention. One-third of our edible fish go to the deep sea for rest and procreation—the other two-thirds are inshore fishes, and are, to a certain extent, anadromous, shifting their locations in spawning time and following the movements of the great variety of things they feed on. As to variety, a trout, you know, will chase anything which has life and moves, just as a kitten plays with anything in motion. A cat will amuse itself with a hornet and a trout will swallow a snake. I have told anglers that fish chase a trailing fly from the natural instinct of chasing, far more frequently than from a desire to eat it. A great many of the predacious creatures gorge themselves on what has already been caught instead of on what they catch. In other words, it is a mistake to suppose that they eat only what they have chased and captured.

Now, tell me if you have ever seen a kitten which was *always* in a playful mood? The vagaries of cats, dogs and game fish can be compared with profit to the student.

Yours, fraternally, C. H.

—A salmon was caught in Scotland with eighty yards of tapeworm, three-sixteenths of an inch in breadth, in the pyloric portion of the gut.

WRIT IN GORE.—There was received at this office last Saturday a most warlike postal card bearing date of May 30. Post mark blotted out in gore. From a legible word here and there among the intersecting lines we infer that the writer has been waging a most sanguinary war upon the big and little fishes of Long Island. His hand—or at least his pen—was dyed in blood. The missive makes us crawl. Aha!

PIJAMAHS.—For the luxury of a cool sleep in warm weather we particularly recommend the *pijamah*. Many of our friends who have reveled in *pijamahs* and slippers, and sipped bitter beer and smoked cheroots in the East, may find the vestments at Messrs. Simmons & Son, Oak Hall, Boston, all same Canton. The Messrs. Simmons also manufacture the celebrated Boston Shooting suits. As to cut, finish and convenience they have no equal.—[*See advertisement.*

National Pastimes.

YALE COLLEGE ATHLETICS.—In the spring athletic games of the Yale Athletic Association, at New Haven, May 29, the following were the winners among a large number of contestants: The 100-yards dash, F. W. Brown, in 10½s.; high leap, O. D. Thompson, 5ft. 2in.; throwing the baseball, W. F. Hutchinson, 343ft. 8in.; the tug of war by the freshmen class, defeating the classes of '79 and '80; the senior race dash over 440 yards, T. E. Mower, 69s.; hammer throwing, O. D. Thompson, 71ft. 3in.; quarter-mile run, Herman Livingston, 54¾s.; hurdle race, 8 hurdles, distance 120 yards, W. C. Camp. O. H. Briggs won the mile walk in 8m. 36s.

ADELPHI ATHLETIC CLUB.—The second annual games of the Adelphi Athletic Club, of Brooklyn, at the Capitoline Grounds, last Thursday, were well contested and resulted as follows: One hundred yards race—A. S. Hooper. Throwing hammer—E. Flynt, 67ft. 7in. Standing long jump—E. Hillyer, 8ft. 8in. Hitch and kick—H. Stokum, 7ft. 1in. Pole vaulting—A. Hooper, 7ft. 6in. Four hundred and forty yards run—Stokum. Putting shot—Stokum, 28ft. 8in. Standing jump—Hooper, 4ft. 8in. Two hundred and twenty yards race—Hooper. Running high jump—Hooper, 4ft. 10in. Half-mile race—Stokum. Professional running high jump handicap—W. Laird, 9ft. 4in. Running long jump—Hillyer, 15ft. 9in. Mile walk, J. L. Ramsay, 8m. 2s.

MANHATTAN ATHLETIC CLUB.—The games at the club grounds, this city, last Monday, resulted as follows:

Two hundred and twenty yards run—H P Pike and R Greig ran a dead heat in 28s. Second trial won by Greig in 28½s.

Two hundred and twenty yards for school boys—Fifteen entries—H J Wilson won in 31½s.

Handicap 100 yards—Twenty-five contestants—J W Murray won in 10¼s.

Handicap three miles walk—Twelve contestants—E B Wall, A A C, handicapped 1m. 40s., in 25m. 6s.

Handicap half-mile run—Eleven starters—Won by N Rowland, Yonkers Lyceum, with 10 yards start, in 2m. 8s.

LACROSSE.—The Toronto Lacrosse Club met the Shamrock Lacrosse Club, of Montreal, in a match for the championship last Friday. The teams were made up as follows:

Toronto Club—J. Hughes, goal; Ross Mackenzie, point; W. O. Ross, coverpoint; H. C. Ross and J. Inness, defence field; C. H. Nelson, C. E. Robinson, T. Mitchell, fielders; S. Hughes, W. T. Arthurs, home field; R. H. Mitchell, H. E. Suckling, home; J. Massey, field captain.

Shamrock Club—Murphy, goal; Hoobin, point; C. McGuire, Hyland, defence field; Morton, Butler, Giroux, J. McHugh, fielders; C. McHugh, Farmer, home field; Lynch, Brennan, home; McKeown, field captain.

The score made was: Torontos, 3; Shamrocks, 2. This gives the championship to the Toronto boys. They have work before them to keep it, however, as challenges have already been received from the Shamrocks and the Montreals.

THE AUSTRALIAN CRICKETERS.—The Australian cricketers who have gone to England to try their skill with England's players, made their *debut* in a game with the Nottingham eleven. Owing to bad weather the game lasted three days and resulted in the success of the English eleven by an inning and 14 runs. The Australians scored only 63 runs in their first inning and 76 in their second, of which Midwinter, Garrett and C. Bannerman only scored double figures, and the last-named only in the second inning. The Nottinghams scored 153 runs in their first inning, of which Mr. J. Selby contributed 66.

CRICKET.—A match of cricket at Prospect Park, May 29, between the Polytechnic Institute Base Ball Club and the Manhattan Cricket Club, resulted in the following score:

POLYTECHNIC.		MANHATTAN.	
Chamberlain, b Scott	4	W C Scott, c Ely, b Lawler	6
Buckley, run out	2	Tilley, b Lawler	19
M Black, b Scott	2	Tucker, c Black, b Lawler	4
Cammeyer, run out	0	Ames, c Harris, b Lawler	3
R Pbauncey, not out	13	Makin, b Chamberlain	0
McKee, c Makin, b Jackson	0	Rogan, c Buckley, Lawler	9
Voorhees, run out	1	Love, c Cammeyer, b Lawler	0
Bunce, c Makin, b Scott	1	Jackson, b Chamberlain	13
R Brophy, b Scott	0	G P Scott, c Buckley, b Chamberlain	0
C Harris, run out	0	McKenzie, not out	1
Jenkins, run out	0	Gowdy, b Lawler	0
Bird, b Scott	0	Byes, 6; wides, 10; no balls, 2	14
James, b Scott	0		
Ely, b Scott	0		
Lawler, c Tilley, b Scott	10		
Barwen, b Scott	4		
Miles, b Jackson	0		
Chadwick, c Love, b Jackson	0		
Byes, 5; wide, 1	6		
Total	43	Total	68

SCORE AT FALL OF WICKETS.

Polytechnic.

3	9	9	11	11	11	14	15	17	18
18	19	19	19	39	40	43			—43

Manhattan.

8	13	20	21	39	39	66	66	68	68—68

Umpires—Messrs. Chadwick and White.

POLO.—Wednesdays and Saturdays have been set apart by the governors of the Westchester Polo Club for play at Jerome Park.

SANGUINARY BASE BALL.—The Patersons and Passaics had a high time of it the other day. The fun began when the pitcher put in a red hot curve ball which took the batter in the back of the neck—the bawl coming out of his mouth. The batter thereupon pitched his bat at the catcher's head and a pitched battle ensued. The whole field was instantaneously transformed into a scene of carnage—converted by a bat war into an *abbatoir*, which is French for slaughter-house. Bats and brick-bats flew in every direction; balls were hurled in and eye-balls hurled out; the "fair foul" of American Freedom screeched and the umpire got his back up; or, as the Englishman would say, "got 'is 'ump 'igher," because there was an appeal from his decision. Thereupon a peeler appeared and put out the whole crowd, who all made a home run and left the field, which was consequently a left-field, the Patersons having the worst of it because the others held the bats.

THE CIRCUM-AMBULATOR—*Kingston, Ont., May* 31.—Henderson, the pedestrian, who started on May 1, at Toronto, to walk 25,000 miles in two years, arrived here to-day, having completed his 1,010th mile.

—Juan Gonzales, a Mexican of Fort Concho, Texas, will throw a lasso 225 feet in length as accurately as a marksman could shoot with a rifle.

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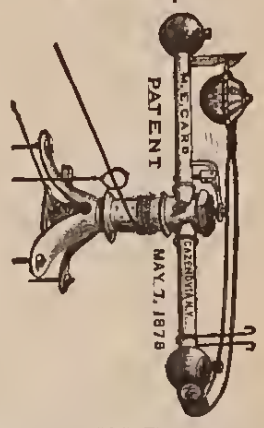

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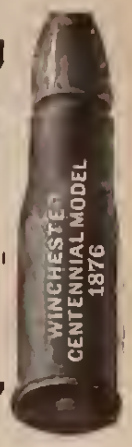

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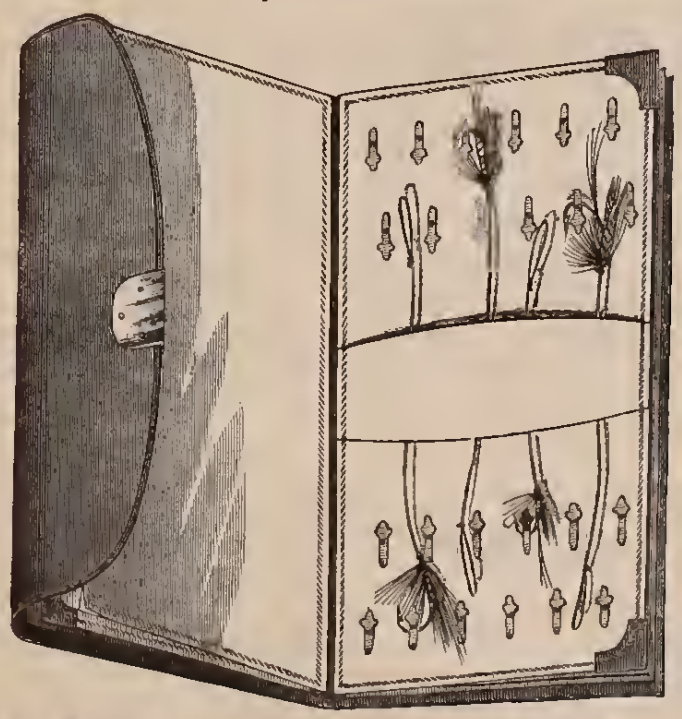

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AT

STATE FAIR GROUNDS,

ST. PAUL, MINN.

SEPTEMBER 2, 3, 4, 5, 6, 7, 1878.

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CHAS. LINCOLN, Supt.

my9 tf

Fleas! Fleas! Worms! Worms!

STEADMAN'S FLEA POWDER for DOGS.

A Bane to Fleas—A Boon to Dogs.

This Powder is guaranteed to kill fleas on dogs or any other animals, or money returned. It is put up in patent boxes with sliding pepper box top, which greatly facilitates its use. Simple and efficacious.

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ARECA NUT FOR WORMS IN DOGS

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Put up in boxes containing a dozen powders, with full directions for use.

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Both the above are recommended by ROD AND GUN and FOREST AND STREAM.

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"PONTO."

Liver color, weighs about 57 lbs.; is a first-class field dog both on coveys and single birds; has great speed and endurance, and is not afraid of briars. Was shown at Baltimore in the same class as Sensation, and was highly commended.

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Lemon and white, weighs about 60 lbs.; litter brother to Till, who took first premium for Native Pointers at New York, May, 1877.

Fee for Either Dog, $20.

As regards performances of dogs in the field, would refer to Messrs. Clark & Sneider, Baltimore; Hon. J. E. Reyburn, 1,822 Spring Garden street, Philadelphia.

FOR SALE, one liver-colored pup, by Ponto, out of Ginger, whelped in August, 1877. Price for pup, $25. Also, five dog and four bitch pups, whelped April 1, 1878, by Ponto, out of Ginger. Price, $15, at eight weeks old, or $20 per pair. Address MUIRKIRK KENNEL, Muirkirk, Prince George's County, Md. apr25 3m

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I keep only cockers of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruffed grouse and woodcock shooting and retrieving. j10 tf

FORTY-FIVE DOLLARS will buy a thoroughly-broken red Irish setter with a pedigree for fifty years. Address E. J. ROBBINS, Wethersfield, Conn. je6

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MEAT FIBRINE DOG CAKES.

Twenty-one Gold, Silver and Bronze Medals awarded, including Medal of English Kennel Club, and of Westminster Kennel Club, New York.

None are genuine unless so stamped.

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For sale in cases of 112 pounds.

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Pure bred red Irish Setter. The handsomest as well as one of the best bred and finest field dogs in the United States; winner of first prize at New York, 1877. Fee, $25.

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Sportsmen in want of first-class cocker spaniels write at once to ROBERT WALKER, Franklin, Del. Co., N. Y. Stock and delivery guaranteed. Price, $15 each for dog or bitch or spayed bitch pups.

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ENGLISH PRIZE, STUD, SPORTING AND NON Sporting Dogs for sale. Greyhounds, pointers, setters, retrievers, spaniels, broke for the field, £20 each; for the field and show bench, of good pedigrees, £40 each; fox terriers, bull terriers, black and tan terriers, from £10 each, all dead game, of good pedigrees, and very valuable for breeding; better quality for the show bench, £20 each. Also a few Yorkshire terriers, at £10 each. The prize Yorkshire terrier, "Willie," will be sold. Winners of silver cup, Queensbury, first and silver cup Ulverston, and ten other prizes. All dogs will be sent to Messrs. Bampton & Steglish, Express Agents, 60 William street, New York. Drafts to accompany order, payable on Alliance Bank, London. Satisfaction is guaranteed by the advertiser, who is a judge and reporter of English dog shows. F. STEEL, Well Royd Farm, Stump Cross, Halifax, England. mar7 6m

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New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Miles Johnson. For sale at this office. Price $2.

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FOR SALE—A Scott Gun, with case; two sets of barrels, Bogardus' pattern, Nos. 10 and 12 gauge, both choked. This gun was made for Centennial Exhibition, and imported by present owner, spring of 1876; cost in this country a little over $300; but little used, and is as good as new. Price $215. Address C. H. S., 136 Walnut street, Philadelphia. je6 1t

FOR SALE—My celebrated Gildersleeve setter Rover, well broken and good retriever on land and water, 3½ years old, orange and white. Also Lady, spayed bitch, well yard broken and retrieves well, 14 months old; black and white; very fast in field. Also dog pup, three months old, from Spurrier's red Irish setter Rose, and from Rover. Also three beagle hound pups from my Bess; took first prize at Boston Bench Show. Pups now three weeks old will be sold when two months old. A full guarantee and pedigree will be given. Sold to reduce my stock. Will take a brace in training. Inclose stamp for particulars. GEO. POWNALL, Christiana, Penn. je6 2t

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GOLD Any worker can make $12 a day at home. Costly Outfit free. Address TRUE & Co., Augusta, Maine.

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W. MITCHELL,

FISHING-ROD MAKER,

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English Sporting Gunpowder.

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Nos. 2, 3, 4, 5, 6, 7 and 8. Superior Rifle, Enfield Rifle, and Col. Hawker's Ducking. W. STITT, 51 Cedar street, N. Y. Agent for the United States.

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Orange Lightning Powder.

No. 1 to 7, strongest and Cleanest made, in sealed 1 lb. canisters. Higher numbers specially are recommended for breech-loading guns.

Orange Ducking Powder,

For water-fowl, strong and clean. No. 1 to 5 in metal kegs, 6¼ lbs. each, and canisters of 1 and 5 lbs. each.

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The best for rifles and all ordinary purposes. Sizes, FG, FFG and FFFG, the last being the finest. Packed in wood and metal kegs of 25 lbs., 12½ lbs. and 6¼ lbs., and in canisters of 1 lb. and ½ lb.

All of the above give high velocities and less residuum than any other brands made, and are recommended and used by Capt. A. H. BOGARDUS, the "Champion Wing Shot of the World."

BLASTING POWDER and ELECTRICAL BLASTING APPARATUS. MILITARY POWDER of all kinds on hand and made to order.

Safety Fuse, Frictional and Platinum Fuses.

Pamphlets, showing sizes of the grain by wood cut, sent free on application to the above address.

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SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot-Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot-gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44 as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

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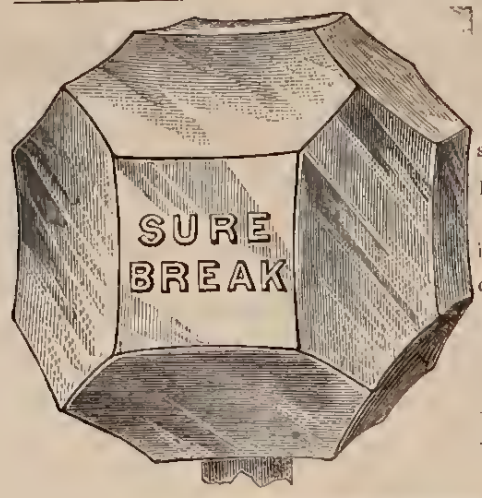

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This is the only ball upon which shot will not glance. This ball, always presenting a flat surface to the shooter, broken when the shot strikes it. Price lower than any other first-class ball.

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These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast, like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

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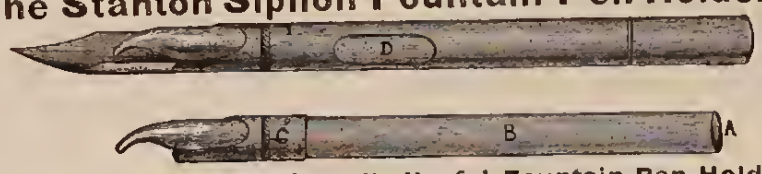

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The only Fountain Pen-holder with a FLEXIBLE SIPHON, so that any size or make of Pen can be used. The only Fountain Pen-holder in which the INK does not come in contact with oxidizable metal, and therefore cannot decompose or coagulate. No spilling of ink can occur in filling, as the tube is filled by suction from any vessel containing writing fluid.

No Inkstand or Special Ink Required.

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Is a very handsome and convenient pocket article; is made of strong metal, heavily nickel-plated and polished. Contains sufficient ink to closely write *twenty pages of foolscap;* will feed to the point of the pen until the last drop of ink is exhausted, and being air-tight the ink can neither evaporate nor mould. Is easily replenished, *always perfectly clean*, and any steel or gold pen can be substituted for the handsome *Esterbrook Indestructible Golden Pen* furnished with each holder.

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Will carry sufficient ink for TEN DAYS' ordinary use. Especially adapted to the use of Doctors, Lawyers, Commercial Travelers, Collectors, Government Officers, Railway Officials, Tourists, and all who can appreciate the immense comfort in always having their own pen and ink with them.

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American Standard Diameters.

(RED LABEL.)

Gives **greater penetration** and **better pattern** than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found **free from shrinkage, more spherical, more uniform in size, harder, heavier and of brighter and cleaner finish** than any other. SEND FOR CIRCULAR.

TATHAM & BROS., 82 Beekman St., NEW YORK.

Also manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

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MANUFACTURERS OF

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Hazard's "Electric Powder."

Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of 1 lb. *only.*

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Nos. 1 (fine) to 6 (coarse). In 1 lb. canisters and 6¼ lb. kegs. A fine grain, quick and clean, for upland prairie shooting. Well adapted to shot-guns.

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Nos. 1 (fine) to 5 (coarse). In 1 and 5 lb. canisters and 6¼ and 12½ lb. kegs. Burns *slowly* and very clean, shooting remarkably close and with *great penetration.* For field, forest or water shooting, it ranks any other brand, and is equally serviceable for muzzle or breech-loaders.

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FFFG, FFG, and "Sea Shooting" FG, in kegs of 25, 12½ and 6¼ lbs, and cans of 5 lbs. FFFG is also packed in 1 and ½ lb. canisters. Burns strong and *moist.* The FFFG and FFG are favorite brands for ordinary sporting, and the "Sea Shooting" FG is the standard *Rifle* powder of the country.

Superior Mining and Blasting Powder.

GOVERNMENT CANNON & MUSKET POWDER; ALSO, SPECIAL GRADES FOR *EXPORT*, OF ANY REQUIRED GRAIN OR PROOF, MANUFACTURED TO ORDER.

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GUNPOWDER.

American Powder Co.

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GENERAL WESTERN AGENTS.

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The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Allegheny Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

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FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

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THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 8, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 12:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:40, 8:13, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 1:30, P. M. trains from New York and to the 7:45, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sep18 1y H. P. BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula, City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

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THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

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Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

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FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St. at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

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Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

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From Savannah, Ga., to Nassau, N. P., and Havana, Cuba, via St. Augustine, Fla., steamship San Jacinto will sail Jan. 29, Feb. 12 and 26, and every alternate Tuesday. Connecting steamers leave New York on Jan. 26, Feb. 9 and 23.

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Steamship Carondelet, February 6 and March 9, and monthly thereafter from Pier 16, East River, New York.

For all particulars, illustrated guide, &c., apply to

MURRAY, FERRIS & CO.,
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FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad.

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FOR PIKE, PICKEREL, BASS, ETC.,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

Shooting season expires December 15. For information as to routes, rates and best points for the various kinds of game, etc. Apply to

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An opportunity will be given *sportsmen* to visit the coast of LABRADOR the coming summer. Address J. M. CHICK, 41 Franklin street, Boston.

Sportsmen's Routes.

Fall River Line

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BOSTON.

And all Points East, via Newport and Fall River. Mammoth Palace Steamers, BRISTOL and PROVIDENCE, leave New York daily from foot of Murray street.

5 P. M. {SUNDAY TRIPS, June 23 to Sept. 8, inclusive.} FROM PIER 28, N. R.

Leave Brooklyn via "Annex" boat at 4:30 P. M. Tickets and State Rooms secured at all principal hotels and ticket offices, at the pier and on steamers.

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Philadelphia and Southern Mail S. S. Co.,
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"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

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People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, including Sunday, at 5 P. M., connecting at Albany with Express Trains

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Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the **Office on the pier,** at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. R. MAYO, Gen'l Passenger Agent.

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent spot.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

HENRY PRATT, G. T. A.
my2 6m Milwaukee, Wis.

Sportsmen's Routes.

St. Louis, Minneapolis

AND

ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids.

C. J. IVES, Gen. Passenger Agent.
E. F. WINSLOW, General Manager. tf

LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (ball) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:50 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M., Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 8 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.
J. CHITTENDEN, Gen'l Pass. Agent. jc6 tf

Hotels and Resorts for Sportsmen.

C. M. BRENNAN,

OLD KENTUCKY BOURBON & MONONGAHELA

40 South Clark Street, Chicago.

Ashland House,

Fourth Avenue, corner of Twenty-fourth

NEW YORK CITY.

Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

H. N. BROCKWAY, PROPRIETOR.
Mar7 tf

Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. je6 tf

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HOPKINS HOUSE, Waretown, N. J. The proprietor, formerly of Harvy Cedars, would hereby inform his friends and the public generally that he has removed to the Hopkins House, Waretown, where he is prepared to accommodate all who wish to give him a call. Every facility for boating and fishing will be found in readiness.

N. B.—Stages connect with trains at Waretown Junction. CHAS. MARTIN, Sr., Prop'r. je6 4t

---

BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y., is now open for the reception of guests. Splendid fly fishing for bass; good boating and bathing. Telegraph and express office in house. Take Montclair and Greenwood Lake Railway from Cortlandt or Desbrosses street.

May30 3m

A. MEYER,

IMPORTER OF AND DEALER IN

California, Rhine, Hungarian Wines,

AMERICAN CHAMPAGNES.

392, BOWERY 392,

Near Fourth avenue, NEW YORK.

BOWLING AND BILLIARD HALL.

The longest Rifle Range in the city, for Sharpshooters only.

Feb23

Hotels and Resorts for Sportsmen.

CRYSTAL SPRING Fish Farm and Pic-Nic Grounds,

ARE NOW OPEN TO VISITORS.

These grounds have been fitted up for large or small parties, with a splendid pavilion for dancing parties, Sabbath school pic-nics, or private parties. Swings of the best quality, croquet grounds, etc., etc. Lemonade, ice cream and other luxuries in their season, furnished on reasonable terms. A limited amount of trout fishing allowed in season. These grounds will be open for visitors during the whole year.

The Fish Farm is located in the Ramapo Valley, where the scenery, historical reminiscences and healthfulness is unsurpassed.

From New York by it is thirty-one miles, via the N. J. Midland R. R. to Oakland Station. From Paterson, N. J., by wagon road, eight miles. The spring is located in a beautiful grove, one mile from Oakland Station, Bergen Co., N. J., and is one of the largest and finest springs in the United States. It is without doubt one of the best known springs for the propagation of the fish of the salmon family.

It has an immense flow of water, from 1,500 to 2,000 gallons per minute. A severe drouth does not diminish it, or a very wet season increase it. The temperature varies but one degree, viz 50 degrees in winter, and 52 in summer. All the natural advantages are combined in and about this remarkable spring for the propagation and raising of brook trout, viz.:

1st. A large and constant flow of water.
2d. Uniformity of temperature during the whole year.
3d. A fall of nearly 40 feet in 600, a gradual descent.
4th. No liability of being washed out by floods.
5th. By having been a natural stream for trout.
6th. By being located in a fine grove of trees from 2½ feet in diameter down to the smallest shrub.

In June, 1873, Mr. B. H. Porter commenced operations at this spring for the purpose of fish culture, and making the grove a permanent and attractive place of public resort. Since then the place has been visited by thousands of persons from nearly every State, besides many from foreign countries, and so far have pronounced it the most perfect establishment of the kind they had ever visited, and the most beautiful place.

We beg leave to inform the public that we open the Grounds as a place of resort believing there is no place of the kind now open to the public during the whole year, where they can see all the *modus operandi* of fish culture, during all stages of propagation, taking the spawn, watching the development of the embryo in the egg, seeing the fish hatch, how they look after they are hatched, how soon and how large they are when they begin to feed, etc., etc. All of which can be seen and will be explained to visitors in a few hours for the nominal sum of twenty five cents.

At present there are twenty-five ponds of all sizes with several more in process of construction, stocked with all sizes of fish, from those of an inch to 18 inches in length, comprising salt water salmon, (*salmo salar*), salmon trout (*salmo confinis*) and brook trout (*salmo fontinalis*) native, and species from different parts of the country, to the number at present of *seventy-five thousand* large and small, in ponds where the fish *can be clearly seen*, not in ponds where you cannot see where they are. The Grove in which the ponds and spring are located, comprise between five and six acres of ground. Our buildings are sufficient to shelter a thousand people in case of storm during their visit. Our charges are only for admission. No extra charges during the day for the use of the Swings, Croquet Grounds, Pavilion and other improvements and means of amusement.

For strictly Sabbath School Pic-Nics, admission fees will be only ten cents each, all others twenty-five cents. No deduction for large parties. We will transport all baskets of refreshments from the depot to the gate, free of charge, for all large parties, from whom a few days' notice will be required. Small parties can come any day without giving us notice. Those wishing to amuse themselves by "tripping the light fantastic toe," in the afternoon or evening, must furnish their own music, unless previously notified in time to be furnished. All communications addressed to B. B. PORTER, Oakland, Bergen Co., N. J., will receive prompt attention.

N. B.—Eggs, small fry, yearlings and large trout for sale. All orders addressed as above.

Buildings cost over $12,000; five years old: Gothic frame villa; all modern improvements; tenants' house; stable, etc., in one; 4 horses; 23 acres; 4 acres grove, with 20 to 30 ponds; fine garden; 100 young fruit trees; apple orchards.

Sportsmen's Headquarters.

Bromfield House,

AND

LADIES' AND GENTS' DINING ROOMS,

55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER, Proprietor.
apr4 tf

Wild Fowl Shooting.

SPRINGVILLE HOUSE OR SPORTSMEN'S RETREAT, SHINNECOCK BAY, L. I.,

By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

---

Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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St. George Hotel,

Cooper, Greenwood Lake, N. J.

S. W. GEORGE, Proprietor.

P. O. address, Greenwood Lake, Orange Co., N. Y. may2 3m

CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters, with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

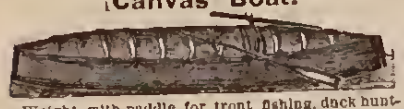
Sportsmen's Goods.

GOOD'S OIL TANNED MOCCASINS.

The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

PRINCIPAL AGENTS—W. Holberton & Co., 117 Fulton street, New York; Jos C. Grubb & Co., 712 Market street, Philadelphia, Pa.; Bradford & Anthony, 374 Washington street, Boston, Mass.

Osgood's Portable Folding Canvas Boat.



Weight, with paddle for front fishing, duck hunting, exploring, etc., 20 lbs; weight, with bottom board, oars, paddle, etc., everything complete, 40 lbs. Manufactured by OSGOOD & CHAPIN, Battle Creek, Mich. Send for illustrated circular. my23 4t

For Rifle & Shot-Gun Practice.

DENNISON'S TARGETS.

25 in 1000 yds. range.

Target Pasters and Score Cards.

ALSO,

Targets & Pads

For testing the pattern and penetration of SHOT-GUNS

Sold by Dealers in Sporting Goods.

On receipt of **Ten Cents a 100-yd. Target** will be sent by mail, with Circular, containing *Major Henry Fulton's* RULES FOR PRIVATE PRACTICE, by

DENNISON & CO.,

Mar14 3m 196 BROADWAY, NEW YORK.

Portable Camping Houses.

Portable Camping, or Tourist Houses built in sections and can be carried in a one-horse wagon and put together without the aid of a mechanic, and are superior to tents. Plan as shown is 8x12 feet and built of narrow pine, painted outside and oiled inside. Price $65.00. Each house contains a stowaway for holding sporting equipments, etc. Order one and save hotel expenses. Plans for cottages, etc., also all kinds of rustic work. These houses can be built more extensively and elaborately if required.

O'BRIEN BROTHERS,
May16 4t Yonkers, N. Y.

LOST

BECAUSE HE HAD NO

COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union take pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 12 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 19, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. GEO. ABRY, President.

J. H. BEHRENS, Cor. Sec., 37 Bowery, New York.

United States Cartridge Company,

LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and to use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

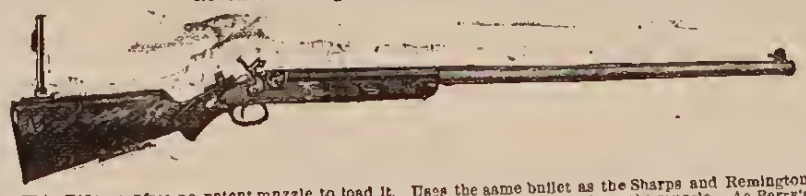
Cartridges for Target Practice.

Send for Illustrated Catalogue.

FOWLER & FULTON, General Agents, 300 Broadway, N. Y.

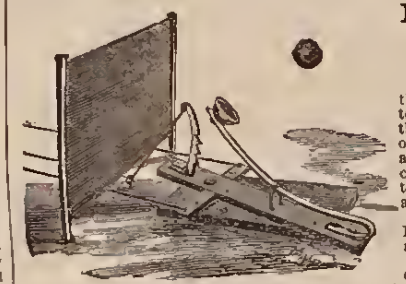
Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.



Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

A NEW IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the potter, is now ready for the market. **Price $8. Old Style, $6.**

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

HEADQUARTERS FOR BALLS, **HAGGERTY BROS. & CO., 10 Platt Street, N. Y. City.**
FOR TRAPS, **HART & SLOAN, Newark, N. J.**

Second and enlarged edition of "Field, Cover and Trap Shooting," by A. H. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, **Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill.**
Dec6 tf

IRA A. PAINE'S

FEATHER FILLED GLASS BALL.

PATENTED OCTOBER 23, 1877.

The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

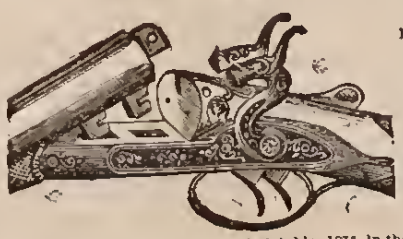
Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade

HEADQUARTERS BOHEMIAN GLASS WORKS, 214 Pearl Street, N. Y.

W. W. Greener's Champion Treble Wedge Fast, Breech-Loader.

THE WINNING GUN.



At the International pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £105, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1875, beating 103 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,328. BEWARE OF INFRINGEMENTS OR IMITATIONS.

W. W. GREENER, St. Mary's Works, Birmingham, England.

H. C. SQUIRES, Agent, No. 1 Cortlandt Street, New York City.

Sportsmen's Goods.

INDIA RUBBER

Fishing Pants, Coats, Leggins and Boots,

RUBBER CAMP BLANKETS,

COMPLETE

SPORTING AND CAMPING OUTFITS, AND

India Rubber Goods of Every Description.

HODGMAN & CO.,

SEND FOR PRICE LIST. 27 MAIDEN LANE, N. Y

FINEST

Blue Flannel Suits,

FOR GENTLEMEN.

WARRANTED FAST COLORS,

From $12.50 to $18,

The price depending on Size and Style.

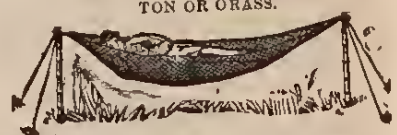
Sample of Goods, Price List and Measurement Blank furnished on request by post.

GEO. C. HENNING,
my9 Washington, D. C.

ASHANTEE

Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.



No 1 weighs 1¼ lbs. Sustains six adults. Sent by mail on receipt of $3.75. Obtain our circulars describing other sizes.

McCOY & SANDERS, SOLE AGENTS,
134 Duane St., New York.

Fishing Tackle.

FISH & SIMPSON'S

NEW BAIT.

The most killing bait ever invented for either black bass, pickerel, or large trout, beautifully mounted with gaudy feathers, furnished in either silver or gold plated. Sent by mail on receipt of price.

Silver plated.....75c. each.
Gold plated.....$1 "

On receipt of two three-cent stamps we will send our new 61-page catalogue, the most complete list ever published on Fishing Tackle, Camping Goods, Shooting Tackle, Pistols, Base Ball, Archery, Cricket, Lacrosse, Firemen's and Gymnasium Goods, Boxing Gloves, Foot Balls, Sporting Publications, and everything in the line of Sportsmen's Goods.

P. O. box 4,968. FISH & SIMPSON,
apr25 132 Nassau street, New York

OCTAGONAL AND ROUND

EIGHT STRIP SPLIT BAMBOO

Fishing Rods.

Made of the most carefully selected Calcutta Bamboo; every piece having an imperfection being rejected. They are mounted with the best German silver nickel-plated joints and reel plates, which never tarnish.

Rods of any desired weight or length made to order. Every portion of the rod is made under my personal supervision.

I will send a rod to any address C. O. D., with privilege of examination before paying for it. See endorsement in "Forest and Stream and Rod and Gun." Four varieties of rod made.

H. P. BUCKINGHAM,
24 Broad St., Utica, N. Y.
may2 tf

Craige's Full-Length Fly Book

with the "Hyde Clip," bound in fine Russia Leather and sewed.

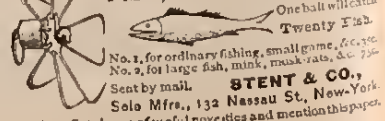
No. 1 book, stiff cover, holding 1 gross flies, $7 00
No. 2 " flexible " " 8 dozen " 6 00
No. 4 " " " " 6 " " 3 75

Sent C. O. D. or upon receipt of price. Stenslman's Flea Powder and Areca Nut, each 50 cents per package, postpaid TEMPLE F CRAIGE (formerly at W. Holberton's Sportsmen's Emporium), Sportsmen's Purchasing Agent. Office, 95 Maiden Lane, N. Y.

"THE EAGLE CLAW."

The best Trap in the World for catching

FISH, ANIMALS & GAME.



One bait will catch Twenty Fish.

No. 1, for ordinary fishing, small game, &c., 50c.
No. 2, for large fish, mink, musk-rats, &c., 75c.

Sent by mail. **STENT & CO.,**
Sole Mfrs., 132 Nassau St., New-York.

Send for Catalogue of useful novelties and mention this paper.

FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, JUNE 13, 1878.

Volume 10.—No. 19. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

MY OLD ROD.

WHEN this old rod was new
The brooks were full of trout—
Good, active fish, and stout—
The anglers then were few;
Men mostly fished with bait
In eighteen twenty-eight,
When this old rod was new.

When this old rod was new
The salmon did abound—
Sold for ten cents a pound—
But Canadian waters through,
To no fly would they rise
Which anglers could devise,
When this old rod was new.

When this old rod was new—
In London it was made,
And full a pound it weighed—
Its ash, its timber, grew;
No lancewood joints or tips,
Or split bamboo in strips,
When this old rod was new.

When this old rod was new
The fishing grounds were near.
To walk we did not fear
At morn a mile or two;
And then return at night,
Creel filled with beauties bright,
When this old rod was new.

When this old rod was new
No poachers with their net
Despoiled our brooks, or set—
A prowling, robber crew—
Their night lines in our lake,
Our finest fish to take,
When this old rod was new.

When this old rod was new
No monster trout were known
In Nepigon or Raugely, grown;
A fish in weight a pound or two
Was thought to be the largest size
That ever gladdened anglers' eyes,
When this old rod was new.

When this old rod was new
The bass had never here been seen,
Big-mouthed or small-mouthed, black or green,
For western streams alone it knew;
Nor grayling in swift Manistee
With brilliant dorsal rising free,
When this old rod was new.

When this old rod was new
Few angling books to read had we,
Save Walton and Sir Humphrey D.—
From them our scanty lore we drew.
Then forests and streams abounded,
But no FOREST AND STREAM was founded,
When this old rod was new.

S. C. C.

For Forest and Stream.

Trout in the Rocky Mountains.

IT was in July, 1863, that I first crossed over the snowy range to the Middle Park, in the heart of the Rocky Mountains, and the centre of Colorado, on a trouting expedition. True, I had a broken clavicle, and my best arm was bound firmly to my body so that I was not exactly calculated for a lively campaign, yet I rode fifty miles in a day over the ruggedest heights, and the wildest gorges and the thickest of forest on the most stubborn and headstrong of ancient Government mules. After that my fishing was mainly by proxy. A company of soldiers were stationed on the bank of Grand River at Hot Sulphur Springs in the middle of the park, and they were catching trout from that stream every day literally by the gunny-bag full. I remember them now as the fattest, slick-cat, jolliest lot of men I ever saw, and they said it was the result of a strictly speckled trout diet. At that time fish of three to five pounds weight were common, and specimens weighing from six to seven pounds were occasionally taken. The fishing was all with hook and line, but science or skill, or fancy tackle were unknown.

Two years later I went again and by accident found that a little creek on the way, at which we threw off our saddles for a noon rest, was literally alive with speckled beauties. In Grand River the sport was equally good and the fish much larger. I caught one that measured twenty-two and a half inches; first losing two hooks by his strikes, and finally breaking my rod in landing him. Since that year I believe I have missed but one summer without making one or more excursions to that locality. In 1868 I did my best fishing. There were a good many people at the springs; a large party of Government explorers, camps of pleasure seekers, etc., numbering altogether nearly one hundred and fifty people, all living in tents or the open air. Whilst many were fishing but few were fishermen, so that those who could catch trout were at perfect liberty to take all they pleased since none would be wasted. I found a new (to me) stream about four miles away, Williams River, in which were numerous rapids interspersed with deep pools, and about two miles above its mouth a fall of twelve or fourteen feet. It had a beautiful little valley with luxuriant vegetation, abundant wild fruit and dense groves of lofty, wide spreading cottonwoods. For five days in succession I saddled my horse and cantered over the hills to this lovely stream, fished from three to four hours and brought back all that my horse could well carry. The smallest catch of the five days was seventy-two pounds, as weighed and reported by Samuel Bowles, Vice-President Colfax and Governor Bross. I never weigh or count my fish. On one of the days I certainly brought in ninety pounds, and on that particular day I caught all from one pool and standing in one place. Other seasons I have done quite as well in other streams, but generally indulged in the sport only at odd hours or during fragments of days, often taking fifteen or twenty pounds at noon rest while my horse was taking his lunch of grass.

Up to 1874 this region could be reached only on horseback with pack mules for the transportation of camp equipage and supplies. From the terminus of the wagon roads on the eastern slope of the mountains, the way was by intricate and difficult Indian trails, over the main range and through dense woods for twenty-five miles, and then as much further through the open vales and grassy meadows of the park. In the year named a wagon road was opened and the next year another. The latter, from Georgetown, is a magnificent road and a splendid drive. In the summer there is a tri-weekly stage, and the time from the end of the railroad is reduced to ten hours, between breakfast and supper. In winter this road is buried under ten or twenty feet of snow, which does not permit wheel travel until the latter part of June, and then only between high crystal walls. But that is early enough. The sport begins in July and grows better until late in the fall. A village has grown up at the Springs. Settlers are scattered along all the larger streams. Herds of horses, cattle and sheep are sprinkled over the prairies, and the charm of camp life in the wilderness is passing away. However, it is not yet difficult to get beyond the settlements, away up the streams in the pine woods. About the Springs fishing is overdone. From twenty-five to fifty hotel guests can be seen each day sauntering up and down the river for two or three miles, catching a few trout each and in the aggregate quite a number. But fair sport can be enjoyed by mounting a horse and riding from five to six miles away. Four miles down stream comes in Williams River from the south; twelve miles down, Troublesome River from the north. Seven miles up, Frazer River enters from the south; five miles further, Willow Creek from north; four miles further, the South Fork from the southeast; six miles above that, the North Fork from the northeast, and five miles above that, or twenty-five miles from the Springs, is Grand Lake—the nicest, the easiest and the laziest place to take trout in that whole region. It is a real Alpine sheet of water, close up against the foot of lofty snow-crowned peaks, walled in by morainal deposits. Two and a half or three miles long and half that in width, its depth is unknown. The river flows out to the West and there is a narrow space of level ground and open pine woods on that side. Elsewhere the mountains rise abruptly from the water's edge. In this level space there are three or four rude cabins, and one man, J. C. Westcott, has lived a kind of hermit life here for ten or twelve years. In summer he follows fishing, generally having a partner or two and plenty of company. Some seasons there are other regular fishermen, but the great majority are transient visitors. To carry on the business of fishing for market requires three or four men operating together. The fish are caught from boats or rafts and kept alive in ponds until three or four hundred weight are collected, when they are hastily dressed, packed with green grass in baskets or open boxes and carried on donkeys to market at Georgetown, Central City and other mining camps, with an occasional cargo to Denver. They travel at night across the park, lie by the next day high up on the mountains, where it is cool, and reach their destination the next night. One or two men accompany the animals, sell the fish and return with loads of flour and other supplies. Three or four men operating in this way will, from the middle of July to the middle of September, catch from three thousand to four thousand pounds of trout. While some are marketing the catch the others are collecting another load. The trout of the lake are mostly small, weighing from four to eight ounces when dressed. The fishing ground is from three hundred feet to five hundred feet off shore, where the water is from twenty to thirty feet deep. It is on the brink of a ledge, beyond which the bottom drops off to an unknown depth. At times the schools of fish visit other places. Several streams enter from the mountain side, and late in the season there are certain hours of certain days when the water about these rivulets are fairly alive with fish. There are also spots in which at certain times quite large trout can be taken, generally after dark, by still-fishing with bait. Nearly all the fish taken are with bait, grasshoppers being the best, and from ten to twenty feet beneath the surface. Those who fish for a business will handle three or four lines, each with a short rod, and take them in as fast as possible. It is the worst kind of "pot-hunting" that can be done under cover of law.

Half a mile above the lake, on the main stream, there is a waterfall and the head of trout navigation. The stream comes down through an impassable canyon, which, looked down into from above, is a chain of lakelets and cascades. The roar of the lower fall can be heard from the west side of the lake; but what is very strange, its location or direction cannot be determined from the sound. One day it may seem to be steadily at one point of the shore, the next day at another, or it may change with the hours or minutes. Sudden gusts of wind are common and very dangerous. From a dead calm the surface of the water is often churned into foam in a few moments, the gale seeming to blow from all quarters as well as straight downward. Persons drowned in the deep portion of the lake sink to rise no more. An Indian legend states that ages ago a band of Utes were camped on the margin of the lake, when they were attacked by a war party of Arapahoes. The battle waged long and disastrously to the Utes, who at last placed their women, children and wounded on rafts of timber and pushed them out into the lake, when a sudden gale swept down from the mountains and destroyed them all. Whether true or false the story, it is certain that the savages have a superstitious fear of the locality, and never venture near the lake if they can avoid it.

There is generally the very best of fishing in the outlet from the lake. The river for a considerable distance is wide and shallow, with an uneven bed of stones sprinkled here and there, with immense boulders that rise above the water. Then it changes to a succession of rapids, with deep, glassy pools between. The neighboring country is alternate open meadow glades and billowy hills covered with pines. Immediately north of Grand Lake is an extensive area of forest, so dense and choked with fallen trees and brush as to be almost impenetrable. In it are several other lakes, visible from the high mountains above, which are doubtless equally well stocked with fish, but I never yet have seen any one who had tried them or even visited them. Coming down through this forest is the north fork of the river and really its main branch. Judging from appearances, it should afford excellent sport for twenty miles further up. All this wooded country abounds with bear and elk, and on the mountain slopes above the lake, to the eastward, near the timber line, are great numbers of mountain sheep and mule deer. The streams have plenty of beaver, mink and marten along them everywhere.

Last summer a friend and myself went to Grand River about the middle of July for a month's sport. We established headquarters at Hot Sulphur Springs and fished up the river, down the river, and in all the neighboring streams. Mounting our horses in the morning, we would ride to the locality determined upon, picket them in the rich grass, one of us go down the stream and the other up, putting in three or four hours, and always returning with well filled baskets. Over but very little water did we fish a second time. The last week of our intended stay we decided upon something more of an adventure. I had recently heard of a newly discovered lake away off in the southwestern rim of the park. A roving and romantic preacher, who had taken his vacation of the summer before in the woods, had told me of it. He called it Black Lake, and said that it was literally full of trout. But he could not give very definite directions how to find it, but described the crossing of the creek that ran from it to Blue River. Packing our blankets, coffee-pot, frying pan, and some provisions on an extra pony, we set out to find the new paradise. Three young men, or large boys—two of them from Denver and one from Tennessee—who were vagabondizing in the mountains for a couple of months, joined our cavalcade; also a young man who belonged at the Springs but was going on a business trip to the Breckinridge, so that we numbered six horsemen and had two extra animals for the *impedimenta*. We struck across the hills southwest, crossed Williams River eight or ten miles above its mouth, and turned up its wide valley between the inclosing mountain spurs. It is a delightful region of rolling grassy hills, interspersed with groves and belts of timber. Hundreds of antelopes were grazing in groups of from five to fifty, but they were wary and wild. Although the boys did considerable firing at long range, they got no meat, and the march we had laid out for the day did not admit of wasting time for a systematic hunt. At the head of the valley we had to turn to the right and pass over a high mountain ridge. I had passed it eleven years before in company with Bayard Taylor by a well beaten Indian trail, and trusted to finding the route as good, or better, now. In that I was disappointed. As we got into the timber and began the steep ascent, the trail scattered out. Fallen timber had greatly obstructed it, and a young growth of pines formed an impervious jungle. The party got scattered and confusion reigned. My friend, who was not used to "roughing it," became exceedingly fatigued and much discouraged. But all things must have an end, and at length we reached the summit and traversed an open forest of living timber with most beautiful intervals of luxuriant meadows, with grass and flowering plants higher than our horses' backs and springs of

delicious, sparkling, icy water. It was a most lovely region, and rich repayment for all our struggles and hardships. For the descent we found the old trail plain and good, and just as twilight was falling we reached Blue River and camped on the green sward in a grove of quaking aspens. We had no tent, and after a steaming supper, to which we did ample justice, spread our blankets in the open air, as is the universal custom with mountaineers. But it was my friend's first experience in that kind of a bed room, and he could not quite enjoy the novelty.

Blue River is a rapid, boisterous stream that heads in the main range near Mount Lincoln and flows north about seventy miles to its junction with the Grand in the western edge of Middle Park. From source to mouth, it falls about seven thousand feet. About its head waters there are extensive and very rich gold diggings, and the stream is thick and yellow with tailings from the sluices. Of course the trout are driven out of the river by this cause, but they yet abound in all its tributaries. The next morning we concluded from the "lay of the country" that we had struck the river too high up, so we turned down its western shore along a new wagon road. The three boys, who had intended going on south to South Park, concluded to accompany us in order to see Black Lake. The Breckinridge visitor continued his journey up the river alone. Five or six miles down the valley we crossed a creek which we recognized as the outlet of the lake, and found it to be the branch known as the Roaring Fork of the Blue. Turning up its course the climbing was very steep and rough. It is over bench after bench of morainal hills, composed almost entirely of boulders and broken stone. The stream plunges down the descent in an almost unbroken sheet of foam, among great black rocks overhung with fringes of black alder and birch. We were told that the lake was two miles from the river, but we clambered over rocks and fallen timber for three hours, and concluded that the distance was five or six miles. In fact, we began to think it the wrong stream, and some were for turning back. Before us was a great amphitheatre in the wildest portion of that ruggedest of ranges—the Blue River spur. We were nearly up to the snow level, and the stupendous, black faces of the cliffs, the spires and needles and pinnacles of the splintered summits seemed almost within reach. At length the way became so steep and difficult that horses could go no further; the canyon closed in; but a couple of footmen, clambering up over the rocks, soon shouted back "Eureka!" So we camped in a grove of aspens, and turned our animals loose in the most beautiful of little meadows of timothy, clover and wild oats up to their mid-sides. After dinner we went up to the lake, and soon caught all the fish we could use. But in exploring the solitude we found that a Crusoe had already fixed his habitation under the lee of a monstrous rock on the lake shore. There was his rude hut, provisions, a few tools, skins of animals and feathers of birds. Moored at the water's edge was a raft to fish from, with its complement of rods and lines, a floating fish-pound, and, hauled up on the rocks, a Bond patent boat. The owner of all this primitive wealth was invisible, but it was plain that his business was to fish for profit. Exploring further we discovered that a trail led across the point of hills from the lake to the river, striking the latter far above the mouth of the creek, and then we understood the two miles distance. Over that trail the Bond boat had been packed on a horse or mule. From the outlet of the lake the stream falls thirty feet in each hundred for five hundred or six hundred feet, roaring and foaming among immense rocks and rafts of drift-wood. There are falls of ten or twelve feet in places, though the water is so divided and broken up into different streams and varying leaps that the trout ascend and descend without trouble. In this water we found the best sport and the finest fish, some of them weighing up to a couple of pounds each, and presenting the most brilliant carmine tints, bright as the rosiest sunset clouds.

At night my inexperienced friend had a new anxiety, as it came on to rain before our supper was finished. But a rubber poncho, soon put up, sheltered the head of our bed, and he was surprised to learn how little is actually necessary for comfort. The boys took the storm without shelter, and with the equanimity of old campaigners. They were a month from their mothers' kitchens, and thoroughly fascinated with wild, out-door life. The next morning they saddled up and started for South Park. We two were left alone. Going up to the lake we could hear beyond it the roar of a waterfall, which I determined to see. My friend thought clambering over the rocks and fallen timber, and wading through the tall grass and weeds, all loaded with water, around the lake, was too much like work. He could get all the fish he wanted along a hundred yards of the beach near the outlet, and I might see the falls alone and welcome. So off I trudged, and a weary tramp it was, but I made it and was paid a hundred-fold. The stream enters the lake from a dense, moss-draped forest of pine, spruce and fir trees more than two hundred feet high. Five hundred feet from the lake it plunges down from a great cliff of granite, descending by a series of leaps of from fifty feet to two or three hundred feet each. I climbed up until I became tired, and as far as I could see the torrent was coming thus down the mountain side. Between the foot of the falls and the lake I landed a few very fine trout, and feasted on delicious currants that covered the banks. Then took my stand at the inlet and caught them as fast as I could throw the fly, until my basket was filled and I had more than I could comfortably carry to camp. Starting around the lake I met my friend and the proprietor of the fishery gliding toward its head. The latter was paddling a neat, trim raft, and the former was casting right and left and hauling in trout at a bewildering rate. Mr. Crusoe had wandered back to his camp that day, and my friend had subsidized him and enjoyed some famous sport without the necessity of making a single exertion except to land his fish in a box at his feet.

Black Lake is a genuine Alpine lakelet of 800 to 1,000 acres, formed by a dam of mountain *debris* across the drainage trough, doubtless the terminal moraine of the last resistless ice river that forced its way down this groove in the solid granite. Its great depth and the mountain shadows give it a black appearance. The water is clear as crystal and cold as newly-melted snow, coming as it does so short a distance from banks and fields of that substance that never disappears. On the west the water is fringed by green timber; on the south and east the old forest has been killed by fire and a new one is taking its place; on the north is a verdant meadow. A hunter has told me that about the falls in winter, when the mist and frost have loaded the trees and every twig and leaf with ice crystals, the scene, lighted up by the sun, is of marvellous beauty and indescribable grandeur. The altitude is about 10,000 feet or two miles above the sea.

Packing up we moved down the creek to its mouth, where our comrade, who had gone to Breckinridge at the head of the river, met us on his return journey. Our night's camp was thoughtlessly made in an open meadow, and a terrific thunder storm gave us a pretty thorough drenching. However, the next morning's sunshine soon set that all right, and we moved homeward, following down the Blue and up the Grand to the Springs. There I found a party of friends equipped for a bear hunt 150 miles further west, beyond two or three more ranges of mountains, who insisted so strongly upon my joining them that I consented to do so. My friend turned his face Denverward, and the bear hunters headed the other way. Of their mouth's adventures, more anon.

B.

Denver, Col., 1878.

QUEER FISH IN THE MOHAWK.

LITTLE FALLS, N. Y., May 30, 1878.

The efforts of the Fish Commissioners to stock the Mohawk with salmon have proved a failure. Many have been put in, but none have been since seen or heard from, except two to be mentioned. The falls at Cohoes and the occasional drying up of some portions of the stream to such an extent that nothing less than a good round appropriation (which cannot be obtained, as we have no interested M. C.) prove to be obstacles that are insuperable to all attempts to utilize this once famous fishing water. There have been other obstacles, also, which should not have been allowed to exist

All are suckers which come to the nets of the early spring fishermen, and countless gravid bass and pike are every year destroyed; and while later on in the season the rod fishermen swear vengeance and the game constables threaten, no steps can be taken to rectify the abuses. The goose has been killed and the golden eggs are very rare. New enemies have made their appearance within the past few years to help deplete our waters. First appeared the pickerel from the lakes, but as he is as yet scarce, and, in the absence of better, does furnish some sport and food, can be forgiven. Then comes the handed proteus, with his lizard-like form and remarkable breathing apparatus, consisting of a pair of triplet gills, red as blood and projecting like fringes. In 1842 De Kay writes:

"This curious creature has been found in the Erie Canal, and doubtless ere long will have reached the Hudson River."

That time has doubtless come. Three years ago one was caught near the mouth of East Canada Creek, and in his stomach reposed two little fish which were pronounced to be little salmon. This year we have a new arrival in the shape of the spotted burbot, known also as La Roche, methy, dog fish and eel pout. One some twenty inches long was captured in March in the sucker net of Mr. Damin Hoffman, a fisherman of East Creek, who kept it in his spring until yesterday, when hearing from him of the curious "chub eel" that he had, I secured it for examination, and found that in all its characteristics it is closely described by De Kay, who says that it is very voracious, feeding on crawfish and the smaller fish, and that it is worthless as an article of food. Since I procured this one I have been informed that within a few years back three or four of these creatures have been captured in the Mohawk. De Kay's description, somewhat abridged, is characteristic. Large dark-brown with lighter spots, anterior nostrils with membranous filament; length, two feet. Description—body oblong, compressed anguiliform; head broad, depressed; jaws nearly equal; scales minute, rounded and deeply imbedded; lateral line in a furrow; arched slightly at anterior part, thence going off straight; eyes small, oval; teeth in the jaws small and recurved; bronchial rays, seven; first dorsal small, subtriangular; first ray short; second commences 0.3 behind first, long, low and coterminal with the anal; pectorals long, pointed at its tips, reaching nearly to base of first dorsal; ventrals anterior to pectorals, long, narrow and ending in a long thin point; anal long, subequal caudal rounded, the rays above nearly touching the second dorsal, and not quite so near the base of the anal; color, deep chestnut-brown, marbled with lighter spots; beneath lighter; pupils black; irides white and golden; ventrals white.

PIREOO.

Fish Culture.

HABITS OF EELS.

THE following communication from the Hon. Robert B. Roosevelt, Fish Commissioner of the State of New York and President of the American Fishcultural Association, will be found of great interest. Any information in regard to eels, their methods of reproduction, will be read with avidity. It is just one of those points in ichthyology which wants clearing up, and sooner or later we must get at the key which will open the mysteries of eel reproduction:

I wrote to the FOREST AND STREAM last year a communication concerning the habits of eels, claiming that my experience went to prove that they spawned in the fresh water—or produced their young there, if they are viviparous, which I greatly doubted—and that the young descended to the salt water in the spring as soon as they were hatched. This was in opposition to the generally accepted theory, and led to much discussion, but it has been fully confirmed by my experiments this year, and I now regard it as conclusively established. A friend came to my place this year, at the time the millions of little wriggling fry were moving, and wanted to argue the position with me. I declined to argue, but told him to go to the stream and look for himself. He came back shortly and quietly remarked that there was nothing more to be said; that "those eels" were certainly going down stream. I do not believe the eels in my pond are different from those in other ponds, or that they get up a special idiosyncracy for my benefit. A person only has to watch them for a few moments to be entirely satisfied. It is useless to argue against the evidence of the eyes, and so far I have reached a definite and positive conclusion. I have, as I explained before, a trough, planked and with screens in it leading from the pond to the upper preserve, and this preserve communicates with the lower one, and that with the stream, emptying into it through a spout two feet above the level of the water. It is hardly possible that eels an inch or two long can ascend a fall of water two feet perpendicular, and they cannot cross the ground when as young as that, as I have proved with 10,000 individuals that were thrown on the bank as I was ladling them out of the trough. The fry last year crowded the trough above, not below, the screens, and wriggled through or under, a few at a time, and went down. They stopped in millions in the upper preserve, not entering the lower preserve in any numbers, as it contained some large trout. They finally all made their way through a small leak in the side of this preserve, which led around the lower pond and into the stream below, and which was not noticed at first.

This year there were no trout in the lower preserve, and they passed down the trough exactly as they did before, and went then into the second preserve, and thence into the stream, and so on to the salt water of the bay. I read an account of this experience at the last meeting of the Fishcultural Association in March last, and thereupon Prof. Baird, our learned United States Commissioner, announced that he had received several eels two weeks previously that, under a microscope, proved to contain mature spawn. I wish now, through your columns, to ask Mr. Baird whether he does not consider that this may have been an error. I know him well enough to be sure he will not hesitate to admit a mistake if it has occurred, especially when it is borne in mind that scientific men have been trying for two thousand years to find spawn in eels by the aid of the microscope, and have heretofore failed. His conclusion does not agree with my facts, and could not have been true of "those eels" in my pond. On Long Island the eels are all in the mud hybernating in March. None are "running," as the eel fishermen call it, either in the ponds or the bay. None are taken in eel-pots; they are motionless, and if taken at all are speared through the mud. They could not, therefore, have been spawning, unless, indeed, they are hermaphrodite, which is not probable. And even allowing for latitude, it is hardly possible that eels anywhere in our country could have mature spawn at the time indicated. In fact, the fry appear before the grown fish begin to move or leave their winter quarters. They appeared April 1, when still the fishermen reported not an eel as "running."

Here then are the facts: The grown eels go down stream late in the fall; the fry, minute, semi-transparent and evidently just hatched, make their appearance in the spring, before their parents come out of the mud, where they have lain dormant during the cold weather, and the fry go down to the salt water almost as soon as hatched. They grow very fast, much more so than any fish I am acquainted with, and will be six inches long in three or four weeks. The only fact yet unsettled is the time of their return to fresh water. But that does not seem material. Now, on these facts I have erected a theory, but theories are temporary bridges to the truth, and I am ready to pull down mine as soon as some one will build a better one. I now theorize—not believe, that expresses a more fixed state of mind—that eels spawn in the fall, like salmon; that they leave their eggs to hatch of themselves, like salmon; that they descend to the sea after spawning, like salmon; that the fry hatch out in the spring following, and that they too, like salmon fry, go down to the sea head up to the current. But they do it the year they are born and do not wait till they are smolts. If this theory is correct we must look for mature eel spawn in the fall, and only in those fish that are caught in the fresh water. This theory is the only one that seems to explain the undoubted facts of the case, for it must not be supposed that fish are traveling in the direction they are headed, as all fish head against the current, if they are feeble or it is strong, precisely as a man would were he swimming down dangerous rapids.

Yours very truly, ROBERT B. ROOSEVELT.

New York, May 27, 1878.

HAVRE DE GRACE AND SHAD HATCHING.—On Wednesday, June 5th, the President of the United States, accompanied by Professor Baird, Secretary of the Smithonian Institution, paid a visit to the Government Hatching Establishment, in Chesapeake Bay. Mr. Hayes was exceedingly interested in the methods employed, which were entirely novel to him, and expressed his approbation to Professor Milner, the Assistant Commissioner of Fisheries, who had the works under charge. At the request of Webb C. Hayes, Esq., a number of young shad will be sent to Ohio, to stock some of the rivers there. In honor of the President, a sailing match among the gillers was gotten up, and it is to be supposed that the Chief Magistrate of the United States had a very good time of it as he could not be followed to the little island of Spesutia by any office seekers. On Monday, the 10th, according to the laws of the State of Maryland, shad hatching ceased, and with it the operations of the Fish Commission. The labor undertaken has been very great, and the results of the most remarkable character. Having been engaged at their first start in North Carolina, where 10,000,000 were secured, in Maryland some 13,000,000 more shad eggs were obtained. Shipments of young fish have been made all over the country. On Tuesday last of this week a shipment was made to California, which will be the third undertaken by the U. S. Fish Commission. A representative of the FOREST AND STREAM AND ROD AND GUN having spent some days last week with the Fishery Commission, we trust in our next issue to give to our readers some idea of the method employed in securing the eggs of the shad, and how they are hatched.

SALMON AND ALEWIVES IN THE MERRIMAC.—We have received from Fish Commissioner Samuel Webber, of Manchester, N. H., the following announcement, under date of January 10, which will be received with pleasure:

I have the pleasure of announcing to you that both salmon and alewives have arrived at Amoskeag Falls. The former on Saturday, the 8th, the latter on Wednesday, the 5th, and in large numbers. This is the first year since 1847 that the alewives have got so far up the river, sixty miles from the mouth. The salmon, as you know, came last year for the first time. The first one seen this year is estimated at 15 lbs. against 8 lbs. last year.

VIRGINIA—*Washington, D. C., June 3d*, 1878.—We commenced April 11th, and made our last trip, May 3d, distributing during that time to the following rivers, viz: Nottoway, 111,000 at Nottoway station, S. & R. R. Rd.; Roanoke, 139,000 at Weldon, N. C.; Meherrin, 150,000 at S. & R. R. Rd. Crossing; James River, 115,000 at Richmond; South Br. Nansemond, 40,000 at S. & R. R. Rd. Crossing; Roanoke, 100,000 at Salem; Appomattox, 60,000 at Petersburg; Mattapony, 180,000 at Milford station; Little River, 100,000 at Taylorsville (Br. of South Anna); South Br. Nansemond, 50,000 at S. & R. R. Rd. Crossing. The U. S. Commission went to Havre De Grace, the work having been carried as far as it could be in Albemarle Sound, and I thought there was little

or no chance of Va. getting any more this season; but about a week ago Professor Baird telegraphed our commissioner that we could have more from Havre De Grace, and we are now continuing the distribution and have sent 200,000 to Shenandoah, at Front Royal, and 175,000 to Shadwell, just below Charlottesville, on the Rivanna River. We hope to get a few hundred thousand more. W. G. W.

Natural History.

A NEW SPAROID FISH.

[*Sargus holbrookii*—BEAN.]

On the 28th of March, 1878, Mr. G. Brown Goode, assistant curator of the U. S. National Museum, bought in Charleston, South Carolina, a fish known in that market as the "bream." It was brought to Charleston from the Savannah Banks in great abundance and sold in readily.

An examination of the specimens proved them to represent a species of *Sargus* not known to be described, for which I propose the name given above.

The description is based upon six specimens, catalogue No. 20,079, varying in length from 256 to 300 millimetres (10 1-12th to 11 13-16th inches) to end of middle caudal rays.

DIAGNOSIS: *Body* ovate, resembling in shape *Sargus vulgaris*, (Geoffr.), rather than *S. candimacula* (Poey), compressed, a very slight protuberance above the upper anterior margin of the orbit, and a very marked one in the supraoccipital region. The height at ventrals is contained slightly less than 2½ times in length of body, and in four of the six specimens it equals the distance of dorsal from end of upper jaw. The least height of tail is about equal to upper jaw, and is contained from 10 to 10½ times in total length. Head 3¾ times in total. Interorbital area slightly less than 1½ times diameter of eye. Snout, measuring from end of upper jaw to perpendicular through anterior margin of orbit, about equals mandible, which is contained 10 times in total. Eye 4⅓ times in head, and nearly 16 times in total length. The first dorsal spine is contained from 1½ to 2 times in the second, and is shorter than the first anal. The longest dorsal spine is contained from 8½ to 10 times in length of body. The dorsal rays gradually decrease in length from the first to the last but one, which is shorter than the last. The distance of the anal from snout is contained 1⅝ times in total length. The first anal spine is usually half as long as the second, which is somewhat longer, and stronger than the third. The second spine is 1-12th of total length of body. The anal rays diminish in length to the one before the last. The middle caudal rays are about 5-12ths as long as the external rays, and 1-10th of total length. The distance of pectoral from snout is contained 3⅓ times, and its length about three times in total. The distance of the ventral from snout is slightly more than the length of pectoral, and its length is contained from 4 7-11 to 5½ times in length of body.

RADIAL FORMULA: BV. D.XII, 13-14. A.III, 13-14. P. 15-16. V.I, 5

SCALES: 8, 60-62, 16.

Teeth: Eight incisors in each jaw, their greatest width equal to half their length. Many small, granular teeth behind the incisors. Three rows of molars in the upper jaw, two in the lower. Two of the specimens examined show a slight tendency to increase the number of rows of molars.

Color: Dorsal, caudal anal ventrals, axil of pectoral, posterior border of operculum, upper part of head, blackish. A black spot on the caudal peduncle extending almost as far below as above the lateral line, and involving about eight longitudinal rows of scales. Checks and greater part of body dull silvery. No cross bands.

This *Sargus* is the one referred to in FOREST AND STREAM, May 30, 1878, as resembling a Cuban form. I dedicate the species to Dr. John Edwards Holbrook, to whom ichthyologists are so greatly indebted for their knowledge of the fishes of South Carolina. TARLETON H. BEAN.

U. S. National Museum, June 3, 1878.

THE "BUCK FLY."

WILLIS, Texas, May 1, 1878.

EDITOR FOREST AND STREAM:

When the trouble is over about the "deer shedding their horns," I want you to bring forward a subject that I have not yet seen discussed, but one, I think, of no mean importance, and one, too, that will puzzle the knowing ones not a little, and that is an insect or grub found in the deer in the Southern States at certain seasons of the year, say from January to April, and peculiar to the deer alone, and known to all hunters as the "buck fly."

What this animal is, or its purpose in the deer, or its destiny, has ever been a mystery to me, and, I presume, to all others who know anything of it. They are found in the chrysalis form in the deer's head, sometimes around near the brain, in the cells of the skull (don't know the technicals) near that organ, at other times in the upper part of the throat in the epiglottic region, and in the upper nasal region; sometimes in large quantities, at other times only few individuals, but they never seem to be of any inconvenience to the deer, and when about to change from the chrysalis to the full fledged fly, they approach the nasal apparatus and are blown out by the deer or make their way out by their own efforts; but tradition says the deer blows them out. They then either fly away or drop upon the ground until they gain sufficient strength and development, then fly. The chrysalis at first is flattish and of a whitish color, but just before changing into the fly becomes a brownish gray color and wrinkly and rough, and an inch in length. By the time the deer have shed their winter hair and turned red, these worms have all disappeared from the animal and he begins to look sleek and grow fat.

After leaving the deer and becoming fully fledged, the "buck fly" is of a dark, brownish or gray color, with the under or second wings a bright scarlet. And further than this I could not describe it, as I have never been able to capture or kill one or known any one else to do so, for they are as timid as the deer, and the only time you ever see one is in the early spring. As you ride through the brush you may rouse one up like an old buck, when off he goes with the like graceful bounds and zig-zag gait of the deer in whose head he has been a recent tenant. Will some of your correspondents, who are better posted on this subject, give us their views through the FOREST AND STREAM? Respectfully, C. L. J.

[We have no definite information to offer on this subject, although we have often observed the larvæ of this or a similar parasite in the throat of the deer. We presume that the insect is a near relative of *Œstrus ovis*, which sometimes proves so troublesome to sheep—ED.]

BIRD NOTES FROM ILLINOIS.

LEBANON, Illinois, April 29, 1878.

EDITOR FOREST AND STREAM:

The weather has for the past winter been almost unprecedentedly mild in this locality. But little snow fell, and the ground was not frozen exceeding two inches at any time. As a consequence of the open weather we were not favored with our usual amount of duck shooting this season. The ducks were less plentiful than last year, and made their migrations at very irregular periods. We were recompensed for this privation, however, by very fair snipe shooting this spring. The first Wilson's snipe of the year was seen January 26. This bird was but a straggler, as no others put in their appearance until March 6. The weather being mild and pleasant during the early part of the latter month, the snipe arrived in considerable abundance, and at any time from the 15th of March to the 10th of April a bag of twenty-five or thirty plump Wilson's snipe might easily have been made in an afternoon's shoot. The last snipe of the season was killed by your correspondent, April 20. We anticipate elegant quail shooting here next fall, as they are very plenty. They are all now paired, and have begun to construct nests. I will now give you date of the arrival of the migratory songsters, etc., up to the present date:

February 8, '78, wild pigeons; 18, cow birds; 19, killdeer plover; 26, red-winged blackbirds; March 0, Carolina rail, Wilson's snipe; 8, king fisher; 9, peewee (*Sayornis fuscus*); 15, crow blackbirds, first butterfly of year seen to-day; 20, jack-snipe (*Tringa maculata*), and field plover, or Bartram's plover; 25, white bellied swallows; 29, yellow-legs (*G. flavipes*) stone birds *G melanoleuca*); 30, purple martins; April 5, solitary sandpipers, blue warbler. A Carolina dove's nest was found to-day on the ground containing one egg—a very unusual occurrence.

April 6, brown thrush; 12, chimney swallows, and noticed for the first time this year gold finches in summer plumage; 13, bank swallows; 16, house wren; 18, king birds, Baltimore oriole and whip-poor-will; 20, wood thrush, olive-backed thrush, blue-gray gnat catcher and prothonotary warbler; 21, orchard oriole; 23, cat-bird, night-hawk, scarlet tanager and great crested fly-catcher.

The arrivals as noted above are in nearly all cases several days ahead of the arrivals in former years. Our summer visitors have almost all arrived. Some few, however, are needed to complete the list. PTARMIGAN.

ALBINO.

THREE RIVERS, P. Q., May 1, 1878.

EDITOR FOREST AND STREAM:

Some four years since Mr. S——, who takes pride in his "black Spanish" fowl, and has a fine flock of the same, evidently well-bred gentlemen and ladies, hatched out a brood of chicks under a foster mother. They were all jet black in plumage, and perfect specimens of the breed. He has never known any of his Spanish hens to sit since he has owned them (several years), save one of this "clutch," who when about three years old raised a brood of chicks. When she moulted shortly after she put on white, and has since so remained. There are a few black feathers left, but she is nearly all white; is well and hearty, a good layer, and apparently has suffered no change of condition, save in the color of her "outer garments." My friend mentioned the incident to me a few days since, and I was a little incredulous; asked him if the eyes were pink, and he did not know. To-day I went to see the hen; found her among her sisters (and brothers), and found also that her eyes are pink.

Some time ago there was a discussion in F. AND S. as to whether "Albinoism" was congenital or not, and I believe that there is a difference of opinion among naturalists upon the question. This case will settle one point, however—that albinoism is not *always* congenital, at least among birds.

The proof is positive; this bird has been bred and reared, and always owned by my friend, who has seen the change go on under his own eye, and I think never heard of the term "albino," or knew of the existence thereof until after he had told me of this strange thing.

It seems to me that some of the zoological gardens or scientific institutions ought to secure this specimen; and if any of them agree to take it and care for it, and make good use of it for increasing the knowledge of the world concerning this curious disease or condition, or whatever one chooses to call it beside Albinoism, I think I can obtain the bird; and, if so, will present it to any proper association applying for it through you, and can procure affidavits as to the facts, although the hen herself shows every point of a well-bred black Spanish fowl (save color), and it is a breed that is noted for "throwing true."

Yours, hastily, MAC.

BREEDING OF THE PINE FINCH IN WINTER.—The interesting information that the pine finch (*Chrysomitris pinus*) breeds in the Northern States in winter will be news to many of our readers. We are promised some valuable notes on this topic by Mr. C. H. Merriam, the President of the Linnean Society of New York, which we hope to be able to lay before our readers in a short time.

PROCEEDINGS OF THE U. S. NATIONAL MUSEUM.—We notice in the advance sheets of the proceedings for 1878, a part of which have just reached us, several papers of considerable importance to zoologists Mr. W. H. Dall describes a number of new forms of mollusks (recent) from Alaska, and also a number of fossil forms from the later tertiaries of California. Professor G. Brown Goode identifies the *Clupea tyrannus* of Latrobe with the mossbunker or menhaden, and that species will henceforth be known by the name *Brevoortia tyrannus* (Latrobe), Gill. Prof. Goode also announces the capture, in Buzzard's Bay, Mass., of *Belone latimanus*, a fish hitherto known only from Cuban waters. The same writer's article, on the "Voices of Crustaceans," is noticed in another column A paper of interest to ornithologists is Mr. Ridgway's description of "A New Humming-Bird from Guatemala." This species, which has apparently been confounded with *Atthis heloisæ*, Mr. Ridgway describes under the name of *A. ellioti*.

WHY CARCASSES FLOAT.—*Mr. Editor:* I read with great interest the different reasons given for deer sinking in the red and not in the blue coat. While hunting a year ago last October with an old friend who had seen and taken part in many a chase across the lake after deer, and had shot them in both the red and blue coat, I found he held the same view as does "Mowich," which I believe the true one. W. A. T.

[The theory of our correspondent has been corroborated in the most substantial manner by the fact that there are firms in this city which manufacture mattresses, cushions and life preservers, filled with deer hair, which is more buoyant than cork, and sustains a weight of ten pounds of iron to one pound of hair. Both blue and red hair are used, the red having least buoyancy. A microscopic examination will readily reveal why the deer's hair is so buoyant.—ED. F. & S.]

A NOTABLE COLLECTION.—Mr. Henry Edwards, of San Francisco, has the largest and most valuable collection of bugs in America. They number over 200,000 and represent 60,000 species. It will probably be purchased by the citizens of San Francisco for the public scientific institutions of that city.

MESSINA QUAIL.—We have received from Captain Wild, of Fort McKavitt, Texas, a specimen of the Messina quail, which has been beautifully mounted by Chas. H. Raymond, Esq., and can now be seen at the store of Abbey & Imbrie, 408 Maiden Lane. We understand that the Messina quail are not numerous in Texas.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING TUESDAY, JUNE 1.—Two wild boars, *Sus scrofa*, presented; two great horned owls, *B. virginianus*, presented; one purple gallinule; one raccoon, *P. lotor*, presented; three hog-nosed snakes, *Heterodon platyrhinus*, presented; one hog-nosed snake, *H. simus*, presented; two chain snakes, *Ophibolus doliatus-triangulus*, presented; two snakes, *Coluber obsoletus*, presented; two water snakes, *Tropidonotus sipedon*, presented; three garter snakes, *Eutania sirtalis*, presented; two black snakes, *Bascanion constrictor*, presented; one copperhead, *Ancistrodon contortrix*, presented; one snake, *Coluber obsoletus-conjunctus* presented; one pine snake, *P. melanoleucus*, presented; fourteen prairie dogs, *Cynomys ludovicianus*, born in the garden.

ARRIVALS AT THE CINCINNATI ZOOLOGICAL GARDEN UP TO JUNE 1, 1878—Four ponies, *Equus caballus*, deposited by Mr. J. Robinson; one woodchuck, *Arctomys monax*, presented by Mr. J. C. Folger; one mocking bird, *Mimus polyglottus*, presented by Mr. C. Oscamp; one fox squirrel, *Sciurus vulpinus*, presented by Mr. S. G Harbaugh; two six-banded armadillos, *Dasypus sexcinctus*, presented by Mr. J J. Bantlin; two American buffaloes, *Bison americanus*, born in garden; one fox squirrel, *Sciurus vulpinus*, presented by M. C. Colebrant; two black snakes. *Bascanion constrictor*, two chicken snakes. *Ophibolus eximius*, one water snake, *Tripidonotus sipedon*, three hog-nosed adders, *Heterodon platyrhinus*, two hog-nosed black, *Heterodon niyris*, two garter snakes, *Tripidonotus sirtalis*, presented by Messrs. Parrott & Mumford; one white crane, *Grus americana*, purchased; one alligator, *A. mississippiensis*, presented; one pony, *Equus caballus*, born in garden; one white-headed goose, *Anser cærulescens*, purchased; two prairie owls, *Brachyotus palustris*, presented; one black snake, *Bascanion constrictor* presented; one night heron, *Nycticardea gardeni*, presented by A. Hofield; six undulated grass parrokeets, *Melopsittacus undulatus*, hatched in garden; one yak, *Bison grunniens*, born in garden; two raccoons, *Procyon lotor*, born in garden; fifteen English pheasants, *Phasianus colchicus*, hatched in garden; seventeen silver pheasants, *Euplocamus nycthemerus*, hatched in garden; nine gold pheasants, *Thaumalea picta*, hatched in garden; twenty-three prairie dogs, *Cynomys ludovicianus*, born in garden; one Virginia deer, *Cervus virginianus*, born in garden; two passenger pigeons, *Ectopistes migratorius*, hatched in garden. H. P. INGALLS, Supt.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

MEETING OF THE NEW YORK HORTICULTURAL SOCIETY.—The regular June meeting of this society, though there were not so many plants and flowers exhibited, was one of the most interesting that it has yet held. Not only were the plants and flowers shown of extra merit, but some of them were very rare and shown in bloom for the first time in this country. Messrs. Beach, Son & Co., 7 Barclay st., led the way with a fine display of Hardy Azaleas and Rhododendrons, including some fine new sorts. Irises, Pæonias, the beautiful yellow bulbous plant from California; Cyclobothra lutea, that had stood the winter without protection; a very fine spike of the curious Hyacinthus plumosus; immense blooms of Clematis lanuginosa and C. Azurea grandiflora, etc. Mr. Jas. Taplin, manager to George Such, Esq., showed the rare and beautiful light-pink Lilium Krameri and a fine spike of L. Auratum; C. L. Allen, blooms of the scarce Beaumontia grandiflora and Magnolia Macrophylla; John Henderson, immense heads of the new Hydrangea Otaksa, very like the old variety in color but a much freer bloomer and superior to it in every way. The gems among the plants, however, were the Orchids, brought by Mr. A. Mayne, Gardener to Mrs. Mary Jane Morgan, 26th st. These consisted of Odonto glossum, Rœzlii and O. vexillarium, both very rare varieties, and on exhibition for the first time; a very fine variety of Cypripedium Stonei, and a good plant of the lovely Dendrobium Pierardi latifolia well bloomed. Mr. C. D. Dickey, of Hunt's Point, N. Y., sent two plates of President Lincoln Strawberry, which received a certificate of merit from the society last season, one of the berries weighing considerably over two ounces. Messrs. Peter Henderson, E. P. Roe, J. Riddle and others also sent very fine strawberries, and a variety called Beauty, sent by Mr. Henderson, received special notice. Although early for Roses, Mr. Wm. Burgess, Glencove, L. I., put up a beautiful group, principal among which were Souvenir de William Wood, Marechal Neil, Mad A. Leroy, Blanchefleur, Marechal Vaillant, William Griffith, a number of varieties of Moss Roses, including the best of them all, the old English Moss, and a new seedling Rose of his own which he has named George Washington, of exquisite shape, color and fragrance. A most interesting and thoroughly practical address was delivered by P. T. Quin, Esq., Newark, N. J., on "The Summer Management of Fruit Trees." Mr. Quin took the opportunity to warn all against the unprincipled tree peddler, who had done more to bring discredit of Horticulture and Horticulturists than all other causes put to

gether. He also warned the novice against planting too many trees at once, to test a few varieties thoroughly for a few years, find out those best suited for that particular soil and locality, and then plant as largely of those varieties that be found best suited as taste or circumstances might dictate. He followed by inveighing strongly against the practice, too prevalent, of allowing orchards to run to grass, having practically tried it, leaving a few rows in his orchard to grow in the sward while the rest was cultivated. In a few years the fruit became small, juiceless and of no commercial value. When growing fruit for the market he advocated strongly to allow the tree to grow vigorously at first, and not to let it bear until it had a good sound constitution and vigor enough to carry it through; condemning in toto the cultivation of dwarf pear trees for market purposes; finishing up his address by practical illustrations of his method of thinning the fruit during June and July so as to get the maximum of size as well as weight from the tree; enforcing his remarks by saying that small or medium sized fruit will not bring in market much more than one-half of what large fruit will do, that it is worse for the tree, and, worse than all, worse for the pocket. A vote of thanks was most heartily awarded him, and an interesting discussion followed on the relative value of dwarf Pears and Apples, versus Standards. The semi-annual exhibition of the society takes place at Gilmore's Garden, May 19th to 21st, and those of our readers who remember last season's display need not to be asked not to forget to go to see it. The society hope this season to make a still finer display, and we advise all to go and see for themselves. Any information will be gladly furnished by the Secretary, W. L. Davidson, Box 191, Brooklyn, N. Y.

The Kennel.

To Correspondents.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

A Terrier Bear Dog.—An old bear hunter in Mississippi was once saved from death, or being badly hurt, by a very small terrier dog. While out still hunting he came across a tree in the hollow of which was a bear's den with two very young cubs in it. As he found ready sale for these little beasts, he was anxious to capture them. Knowing that the old one was not far off, he determined to await her appearance, shoot her, and carry off the young. As she did not return as soon as he expected, he made bold to capture the cubs and start away with them. It was not long, however, before his position became quite unenviable. The old one, returning and finding her babies gone, became savage and started in search of them. It was but a short time before she was on the right trail, and would have soon overtaken our hero, but for the timely interference of the little dog, which, seeing the excitement, flew at the bear, biting it about the hind legs, and so annoying her that she would turn to strike at it, all of which retarded her charge upon the hunter; the dog, being so small, could dodge the blows of the infuriated beast and be ready at a moment to begin the attack again. The hunter, who was as cool under the circumstances as possible, finding that he had gained a little, wheeled to fire at the bear, when, to his horror, the gun missed fire. Seeing his utter helplessness, he threw down the cubs; but so savage was the bear that this did not check her, and she had come so close that the hunter, but for the persistent attacks of the terrier, would have been caught. At last he succeeded in getting up a tree too small for the bear to follow him. She lingered about the spot for a long time, evidently anxious to punish the offender. The hunter, too, was not content to leave until he had bagged his game, nor did he. Waiting until the old bear had gone away, he descended from the tree, got his rifle ready, and in a short while had killed the mother and recaptured the cubs. The little dog did not escape unhurt, having received a blow by which it lost one of its eyes. I know the person of whom the above adventure is told, and do not believe him to have exaggerated the facts in the least.

Nashville, June 5, 1878. J. D. H.

Mr. Lort, Esq., and Dr. Strachan—*Editor Forest and Stream:* The very large number of letters (twenty-eight) which I have received from gentlemen, experts and lovers of the sporting dog, congratulating me upon my criticism of Mr. Lort, in the letter which appeared in your issue of May 23, and urging me in many instances to further discussion and reply to various correspondents, leads me to ask you to permit me through your columns to reply to one and all that I have neither time nor inclination to continue such controversy. I wrote what I did because it was forced upon me as *a duty*, although an unpleasant one, and I said what I had to say, or at least as nearly so as your printer would allow me! and now am quite content to leave the matter in the hands of others. The character of such replies as have been brought to my notice is at any rate not of such a nature as to be entitled to any reply from me, but I feel inclined to thank the large number of prominent gentlemen who have personally written to me and to whom I find it out of my power separately to reply. By giving this space in your valuable and increasingly delightful paper, Mr. Editor, you will confer a favor upon yours sincerely, A. Russell Strachan.

51 *E. 23d st., N. Y.*

A Compliment Paid to Mr. Lincoln.—The following pleasant letter was received by Mr. Charles Lincoln, just prior to his departure for St. Paul, where he goes to arrange the prize list of the forthcoming Bench Show to be held there. Mr. Lincoln is quite sanguine that the show there will be a remarkably good one:

Massachusetts Kennel Club,
Boston, May 6, 1878.

Charles Lincoln, Esq.:

My Dear Sir—I have the pleasure to inform you that at a meeting of the club, held this day, it was voted that the thanks of the club be given to Mr. Charles Lincoln, the Superintendent of our recent Bench Show, for the very efficient and satisfactory manner in which he discharged his duties, and that the Secretary send him a copy of this vote.

I am yours very truly, Edward J. Forster, Sec.

Canine Degradation.—There is no telling to what depths even a dog may fall. Securely muzzled, coupled, held by a leash, and accompanied by a sturdy attendant armed with a cruel lash, two magnificent, strong-limbed bloodhounds, whose every movement bespoke fleetness and endurance, were led down Broadway one day last week, bearing on their dishonored backs the gaudy blazons of a corn doctor. We thought we detected in their eyes that peculiar light that shone in the eyes of the untamed Spartan captive in the streets of Rome.

Name Claimed—*Bloomsburg, Pa., June* 6.—I claim name of Lorna Doone for my Irish red setter bitch puppy, bred from Sprague's Ruby II. (Tippo—Ruby, Ducat stock), sired by Ranger. J. R. Schuyler.

St. Louis, Mo.—I wish to claim the names Surprise and Missouri for my two C. W. bitch puppies out of Russa G. Champion France, born Dec. 18, 1877. W. Vie.

Visits—*Bloomsburg, Pa., June* 6.—My Irish red setter bitch Nell II. (Plunket—Nell) has visited Dr. Jarvis' Champion Elcho. J. R. Schuyler.

Gentlemen wishing to form Clubs will find rules of organization in the "Club List;" price, 50 cents.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
June 14	11	03	7	24	6	53
June 15	11	57	8	15	7	46
June 16	0	15	9	07	8	36
June 17	1	04	9	57	9	18
June 18	1	50	10	47	10	02
June 19	2	33	11	35	10	43
June 20	3	16	M		11	24

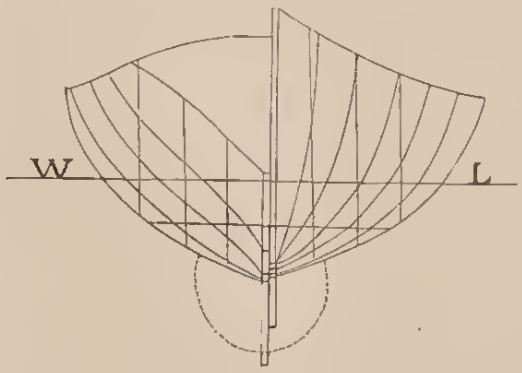
BOAT AND YACHT BUILDING.

BY NAUTIOUS.

STEAM YACHTS.

In the past ten years small screw steamers for use as yachts or for business purposes have taken a leading position. The first attempts at building small screw steamers were crude: the hulls were poorly modeled, the engines too heavy and slow, and the boilers not only too large and heavy, but deficient in heating surfaces and not able to carry the requisite amount of steam necessary to make such boats a success. As an aid to those wishing to build or buy a steam yacht, the following remarks may be of service: The hull should be light and stiff. The proportion of width to length depends, first, on the size of the boat. A small boat should not be less than four feet beam, otherwise there will be no room, and the boat

DIAGRAM № 52



will be "cranky." If a boat is wanted for speed the proportion of length to width must be one foot beam to eight feet of length of load line, or more. The water lines should be fine, and midship section small. If the boat is to be used in shoal water the screw should be placed in such a manner that it will not project below the bottom of the boat; in this case the water lines must be hollowed considerably toward the stern, so as to give as easy a run as possible. The best plan is to place the screw low down, so that one-third or one-half of its diameter will be below the bottom of the boat, thereby obtaining solid water to work in and consequently a greater percentage of speed. To protect the screw the keel is made of an extra depth. The deep keel also gives a firm, stiff floor, thereby preventing the shaft from being twisted out of alignment. The boiler should be constructed with the greatest possible amount of heating surface compatible with good circulation. The shell may be constructed of iron, but is best of steel, and should stand a working pressure of at least one hundred pounds to the square inch. The riveting should be double, thereby admitting the use of lighter plates. (The time is not far distant when small boilers will be welded up solid, without any rivets, thereby reducing the weight of boilers largely.) The fire box is usually made of iron or steel in this country. The English use copper, as it is a better conductor of heat, and will give better results from the same amount of fuel: brass and copper tubes are used for the same reason. The cheapest boiler, and the one most extensively used, is the vertical tubular. This form of boiler should be of larger diameter and less height than the patterns in common use: larger diameter to admit of a larger number of tubes, and less height to bring the centre of gravity of the boiler as low down as possible. This form of boiler is not the most economical of fuel—but that is of secondary importance to stability. The return tubular boiler is more expensive, but is probably the best type that can be used for steam yachts; the centre of gravity is low down, and it is very economical. The diameter of this boiler should also be large compared to its length, the objection to a long boiler being founded on the fact that the water level is hard to find when the boat is used in rough water, owing to the pitching of the boat. The locomotive boiler is used in racing boats of the Thornycroft type. It is desirable that the engineer knows how to test a boiler in the absence of a professional inspector. The following mode is easy, safe and conclusive: Fill the boiler and its connections to the steam valve (which should be shut tightly) full of cold water; build a fire under the boiler, which will soon cause the water to expand; watch the pressure gauge, and the moment the pressure reaches the point determined on for the test open the blow off valve and thus relieve the pressure. Steam should not be carried to more than two-thirds the amount of the test pressure. There is no danger in testing boilers by this method, as if a rupture should occur there is no steam, and there can be nothing but an escape of water. Steam pressure gauges should be graduated to two or more times the number of pounds it is proposed to carry in the boiler, for the reason that gauges are more reliable in their indications at mid scale than at either high or low points. It is best to use two gauges so that one may be a check on the other. For the same reason it is better to use two safety valves, as sometimes one may refuse to act. Safety valves, with nickel-plated valves and valve seats, are best.

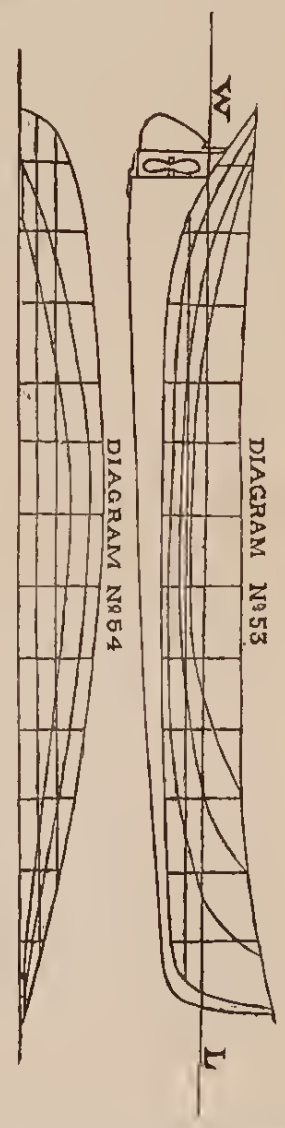


DIAGRAM № 54 DIAGRAM № 53

The engines should be light and fast running, developing their power from high steam pressure and speed of piston. They require more attention being given to good fitting than would be necessary with heavy, slow running engines. The most satisfactory type of engine is the English double cylinder vertical; single engines are cheaper, but will not work as smoothly at high speeds. The water supply may be maintained by either a pump or an injector; their is but little to choose between them, the injector is the handiest and probably the best for non-condensing engines. Small boilers may be fed by an equilibrium chamber filled by hand, and provided with a glass water gauge—this is the simplest method of any. A galvanized iron pan should extend under the boiler to catch and prevent ashes from mixing with the bilge water. A similar pan should be placed under the engine to catch oil drippings, which would otherwise injure the boat. The engine and boiler should be well protected by covering and lagging to prevent radiation of heat. The sleeve for the shaft should be long, and formed in such a manner as to strengthen instead of weaken the deadwood. The stuffing box on its inner end should be long, so as not to require repacking often. The outside bearing is best made by shrinking a brass sleeve on the shaft, and making the boxing of *lignum-vitæ* wood; this, if well fitted, will last a long time and give no trouble. The working parts of the engine should be made of steel, and the crank balanced. For small boats it is hardly necessary to use ordinary link motion. If the valve is set to cut off at three-quarter stroke, it will give the maximum effect that can be expected from the expansion of steam, and some simple device may be used for reversing, doing away

with the complexity and expense of a link motion. There are several compact forms of fast running engines that may take the place of the vertical. Unfortunately the best are made in England, and import duties are high. I refer particularly to Willans' three cylinder engines and also to Halsey's, both of which are simple, compact, capable of high speed, and last, but not least, their centre of gravity is very low down, adding greatly to the stability of the boat. The thrust-block is an important part of the shaft fittings. The best plan is a series of solid rings on the shaft running in a box with grooves to correspond, and kept well oiled. A surface condenser may be made by running hard drawn brass pipe from the exhaust down through the bottom of the boat, carrying them along the keel to and around the stern post and back on the other side of the keel to a connection with a hot well and air pump. This plan is often used for boats that run much on salt water, as but little fresh water need be carried in the tank. It is preferable, however, to dispense with this refinement in small boats. The model with this article is designed to show the best mode of placing the screw, it is also suggestive of a boat that will give a moderate speed—ten to twelve miles per hour, if well engined. The following tables of sizes of boats, engines, etc., have been compiled from the best examples of home and foreign practice, and will be found a good guide. Where indicated horse power is mentioned, it means that the engines are measured by an engine indicator, and are actual horse powers—not the nominal horse power of engine builders founded on the size of the cylinder. John Penn & Son, the eminent engineers of Greenwich, use the following dimensions for small launches.

Length of launch—21ft., 31ft., 52ft. Beam—5ft. 4in., 6ft., 9ft. Draft—1ft. 2in., and 2ft. 3in.; 1ft. 9in., and 2ft. 3in.; 1ft. 4in., and 3ft. Diameter of cylinder—4½in., 5in., 7in. Stroke—5in., 6in., 6in. Indicated H. P.—6½, 10½, 20. Weight, E. and boiler with water—900lbs., 1,700lbs., 3,600lbs.

Yarrow & Hedley, Poplar, London, one of the most extensive builders of steam launches in the world, and who have made the business a specialty for years, furnish the following standard sizes:

Length of launch—23ft., 30ft., 37ft., 43ft., 50ft. Beam—5ft. 3in., 6ft., 6ft. 6in., 8ft. 9ft. 6in. Draft—2ft., 2ft. 3in., 2ft. 6in., 2ft. 9in., 3ft. Indicated H. P.—5, 7, 12, 16, 30.

The steam yacht *Hermione*, constructed by Edwards & Symes, London, is 55ft. long, 11ft. beam, 5½ft. deep. Engines, two cylinders, each 8in. diameter and 9in., stroke; heating surface of boiler, 325 square ft.; grate surface 13 square ft. When worked with eighty lbs. of steam, the engines make 220 revolutions per minute, and the speed is thirteen miles per hour. When working at full speed the engines develop 120 indicated horse power and the boat makes fifteen miles per hour easily.

Mr J. S. White, of Cowes, England, constructed a steam yacht for the Khedive of Egypt, which is noted as a fine sea boat with a good medium speed—a perfect success every way. The following are the dimensions: Length, 50ft; beam, 10 ft; draft, forward, 2ft. 10in; draft, aft, 3ft. 6in; displacement, 11 tons; screw (four bladed), 3ft. 6in. diameter; pitch (average), 3ft. 10in.; engine, two cylinders, 7¾in. diameter and 6in. stroke; grate surface, 5½ square feet; speed, 11 to 12 miles an hour; indicated horse power, 43.

Thorneycroft & Co, of Cheswick, England, build the fastest steam yachts known. The *Miranda* is 50ft. long over all; on water line, 45ft. 6in.; beam, 6ft. 6in.; on the water line, 5ft. 0½in.; draft of water at the stern in running trim, with six persons and 336 pounds of coal aboard, is 2ft. 6in. taking extreme depth of the screw. The hull is built entirely of Bessemer steel, and is from 1-16, to ⅛ of an inch thick. The engines have two cylinders, 6in. diameter, and 8in. stroke. The screw is two bladed, 2ft. 6½in. in diameter, and 3ft. 4in. pitch. The screw shaft is inclined one foot in 28 feet. Heating surface in boiler, 116 square feet; grate surface, 4¼ square feet. Locomotive boiler, plates steel, 5-16in. thick; fire box copper, 3-8in. thick; fire box stays, ¾in. thick, placed 4in. apart. A 3 milimetre Giffrard injector is used to feed the boiler. The boiler is 30in. diameter, and 3ft. 5⅝in. between tube plates; 74 brass tubes, 1½in. outside diameter. Working pressure of steam, 120 pounds; weight of engines, machinery and boiler (with water up to working level), 4,500 pounds. At 300 revolutions per minute the speed is 11 miles per hour; and the engines indicate 11 horse power; slip of the screw at this speed 12.9 per cent.; at 500 revolutions per minute, the speed is 16 miles per hour, the engines indicate 42 horse power, and the slip of the screw is 14.7 per cent; at 555 revolutions per minute the speed is 18½ miles per hour and the slip of the screw 11.3 per cent; at 600 revolutions per minute, the speed is over 20 miles per hour, and the engines indicate 71 horse power. The displacement of the *Miranda* is 3.73 tons running trim, with six persons aboard. Several yachts, built in imitation of the *Miranda*, both abroad and at home, have been equally successful; notable examples are the *Queen Mab*, built at St Petersburgh, and the *Continental*, built in this country. The former boat is constructed almost wholly of Muntz metal, and the latter of steel. The fastest steam yacht in the world is the *Gitana*, built for the Baroness Rothschild by Messrs. Thornycroft, and now on Lake Geneva. The principal dimensions of this prodigy are as follows: 91ft. long, 13ft. 6in. beam; engines compound, with three cylinders and injection condenser; the high pressure cylinder is 13.5in. diameter, and the two low-pressure cylinders are each 15in. diameter; the stroke of all is 16 inches. Boiler of the locomotive type, with copper fire box and brass tubes; the working pressure of steam is one hundred pounds. On the trial trip 43 miles were run in one hour, 48 minutes and 22 seconds equal to 23.89 miles per hour! The boiler pressure was one hundred pounds to the square inch; vacuum, an average of 24 inches, and indicated horse power 450; mean number of revolutions 318 per minute., Unfortunately the diameter and pitch of screw, displacement of boat, etc., cannot be obtained. The New York Safety Steam Co. use the following formulæ and have built some very successful boats:

Length—25ft., 28ft., 32ft., 38ft., 50ft., 60ft., 68ft., 75ft. Beam—5ft. 8in., 5ft. 10., 6ft. 4in., 7ft. 6in., 9ft., 10ft., 11ft., 12ft. Draught—2ft. 3in., 2ft. 4in., 2ft. 6in., 3ft. 2in., 3ft. 6in., 4ft. 2in., 4ft. 8in., 4ft. 10in. Diameter of Cylinder—3in., 3½ in., 4in., 5½in., 7in., 9in., 10in., 12in. Stroke—5in., 5in., 6in., 7in., 9in., 12in., 12in., 12in. Diameter of screw—26in., 28in., 30in., 36in., 42in., 48 in., 54in., 56in. Pitch, 3ft., 3ft., 3½ft., 4ft., 5ft., 5ft., 6ft., 7ft. Boiler. Diameter of shell—28in., 30in., 33in., 36in., 46in., 50in., 54in., 60in. Height—45in., 46in., 48in., 56in., 76in., 82in., 86in., 90in. Heating surface.—75 sq. ft., 00 sq. ft., 115 sq. ft., 170 sq. ft., 246 sq. ft., 332 sq. ft., 402 sq. ft., 504 sq. ft. Weight completed—1,500lbs., 1,700lbs., 2,000lbs., 3,000lbs., 4,800lbs., 7,500lbs., 8,500lbs., 10,000lbs. The *Flirt*, built by Mr. H. S. Maxim, is a very successful small launch: length, 21ft.; beam, 4ft. 2in; depth, 21in; one cylinder, 3½ inches diameter, and three inches stroke; steam ports, 2½ inches by ¼ inch; engines make 700 revolutions per minute. Boiler, 26 inches long, and 20 inches diameter, of the return tubular type, constructed of 3-16 inch steel, with cylindrical furnace 11 inches diameter and 16 inches long; grate surface, 1 square foot; heating surface, 34 square feet; tubes, 1½ inches diameter. The boiler is tested to 450 pounds to the square inch; working pressure, 150 to 200 pounds; screw, two bladed, eighteen inches diameter. Mean pitch, 2⅝ in. Draft aft, loaded, 32in. Weight of boiler, 260lbs.; of engine, 75lbs.; weight of machinery, complete, 400lbs.; speed, 10 to 12 miles per hour. The *Cinderella*, built by Mr. W. Baxter, is 30 feet 10 inches long, 5 feet 3inch beam, and is 32 inch draught aft. The cylinder is 4 inchs diameter and 4 inches stroke; revolutions per minute, 325 with 100lbs. of steam. Boiler upright, 22in. diameter and 36in. high; furnace, 15in. high; grate surface, 255 sq. in: boiler contains 37 tubes, 1¼in. diameter, and a superheater of one 8in. central globe, surrounded by 9 globes, 4in. diameter. The screw is two-bladed, 26in. diameter and 36in. pitch. Speed, 10 to 12 miles per hour. It is hoped that the above examples may be of use to some of the readers of FOREST AND STREAM. Many more might be given, but the length of this article warns me to close. The subject demands a volume, which may at some time be undertaken. With the present paper Nauticus completes the series on Boat and Yacht Building, and, for the present, bids the reader adieu.

YACHTING NEWS.

NAHANT REGATTA.—The Boston Yacht Club in conjunction with the Dorchester, will hold a "Union" regatta off Nahant, Mass., June 17, at 11 A. M. Schooners will be divided in two classes—the first comprising those over 40ft. of sailing length, the second those of less length. Sloops will be divided into four classes—the first for all over 40ft., sailing length; the second for all from 26ft. to 40ft.; the third for all from 20ft. to 26ft., and the fourth for all under 20ft. Course for first class, 23 miles; for second and third classes, 10½ miles, and for fourth class, 7 miles. One prize will be given in each class, and a second if four or more boats start. Ten minutes allowed for crossing the starting line, after that, time to be counted from expiration of that period. Boston Y. C. measurement will be in force. Shifting ballast or heaving overboard any ballast not allowed. One man for each 5ft. of length only or fractional part thereof. Yachts, excepting fourth class sloops and cats may carry any sails. Rouse out those spinnakers and let us have some lively seamanship for once! The old fogie rule of limiting canvas excepting in Corinthian matches should be abolished altogether. First class yachts must carry a boat not less than 10ft. long. It would be a good plan to make smaller craft carry a circular life preserver over or near the stern where it can be cut adrift readily. The Regatta Committee is a strong one, headed by Frank E. Peabody as chairman, and this is a guarantee of a successful race, wind and weather permitting. Owing to the proximity of the metropolitan matches it is not likely that any New York craft will be able to get round the Cape to take part in the event.

SEAWANHAKA CORINTHIAN MATCH.—It is not certain, we believe, where the peculiar designation "Corinthian" was originally devised, nor is its meaning to be interpreted exactly. The first use of the word in its present sense seems to date from the Corinthian Yacht Club, an organization which flourishes on the south coast of England. It is said of them that their title was derived from the hardy fishermen in the neighborhood, who used to race their boats and were styled in the local vernacular "Corinthians." The yacht club in question, in starting sailing matches, limited the boats' crews to strictly amateur sailors, and, in imitation of their prototypes, the fishermen, soon became known as Corinthians likewise, an appellation which was finally adopted by the club and incorporated in its title. From that date on the term seems suddenly to have sprung into popularity until at the present day it has come into universal application among yachting men as denoting crews composed of amateur sailors in lieu of professional tars. In America sailing matches with yachts manned from lay ranks reached back many years, though only among our smaller craft. Jib and mainsail and small sloop races were, we believe, carried on systematically under stringent rules among some of the junior clubs of Boston and vicinity, and prizes set apart for helmsman and crew in orthodox Corinthian fashion. But it was not until the Seawanhaka Yacht Club, at the time a young and enterprising concern, took hold of the matter in earnest that Corinthian yachting among the larger boats actually came into vogue. To that club justly belongs the credit of having taken the first decided step in the direction of popularizing the sport of yachting and of educating the rising generation to a full appreciation of the wonderful benefits and pleasureable experiences to be had from "paddling one's own canoe." The success that has attended their efforts was noteworthy from the very first, and to-day the Corinthian matches under their auspices are looked forward to with great anticipation by all who follow the sport with spirit and those who are are fortunate enough to be drafted into the amateur service for racing days. While it does not seem likely at present that we will see many of the larger yachts come to the start this season, the public is promised a lively match among the sloops. Among others, there will be *Volante*, *Petrel*, *Midge*, *Julian* and *Blanche*. If these crafts are fortunate enough to strike a brisk norther there will be just enough sea on to give them a fine test all around. *Volante* and *Petrel* are of the modified cutter type, and *Julian* is a centre-board sloop of heavy displacement, while the other two are light draught craft of the usual description. There will thus be representatives of all three types in the match, and the results will be most interesting to watch. In a very heavy sea we should pin our faith on *Volante*, in moderate weather on *Petrel* or *Julian*, and in light winds and smooth sea on one of the remaining two. *Julian* is said to be sailing in fine form, and as this is the first time she will hoist racing colors, her *debut* will be closely watched.

REGATTA ASSOCIATION OF SOUTH CAROLINA—*Charleston, S. C.*—After the rowing races the craft that were to participate in the sailing races began to take position off of East Battery, the starting point, and by 12 o'clock there were twenty-two boats in position, with mainsails up, ready and anxious for the start. There were four distinct courses to be run by the different classes, and the entries were as follows: For first-class yachts, thirty feet and over, distance twenty miles—*Eleanor*, 36ft. 6in., flag blue, Capt. Thos. Young; *Hattie* (of Savannah), 30ft., flag white, Capt. A. W. Clark; *Unnamed*, 30ft., flag red, H. C. Cheves; *Wildbird*, 30ft., W. Lawton Mikell. Time allowance, 1m. 30s. per foot, measured on water line; entrance fee, $5; prize, $75.

Second-class yacht race; distance, sixteen miles; entrance fee, $3; first prize, $40; second, $10. Time allowance, one minute per foot. Entries—*Annie*, 17ft., Robert Chisholm, Jr.; *Ella*, 18ft., Wm. Trenholm; *Cidelise*, 13ft. 6in., Frank Porcher; *Hector*, 23ft., R. Maywood; *Madcap*, 17ft., J. E. Mikell; *Uncle Peter*, 23ft., R. Murphy; *Fleetwing* (of Savannah), 21ft. 6in., Dr. Wm. Waring. First-class batteau race; distance, twelve miles; entrance fee, $3.50; prize, $30. Time allowance, one minute per foot. Entries—*Marion*, 21ft., M. L. Doar; *Fox*, 23ft., J. P. Duva; *Arctic*, 22ft., M. A. Jones; *Othello*, 25ft., E. R. Middleton; *Mary Louisa*, 21ft., C. Plaine; *Arrow*, 25ft., C. Becker; *Josephine*, 20ft.; *Evangeline*, 21ft. Second-class batteau race; course same as for first-class batteaux; prize, $20. Entries—*Petrel*, 16ft., F. Jones; *Dream*, 17ft., R. Pinckney; *Glide*, 16ft., W. H. Pinckney. At 12:15 precisely the startling gun for the first-class yachts was fired, and a gun at intervals of one minute to start the second-class yachts, and first and second-class batteaux. The wind had increased considerably since morning, and was now blowing stiffly from the northeast. The association steamer Sappho, which was crowded with members of the Regatta Association and their friends, started with the racers. For the first three miles the four first-class yachts held well together, led however by the *Eleanor*, who had the advantage of her large sails. On nearing Sumter some very pretty sailing was done by the *Wildbird*, and she very soon was on even terms with the *Eleanor*, who had to luff and lose some little time in repairing her halyards, which had given way. The *Hattie* followed third, and the *Unnamed* was some distance astern. The wind now increased almost to a gale, and the race became exciting. The second-class yachts and batteaux were clear in the distance. Soon after passing Sumter the *Hattie*, who held third position in the race, capsized, but a steamer was very near the scene of accident, and rescued the fourteen composing the crew. Soon after this accident the *Unnamed* began to show signs of distress, and it was discovered that she had shipped several heavy seas, owing to the loss of her tiller, and was almost in a sinking condition. Her crew succeeded in bringing her up to the wind, and after bailing some time were enabled to start again. The *Eleanor* now led a little. The contest between her and *Wildbird* was extremely exciting up to the very end, and after they had passed the stakeboat it was impossible to tell who had won, until reference was made to the terminal judge, who gave the official time as follows: *Eleanor*, first, 3h. 19m.; *Wildbird*, second, 3h. 27m. The time allowed the *Wildbird* by the *Eleanor* being 9m. 45s., the *Wildbird* wins the race by 1m. 45s. The *Wildbird* is owned by Mr. C. H. Glidden, and was built by P. McGiehan, of New York, only a short time since. She is the prettiest yacht in our harbor, and her sailing in the race proves that she is one of, if not, the fastest. The second-class yachts passed the stakeboat in the following order: *Hector* first, *Fleetwing* and *Annie*. The *Ella* and *Cidelise* withdrew from the race soon after passing Fort Johnson, and the *Madcap* lost her mast just before reaching Sumter. The first-class batteaux race resulted as follows: *Arctic* first, *Fox* second. The *Marion* and *Arrow* were compelled to drop out of the race owing to the heavy seas, and the *Othello* was capsized near Fort Ripley. The second-class batteau came in as follows: *Petrel* first, *Glide* second, *Dream* third. Thus ended one of the most exciting regattas that Charleston has ever had. YENOTS.

WISCONSIN YACHTING.—*Madison, June 3.*—Several regattas will be held, the first of which will be held this month, when the usual prizes will be offered and the yacht club rules prevail. In July the annual regatta will be held. Our clubs are now in active training for the purpose of taking part in the Mississippi Valley Amateur Rowing Association, to be held at Peoria, Illinois, June 19. Lake Mendota is fairly swarming with water craft from the unpretending row-boat to the magnificent steam yacht *Mendota*, which, by the way, is one of the finest boats in Western waters. She is owned by Captain Freeman. The captain's boats for speed and safety cannot be surpassed. The latest improvement at his boat-house has been the addition of a telegraphic machine by which dispatches may be sent therefrom to all parts of the country. ROVER.

VICTORIA-FIDGET MATCH.—These two sloops, belonging to the Central Hudson River Yacht Club, had been matched for some time by their owners and finally met on June 6 to sail over the regular club course twice around. The owners were to sail the yachts themselves and were allowed a crew of six besides sailing master. No shifting of ballast was allowed. This latter rule was perhaps the most satisfactory feature of the programme, for as long as sand bags can be piled up to windward *ad libitum*, the yachts become mere sailing machines, and whatever the results, they are of little value in determining the relative speeds of competitors, but represent rather an excess of brute force, coupled generally with recklessness on the part of the crew. Matches sailed with shifting ballast may be very interesting when considered in the light of mere betting or gaming events, and serve the ends of excitement and physical exercise, but they cannot but be considered as devoid of all elements of true seamanship and competition in scientific design. The race at New Hamburgh is a praiseworthy example of deference to the nobler purposes of yachting when carried out in a true sporting spirit, and we do not think that any one will consider the race between the crack sloops *Fidget* and *Victoria* any the less impressive because ballast was kept fast and models and seamanship had a fair show. *Fidget* was sailed by Commodore Irving Grinnel, and *Victoria* by Mr. Roosevelt, Mr. Van Wick acting as judge and Mr. A. Meyers as umpire. Both yachts stood to the westward, then, tacking, watched for a favorable slant and crossed the line as follows: *Fidget*, 10h. 42m.; *Victoria*, 10h. 44m. 2s. *Victoria* held her wind well, and running up on *Fidget's* quarter, gave her a blanketing and left her astern. The wind was blowing fresh, and when above Marlborough the leading sloop was knocked down and had to be closely watched and luffed through. *Victoria* rounded the buoy with a good lead. It was now a leading wind for her, and canvas was goose-winged and topsail set. When *Fidget* got round the upper buoy and her skipper gave her sheet and putting up his helm, her large area of canvas began to tell, and she lessened the gap, *Victoria* trimming aft for the second thrash two minutes ahead of her rival. On the beat to the windward the boats broke tacks and parted company. Off Jows Creek *Fidget* found the wind more from the westward, enabling her to fetch the Rensselaer buoy in a single tack, while *Victoria*, off to leeward, had almost a dead beat of it. If this was not a streak of luck on the part of the Commodore it was certainly a fine piece of tooling, for he crossed the bows of *Victoria* to windward and bore up, rounding the upper buoy with a good lead that sent joy to the hearts of *Fidget's* New Hamburgh backers. This lead she maintained round the Low Point buoy, and *Victoria's* running out of the wind for a while served to increase the gap between them. No sooner had the latter got down to her work again on the wind, than she again rapidly caught up to New Hamburgh's pet; but the distance

remaining was short, and *Fidget* passed the line a leader by one minute and ten seconds. Time allowance, 1½m. to the foot, however, gave the challenge pennant to Mr. Roosevelt, *Victoria's* length being 27ft. 6in. against *Fidget's* 28ft.

BROOKLYN UNION REGATTA.—The entrances promise to be large for this event. It brings together many of the best craft of different clubs, and affords an opportunity not often met with of testing the qualities of the leading yachts in metropolitan and foreign waters. The race has been fixed for the 18th inst., and it is to be hoped that fickle June may send us a snorter, for nothing is more unsatisfactory than a cup won by flukes and slants. Probably more large schooners will show up with colors a-peak than for any other match of the season, and that is saying a good deal, in view of the many still lying in ordinary and for sale or "to be let furnished." *Dreadnaught, Estelle, Comet, Mystic, Tidal Wave, Clytie* and *Atalanta* form a list containing half a dozen of the fastest schooners in America, and if *Intrepid* and the Scotch *Oneagh* would join, the race would be second to none witnessed in New York waters for some years past. Though we have no knowledge of Mr. Francis Cope's intentions, we should very much like to see *Oneagh* compare notes with the American fleet, for Hansen, of Cowes, has certainly turned out as handsome a clipper in *Oneagh* as is to be met with in British waters. Though she may not be a racing craft in British eyes, she would belie her appearance if she could not show her wake to *Cambria* or *Livonia*. To be sure, she would have to do so by a knot or two to stand any chance with such flyers as *Atalanta, Tidal* or *Clytie*, and would find it a tough job to hold her own with the New York schooners, either on the wind or with her boom over the quarter; but, at all events, should she not be actually raced, we hope to see her under weigh and may then be able to estimate her calibre to some purpose. Not the least interesting chapter of the forthcoming match will be the special class devoted to greased lightning, in which Mr. Meig's favorite double-barrel invention will meet to the number of three and show the sand bag heavers what a real racing machine ought to be.

SOUTH BOSTON YACHT CLUB REGATTA.—The opening regatta of the South Boston Yacht Club took place June 2. Twenty yachts were started. *Lilly* from Lynn took the first prize in the first class centre-boards, leading all the way and winning easily. *Lottie* failed to round a buoy, and being disqualified the first prize for keel sloops went to *Gael*. *Actress*, in the third class, lost the prize for the same reason *Lottie* did, the course being a new one and apparently not well understood. In the second class *Anonyma* capsized and spilled her crew, and *Posy* and *Ripple* protested, claiming a foul each, which the regatta committee will have to unravel. The large number of keels entered for the race is noteworthy. Prizes were awarded to *Lillie* and *Gael*, and also to *Mystic* and *Breeze*. In the second class, to *Sunbeam* and *Fagin*, second prizes being protested as above, while in the third class first prizes were awarded to *Druid* and *Chiquita*, and a second one to *Clara B.*

THE YACHT AGENCY.—Mr. Thos. Manning has removed his agency for the purchase and sale of yachts to No. 53 Beaver street. He has on his lists a large number of desirable vessels for sale at figures much below their value. It will be remembered that he recently effected the sale of *Mohawk* and *Fleur-de-lis*, the latter to Mr. Boucicault, who has deferred building a steamer until next year. Mr. Manning, a short time ago, offered $2,500 for the sloop *Egeria*, which could not bring over $1,000 at a recent auction. *Egeria* happens to be just one of those craft which are in every way desirable and of ready sale. The failure to get a respectable bid for her rests with that short-sighted policy which does not avail itself of legitimate advertising mediums, but trusts to such cheap means as handbills, etc., for making known a sale. Result, no bidders and no price. Had the proposed sale of *Egeria, Tarolinta* and *Josephine* been thoroughly ventilated through the columns of the FOREST AND STREAM, genuine buyers would have appeared in place of an idle crowd of the curious, of which the proverbial "small boy" formed a large contingent.

AUTOMATIC RUDDERS FOR MODEL YACHTS.—When sailing on a wind, a small rudder with very little lead on it will suffice to keep a model yacht full, and she will gain yards to windward of the craft that is depending on the preponderance of head-sail to keep her going. The rudder for reaching must be a size larger, and proportionately heavier than that for turning to windward, while the quartering and running rudders will partake somewhat of the barn-door character. A model two feet long requires from half an ounce to one ounce of lead for a turning rudder, two ounces to three ounces for reaching, three ounces to four ounces for quartering, and five ounces to six ounces for running. I generally use six rudders, as I find that great nicety in trim can be gained by so doing. Of course much depends upon the shape and rig of the model. A very broad model will require about double the weight of rudder that a narrow model will. With respect to the main-sheet fast to the tiller, I have tried that also, and although it answered after a fashion, yet it is not so sure a method as the weighted rudder.—*L. E. Biddell in London Field.*

—Mr. N. H. Bishop has been elected honorary member of the New York Canoe Club, a compliment he well deserves. His book, "Voyage of the Paper Canoe," is about to be published by David Douglas, of Edinburgh, Scotland.

A NEW MODEL.—*Editor Forest and Stream:* I send you a design for a hunting and fishing boat, which also can be used for canoeing, which I think possesses some advantages over its cousins german. I also send you the photograph of the boat I designed and built in 1874 for hunting purposes. The merits of this mode of construction are that the boat cannot sink, even if full of water, being kept afloat by the air-tight tin tanks or boxes, which are of three hundred and sixty pounds floating capacity. The centre of gravity being in the longitudinal middle line, at bottom of boat, it is next to impossible to upset it. The skeag and centre-board (which the balance of the type do not possess) make it a splendid sailor, and for paddling or rowing in a heavy wind is admirable. The centre-board is hung at the heel and closes up when you run the boat on the beach or run over a log. When the boat is run ashore you step out on the deck, the same as on a gang plank. There are hooks, three on each side, on which, guns or rods are hung, insuring them and yourself from accident, and from rain as they are under deck. The deck plan is admirably adapted for Lyman's bow-facing rowing gear. The opening in the deck five feet six inches long by fourteen inches wide gives great comfort of position, and the space under decks from air tank to air tank is eight feet six inches by twenty-six inches nearly for the length. The "captain and crew" can use the moveable bench for seat or take his ease on an air cushion on the floor board, which is the best when using the Lyman oars. In sailing I use a rudder. The boat is built with bulkheads, which gives it the shape desired, the sides being screwed on first and shaped or trimmed down after the bottom boards and deck are on. The bulkheads are fastened to a board ten inches wide, solidly, and placed on another board, or work bench, to prevent bending. The end pieces or blocks remain in the boat, and are also fastened to the board from the under side, and only loosened from the board when the sidings and bottom are fitted on the bulkheads, the decking being the last work done. When the boat is turned up and the bulkheads taken out, batten the two joints at bottom on the inside, 1½in. wide, the length of the joints, white leaded, ⅛th of an inch, pressed tight to the boards, and then closely tacked along the edges. In caulking be careful not to force the battens out. Put in the bows, fasten them from the outside, then put in the knees, not forgetting the gun racks. The skeag is fastened from the inside with suitable screws and a walnut rudder post screwed to the end block of the boat and skeag. The rail is placed on each side of the boat, covering the joint made by the deck and siding, and should be 1¼in. over the deck to prevent anything from slipping off into the water. The combing around deck 1½in. above deck and ⅛in. thick. The centre-board should swing quite free, as it is intended that it should take care of itself. The draft will be from 4 to 5 inches; load, 800lbs.; weight of boat, 40 to 50 lbs., and I think an expert could make it far less; cost of boat should not be over $35. The model is fast, and 70ft. of sail can be used with safety.

PERDRIX.

[The above described model partakes in general of some of the features of the Barnegat Sneak Boat, though much better fitted for sailing and general purposes. It can be recommended for sailing, fishing and hunting on inland waters, though for rough water we should judge it not as well adapted as the shadow type owing to its flat floor forward and beamy nose. Working drawings and photograph can be seen at our office, and we will take pleasure in submitting them for inspection.—ED.]

EASTERN NEWS.—*Boston, June 8.*—*Halycon*, Mr. Brooks, has appeared off Rowe's wharf, and is in commission.....*Undine*, Captain Bryant, sailed for New York to go into races there.....*Alice, Narragansett, Thistle, Nautilus*, sloops, at anchor on the flats.....*Fleur-de-Lis*, sold to Boucicault, is to lie off Cohassett this summer.....City Point is alive with small craft, while the *Wivern, Julia, Idler*, Mr. Dexter's new sloop, bought of Salem parties, *Enterprise, Magic* and *Vicking* are among the larger ones.....The Nassett club book for 1878 is out and shows a good list of boats and members.....The *Intrepid* was in the harbor last Sunday, but went out again.

CRUISER.

JERSEY CITY YACHT CLUB.—This club held its twentieth annual regatta, Tuesday, June 11. In the first class *Genia* was declared winner in 5h. 33m. 47½s. In the second class *Lurline* finished first boat; in the third class, *Knights Templar;* in the fourth class, *Willie* won in 5h. 8m. 9s.; in the fifth *Annie Forsythe* was victorious.

ADDIE TAYLOR AND H. H. HOLMES MATCH.—The match between these two famous open boats was sailed June 11, but on account of light and variable winds was not brought to a satisfactory conclusion, and will soon be sailed over again.

YACHTING DRIFT.

That is right, Commodore; go for "Along the Wharves." A man that does not know a tugger from a yawl had better pack his duds and ship.....Mr. Dion Boucicault paid $7,500 for the *Fleur de Lis;* she was built in 1865 by Van Dusen, and altered in 1872 by Carll of City Island.....The attempt at auctioning off *Tarolinta, Josephine* and *Egeria* was a failure, owing to the bad management of the sale. A Chatham-street Jew knows enough to advertise his wares.....*Mohawk's* name will be changed to *Eagre;* can't find the thing in Webster; somebody says it means one tide whirling above another, and that the name is peculiarly appropriate.....*Nettie* has been off soundings on a four days' cruise; all hands satisfied with her.....Mr. Astor has gone to Europe, and *Ambassadress* will not race.....*Madeleine* will be out shortly.....Every yachtsman should have a copy of some coast pilot. Capt. Pratt's new book is the best.....Marblehead will hold a regatta June 17. All the yachts of the vicinity will participate.....Several yachts are building in San Francisco; the sport is looking up in the stepping-off State. Pacific yachtsmen are anxious to know what *Ariel* can do.....Canoeing has been actively undertaken on the Sacramento, Cal.....Schooner *Rambler* is in commission; one of the late birds.....*Idler* goes to Stapleton to lay up.....*Blanche*, who will race in the Corinthian, June 15, is a Boston sloop.....The catamaran *Amaryllis* has been sold for $300 to a Chicago gentleman, who will ship her to that city in the fall, after giving *Tarantella, Gilpin* and others all they can do to beat her. Smedley is building a sloop for Mr. J. G. Fowler, B. Y. C., 37ft. long, 12ft. beam and 4ft. deep, with 10ft. board; mast, 36ft. 6in. long; boom, 31ft.; gaff, 16ft.; bowsprit outboard, 17ft.

OAR AND PADDLE.

THE ENGLISH CHAMPIONSHIP.—In the single scull race from Putney to Mortlake, Higgins, of the Thames, beat Elliott, of the Tyne, winning $2,000 and retaining the championship of England. Time, 24m. 38s.; slower than he had made on previous occasions.

THE AMERICAN FOUR.—The Shoe-wae-cac-mettes, of Monroe, Mich., the champion four of Watkins, left for England in the Anchor Line steamer Alsatia, for London. They take out their old paper shell with stationary seats, and their enterprize and modesty in carrying out the leading feature of the Watkins races deserves commendation. They lack all training and style, and, though they will be laughed at abroad, they have our best wishes, and that they may make a tolerably creditable finish, at least, we hope. Mr. Geo. W. Lee, of the Tritons, who won in the single scull race, accompanies them with his paper boat, 28ft. by 12in. Mr. F. W. Jackson, Secretary of the Watkins Association, goes out in the same steamer, and will have general supervision of the American oarsmen.

VIRGINIA BOATING.—The Kanawha Rowing Club had their first regular race May 28, under the auspices of Mrs. M. L. Branch, at Richmond, Va. Mr. W. Habliston, in his Coquette, defeated Sylph and Oriole. The course was on the canal from the Pump House to Eighth street.

SOUTH CAROLINA ROWING.—*Charleston, S. C.*—Our regatta commenced on the morning of the 30th. There was scarcely a ripple on our beautiful bay. At half-past seven the whistle of the Regatta Association steamer gave warning to the boatmen that it was time for them to take their positions. The first and most important race of the day was the race for four-oared shells. Distance, two miles; prize, a silver goblet, and a gold medal for each member of the winning crew. There were only two entries for this race. The Palmetto B. C. entered the four-oared shell *Annie Owens*. Crew: Bow, H. B. Bull, 145 lbs; No. 3, James P. DeSaussure, 145 lbs.; No. 2, Wm. M. S. Cesesne, 164 lbs.; stroke, H. Nott Parker, 146 lbs. The Electric Independent B. C. entered the four-oared shell *Nora*. Crew: Bow, J. T. Flynn, 130 lbs.; No. 3, M. J. Mahony, 139 lbs.; No. 2, H. G. Leach, 142 lbs.; stroke, T. L. Alston, 134 lbs. Mr. Henry Cheves, who was to have pulled bow oar in the Palmetto crew, unfortunately strained himself the day previous to the race. Mr. H. B. Bull had to take Mr. Cheves' place, and Mr. J. P. DeSaussure took Mr. Bull's position, No. 3. The Palmettos seemed to be the favorites. Most of the steamers and sailing craft anchored near the terminal yacht, on which was stationed Mr. J. L. Walker, terminal judge. The starting judge, Mr. J. D. Easterlin, the umpire, Mr. E. L. Wells, and E. De B. Hunter were on board the steamer *Moccasin*, which was at the head of the course preparing the crews for the start. A few minutes after eight o'clock the crews took their positions, the *Nora* on the St. Andrews side of the river and the *Annie Owens* on the city side. The two boats darted off almost at the same instant. A short distance from the starting point the Palmettos were pulling about 36 to 38 and the Electrics about 38. Both boats kept well together for the first half mile, when the Palmettos forged about a length ahead, which they kept until they had nearly reached the first mile flag. Here the Electrics pulled up to them again, and from this point to the terminal flag the race was one of the closest and most exciting that has ever been seen on our harbor. From the battery to the terminal flag the race belonged to either crew. Both now spurted, and when the two boats rushed across the line apparently exactly even, no one knew to whom victory belonged. Upon going up to the judges' yacht, however, Mr. Walker announced the actual result; the Electrics had won the race by three-quarters of a length and by one second. Electrics, 13m. ½s.; Palmettos, 13m. 1½s. Distance, two miles. The second race was for four-oared gigs, forty-two feet and under. Crews under twenty-one years of age. Prize, silver goblet. Distance, one and one half mile. The entries were as follows: Electric Independent B. C. entered gig *Ella Lee*. Crew: Bow, John B. Kenny, 121 lbs.; No. 3, Geo. Wharton, 145 lbs.; No. 2, Charles Plane, 134 lbs.; stroke, D. McDougal, Palmetto B. C. entered gig *Azile*. Crew: Bow, K. S. Tupper, 120 lbs.; No. 3, H. Dotterer, 135 lbs.; No. 2, P. L. Bissell, 127 lbs.; stroke, J. D. Kirkpatrick, Jr., 128 lbs. Same Club entered gig *Mamie*. Crew: Bow, C. S. Matheson; No. 3, J. Drake; No. 2, Felix Holmes; stroke, W. B. Means, Jr. The start was a capital one, and the boats kept well together for the first half mile.

The superior rowing of the Electrics began to tell, and they forged slowly but surely ahead, and crossed the line about four lengths ahead of the *Azile*. *Ella Lee*, 9m. 7s.; *Azile*, 9m. 13s.; *Mamie*, distanced. Distance, 1½ mile.

The third race of the day was for Whitehall boats, 21ft. and under. Distance, one mile; prize, silver cup. The entries were as follows;

Independent B. C. entered the *Wave*. Crew: Stroke, B. S. Inglesby; No. 3, A. S. Easterly; No. 2, W. H. Cogswell; bow, E. F. West; coxswain, A. J. Salinas.

Same club entered *Water Lilly*. Crew: Stroke, W. B. Holmes; No. 2, J. H. Beebe; No. 3, J. B. Walpole; bow, G. Inglesby; coxswain, E. R. Venning.

Palmetto B. C. entered *Minnie*. Crew: Bow, K. S. Tupper; No. 2, P. L. Bissel; No. 3, H. Dotterer; stroke, J. D. Kirkpatrick, Jr.; coxswain, J. B. Bissell, Jr. The *Water Lilly* only entered so as to make up the race, and after rowing but a short distance dropped out and left the race to the *Wave* and *Minnie*. The *Wave* took the lead from the start. The crew of the *Minnie*, however, seemed to improve with every stroke, and pulled right away from the *Wave*, beating her at least six lengths.

The fourth race, for boys under seventeen years of age, distance, half mile, prize silver cup, was the last for the day.

The Independent B. C. entered *Wave*. Same crew as rowed in the third race.

Palmetto B. C. entered *The Meteor*. Crew: Bow, F. K. Hunter; No. 2, F. R. Frost; No. 3, J. C. Simonds; stroke, J. D. Kirkpatrick, Jr.; coxswain, J. P. DeSaussure.

Same club entered *Minnie*. Crew: R. N. G. Smith; No. 2, W. H. Parker, Jr.; No. 3, Kirby S. Tupper; stroke, L. F. Robertson, Jr.; coxswain, J. B. Bissell, Jr. This race was a very close and exciting one, as the boats all started together and kept almost even the entire course to within a few yards of the terminal flag, when the *Minnie* and *Meteor* shot ahead, carrying the color of the Palmettos first across the line for the second time that day.

Second day—On the morning of the 31st there was quite a fresh breeze blowing, which made the water lumpy. The first race for the day was the English Challenge Cup Race, open only to Charleston crews, four-oared shells; distance two miles. The prize—a very handsome silver cup—was presented to the Regatta Association in 1875 by Messrs. Hume and Hill, on the conditions that any club winning it three successive years should be entitled to it. It was won by the Palmettos the first year and by the Carolina Independents the second year. The same crews and boats that pulled in the four-oared shell race the day previous were entered for the challenge cup. A capital start was obtained, the Electrics taking a slight lead, with a 38 stroke, the Palmettos following with a clean, steady stroke of about 36. A short distance from the mile post the Electrics, who had been leading, did some bad steering, and their stroke became ragged and uneven. From this point the Palmettos began to gain on them, and very soon were running bow and bow. The steady clean stroke of the Palmettos began to send them ahead gradually. The Electrics' rowing became uneven. It was soon very clear that the race belonged to the Palmettos; their steady, powerful pulling and speedid spurt for the last hundred yards sent them past the flag four lengths ahead. Summary: Palmettos, 12m. 20s.; Electrics, 12m. 28s.; distance, two miles.

The second rowing race for the day, and last for the regatta, came off next. Single sculls, distance, half mile. There were five entries for this race, as follows: F. F. Thurston, K. S. Tupper, J. B. Bennett, I. B. Drake, W. W. Shackelford, Jr. The start was a good one, but Thurston dropped out before they had pulled half the course, as his shell was filling with water, and a short distance further Bennett dropped out, leaving the race to Tupper, Drake and Shackelford, who pulled well together until within about a hundred yards of the terminal flag, when Drake went ahead with a splendid stroke, and crossed the line four lengths ahead of Tupper and about six lengths ahead of Shackelford.

YENOTS.

THE HANLON-MORRIS RACE—*Toronto, Ont., June* 5.—Edward Hanlon, the Toronto, Ont., oarsman who lately vanquished Fred Plaisted, left this morning for Pittsburg and Hulton, to take up his quarters and learn the course. He is in much better form than when he crossed the line ahead of Plaisted. He was accompanied by Heasley and Houdon, his trainers, and Mr. Douglas, of the Hanlon Club. He took with him his Swaddle and Winship, and his paper boat, a new one by Elliott, will follow him to Pittsburg. A boat house built on a raft is in readiness for him at Pittsburg, and will, upon his arrival, be towed up the river to Hulton. The date fixed upon for the race is Thursday, June 20th, over the Hulton course, distance five miles, $1,000 a side, Hanlon being allowed two hundred dollars for expenses. After the race Hanlon will go to St. John, N. B., to give Wallace Ross a chance on home water.

—Brockville, a small town on the St. Lawrence River, two hundred miles east of Toronto, talks of making a stir on Dominion Day (July 1st) by arranging for a single scull race, four miles; they are very anxious to have Hanlon take a pull in it. McKen will row and they expect Frenchy Johnson and Riley to enter. The capital, Ottowa, also yearns for aquatic sports and offers to get up a race if Hanlon will pull.

—Another aspirant for sculling fame, McKen, of this city, challenged Felsingburg, of Wheeling, Va., for a three or five mile race, but the latter declined for the present. McKen, determined to get on a race, intends scattering the challenge among the New England oarsmen, including Davis, of Portland, Mr. Plaisted's trainer, looking for some of them to gether it up. McKen looks for his new Swaddle & Winship boat next week. AH-MIK.

THE WATKINS CHAMPION FOUR—*Monroe, Mich., June* 7.—The Shoe wae-cae-mette Boat Club is the youngest of the River Raisin Navy, having been organized in 1875 with a very small membership, which, indeed, has never increased much beyond the original number. Combining a word from the Pottawottamie and another from the Shawnee, signifying Grape River, the result was "Shoe-wae-cae-mette," and this expressive compound word, so full of difficulties to many English tongues, now stands as the appellatus of the champions of America. It is pronounced as if spelled thus: "Show-wah-say-metty." The crew who have made famous the name of their club are young men, all natives of Monroe, except one, and he was born in the same county. Stephen Dusseau, the stroke, is a tall, finely made, bronzed young man, of about thirty years of age, who was born in Vienna, a village ten miles south of Monroe, of respectable, well-to-do parents, with whom he always resided until he came to Monroe, a few years since, to remain with his uncle, who is the proprietor of a sportsmen's hotel, and the resort during the duck shooting season in the fall of sportsmen from all parts of the East and South. Mr. Dusseau, when officiating in any capacity, has acted as hotel clerk, and cannot by any means be said to have labored at manual labor for a livelihood. W. H. Durell is a native of Monroe, son of Henry Durell, of the firm of Adams & Durell, manufacturers and dealers in furniture. He has always resided with his father, whom he has assisted at various times, but never engaged at any business upon a salary, and cannot be considered a laboring man. The two Nadeaus, Moses and Joseph, are also natives of this city. About the time they approached manhood, their father, who was a grocer and liquor merchant, died, and left a comfortable estate, which yielded the family a very neat income, sufficient for their support. The young men were extremely fond of outdoor sports, and shooting was a favorite pastime. At various times they have engaged in light indoor work in commercial houses, and Moses has been in the employ of the writer of this article, who always found him an enthusiastic, competent, reliable and willing young man. The two, as I have said, are brothers, and descendants from the first families of French settlers. All four of this remarkable crew are young men of excellent character and reputation, sober habits, and, though they have not the advantages of a collegiate education, nor the culture which men of higher and better circumstances or birth enjoy, are in every sense respectable and entitled to the respect, kind consideration and dignified treatment which their late wonderful and surprising achievements in aquatics would alone demand for them. The question has been raised: Are this crew disqualified by reason of their occupation from entering the Henley Regatta? Their friends in Michigan think not, and with them all must agree on considering the above brief outline of their lives. The English rules may bar out all but "gentlemen," and if all contestants must have a genealogical record reaching back to King John, I would say in the words of Jonson:

> "Boast not these titles of your ancestors,
> Brave youths; they're their possessions, not yours;
> When your own virtues equal'd have their names,
> 'Twill be but fair to lean upon their fames,
> For they are strong supporters; but, till then,
> The greatest are but growing gentlemen.
> It is a wretched thing to trust to reeds,
> Which all men do that urge not their own deeds
> Up to their ancestors;—"

Or, as John Cleveland as well says:

> "He that to ancient wreaths can bring no more
> From his own worth, dies bankrupt on the score."

Let, then, respectable gentlemen be admitted to all amateur regattas. But the ways of those cockneys are past finding out; and though they might send one of their crews of high degree over here to compete with our men, it is, perhaps, possible that they may rule out the same men over there. However, we shall see what we shall see. KINKA.

[From our correspondent's letter it appears that not a single member of this "four" can be debarred from Henley, as none of them have ever been engaged in manual labor. Though we hardly think they can win, their wonderful staying powers will bring them close to the leading crew.—ED.]

—An exchange gives the "Latest Base Ball News." Yes, and give us the Basest Late Ball News.

—We call our readers' particular attention to the advertisement of the old firm of Messrs. Dodd, Mead & Co., 751 Broadway, who make a specialty of works in natural history. They solicit correspondence with libraries, reading clubs, and book buyers generally.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

The Sportsman's Glossary contains the meanings of all those terms which no fellow can find out anywhere else.

Game Bag and Gun.

JUNE IS A CLOSE MONTH FOR GAME

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson Snipe, $3 per dozen; plover, $3 per dozen; bay birds, large, $3. per dozen; small do, 50 cents; wild pigeons, flights, $1; stall fed do, $1.50; Philadelphia squabs, $2.50; wild do 75 cents.

Poultry.—Philadelphia and Bucks County dry picked chickens, 25 cents per pound; do fowls, 16 cents; do turkeys, 16 cents; do ducks, 18; State and Western chickens, 16 cents; do turkeys, 15 cents; do fowls, 14 cents; do ducks, 16 cents; spring chickens 25 to 35 cents.

CANADA—*Montreal, June* 4.—Last Wednesday I brought to bag an old bald head eagle that has for many years frequented the shores of Missisquoi Bay, off Lake Champlain. He is now being mounted by our taxidermist in the Natural History rooms here. N. P. L.

A MESSAGE FROM THE BUSH.—We have received the following letter inclosed in an envelope of birch bark, sealed with spruce gum. It has a most familiar backwoods and "Injun" smell about it which is exhilarating. We envy the sender in his haunts. "May we all be there!"

SECOND CONNECTICUT LAKE, May 31, 1878.

EDITOR FOREST AND STREAM:

About three years ago I went into your office to ask after reliable map publishers, and was kindly directed to one, but I had not sufficient life remaining to care for civilities. I will now thank you, and should you seek for quiet and recreation in this locality you will find that once feeble body at your service gratis. I carry my 75-lb. boat with ease over the mountains to unfrequented lakes and ponds, and do not always follow trails at that. I have not been within hearing distance of a locomotive since 1875, but some power brings your valuable paper weekly even here, forty-five miles from North Stratford, on the G. T. R. R. This lake is one of the chain that forms the source of the Connecticut River. The lumbermen have not ventured so far up the rapids, and its shores are frequented by moose, caribou and deer. I have observed eight deer and one moose on its grassy shores quietly feeding this week. There has never been any jack shooting down here, I have been informed, until I came here, and I have done none since 1876. Then, with N. A. Williams and nephew, of your city, we obtained six shots before midnight of Aug. 1. Trout and salmon trout are taking bait eagerly. I have taken several ranging from three-quarters to three and a half pounds this week.

EDW. NORTON.

[The information which our correspondent gives about the numbers of moose in New Hampshire is very gratifying.—ED. F. AND S.]

MASSACHUSETTS—Cambridge has a new club, known as the Middlesex Sportsmen's Club, of Cambridge. The officers are: Pres., T. H. Hall; Vice-Pres., Ira Taylor; W. R. Schaefer; Sec., F. R. Schaefer; Treas., F. R. Ellis.

WOODCOCK ON LONG ISLAND.—A clergyman who gives as a pleasant incident of his settlement in a new eld the natural introduction to a fellow sportsmen by his dog Gipsey, a granddaughter of the famous "Whiskey," writes us as follows concerning the coming woodcock season about Sag Harbor:

"In our wandering for about one hour and a half we saw six woodcock, whereupon we concluded that woodcock, like many other things, had taken advantage of the early spring and were preparing to give us good shooting in July. I think I never saw the birds so tame as they were that afternoon. They were as gentle as rail. A party of gentlemen might secure very fine sport through the first half of July by making Sag Harbor their centre, and branching out to Noyac (where there is a very fine establishment for raising trout), and northwest, etc., and as woodcock are plenty this season, the good marskman cannot help securing very fine sport. The son of Nimrod is not tormented in this vicinity by those hateful bits of board nailed to every tree, and reading, "Gunning forbidden by law," "Don't shoot on this farm," "Hunters be not alowd hear," etc. As far as I have seen the trees are unadorned after the above manner. POINTER.

NEW JERSEY—*Forked River, June* 8.—The gunning for bay birds has been very good. A Mr. Shaw, of the Grand Hotel, N. Y., with John Bunnell, shot in two days, the early part of this week, thirty-five bay snipe of different kinds. The prospects, owing to the mild weather, for fine shooting next fall are better than for a number of years. The houses on the beach are to be kept the same as heretofore, only one having changed hands. "Harvey's Cedars" will hereafter be kept by Charlie Bennett, well known as an efficient hotel keeper about here. The Barnegat House, formerly Carman House, at this place, will be kept open this season under the management of Mr. S. L. Atkinson, and everything will be strictly first-class, the house having been very much enlarged and improved during the past season. ARTHUR.

Kinsey's Ashley House, Barnegat Inlet, June 8th.—A falling off of bay birds. A few good bags made this week. B.

PENNSYLVANIA.—*Sharon, June* 4.—Over five hundred thousand wild pigeons have been caught and shipped from Warren County, Pa., during the present season.

TENNESSEE—*Columbia, June* 1.—Farmers report an unusual amount of quail in the fields, and do all they can to save them from being killed when cutting. From all we can hear, there will be bird shooting for every body. VAL.

MINNESOTA—The State Association convenes at St. Paul, June 19, 20 and 21. Ten thousand pigeons have been received for the shooting tournament, and a large concourse of sportsmen from Minnesota and adjoining States is expected.

OHIO—*Wilmington, June* 5.—Large broods of quail hatching out hereabouts, and everything promises a fine shooting season. POSTED.

MONTANA—*Helena, May* 28.—Game in this county is abundant. Grouse and chickens have been doing well. Our winter has been mild, and spring favorable for chickens and other small game, and sportsmen are anticipating fine sport at the expiration of the game law, August 10. If any person can spare time to visit Montana, he will find a fine climate and good shooting, large and small game; and as to scenery, the world cannot boast of a second Yellowstone National Park, and Americans should not undertake to see Europe until they have seen America's greatest wonder, distant from Helena about 180 miles. Have had a few visitors from England and Ireland, who have repeated their visits. HELENA.

—The Helena Hunter's Lodge, referred to in our issue of May 9, is located in Montana, not in Arkansas. A member writes:

"We have organized a club for fishing and hunting, and have taken up 170 acres of land. Have a fine lake, and are stocking same with trout. Isolated from the "genial influence," etc., we fall back on our own resources and amusements. Have a rifle, rod and gun, and now this fishing and sporting club can boast of as good marksmen as any State in the Union. You may have an opportunity to hear from us, and that soon."

SQUIRRELS.—If any one wants squirrel shooting that is squirrel shooting let him go to the happy hunting-grounds of Walla Walla County, Cal. A bounty offered there for squirrel scalps has brought in within the past two months 86,850 of these trophies. A man named Holmes presents 15,500 scalps at one time.

BRAINERD, Minn., May 24.—*Editor Forest and Stream:* In your paper of May 2, "Guy Rivers" has an article entitled "Scenes in the Choctaw Nation," in which he describes at length the killing of a panther at night (a terribly dark night it was, too), by shooting at his eyes, which he says were like "two large round orbs of fire that shone with baleful brilliancy." Will the gentleman please state how he could see those "orbs of fire" when it was very dark and he had no camp fire? We have had some experience in night shooting at deer and other animals, but never yet have been able to catch the glimmer of an eye unless we had a "jack" or the animals came near enough to the camp fire to see their eyes, or rather the shine of them from the reflected light. What we want to know is this—will a panther's eyes shine like "orbs of fire" with a "baleful brilliancy" in a night as dark as can be, with no artificial light near at hand? Would like to hear from some night hunters, if the subject is worthy of their attention. HAVILAND.

[Our experience of night hunting is very limited, but we have always supposed that an animal's eyes shone by reflected light only.—ED.]

The American Club List contains the names of nearly 2,000 Angling, Boat, Gun, Hunting, Base Ball, Athletic, Kennel, Rifle, Yachting and Miscellaneous Clubs; price, 50 cents.

PIGEON MATCHES.

HOW TO PREPARE SCORES.—To insure insertion in current issues of this paper, scores should be sent so as to reach us on Tuesday, and earlier if possible. These particulars should be given and these only: Place, date, name of club, name of competition, kind of trap and balls used, distance of rise, boundary, rules governing, and weather. Scores are valueless without these.

* An asterisk signifies dead out of bounds.

CANADA—*Strathroy, May* 21.—Plunge trap, 23 yards rise, 80 yards boundary; badge held by John Paine.

Despard	1 1 1 0 0 1 1—5	Smith	1 1 1 1 0 1 0—5
Johnston	1 0 0 1 1 0 1—4	Paine	1 1 1 1 0 0 1—5
Saul	0 0 1 1 1 0 0—3		

Ties on five.

Smith	1 0—1	Paine	1 1—2

No birds to shoot off Despard's tie. Paine retains badge.

Same Day—Gass balls, Bogardus trap, three sides trap.

Johnston	0 1 0 1 0 0 1 1 0—4	Saul	1 0 1 0 0 1 0 1 1 1—6
H S Smith	1 1 0 1 1 0 1 1 1 0—7	R Smith	0 1 0 1 1 1 1 1 1 1—8
Paine	0 0 0 1 1 1 0 1 1 1—6	Cuddy	1 1 1 1 1 0 1 0 1 1—7
M Smith	1 1 1 1 1 1 0 1 1 1—9	Despards	1 0 1 0 1 0 1 1 1 0—6

ANGELS.

MONTREAL GUN CLUB.—Fourth monthly shoot, June 8. Five single and two double rises each; 21 yards rise, 80 yards boundary; club rules:

Hamilton	1 1 0 1 1 11 11—8	Bachlow	1 0 0 0 0 00 10—1
Blackwood	1 0 1 1 1 11 11—8	Hocking	1 0 1 0 0 00 10—3
Tevers	1 1 1 0 1 01 11—7	Strachan	1 1 1 1 1 11 11—9

Same Day—Side shoot.

Strachan	1 1 1—3	Blackwood	1 1 1—3
Hamilton	1 1 1—3	Tevers	1 0 1—2
Bonneville	1 1 1—3	Hocking	0 0 1—1
Walker	0 1 1—2	Bachlow	0 1 1—2
Total	11	Total	8

ROYAL 11.

MAINE—Augusta has a new club known as the Cushnoc Heights Gun and Fishing Club. Weekly matches at glass balls are held.

Augusta, June 6.—Cushnoc Heights Gun and Fishing Club: regular weekly practice; double spring trap; 28 yards rise; Paine's rules.

Farnham	1 1 1 1 1 1 1 1 1 1—10	Mackie	1 1 1 0 1 1 0 1 1—8
Higgins	1 1 1 1 1 0 0 1 1 1—8	Clincut	1 0 1 0 1 1 0 1 0 1—6
Fish	1 1 0 1 1 1 0 1 0—7	Dyer	0 0 1 0 0 1 0 1 0 1—4
Thorndike	1 0 0 0 1 0 0 1 0 0—3	Longfellow	1 0 0 1 0 0 1 1 0 1—5
Hunt	0 0 0 1 0 0 0 0 1 0—2	Tobey	0 1 1 0 1 1 1 0 1 1—7

This club was organized the 1st of May, contains fourteen members and the above is their third club shoot.

MASSACHUSETTS—Cambridge Glass Ball Club shoot, at Belmont, June 7.

William H Harrison	1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 0 1—17
Chas Butebrook	1 0 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1—17
William Evans, Jr	0 1 1 1 0 1 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1—15
A S Harriman	1 0 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 0 1 1—15
A H Hebbard	1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 0 0 1 0—15
C E Hall	1 1 1 1 0 0 1 0 1 1 0 1 1 1 1 1 1 1 0 1 0—14
Charles Farwell	0 1 1 1 0 0 0 1 1 1 1 1 1 1 0 0 1 0 1 0—12
C C Hebbard	1 1 1 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1—17
R Mann	1 1 1 0 1 0 0 0 1 1 1 1 0 1 1 1 1 0—14

NEW YORK—*Niagara Falls, June* 3.—Pigeon match between H. F. Pierce and J. M. Wilmer; H and T traps, New York State rules:

Wilmer, 26 yds	1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 0 1 1 1 *—20
Pierce, 21 yds	1 1 1 1 0 1 0 0 1 1 0 0 1 1 0 0 1 0 0 1 1 1 1 1 1—16

Same Day—Match between S. T. Murray and R. O. Fulton, ten birds each, 26 yards.

Murray	1 1 1 0 0 0 1 1 1 1—7	Fulton	1 1 1 1 1 0 1 * 0 1—7

Tie on seven—31 yards.

Murray	1 1 1 0 3—3	Fulton	0 1 1 1 1—4

Same Day—Match between G. B. Curtis and Thomas Walker; five birds each.

Curtis	0 0 0 0 1—1	Walker	1 1 1 1 1—5

FOUNTAIN GUN CLUB.—Regular monthly match, Parkville, L. I., June 5, for championship badge; seven birds each, handicapped rise, 80 yards boundary; Fountain Gun Club rules.

Cleaver, 21 yds	1 1 1 1 0 1 1—6	O'Connor, 23 yds	0 1 1 1 1 1 0—5
Helmstedt, 23 yds	1 1 1 0 0 1 1—5	Weaver, 21 yds	0 1 1 1 0 1 1—5
Slane, 23 yds	1 1 0 0 1 1 1—5	Eerry, 23 yds	1 0 0 1 1 1 1—5
Williams, 25 yds	1 1 0 1 0 1 1—5	Miller, 23 yds	* 1 0 1 1 1 1—4
Hanson, 21 yds	1 1 1 * 1 0 1—5	De Frane, 23 yds	0 0 1 * 1 1 1—4
White, 23 yds	0 0 1 1 1 1 1—5	Dr Race, 21 yds	1 1 1 * 0 1 0—4
Blankley, 23 yds	1 1 1 1 0 1 *—5	Hergen, 19 yds	1 0 1 1 1 * 0—4
James, 25 yds	0 1 0 1 1 1 1—5		

Messrs. Henderson, W. R. Hunter, J. Bohling and Dr. Steele each killed 3; Livingston, Bogert and Carlin, 2; and Messrs. Allen, Jones and Hinkling 1 each.

BROOKLYN GUN CLUB.—In a match last Tuesday for the club championship, Messrs. Eddy, Wynn and Race tied on ten birds each, Eddy winning the shoot off with three birds straight.

BROOKLYN DRIVING PARK.—Geo. Helmstedt was defeated in a match last Tuesday by J. H. Batty, who killed 19 birds out of 25, to his opponent's 17.

KINGS COUNTY CLUB.—In a match at the Brooklyn Driving Park on Tuesday, for club championship, ten contestants, Mr. Chas. Meyer won with 10 birds straight.

NEW JERSEY GUN CLUB.—Monthly handicap glass ball shoot for club badge, May 29, 1878; club rules to govern; Hatch trap:

Hepsley, 21 yds	10 11 11 11 11 11 11 10 11 11—18
Sanders, 20 yds	11 01 10 10 11 10 10 11 11 01—14
Sedore, 20 yds	01 10 01 11 10 11 11 11 00 01—13
Bartle, 18 yds	01 01 01 11 01 10 00 11 11 00—11
Dusenbury, 19 yds	01 11 11 00 01 11 11 11 11 10—15
Piercy, 19 yds	01 00 11 11 11 10 11 10 01 10—13
Pearson, 20 yds	11 11 11 11 11 10 01 11 10 11—17
Smith, 19 yds	11 11 01 01 01 11 10 11 10 01—14
Sturtoff, 18 yds	11 11 00 00 00 00 11 11 11 11—12
Wycks, 18 yds	11 01 10 10 11 11 00 00 10 01—10

THE FREEHOLD TOURNAMENT.—Shooting tournament at Freehold, N. J., Decoration Day; proceeds to be devoted to the Monmouth Monument Fund; Bogardus rules, eighteen yards, traps five yards apart.

TOWNSHIP TEAMS.

Atlantic.	
T E Snyder	0 1 1 0 1 0 1 1 0 0 0 1 0 1 1 0 0 1 1 1—11
T F Taylor	1 1 0 0 0 0 1 0 1 0 1 1 1 1 1 1 1 0 1 1—13
F E Ryder	1 1 0 0 1 1 1 1 1 1 1 1 1 0 1 0 1 1 0 0—14
C Stillwell	1 0 0 1 1 1 1 0 1 0 0 0 0 1 1 0 0 0 1 1—10
C Jacobus	0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 0 0 1 1—14
Total	62
Freehold.	
H C Talmage	0 1 0 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—16
W Segoine	0 1 1 0 1 1 1 1 0 1 1 1 1 0 1 0 1 0 1 1—14
J H McLean	1 1 0 1 0 0 1 1 1 0 1 1 1 1 0 1 1 0 1 1—14
J L Terhune	0 0 1 0 0 1 0 0 1 1 1 1 1 0 0 0 1 1 1 1—11
T A Ward	1 1 0 1 0 1 0 0 0 0 0 1 0 0 0 1 1 0 0 1— 8
Total	63
Manalapan.	
Vanderveer	1 0 0 1 1 1 1 1 1 0 1 1 1 1 0 1 1 0 0 1—14
W L Conover	0 0 1 0 0 0 1 0 0 0 0 0 0 1 1 1 1 0 0 1— 7
S Dey	0 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1—14
D Laird	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1— 1
F Davison	0 1 1 1 1 1 1 0 1 0 0 1 0 0 1 1 1 1 1 1—14
Total	50
Matawan.	
J Van Brockle	1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1—18
J Lambertson	0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1—16
K H Wyckoff	1 1 1 0 1 1 1 0 1 0 1 1 0 1 1 0 1 1 1 1—15
R Worrell	0 0 0 1 1 0 0 0 1 0 1 1 0 1 1 1 1 0 0 0—10
P Disbrow	1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 1 1—17
Total	76
Millstone.	
G W Dey	0 0 0 1 0 1 0 0 0 0 1 0 1 1 1 1 0 1 1 0— 9
G Halkman	0 0 0 1 0 1 0 1 0 0 0 1 1 0 0 0 0 0 0 0— 5
T Embley	1 1 0 1 1 1 1 1 0 1 0 0 0 1 1 1 1 1 0 1—14
J Jackaway	0 0 1 1 0 0 0 0 1 1 1 0 0 0 0 0 0 1 0 0— 0
F Brown	0 0 1 0 0 0 1 0 0 0 0 1 0 0 1 1 0 0 0 1— 6
Total	40
Raritan.	
T Lambertson	1 1 0 1 0 1 1 0 1 1 1 1 0 1 1 1 0 0 1 1—14
J Ivins	0 0 1 1 1 0 1 1 0 1 1 1 0 1 1 1 1 1 0 1—14
G Walt	1 0 1 0 1 1 0 1 1 0 0 1 0 0 1 1 1 1 1 1—13
W Watts	0 1 1 1 1 0 1 0 1 1 1 1 1 1 0 1 0 1 0 1—14
S Dey	1 1 0 0 1 0 1 0 1 1 1 1 1 1 0 0 0 0 1 1—12
Total	67
Wall.	
E H Haight	1 1 0 0 1 0 1 0 1 1 1 1 1 1 0 1 0 0 0 1—12
S Hewitt	0 1 1 1 0 0 0 1 0 0 0 0 0 1 0 0 0 1 1— 7
C Gaskin (boy)	1 0 1 1 0 1 1 1 1 1 1 1 0 0 1 0 1 1 0 1—14
J Fields	0 1 1 1 1 0 1 0 1 0 0 1 1 0 1 1 1 1 1 0—13
G Haight (boy)	0 1 1 0 1 1 0 1 0 1 1 1 1 0 0 1 1 0 1 1—13
Total	59
Eatontown.	
T Riddle	0 0 0 0 1 0 1 0 1 1 1 1 0 1 1 1 1 0 0 0—10
H Edwards	0 0 1 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0— 3
A Smith	0 0 1 0 0 1 1 1 1 1 0 0 1 0 1 0 0 1 0 0—10
R Drummond	0 0 1 1 1 1 1 1 0 1 0 1 0 0 1 0 1 1 1 1—12
C Wheeler	0 0 0 0 1 1 0 1 0 0 1 1 1 1 1 1 1 0 1 1—11
Total	46
Howell.	
A Francis	1 0 1 1 0 1 1 1 0 1 0 1 0 0 1 1 1 0 1 0—12
J Megill	1 0 1 1 1 1 1 1 1 0 1 • 0 0 0 0 0 0 0 0 1—16
R T White	0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 1 0 0 1— 4
J H Van Schoick	0 1 0 0 1 0 0 0 0 1 0 1 1 1 1 1 1 1 0 0—11
T Forman	0 1 1 0 0 0 0 0 1 1 0 1 1 0 1 1 0 0 0 1— 9
Total	52
Marlboro.	
W I Conover	0 1 1 1 0 0 1 0 1 1 1 1 1 1 1 0 1 1 1 0—14
I V N Willis	0 1 0 0 1 1 0 0 0 1 1 1 1 1 1 0 1 0 1 1—12
E McElwaine	0 0 0 0 0 0 1 0 1 0 0 1 1 0 1 0 0 1 1 0— 7
J D Bonce	0 0 1 0 0 0 0 1 1 1 0 0 0 0 0 1 0 1 1 0— 7
A S Schanck	1 1 1 0 0 1 0 1 1 1 1 1 0 1 0 0 1 1 1 1—13
Total	53
Middletown.	
W Buck	0 0 0 0 1 1 1 0 0 0 1 0 1 1 0 1 1 0 0 0— 8
B Griggs	1 1 1 1 0 1 1 0 0 1 0 0 1 0 1 0 0 1 1 1—12
M Longstreet	0 1 1 0 0 0 0 1 1 0 0 0 1 0 1 1 0 1 0 0— 8
G F Marsden	1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1—18
A B Clark	1 0 0 0 1 1 1 1 0 0 0 0 1 1 0 0 0 1 0 0— 8
Total	54
Ocean.	
J H Morris	0 0 1 1 1 1 1 1 1 0 1 0 0 0 0 1 0 1 1 0—11
W Green	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0— 0
J Van Dide	0 1 1 1 1 1 1 1 1 0 1 1 0 1 0 0 1 1 0 0—13
D Slocum	1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 0 0 0 1 1—14
J H Bennett	0 1 1 0 1 0 0 0 1 0 0 0 0 0 1 1 0 1 1 0— 8
Total	46
Shrewsbury.	
F R Smith	0 0 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0—15
S T Hendrickson	1 0 0 0 0 0 1 0 0 0 0 0 1 1 1 1 1 1 1 0— 9
W Minton	0 0 0 0 0 0 1 0 1 1 0 1 1 0 1 1 0 1 0 1—11
H White	1 0 1 0 0 0 1 0 1 1 0 1 1 0 1 1 0 1 0 1—11
J B Bergen	1 1 1 0 0 1 0 1 1 1 0 1 1 0 1 1 1 1 1 0—14
Total	60
Upper Freehold—Unfinished.	
R Brewer	0 1 0 1 0 1 0 1 1 0—5
E W Howard	1 1 1 0 0 0 0 0 1 0—4
E T Wyckoff	0 0 1 1 1 1 1 1 1 1—5
A L Clayton	1 0 1 1 1 1 1 0 0 0—6
C H Meirs	0 1 0 1 0 1 0 0 1 0—4

The rain preventing the completion of the tournament, the other matches were postponed until last Friday, when Mr. Brewer, of Upper Freehold, with nine competitors, won the gold badge, hitting 17 out of 20; Henry Langstaff, of Newark, won the silver pitcher and cup. In the match for the junior championship of New Jersey the contestants were: Henry Langstaff, of Newark, and George Height, of Wall, Monmouth County, both thirteen years of age.

Height	1 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1 0 1 0 1—15
Langstaff	1 0 1 1 1 1 0 0 1 1 0 0 1 1 1 1 1 0 0 1—13

The team prize was the honor awarded to the winning team of presenting the proceeds of the tournament to the Monument Association. It is worthy of remark that Prof. Henry Talmage, of the Freehold team, has but one arm,—the left. Ten balls in succession is good work for a left arm.

PENNSYLVANIA—*Greenville, June* 3.—Semi-annual badge shoot on Thursday, with the following result; ten glass balls, 18 yards, Bogardus rules.

Camp	0 1 1 1 1 1 0 0 1 1—7	Holmes	0 1 0 0 1 0 0 0 1 0—3
Derby	1 1 1 0 1 1 0 1 0 1—6	Goocher	1 0 0 0 1 0 0 1 0 1—4
Brooks	1 1 1 1 1 0 1 1 1 1—9	Herrick	1 1 1 0 1 1 1 1 1 1—9
Phillips	1 1 1 1 0 1 1 1 1 0—8	Nelson	1 1 1 1 1 1 0 1 1 1—9

Tie on nine.

Brooks	0 1 1—2	Nelson	0 1 1—2
Herrick	1 1 1—3		

NORTHWESTERN SHOOTING CLUB—*Erie, Pa., May* 3.—Sixth match for gold badge.

W W Derby	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—19
Capt Hayward	1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1—18
T W Jareckt	1 1 0 1 0 1 1 1 1 0 1 1 1 1 1 1 0 1 0 1—15
Will Tracey	1 0 1 0 0 1 0 0 1 1 1 1 1 1 1 1 1 1 0 1—14
Johnnie Smith	0 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 0 1—16
Jake Graham	1 1 1 1 1 1 1 1 0 1 0 0 1 1 0 1 0 1 1 1—16
John Ryan	0 1 1 1 0 1 1 1 1 1 0 1 0 0 1 1 1 1 1 0—14
Sam Thompson	0 0 1 1 0 1 1 1 1 0 1 1 1 0 1 1 1 1 0 0—14
Jasper Harding	0 1 0 0 0 0 1 0 1 1 1 1 1 1 1 0 1 1 0 1—12
T Lynch	0 0 0 0 1 1 1 1 1 1 1 1 0 1 0 0 1 1 1 1—13
P Diefenbach	1 1 0 0 0 1 0 0 1 1 1 1 0 0 0 1 0 1 0 0— 9
John Graham	1 0 1 0 0 0 1 0 0 0 w

WASHINGTON, D. C., *May* 30.—Grounds of the Mount Vernon Ducking Club; glass balls; Bogardus traps and rules; forty-five single and ten double balls.

E L Mills..1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—45. 11 11 11 10 10—8—Total, 53.

A B Henderson..1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1—40. 10 11 10 11 10—7. Total, 47.

E M McLeod......1 0 1 1 1 1 1 1 1 0 1 1 0 0 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 0 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1—35. 11 11 11 01 01—8. Total, 43.

Mr Woodruff..0 1 0 1 0 1 1 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 0 0 0 w—16

MICHIGAN—Regular shoot for the State medal; Hurlingham Park, Detroit, June 6; English rules.

Eldridge	0 0 0 1 1 0 w	J Stenton	1 1 1 1 0 1 1 1 1 0 w
Long	1 1 1 1 1 1 0 1 1 1 1—10	Barbour	1 1 0 1 1 0 1 1 0 1 0— 7
G Stenton	0 1 0 1 1 1 0 w	Gillman	0 1 1 1 1 1 1 1 1 1 1—10

Tie on ten.

Long	1 1 1 1 1—5	Gillman	1 0 1 1 1—4

Sweepstakes—Plunge traps, 26 yards rise.

Glenn	0 1 1 0 0 1 0 w	Gillman	1 1 10 1 1 1 0 0 1—7
Long	1 1 1 1 0 0 0 1 w	G Stenton	1 1 0 0 0 1 0 w

Sweepstakes—English rules; miss and go out. First sweep:

Long	1 1 0—2	G Stenton	1 1 1—3
Gillman	0	Eldridge	0

Second sweep:

Long	1 1 1 1 1 1 1 1—8	G Stenton	1 1 1 1 1 1 1 0—7
Gillman	1 1 1 1 1 1 1 1—8	Eldridge	1 0

Long and Gillman divided.

In the exhibition glass ball shooting at the Theatre Comique, out of a possible 48, J. Stenton won with a score of 40.

MICHIGAN.—A grand shooting tournament, open to all, will be held at Detroit, June 18, 19 and 20. Mr. E. H. Gillman is one of the Committee of Arrangements.

ILLINOIS STATE CONVENTION.—The fifth annual tournament of the Illinois State Sportsmen's Association opened at Singleton Park, Quincy, Ill., last Tuesday. A large number of well known marksmen from every part of the Union were present. In the first contest there were sixty-five entries; 10 birds each; 21 yards; class shooting: Kleinman, Chicago; Haworth, of Quincy; Erb, of St. Joseph, Wis., and Carr, of St. Louis, killed 10 straight. Haworth won with 5 straight birds at 26 yards. In the ties of nine, with eleven contestants, Thomas Stagg, of Chicago, won, killing all the birds. In the ties of eight, Turrell, of Chicago, Kimball and Willey, of Peoria, killed 5 each at 26 yards; Kimball won, killing all his birds. W. B. Wilcox, with thirteen contestants, won ties of 7. The clubs of the State were well represented at the business meeting on Tuesday evening.

THE ROTATING TRAP.—This new style of glass ball trap is rapidly growing in favor with shooters, its peculiar method of throwing the balls affording practice more nearly approaching real bird shooting than anything heretofore devised. The general agent is W. H. Cruttenden, Cazenovia, N. Y.

The American Club List enables dealers in sporting goods to communicate with the customers they wish to reach; price, 50 cents. Every dealer should have it.

National Pastimes.

ARCHERY.—Hackensack, N. J., has a new archery club with a large list of members. Staten Island, N. Y., ladies find especial pleasure in winging the arrow toward its mark. St. Louis, Mo., archery clubs are gaining great popularity. The San Francisco disciples of the mythical Tell have organized the Pacific Archery Club. Between the Mississippi River and the Pacific Ocean are numerous archery clubs whose names will probably never be known to the general reader. Their skill, however, far exceeds the wildest dream of the pale-faced marksman.

LONG DISTANCE WALKING.—The twenty-five miles walk for the amateur championship of America was held at the American Institute Building last week. The entries were: J. H. Jordan, Indiana; T. H. Armstrong, Harlem Athletic Club; C. Holske, Harlem Athletic Club; Charles Conner, Scottish American Athletic Club; F. J. Mott, Harlem Athletic Club; J. W. Goodwin, American Athletic Club; G. Schultz, New York; T. R. Smith, New York; T. Buckley, Scottish American Athletic Club; F. L. Edwards, Scottish American Athletic Club; A. Varian, Knickerbocker Yacht Club; W. W. Cornish, Manhattan Athletic Club; T. H. Noonen, American Athletic Club; R. H. Pelton, Greenpoint Athletic Club; T. C. Duffy, Harlem Athletic Club. The finish was as follows: The twenty-five miles were made by Armstrong in 4h. 19m. 19s.; Holske, 4h. 19m. 24s.; Connor, 4h. 19m. 58s.; Goodwin, 4h. 29m. 47s.; Edwards retired on his twelfth mile; Mott on his twelfth, Cornish on his eighteenth, Noonen on his seventeenth, Pelton on his eighteenth and Duffy on his seventeenth mile. The prizes consisted of a $200 watch and gold and silver badges. A forty-eight hours' walk for professionals was contested by C. A. Harriman, Haverhill, Mass; G. Guyon, Chicago, Ill.; W. O'Brien, New York; John Ennis, Chicago, Ill; C. S. Redmond, Boston, Mass; F. C. Clark, Philadelphia, Pa; McCloud's Unknown; F. E. Benson, Hartford, Conn. Guyon was the winner. He retired after having finished 187¼ miles in 46 hours; F. E. Benson, of Hartford, accomplished 133 miles in 46h. 21m. 35s.; W. O'Brien, of New York, finished 177 miles in 46h. 23m. 29.; J. Ennis, of Chicago, made 142 miles in 46h. 21m. 35s.; F. C. Clark, of Philadelphia, did 112 miles in 42h. 25m. 21s.; Rice, of Vermont, did 67 miles and one lap in 45h. 33m. 5s.

—Next Saturday afternoon, at the Manhattan Athletic Club Grounds, Mr. George J. Law will attempt to walk fifty miles in nine hours, starting at 10 A. M. In the afternoon James Groves will try to run twelve miles in one hour.

LADIES' OUT-DOOR SPORTS.—The Ladies' Club for Out-Door Sports, of Staten Island, held their first annual meeting at New Brighton last Friday. The sports consisted of lawn tennis, archery, croquet, and other kindred games. There were a large number of spectators and the meeting was very successful. All the officers of the club are ladies: President, Mrs. R. E. Robinson; Vice-President, Mrs. John G. Dale; Treasurer, Mrs. H. E. Alexander; Directors—Mrs. John H. Pool, Mrs. R. B. Whittemore, Mrs. M. G. Haughton, Mrs. J. C. Henderson, Mrs. Sidney DeKay, Mrs. R. W. Cameron and Mrs. George B. Ripley. Secretary, Miss M. Krebs.

YONKERS' LYCEUM.—The annual spring games of the Yonkers Lyceum, at their grounds on South Broadway, were held last week and resulted as follows:

Running broad jump—Eight contestants—Won by G McNicol, Manhattan A C, 19ft. 1in.; M McFaul, Fanwood Club of Deaf Mutes, second, with 18ft. 6in.

One hundred yards run—Open to school boys of Yonkers—Won by J F Jenkins, Jr., in 11¼s.

Handicap one mile walk—Open to members of the Lyceum—Won by N B Starr, 8m. 9¾s.

Throwing base ball—G E Horton, Harlem Club, won with 301ft.

One-half mile run—F Banham, Harlem Club, 2m. 12s.

Vaulting with pole—McNichol, Manhattan Club, and Ingboth, Scottish-American Club, vaulted 9ft. 6in., the contest being then postponed.

One hundred yards dash—McFaul, Fanwood Club, 10¾s.

One mile walk—F J Mott, Harlem Club, 6m. 57¼s.

One hundred and forty yards dash—C H Rowland, Yonkers Lyceum, 56¼s.

Two miles walk—N A Armstrong, 14m. 32s.; M Walcott, Manhattan, A C, second.

Tug of war—Scottish-American team defeated Harlem, Yonkers and Chicken Island teams.

STEVENS' INSTITUTE ATHLETICS.—At the fifth field meeting of the Stevens' Athletic Association, the events were as follows:

Quarter-mile run: Won by D. Jardine, '78, in 58 seconds. Running high jump: Rosenberg, '81, 4ft. 7in. In throwing the base ball H. Suydam, '78, was first at 310 feet. The 100-yards dash was won by D. Jardine, '81, in 10¾ seconds. Throwing the hammer, weight 16 pounds, was won by F. Rosenberg, '81, the distance being 65ft. 9in. P. T. Birchard, '78, in pole vaulting cleared the bar at 7ft. 3in., and was the winner. The one-mile walk was won by F. Haussling, '81; time, 8m. 56s. The running long jump was won by H. Suydam, '78, who leaped 17ft. 10in. In the half-mile run Soydam was again the winner in 2m. 10¾s. The one-mile walk, open, was won by Henry Armstrong; time, 7m. 32¼s. The 220-yard run was won by D. Jardine in 27s. In putting the shot, 16 pounds, Rosenberg, being the only entry, cast for a record. The distance was 30ft. 11in. The half-mile run, open, was won by R. Morgan, Harlem Athletic Club; time, 2m. 17s. The hurdle race was won by H. Soydam, '78, in 21½s.

NEW YORK ATHLETIC CLUB.—The weather having prevented the games on the days previously set apart, the club has postponed its field day to July 4. The entries are re-opened to close June 22.

CRICKET.—The Buffalo Cricket Club has elected the following officers: President, Harry Smith; Vice-President, W. R. Hopkins; Treasurer, S. S. McCrae; Secretary, C. McCreadie; Committee of Managers—E. E. Dudley, N. Totten and J. L. C. Cronyn.

ST. GEORGE VS. MANHATTAN.—The game at Hoboken last week resulted in an easy victory for the St. Georges, who did some unusually good playing. The score at the close of the nearly seven hours' game was:

ST. GEORGE.

Moore, b Hosford	81	Jones, run out	22
Hance, b Greig	9	Richardson, b Hosford	9
Cross, c Love, b Jackson	41	Talbot, c Jackson, b Lane	3
Gyles, b Hosford	16	Mostyn, not out	0
Marsh, c Hosford, b Jackson	22	Byes, 6; leg bye, 1; wides, 6	13
Sleigh, c Rogan, b Greig	7		
Moeran, c Scott, b Jackson	8	Total	231

St George.......... 17 97 154 164 178 189 200 221 225 231—231

MANHATTAN.

First Inning.		*Second Inning.*	
Hosford, run out	9	run out	21
Jenkins, run out	0	run out	2
Makin, hit wicket, b Giles	14	at Bance, b Cross	12
Regan, not out	20	c Sleigh, b Cross	0
Greig, b Moeran	3	not out	26
Jackson, b Moeran	2	not out	0
Kersley, c Hosiman, b Moeran	7		
Love, b Moeran	0		
Hooper, b Moeran	0		
Scott, b Moeran	9		
Lewis, b Moeran	0		
Wide	1	Bye	1
Total	08	Total	62

First inning.......4 22 23 30 30 50 50 50 68 68—68
Second inning.......4 21 25 59 62 .. ..—62
Umpires—Messrs. White and Smith.

—California is organizing lacrosse clubs.

A Dictionary of sporting terms and colloquial words has been long needed. The Sportsman's Glossary supplies the need.

New Publications.

ZIMMERMAN'S POPULAR HISTORY OF GERMANY, with 600 illustrations by P. J. N. Geiger and others. New York: Johnson & Miles, 27 Beekman st.

There are two ways of writing history. The historian may prepare a deep, abstruse and learned work which shall be read and understood only by the student, or he may clothe his work, equally able and learned, in such a dress that it shall possess life and a charm for the multitude. To this latter task Zimmerman brings the resources of thorough scholarship and deep research, and a poetic fancy, united with a brilliancy of diction, which combine to make his work not only authoritative but attractive and intensely interesting. If there is any history which deserves such a frame it is that of Germany. Next to the history of England Americans should be interested and informed in the story of the German people. It is therefore with gratification that we note the continued excellence, both of the English employed by the translator, and of the admirable engravings embellishing the volumes of this valuable work. The rise of the German nation is a grand theme; its lessons, even for this western world, are many, and well worthy of our study.

LIEUTENANT WHEELER'S REPORT.—We have received the "Annual Report Upon the Geographical Surveys West of the One Hundredth Meridian," by George M. Wheeler, First Lieutenant of Engineers, U. S. A. This report is Appendix NN of the "Annual Report of the Chief of Engineers for 1877," and embraces the report of the work done in California, Oregon, Nevada, Texas, Arizona, Colorado, Idaho, Montana, New Mexico, Utah and Wyoming. The pages are filled with information of great value, and in their exhibit of the work accomplished under the able direction of Lieut. Wheeler, are a fresh evidence of the wisdom of further prosecution of this survey.

Scientific men, naturalists, future immigrants, prospective miners and other classes will find much here that is of new interest and really invaluable.

SHOOTING STARS as Observed from the "Sixth Column" of the *Times*. By W. L. Alden. New York: G. P. Putman's Sons, 1878. Paper 50 cents; cloth $1.00

He is a public benefactor who makes two grins grow where there was only one grin before. He is more of a benefactor who makes a thousand grins appear where no grins were ever known before. Accepting these premises we may accord to Mr. W. L. Alden, the well known "Funny man of the New York *Times*," the honor which of right attaches to a public missionary of mirth and health. We have known physicians to prescribe "Sixth Column" doses to their patients with most happy results. Fat Men's Associations are constantly passing resolutions of regard for the man whose effusions have made them laugh and grow fat in spite of themselves. We have breakfasted in most exemplary family circles where that funny column was read at the breakfast table, the younger members snickering all through the family prayers which followed and getting soundly trounced therefor. We have seen impressible young ladies on the street cars go into hysterics over those *Times* jokes. We have been kept awake for the best part of a whole night in a sleeping car by a man in the berth next to us retailing those editorials to his wife, and hawhawing over what he thought was "so funny." What the effect of a whole book of these things will be we cannot tell. If the books are sold promiscuously on the horse cars we shall look for as great a panic among the passengers as the elevated railroad creates among the horses.

REPORT UPON FORESTRY.—We are indebted to the courtesy of Hon. Wm. G. De Lne, Commissioner of Agriculture, for the Report of Dr. Franklin B. Hough upon Forestry, and we shall treat it somewhat at length at an early day.

BULLETIN OF THE ESSEX INSTITUTE.—Nos. 1, 2 and 3, of Vol. X of this publication have just reached us, and we have read with great interest Prof. J. A. Allen's valuable paper on the "Birds of Massachusetts." Massachusetts, and especially the Eastern portion of the State, has so many skillful and enthusiastic collectors that its avifauna has been very thoroughly worked up, and the result, as given in the present list, is 317 species of birds actually taken in the State, while there are perhaps twenty-four others which are known to occur so near its borders that there can be little doubt but that they will ultimately be added to the list as it stands at present. In addition to the "List" and the "Annotations" thereto, the author gives a very valuable history of what has hitherto been written on the subject, and also pays a high compliment to Messrs. Brewster, Purdie, Deane and Maynard, a quartet to whom all American ornithologists owe a debt of gratitude for the earnestness with which they have labored in behalf of the science in the East. Another very interesting paper in the *Bulletin* is Mr. Leonard Waldo's lecture, entitled, "Telling the Time."

THE NATURALIST.—In the June *Naturalist* Mr. Charles Sedgwick Minot gives us "A Lesson in Comparative Histology" which, besides being in itself very interesting, abounds in valuable information and is well worth the careful perusal of all young students. "Ramblies Round San Francisco," by W. A. Lockington, is really a delightful sketch. It is so seldom that we find any writer who is able to see and describe the common things in Nature, those which we see so often that we come finally to pass them by without notice—that when we do meet with one so observant we are impelled to call special attention to his writings. It is this same power of observation and detailed description that has given some of our most charming authors their reputation and we shall hope in the future to hear more of Mr. Lockington. Mrs V. O. King contributes to the present number an article on "Phosphorescent Insects—Their Metamorphoses," and Mr. Lester F. Ward one on the "Genealogy of Plants," both of which are valuable; and Dr. A. S Packard, Jr., the editor of the *Naturalist*, tells us what is now known of "The Mode of Extrication of Silkworm Moths from their Cocoons," a subject of high interest to all entomologists. The Departments of Recent Literature and General Notes are no less interesting than usual, and contain many items of value.

BOOKS RECEIVED.

AUNT PATTY'S SCRAP BAG, by Caroline Lee Hentz. Philadelphia: T. B. Peterson & Bro. Price $1.

NORA RAY, THE CHILD MEDIUM.—A spiritualistic story. Gloucester, Mass.: Proctor Brothers. Price 50 cents.

Clubs ordering several copies of the Club List will be allowed 30 per cent. discount.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

E. E. L., Philadelphia.—The black bass season in Pennsylvania opens July 1.

R., Wethersfield, Conn.—You can collect nothing but the fee, if you paid that.

SCHOTGUNN, Painesville, O.—Bogardus and his son shoot with both eyes open.

J. C. M., Hastings, Minn.—The puppies are from Sensation and party is reliable.

J. Y. Y.—There is shell on which we deem safe to put the cap after having loaded it.

OSPORN, New York City.—In pigeon shooting it is allowable to use both barrels on one bird.

E. A. A.—Having mislaid our copy of rules must defer answering your query until next week.

H. C. P., Brooklyn.—You can procure the Babbitt patent bronze blocks of A. B. Babbitt, Tiverton, R. I.

WHIP, Boston.—You can buy a coach horn at the store of any dealer in martial instruments we should think.

C. N. Q., Collinwood, O.—You will find about Manistee, Mich., excellent grayling fishing and some wild fowl shooting.

H. H. T., Leland, Ill.—The rifle and pistol mentioned are both good. You will find quail and pinnated grouse about Storm Lake, Iowa.

J. R., New York.—We have not yet received the new game laws of Maryland. Under the old law the season for woodcock in that State opened Oct. 1.

C. C. F., Sullivan.—No game law as to frogs. They are good to eat from now right on until you can no longer get them. They are selling all the time in the market.

H. W. N., Lawville, N. Y.—Write to Mr. Frank Porter, Sec. Narragansett Gun Club, Newport, R. I., for the Narragansett rules which

L. S., New Orleans, La.—Gas machines of the character you describe are obtainable, but the cost depends upon number of burners required.

R., New Brunswick, N. J.—What game is there around Shark River N. J., in July and August? Ans. Perhaps a few woodcock on the main land opposite the beach.

W. P. S., Cincinnati, O.—Two pounds of meal to one of meat (beef's heart) is about right for your dogs, unless they are being worked hard; if the latter then increase quantity of meat.

T.—What is the number of grains of strychnine to kill a large dog? Ans. Canines are very susceptible to this drug, but if necessary it is well to give about two grains and make certain of the result.

J. W. K., Elkhart, Ind.—The engineer of a yacht must procure a United States license from the inspectors of your district, or he will be liable to arrest. The pilot is not required to take out any license, however.

MONROE INQUIRER.—Your description answers that of a remarkably good pointer, and the picture, so far as it can be made out, fortifies that opinion. Of course it is useless to speculate on the strain. No evidence of hound.

F. C. H., Elizabethtown, Pa.—You can procure a county and township map of Pennsylvania of the Coltons, 172 William st., New York. For general hunting and trapping in Pa. go to any of the mountain forest tracts.

H., Worcester, Mass.—Setter dog; no appetite, nose hot and dry, slight discharge from eyes, breathing short, bowels costive, coat dry and wiry. Ans. Your dog has distemper and should be treated systematically for that disease.

A. J. B., Yonkers.—Dog has fits. Good appetite, fits slight, about eight, two or three days apart. Ans. The fits are probably due to some intestinal irritation. Give him a large teaspoonful of castor oil once a day for about four days, and note effect's.

A. F. V., New London.—Dog's eyes running; he coughs and sneezes, flanks drawn in, eats very little, breathing regular and seems lively. Ans. Give him two grains of quinine three times a day and be particular about his food and sleeping quarters.

Geo. H., Jacksonville, Ill.—Where is the best place to purchase archery goods? Ans. Of Fish & Simpson, 132 Nassau st., or Holberton & Co., 117 Fulton st, New York. Would refer you to parties in Chicago, but none of them advertise with us.

E. B. G., Elmira, N. Y.—W. C. Coup founded the New York Aquarium. To measure the circumference of birds' eggs use a pair of calipers made for the purpose and for sale by C. J. Maynard, Ipswich Mass., who deals in all taxidermist's materials.

POETIC SOUL, Jersey City.—I venture to inclose this poem for publication. If you doubt its genuineness I can call and vouch for the same Ans. The poem received. We do not doubt its authenticity. Call at your peril. We are ready. "Forwarned is forearmed."

J. L., Austin.—Would a 26 barrel 32 in. long cal. rifle be large enough for small game such as ducks, or geese, and could it be used for target shooting? What is the range of such a rifle? Ans. Would do admirably well; accurate for 100 yards for target shooting.

SCHOOL BOY.—Which is the correct expression, "a three mile walk," or "a three miles walk?" Ans. The latter is grammatically correct; the former incorrect. The frequent use of "three mile walk," "hundred yard dash," etc., does not make them any the less ungrammatical.

F. J. F., Chicago.—The fish you speak of as now being taken at St. Joseph, Michigan, may be a Geneva cisco, which is found in quite a number of other places besides Geneva Lake. See "Sportsman's Gazetteer." Why don't you send a specimen to Prof. Jordan, at Indianapolis, Ind?

W. A. F., Baltimore.—Will you kindly give me the address of any one in this country who makes the Berthon Folding Boats mentioned on pages 635-6 of your "Sportsman's Gazetteer?" Ans. There are no agents in this country at present. Address Berthon Boat Company, limited, 30 Bedford Row, London, W. C.

C. F., Philadelphia.—About Renovo, Pa., is trout and other fishing. The forests abound in game. The insect powders mentioned in "Hallock's Gazetteer" are not disagreeable to use. You will find good summer lodging at almost any of the farmhouses about Renovo, Youngwomanstown, and neighboring villages.

C. M. S., Dunbarton, N. H.—1. Can you tell me through your next paper whether there is a daily or weekly paper published in St. Augustine, Florida? 2. Also whether the Shelton auxiliary rifle barrel would be useful for deer shooting in Florida? Ans. 1. A weekly only. The *Press*. 2. It would be found most useful and effective.

J. W. M., Rochester.—My spaniel is somewhat over six years old, abdomen swollen hard and distended. Wheezes somewhat; sometimes eats ground peas, shells and all. What shall I do for him? Ans. There is probably some bowel obstruction. Would advise soft nourishing food for a time, and now and again a dose of castor oil in warm milk.

ENQUIRER, N. Y.—You can find excellent pinnated grouse shooting on the line of Chicago and Northwestern railroad. If you followed the "Editorial Rambles" published last fall and winter you should be posted from them. Trouting all along the Cedar and Grand Rapids road. The law for chickens is up in Michigan and Iowa Sept. 1, and in Minnesota Aug. 14.

J. B., Boston.—You can hardly go amiss for game in any of the middle, or western counties of Texas. As to men making their living by hunting that depends upon the hunters and the market. You have violated our rules in not sending your name, or we should return you the dollar you inclose, as we make no charge for answering correspondents.

SUBSCRIBER, Menomonee, Wis.—Gordon setter dog about two years old. His eyelids, or eyes, have secreted for a year past a thick matter, creamy in appearance. He is healthy otherwise and eats well of food from the table—bread, milk, etc. Ans. Probably is overfed. Give a little sulphur and castor oil, and wash the eyes with weak alum water once a day.

SUBSCRIBER, New York.—What would five acres of ground and a small house for breaker cost in a country adapted to a kennel. What would be the running expenses? Ans. Such a place is often to be had for $1,000 to $1,500, and if the kennel is small running expenses will be about $500 a year exclusive of cost of stock, which may be much or little according to choice.

W. W. D., Erie, Pa.—In a pigeon shoot with three prizes and five entries four men tie on three birds each, the other killing two. How should the money be divided? Ans. If it is class shooting the ties on three should shoot off for first; second goes to the man who killed two; third may be divided up as the shooters shall agree, or kept for another shoot by same parties.

J. F., Wilkes Barre, Pa.—Setter dog two years old has running at the eyes; coat rough and bad color; nose most of the time cold and moist; appetite good. Fed on scraps from the table, plenty of exercise and lively as usual until last few days. Gave him areca nut a few weeks ago, when he passed a few worms. Ans. Give him a little sulphur and castor oil twice a week.

J. W. H., New Brunswick.—Have some setter pups twelve weeks old. They pass worms one and a half to seven inches long. Have given them areca nut. Have put sulphur in their water. Will you kindly prescribe? Ans. Leave the sulphur in the water and give a little in warm milk once a day for three days; then a couple of doses of castor oil, say two teaspoonfuls.

W. H. McA., Baltimore.—Do you think I will be in time for some good salmon fishing by leaving here on the 20th of June for New Brunswick? Ans. Many gentlemen now about starting for Canadian rivers. You may get good salmon fishing at any time during the season until Sept. 15, provided there is a rise in the rivers. The 20th of June will be in ample season, although there has been an early run of fish.

C. K. S., Nunda, N. Y.—I have a pointer fourteen months old. About three months ago a lump about the size of a BB shot formed inside one of his ears and it is now as large round as a silver dime. It is hard, of a light red color and particularly transparent. Ans. Any surgeon in your neighborhood will be able to give you correct advice about this; probably it should be cut through with a knife and then destroyed by caustic.

S. L., Urbana, Ill.—Setter dog six years old had tumor come on his throat last summer the size of two fists. Taken out by surgeon. Last February he had a cough which continues. About March 15 noticed enlargement of abdomen which has increased. Slight exercise causes wheezing and coughing. Does not seem to suffer much pain; appetite fair. Ans. He is probably developing tumor in abdomen. Let the surgeon examine him again.

H. S., Erie, Pa.—We want to find out what the Brayton motor is ourselves; but some inventors and manufacturers understand their own interests so little that they remain as dumb as oysters, when a little publicity of their inventions might fill their purses to repletion. The Brayton motor, if placed before the public, would be in demand for every-screw yacht in the country, but in spite of that, letters and queries failed to elicit anything concerning it. Can any of our readers enlighten us?

D. P., Brookline, Mass.—Setter dog troubled with some disease of ears; shakes his head continually and suffers great pain. Howls in his sleep as if from pain; otherwise very active and well. In the field he often turns rises on his hind legs and shakes his head violently Ans. The dog has canker of ear. Keep them clean with white castile soap suds once a day and then pour in a little dilute lead water, holding it there for a minute. Use some contrivance to keep the ears from being shaken.

F. C. M., Elizabeth.—Will you be kind enough to tell me what you consider the best work on dog breaking? I have a Gordon pup three months old. Is he old enough to commence on? In next issue will you please give Sancho's and Lady May's pedigree? Ans. Would advise you to buy the "Sportsman's Gazetteer" in preference to other works. It is very simple to understand, concise and comprehensive. A dog is never too young to teach. If you begin early to teach you will have little "breaking" to do. For pedigrees address Arnold Burges, Hillsdale, Michigan

W. A. Mc., Milwaukee.—The shell you send us belongs to the *Scalaria*, though there are a great many species. They are found mostly in tropical seas, though some are met with in Greenland, Norway, Britain and also in the West Indies. China, Australia and the west coast of America. The shell you send us we do not think is the *Scalaria pretiosa*. We may take some time before we can positively class it. Will you kindly write us exactly how you obtained it? If we remember rightly it was from the stomach of a fish. As to the mulberry wood it has for bow making the advantage of not being affected by moisture. Hickory is good for strength when lateral strain is wanted, its long fibres allowing great tension; but it does not recover.

G. W. K., New York.—Would trout thrive in well water? I pump from a well on my premises in quantities averaging between one and two hundred gallons per minute constantly into a tank on my roof, say two feet deep. The water is the same temperature all the year (52 degrees). It comes from a strata of gravel about 30 feet below the surface and is inexhaustible. If the experiment is feasible should they be fed, and if so with what, flesh or vegetables, and what particular trout should I get? Ans. Your trout will not thrive in well water, which does not contain food enough. Should you care to experiment you must put a lot of aquatic plants into your pond, or inclosure, and feed the trout with bread crumbs, maggots, chopped cooked liver, curds, small minnows, etc., etc.

F. W. B., Boston.—Foxhound 12 months; food, meat, bread and milk. Eyes dull, half closed and discharges a good deal from the corners; tongue and lips very red. He is drawn in at the flanks a good deal and has lost flesh; breathing does not seem labored; bowels are bound up; secretion of the kidneys is not much colored; appetite very changeable; cares most for milk. He sleeps in the house nights. During the day he sleeps out of doors under the trees. He lies with his head close to the ground. He will lie in the sun for five or ten minutes, then go lie in the shade. Have been giving him one grain of calomel in his milk for the last three days. Between his hind legs the leg is very red and the skin is cracked open in a good many places. Ans. You should have followed the calomel with a couple of small doses of castor oil; do so now and stop feeding meat. It is probable the dog is having distemper.

T. C. H.—1. Which is the most direct way and what is the distance between Troy and Lake George? 2. What game is in season along the latter part of August? 3. What is the fare by rail from Troy to Lake George? 4. For how much can a boat be hired, and where is the best place to hire one at Lake George? 5 Are there any restrictions on hunting or fishing parties in that locality, and if any what are they? 6. Which part of vicinity of the lake is the best for hunting? Ans. 1. Take Rensallaer and Saratoga railroad to Fort Edward and the lake, terminus at Caldwell. 2. No game in August except a few woodcock and pigeons. 3. Distance 70 miles or so; fare something over $2. 4. Boats at Caldwell, Bolton, Fourteen Mile Island and all the landings; charges $2.50 per day with man, or $3 per week without. 5. You can *hunt* as much as you like, but we advise you not to kill anything but the kinds of game we have mentioned. 6. You can get the most hunting where there is the least game.

W. V. J., New York.—We propose to take a trip from Walton on the west branch of the Delaware to Trenton, N. J. Can you inform us if such a trip taken in a canoe or flat bottom boat would pay for the trouble? Would we get any black bass, or trout fishing on our way down. We have a flat-bottomed boat built of zinc that we think of using. Would a Herald canoe be better? What could we buy one for, and is there any duty to be paid on one coming from Canada? Would like to buy a second-hand one if in good order. Ans. There ought to be good bass fishing now in the Delaware and both its branches, especially the west branch. A great many fish have been put in it. At the same time serious complaints have been made about the destruction, especially of yearlings, by small mesh-nets, notably at Port Jervis. Numerous trout streams *en route*. We prefer a Herald canoe to a skiff, or an English or Gordon, which are cheaper if not better. The latter are made at Peterboro and Lakefield, Canada, cost $25; freight and duty at least $12 more. Ship via Port Hope, Rochester and N. Y. Central, R. R.]

FOREST AND STREAM ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INOULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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All transient advertisements must be accompanied with the money or they will not be inserted.

No advertisement or business notice of an immoral character will be received on any terms.

*** Any publisher inserting our prospectus as above one time, with brief editorial notice calling attention thereto, and sending marked copy to us, will receive the FOREST AND STREAM for one year.

NEW YORK, THURSDAY, JUNE 13, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

☞ Trade supplied by American News Company.

CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, June 14.—Creedmoor: Thirteenth Regt. Practice. Base Ball: Hornell vs. Tecumseh, at London, Can.; Rochester vs. Allegheny, at Allegheny; Hartford vs. Live Oak, at Lynn; Resolute vs. Champion, at Elizabeth. Trotting: Watertown, N. Y., Providence, R. I.; Fleetwood Park, N. Y.; Jackson, Mich.; Peru, Ind.; Cedar Rapids, Ia.; Calamazoo, Mich.; Massillon, O. Running Meeting at Columbus, O.

Saturday, June 15.—Creedmoor: Waters' Long-Range Match; *National Guardsman* Match; Skirmishers' Badge Match. Seawanhaka Yacht Club Open Regatta. Nova Scotia Yacht Squadron Opening Cruise. Neptune Boat Club (N. J.) Annual Regatta. Harlem Rowing Association Regatta Schuylkill Navy Regatta. Orion Rowing and Athletic Association Annual Games. Cricket: Young America vs. Merion, at Turnpike Bridge; Dorian (2d.) vs. Belmont (2d.), at Haverford; Philadelphia (2d.) vs. Young America (2d), at Nicetown. Base ball: Indianapolis vs. Boston, at Boston; Milwaukee vs. Chicago, at Chicago; Hornell vs. Buffalo, at Buffalo; Rochester vs. Allegheny, at Allegheny; Cincinnati vs. Providence, at Providence. Running Meeting as above. Shooting Tournament at Murfreesboro, Tenn.

Monday, June 17.—Creedmoor: 11th and 71st Regt. marksmen. Quaker City Yacht Club Annual Regatta; Union Regatta, Boston and Dorchester Yacht Clubs, off Nahant; Eastern Yacht Squadron Rendezvous at Swampscott Bay; Atlantic Yacht Club Annual Regatta; Hudson Yacht Club Annual Regatta; Lynn (Mass.) Yacht Club opening regatta. South Boston Club Union Regatta, off Marblehead; Haverhill (Mass.) Yacht Club Spring Regatta. Eastern Rowing Association Open Regatta; Cornell University Spring Regatta. Base Ball: Cincinnati vs. Boston, at Boston; Rochester vs. Erie, at Erie.

Tuesday, June 18.—Brooklyn Yacht Club Annual Regatta; Empire Yacht Club Annual Regatta; Empire Navy Annual Regatta, Peekskill Bay.

Wednesday, June 19.—Creedmoor: Amateur Rifle Club, 600 yds. Match. Courtney-Demoster match at Geneva; Mississippi Valley Amateur Rowing Association Regatta, at Peoria, Ill. United Schnetzen Association. Open Athletic Games, Union Hill, N. J.

Thursday, June 20.—Creedmoor: Twenty-third Regt. Mississippi Valley A. R. A., as above. Seawanhaka Club Regatta, at Columbia Grove. Haulan-Morris Match, Pittsburg, Pa.; Potomac Amateur Regatta.

What is a Dingledebooch? See Sportsman's Glossary.

SPORTSMEN'S PROTECTIVE GAME CLUBS.

FIVE years ago the number of societies organized for the avowed purpose of protecting game and fish could almost be counted on one's fingers. Now they number hundreds. A glance at "Hallock's American Club List" will convey an idea of how they have multiplied. Many societies are devoted to angling, and a very large number to practice at the pigeon or glass ball trap; but nearly all these are composed of intelligent sportsmen; and presumably they countenance the protection of game, although it is not so written in the letter of their constitutions. The club list referred to contains the names of six hundred organizations included under the titles of Angling, Gun and Sportsmen's Clubs, and exclusive of Rifle, Athletic, Kennel, Yachting, Boating, and other kindred clubs, which number fully thirteen hundred more. In the State of New York alone there are over one hundred, and fifty of these were represented at the recent convention at Buffalo. The number of new applications this year for affiliation with the State Association shows that interest in the general subject of sport and protection is increasing, and no doubt time will prove the benefits which must accrue from combinations of men determined to prevent the game of the country from being killed out of season and wasted.

It is not to be supposed that all the twenty-five thousand men which these six hundred clubs represent are earnest advocates or supporters of game laws, or vigilant in their espionage of transgressors; but there is a goodly leaven among the number which will permeate the whole mass by and by and extend its usefulness throughout the population of the States. There is but little encouragement just now to sustain or comply with game laws which for the most part, if nothing worse, are a hatch of crudities; but when wisdom shall hereafter sway and shape legislation (as it certainly will do under the increasing knowledge disseminated by those who are sustaining the hands of Prof. Spencer F. Baird and his little junta of conservators), there will be felt a sympathetic throb from one end of the country to the other. Efforts will be made of practical worth. Constables and prosecuting attorneys will not mock the conscientious endeavors of game protective clubs by purchasing from poachers the things forbidden to be killed or eaten; and judges will not forestall the opening day of the season by stealing a march upon those more scrupulous.

With the growth of population and the parcelling and enclosing of lands, private rights and boundary lines will come to be respected by sportsmen; farmers will not be stimulated to trap and snare the game on their possessions in order to prevent it falling into the hands of men who despise their trespass notices. The small gains from the sale of a few bunches of birds will be considered no emolument whatever. Instead of field and cover being swept of every pin-feather, year after year, the growing wheat and leafy copse will become nurseries for small game; and complaisant sportsmen who shoot for pleasure will look upon the farmers as benefactors, to perpetuate their sport, and not as harpies, to snatch the dainties from their bag and larder. The sportsmen, in turn, no longer unbidden, will come in proper season—after the harvest—no more vexing the farmers with dreams and apprehensions of trampled fields and patches. Poachers will then be estimated as horse thieves are, and receive no better countenance or shrift. Mercenary hotel keepers, unable to purchase game, because the farmer, the sportsman and the appointed constable stand watch and ward together to protect it, will no longer pander to the depravity of snobs, who sicken their stomachs with unfit food in order to show how easily they can defy the laws with impunity.

But before we can realize any such millennium as this, the public mind has got to be thoroughly inoculated with a sense of its practicability and advantages; and the surest means to such an end will be found in the organization of game protective clubs all over the land. Instead of a few hundred as now, there will be a host like the Grand Army of the Republic, every man an enlisted defender of legitimate sport, a conservator of the species, a promoter of health and good living, and a "hale fellow well met" in the fullest significance of the term. In order to assist the good work, the editor, who has prepared the club list referred to, has included a suitable form of constitution and by-laws under which clubs may organize; so that the lack of information will no longer be an excuse or obstacle to any consummation of this sort. Every sportsman should possess a copy of the book.

—The following pertinent and conscientious communication was received after the foregoing paragraphs were printed. While our correspondent's arguments are eminently logical, we think the state of things complained of is accounted for in the second and fourth paragraphs above written:

EDITOR FOREST AND STREAM:

There is in this State an association of gentlemen, the full title of which is, "The New York State Association for the Protection of Fish and Game." As far as I can learn, its history and, theoretically, its aim and would-be attainments are somewhat as follows: The necessity of a thorough and efficient system of game protection was recognized. To secure necessary legislation and to properly enforce the laws when made, local clubs were organized in different parts of the State, whose members are pledged, individually, to observe the laws, and unitedly, to enforce their observation upon others. The sphere of each separate club is limited, and probably no one club would be possessed of sufficient means to secure legislation; therefore, the clubs unite to form one central club, with a management and officers of its own, whose duty it is to look after those things which are beyond the reach of individual clubs, or which are for the general interest of all. Delegates—who form this main organization, and from whom its officers are chosen—are sent yearly from each of the interested organizations to an appointed rendezvous, in order to unite more firmly the bonds which hold them together, to facilitate an exchange of views and ideas, to report past progress and devise means for future improvement, and, not least, in order to come boldly and prominently before the people to show their might and set such an example as will exert a powerful influence in turning public opinion in their favor. When they adjourn, their power for good is increased, and past imperfections brushed away. Thus, year by year, the difficulties in their path become less and less, until, at last, a proper protection of game becomes one of our most firmly rooted institutions.

Now, in theory, what better system of united action to secure the best laws, what more thorough network of surveillance could be devised for the protection and multiplication of our stock of game and fish? But, alas! This is theory only. True, we have many good local clubs, and we have one Central Association, which got a most excellent start by assuming the name most fitted to its ideal work; but, like a froming school-boy, it soon got tired of work, and went to playing, and, like the same school-boy when unrestrained, its play became largely interspersed with mischief.

It is fair to suppose, from the original aims of the Association, so incontrovertibly set forth in its title, that whatever not directly pertaining to the protection of fish or game should form a part of the proceedings at its yearly meetings, would be merely for relaxation, to fill up short recesses, or, possibly, to add a zest and attraction to the whole thing, but in no wise to interfere with or overshadow its real work. To show that the reverse of this is the true state of affairs I need only refer to the proceedings of the Convention [in other States as well as this.—ED. F. & S.] for the last few years, which are on record in the files of the various sportsmen's papers, and which are easily accessible to any one who may doubt the truth of my statements. Every year there has been less and less interest shown in game protection, and more and more in trap shooting, till the climax was reached this year, when absolutely nothing was done toward the object for which the Association was formed. The President made a short speech, mainly for the purpose of saying that "the object of this Convention is the protection of fish and game, and it is not, as some people would suppose, merely a trap shoot." This, I may say, was the nearest approach to the ostensible purposes of the Convention; yet it lasted only five days, and slaughtered about 6,000 pigeons! Now, in the name of common sense, what does the President mean by telling us that the Convention was not a trap shoot, but for the protection of fish and game?

The general public must, by this time, be pretty well convinced that game protection consists in killing pigeons. If it is not so convinced, it is not the fault of the New York Association for the Protection of Fish and Game.

OSSINING.

THE SCHUETZENFEST.—Our German and American readers will remember that on Monday, the 17th of June, the matches of the Sharpshooters' Union of the United States will commence. The programme extends over the whole week, and on Monday, June 24th, the gold medal offered by the FOREST AND STREAM AND ROD AND GUN to the best team will be shot for.

Montag, 24ten Juni.—Concurrenz Schiessen fur die goldene FOREST AND STREAM AND ROD AND GUN *medaille. Aufang* 11 *Uhr im Schutzenpark. Beitrag jedes concurnrendem corps* $15. 8 *Schutzen jedes Teams. Berechtigt alle Schutzengesellschaften, wenn sie auch nicht zum Bundl Gehoren,*

which translated means that the entrance fee of each competing corps will be $15; that teams are composed of eight men, and that any associations, not members of the Union, can enter. We trust to see a large assemblage, of our friends, during the whole week. Our medal is now in the joweler's hands, and we believe that it will be worthy of the occasion. Hoping that there will be fine weather during the week, and with our best wishes for the success of the meeting, we say, "*Hoch liebe die siegreichen Schuetzen.*"

THE KIND OF STUFF CANADIAN SPORTSMEN ARE MADE OF.—One of the most valued correspondents of the earlier life of our paper was Geo. M. Fairchild, Esq., of Valcartier, Canada, who used to write us spicy sketches of his winter camps in the snow, and his chases after caribou among the Laurentian Mountains. It seems to be a proclivity of Canadians to winter it out. While we are snug around the hearth or taking indulgence in the semi-tropical warmth of Florida, these hardy craftsmen are tripping their snow-clogged snowshoes over the trackless barrens, and banking up their tents with shovels to keep out the frost. Their activity keeps their blood warm in the day-time, and in the night they draw their capotes over their heads and curl themselves up in the tents like bears. Often they kick aside their rugs and blankets so as to cool off in the night, and it is asserted that the interior of a canvas camp, which has been banked up with snow, is frequently intolerably hot. This we can testify to, though our own experience of temperature does not reach below the zero, while theirs becomes solid with the mercury at 40 deg. Such ruddy glow as the arctic atmosphere gives to the cheeks, and such stability as it gives to the health, can scarcely be imagined.

These Canadians pull trout through the holes cut in the ice with a gusto equal to the summer zest of angling, and they patiently starve themselves for two days to track and capture a caribou, in order that they may appreciate the meat the more for the abstinence. The editor of the Toronto *Evening Telegram* is one of these fellows. He writes to us, June 1:

"I take an earnest delight in the sporting matters you deal with, my appetite for such having been whet up by a trip (in company with a single companion) of six months—September to March of one season—in the wilds of northern, unsurveyed Canada, not seeing a human face but our own for five months. We built log houses, and while tramping sheltered ourselves with a cotton tent. We occupied our time in shooting duck, partridge and deer for food, and trapped beaver, minx, martin, fisher, etc. Came out on snow-shoes, fifteen days' tramp to the first signs of civilization, each dragging a tahoggan loaded with our tent, food, skins, clothing, etc., etc. The tahoggans we made ourselves, hewing a plank 1-4x12in. out of a 15in. tree. We took the trip for our health. It was adventurous and enjoyable, though made up of a good deal of hard work and hardship, but brought us out hale and hearty."

DOCKING HORSES' TAILS.—Mr. Bergh complains that, in response to charges of cruelty advanced by him, he is too often met with ridicule. Now, here is the question of docking such ponies as are used in polo: Mr. Bergh insists that to dock a pony is cruel. The cruelty in this action we cannot for the life of us see. It may be stupid or useless, and make a pony look ugly, but if Mr. Bergh is to get up in arms because people lop off horses' tails, or cut dogs' ears or tails, next we will hear of the arrest of some of our good mothers for boring their daughters' ears. We are quite as conscious as anybody that there must be an advance in morals, and that, as Lecky shows, what is deemed as perfectly right in one century is deprecated in the next. Still we are too far off yet from those blessed days when men will shudder when they turn a turtle on his back, boil a live lobster or poach an egg. A good deal of vital energy, we are afraid, is lost by the worthy President of the Society for the Prevention of Cruelty to Animals on petty, useless topics of this character, such as of docking tails, which might be devoted to more crying and monstrous evils.

A GLASS BALL MONUMENT.—A novel method of raising a battle-monument fund is that adopted by the Monmouth, N. J., people. They have been holding a series of glass ball matches, the proceeds of which go toward the erection of a monument commemorative of the battle of Monmouth. This is a pleasant conversion of the brittle spheres into enduring granite and bronze; perpetuating by such sport the memory of men whose weapons knew only serious work. At the tournament last Decoration Day fourteen towns were patriotically represented by their chosen teams. Here is a hint for a national tournament for the benefit of that unfortunate Washington Monument.

FARMS IN MINNESOTA.—FOREST AND STREAM is a good advertising medium for other things than fishing tackle and sportsmen's hardware. For instance, the Becker farm in Minnesota has recently been sold, through the medium of this paper, to Dr. D. R. Sutherland, of Poughkeepsie, for $31,000 cash, which sum covers a very promising crop of 1,000 acres, which ought to yield 25,000 bushels of grain.

What we want now is to sell the 17-section plot lately advertised in our columns. It is a rare chance for parties wishing to engage in farming on a grand scale. Thirty thousand dollars capital is required, to be paid up in two years. Full particulars with the managing editor of FOREST AND STREAM. Over 30,000 emigrants are said to have settled in Minnesota within six months, and the value of land sold is stated to have been nearly $5,000,000 in the month of May. The land we offer is on a line of railroad and can be bought at $2.50 per acre.

IN MEMORIAM.—It is with regret that we announce the death of Jackson Gillbanks, Esq., of Whitefield House, Cumberland, England, who departed this life May 19, 1878, aged fifty years. Mr. Gillbanks was a frequent contributor to the columns of this paper. An ardent sportsman in his younger days, in later life he devoted a great deal of his time to the introduction of game birds and fish into England. It was at his suggestion that, some years ago, we forwarded to the Prince of Wales the eggs of our prairie chickens, and we now have among our papers many valuable suggestions made by Mr. Gillbanks as to the means to be employed in forwarding live game and the eggs of game birds to England. Mr. Gillbanks was exceedingly interested in fish culture, and anxious to gain all information from American sources. In England Mr. Gillbanks was well known for his contributions to the London *Field*.

OUR YACHTING COLUMNS.—We are in receipt of many gratifying encomiums of our yachting department. The public, always quick to comprehend honest efforts in catering to its wants and tastes, has given its unqualified approval of the professional nature of this department and the liberal space accorded it. The yachting columns of the FOREST AND STREAM fill a long existing void in the sporting literature of America, and it is our intention that they shall be brought to as high a degree of perfection as the well-directed efforts of our editor, who is a practical naval architect, seaman and yachtsman, can attain. That the public appreciates this purpose we are convinced, from the fact that FOREST AND STREAM is universally recognized at present by the London *Field* and other English papers as authority, and the accepted medium of the sport in America. The one hundred yacht clubs of this country ought to have a representative of their interests, and we will bid high for the position.

IMPORTANT TO SUBSCRIBERS.—From Georgia we have received this hint:

"Times so hard thought you would have made your paper $3 before this."

Yes, we are just about to do something of the kind. Should have reduced our rates long ago, but have been hesitating whether to make a merely nominal charge, say 50 cents per annum, or to send the paper free, pay postage on it, and throw in a double-barreled shot-gun, fishing-rod and chromo—expressage prepaid—to each new subscriber. If times continue to harden, each of our subscribers may expect to make an independent fortune out of this concern. In view of such a possible contingency, we need not suggest to the casual reader the expediency of immediately sending in his name. It's better than buying lottery tickets.

CLAMS AT A PREMIUM.—The Centennial clam feast at Case's Grove, above McComb's Dam Bridge, came off happily, Tuesday, June 11, and closed in good order in spite of damp weather. Under the able presidency of Mr. Shepherd F. Knapp, the event brought together many citizens of the metropolis of all grades and parties, who, at the convivial board, merged their differences for the nonce in a general onslaught upon the succulent bivalve and enlivening contents of sundry baskets labelled in French. The proposition made to intrust the city's destinies ere long in the hands of Mr. Knapp was received with loud acclamation by all.

A LIFE SONG.—A New York lady has been receiving some newspaper attention because she recently sang continuously for three consecutive hours to an audience in Cooper Institute. That's nothing. We have heard of lots of people doomed to Sing Sing for a whole lifetime.

A FLORIDA INVESTMENT.—The current number of the *Florida New Yorker* announces that, owing to the failing health of its editor and proprietor, Mr. J. B. Oliver, that journal is now for sale. Here is an opportunity for capital, brains and enterprise.

—William Cullen Bryant, the best known and oldest of the American poets, died yesterday, June 12, in the 84th year of sage.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Ohio State Sportsmen's Association, Cincinnati, June 15; Secty., Wiltbank, Toledo.

Tennessee State Sportsmen's Association, Nashville, Dec. 2 Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

Minnesota State Association, St. Paul, June 19, 20 and 21.

ROBINS AS GAME BIRDS.—*Mr. Editor:* In your issue of May 30, in the "Game Bag and Gun" column, your Salem correspondent speaks of shooting robins among other birds. I respectfully suggest that if your correspondent is a sportsman he ought to be sufficiently informed to know that it has been a crime to shoot robins in this State for some years, and if he does know this and commits the crime, he ought to be prosecuted. It poorly accords with the spirit of many Massachusetts sportsmen to read the record of the wanton slaughter of one of our best songsters in our sporting journals by one of its accredited correspondents. It is a matter of pride with us that we are so far in advance of New York, New Jersey, and some other States, that we are not able to exult over a bag of slaughtered robins. E. H. LATHROP.

Springfield, Mass., June 5, 1878.

[We have seen flights of robins so numerous as to break the branches of the cedars, where they alighted to eat the berries, and if superabundance ever gives license to destroy or diminish, it would apply in such cases, especially as robins are larger and more delicious than many species of snipe. We do not gainsay what our correspondent says; we would assuredly protect robins from the fowler and gunner, and exclude them from the list of game birds; but occasions frequently offer in scattered localities, where the killing of them would be especially justified, not for sport truly, but for the stew and pot-pie. Our point is that a sweeping, inexorable, restrictive rule bears hard upon circumstances which operate to make a privilege which the tenderest conscience would prompt us to accept. The whole question rests upon the abundance or dearth of supply. However, the law of Massachusetts, being against robin shooting, ought not to be violated.—ED.]

NEW YORK.—The sportsmen of Akron, N. Y., have organized the Forest and Stream Sportsman's Club for the protection of fish and game, with twenty-seven members and the following officers: Dr. L. P. L. Parker, Pres.; Wm. L. Paxon, Vice-Pres.; Dell Morgan, Sec.; N. B. Wickwire, Treas.

[We acknowledge with pleasure the honorary membership conferred upon the Editor and Business Manager of this journal.]

—Cohoes, N. Y., has a game club with the following officers: Isaac Clute, Pres; Leon Lackman, Vice-Pres.; Herbert Tanner, Treas.; Orville Winney, Sec.

SARATOGA GAME CLUB—*Saratoga Springs, May 27.*—A few gentlemen interested in field sports have organized the Saratoga Game Club for the enforcement of all laws and ordinances for the protection of game, improvement of skill in shooting and fishing, the restocking of our forests and streams with game, and the fostering of public opinion in all that relates to the better preservation of all varieties of game. The officers are: A. R. McNair, Pres.; W. H. Hodgman, Vice-Pres.; L. A. Sharp, Sec. and Treas. L. A. S.

PENNSYLVANIA.—The Game and Fish Protective Association of Johnstown was organized May 19 with twenty-three members and the following officers: John Cox, Pres.; W. A. Kilgore, Vice-Pres.; Jas. Eldridge, Treas., and H. McMillen, Sec.; Messrs. S. E. Young, F. B. Gilbert, Geo. T. Swank, J. W. Waterman and John Roberts, Executive Committee. The club have appointed fish wardens, propose to stock Mill Creek with trout, and are energetic in their efforts to increase the fishing of the vicinity.

—The Tennessee Sportsmen's Club has been organized by the sportsmen of Maury County, with the following officers: Joseph H. Dew, Pres.; Thos. L. Porter, Vice-Pres; Wm. N. Hughes, Treas.; Josh G. Bailey, Sec. Twenty members were present at the first meeting, and an equal number will probably be added at an early date.

For rules governing matches and competitions of various kinds see the "American Club List," price 50 cents.

The Rifle.

For Forest and Stream and Rod and Gun.

FROM SHORE TO SHORE.

DR. W. F. CARVER'S TRIP FROM SAN FRANCISCO TO NEW YORK.

I propose to avail myself of your kind offer of the use of your columns to keep a promise made to my many friends that I would render them an account of my recent professional journey across the Continent, which time and engagements on land will permit me to keep in no other manner. Having determined upon coming East, and making a tour of the world, I shot my farewell match at Oakland, Cal., on the 22d of February last, on which occasion I succeeded in breaking 885 glass balls out of a possible 1,000, with a Winchester rifle. I then turned eastward, and have given exhibitions of rifle shooting in many places, meeting everywhere with a cordial and almost enthusiastic reception, and now that I am upon the Eastern shore of this continent, I look back upon my journey with pleasant recollections of many warm friendships made on the way.

Leaving San Francisco my first halt was at Sacramento, Cal. I gave two exhibitions at the Agricultural Park, both successful and well attended. Upon the urgent request of Mr. Daniels, I made a flying trip to Chico, Cal., and gave an exhibition there. It consisted principally of fancy shooting. My reception was hearty and attendance good. From Chico I went to Carson City, Nevada, where I was received by that warm-hearted and whole-souled gentleman, the Hon. Hub. G. Parker, the recollection of whose many kindnesses will remain green in my memory. My success here was wholly due to this gentleman. After enjoying his hospitality for two or three days, he accompanied me to Virginia City, Nev. Here we were both received by Mr. W. A. Perkins, to whom I am under many obligations for attentions which contributed largely towards the success of my exhibition on the Comstock. At Salt Lake City I was received by a company of thorough sportsmen, led by G. W. Mears, Esq., all of whom vied with each other in their unceasing efforts to make my stay in the Mormon City the pleasant and successful one it was. Much of my time, however, was employed in flirting with the Mormon girls—a dangerous pastime, I was told; for the intrepid *habitue* of the plains who never quails before the savage glance falls an easy prey to the sly gleams of the maiden's sparkling orbs.

At Denver, Col., I was cordially met by the resident sportsmen. Here I gave an exhibition amid a driving snowstorm, and consequently at great disadvantage. I was, however, challenged by G. W. Gove, a man 70 years of age, to shoot a match of 100 glass balls, his shot-gun against my rifle. Advanced in years as this gentleman is, he has no equal, much less superior, as a shot, among the younger men of the country. My score was 97 out of the 100 balls, making the match a tie.

From Denver to Cheyenne, W. T., where I arrived in the midst of a terrific wind-storm. I was now approaching "the old home," and at Cheyenne I met many old and familiar faces—companions of years gone by. Owing to the extremely bad weather, I gave but a short exhibition of fancy shots, and proceeded on to Omaha, Neb. Passing through this section the familiar landmarks carried me back in memory to the wild and stirring scenes through which I had passed in earlier life. Here, over these broad plains, I had hunted the buffalo, chased the antelope, and encountered the Indians. Here, upon the Medicine below, I had passed many a happy month of freedom from the cares of this world. But how changed! Far and wide I gazed to find the evidence of buffalo and other game, but they had passed away, and civilization had placed its mark upon the country through which I once roamed free as air. Buffalo and hostile Indians both have retired before the advance of the iron monster which now drags its loads of human freight daily across the continent. I expected to leave the train at North Platte to pay a visit to my old home on the "Medicine," and enjoy a few days' hunting, but the famous marksmen in the East, having learned of my coming, were publishing challenges from day to day, and I was particularly anxious to accommodate them as soon as possible, so I continued on my journey, thereby missing this long anticipated pleasure.

Reaching Omaha, trouble commenced in earnest. Here the shooters made their first bold stand, as if determined to wrest my laurels from me. Among the bravest of the brave was John W. Petty, of the firm of Collins & Petty, known among his most intimate friends as "Spoon Bill," on account of his peculiar attitude while making a shot. He stands six feet in height, of firm, manly proportions, and is possessed of a keen, mobile eye, which rests upon an object with that determination which denotes the man of remarkable nerve which he is. His position while shooting is known as well as his reputation as a marksman. When once assumed, nothing in the world can attract his attention. As the butt of his piece strikes the shoulder, he rests his nose between the hammers of the gun, and his eyes shoot forth light of unusual brilliancy. My match here with Petty was hot and closely contested, but the genial John suffered defeat in the most gentlemanly manner possible, although he made one of the most remarkable scores on record by breaking 478 glass balls out of a possible 500. Owing to the courtesy of the U. S. officers at the Fort, and also of the members of the Omaha Sportsman's Club, my stay here was somewhat prolonged.

A hunt was organized on the Platte River after geese and ducks, for my special benefit, under the leadership of Oil Collins, of Messrs. Collins & Petty, which offered unusual excitement and interest, as every man was armed with a rifle, and all were to shoot at flying objects. We went out in a wagon, and as we rode up the hill looking down upon the Platte River, we could see thousands upon thousands of geese upon the sand-bar, running out to an island in the river about a mile away. Descending from the wagon, we started for the river to cross over in a boat. As we were descending the hill, a flock of quail flew across in front of us. In an instant every man had his piece to his shoulder, and the sharp crack of the rifles, the whiz of the bullets and whir of the birds made up a most animated and exciting scene, as we were all armed with the Winchester Repeating Rifle. As a solitary bird was disappearing over the elevation, the last shot was fired by Collins, who was trying to shoot the top off of that hill. Every gun was emptied, when

suddenly a noble buck stepped out from the brush on our right about thirty yards distant, and stood for a moment gazing at the party in apparent astonishment. The situation was ridiculous. There we stood with empty guns, and our cartridges packed away in the wagon some distance off. Suddenly the crack of a rifle was heard, followed by the whiz of a bullet, and the noble animal leaped into the air and fell dead in his tracks. Turning about, we observed the beaming countenance of our friend "Spoon Dill" peering forth from a thicket. As he approached us his face was lighted up with a smile of the most intense satisfaction, which immediately elongated when we informed him that his lucky shot was a serious violation of the Nebraska game laws, and worth to him the sum of $50. However, Petty removed the hide, cut off the head, and, putting the carcass into the wagon, remarked, "Make good sheep!" On the way home, in reply to repeated inquiries, "What have you got there, John?" he would answer, "Sheep from a friend's ranch up in the country. Pretty big, but not very fat." John sold his "sheep" in Omaha to get even, as far as possible, on the game laws. Reaching the river, we crossed over to the island in a boat, and commenced an indiscriminate slaughter of geese and ducks. Leaving Collins and Petty in charge of the boat, Mr. Schuyler and myself proceeded up stream two or three miles, and waded across to another island. Immediately upon reaching it, a flock of five ducks flew by, and out of this flock I killed three with three consecutive shots from my Winchester rifle. After enjoying about two hours' hunt, during which my friend Schuyler had killed two geese and a duck, we picked up our game and returned to our friends in charge of the boat, whom we found in a most curious position. There was Collins in the stern of the boat, his head lying back upon the rudder-post, and his hair standing out "all ways for Sunday." His feet were hanging over the gunwales and dangling in the water, while his right arm was extended in a direction from which his hat could be seen floating off down the stream. Petty sat in the bow in a half-reclining position, amusing himself in a vain attempt to shoot the noses off the numerous champagne-bottles which were floating on the water. His eyes had lost their brilliant lustre, and the desperate effort it was for him to endeavor to remove the head of one of those bottles led us to suspect that the "genial John" was not himself. Rousing them from their sport, we all tumbled into the boat, crossed to the main shore, and, climbing into the wagon, started homeward in the midst of a terrific thunder-storm, which never ceased until after we had reached Omaha.

The next morning I took my departure, and reached Des Moines, Iowa, during the day, when I was received by the Sportsmen's Club of that city. Giving one exhibition here, I made due preparation to march on Chicago, where, as all my friends know, rumors had gone forth that in this metropolis of the West I was to be slaughtered instanter. Entering Chicago on a sunny afternoon, I registered my name at the Palmer House, and at once took up my post of observation behind a pillar in the rotunda. In a few minutes a man enters, and with a stealthy step glides up to the register, and turning over the leaves with trembling hands, his eye lights upon my name. Turning first to the right, then to the left, he glanced cautiously about him, and when convinced that no one was observing him, he made a hold rush for the door. In his haste he stubbed his toe upon the door sill, and that "Stubb" betrayed him; for, in this anxious and mysterious individual, I instantly recognized the "Champion Wing Shot of the West!" Reaching the street, he shot off toward the setting sun at the speed of sixty miles an hour, the angles of his coat tails resembling the small dining tables of Pullman's hotel cars. Feeling safe after this discomfiture of the enemy I started out on a ramble about town.

Turning a corner, I came upon a man employed in cleaning a shot-gun, whose face is familiar to most of the world. Saluting him with "How do you do, Captain?" he looked up with a surprised and anxious gaze, saying: "What d'yer sou?" I soon learned that Mr. E. T. Martin was absent in the country, and I breathed freer, for the coast was now clear. Returning to the hotel, I obtained a refreshing night's rest, and in the morning received a call from Sheriff Kern, President of the Audubon Shooting Club of Chicago, who was accompanied by several of the most prominent men of the city, who during my stay, extended to me every attention, and their generous hospitality served to make my visit to Chicago delightful, and one to be remembered. While here I called upon Dr. Rowe, editor of the Chicago *Field*, but regret to have found him absent on a visit to New York.

I gave one exhibition in Chicago in the presence of about 1,000 spectators, and then proceeded to Cincinnati, where I was received by Mr. McCormick, sporting editor of the *Inquirer*, and, with the assistance of Messrs. Kittridge & Co., shot a very successful exhibition. Upon my departure from Cincinnati I received from Murat Halstead, Esq., editor of the Cincinnati *Commercial*, an extensive and gratuitous advertisement, which, by virtue of being rare, racy and possessed of characteristic ring, has been widely copied, and gone farther to enhance my financial interests and professional popularity than any favor I have received from the press since my departure from the Pacific coast.

Hence to Detroit, Mich. I was cordially received by Ed Giliman and Johnny Long, with whose assistance I shot a most successful exhibition in that city before a large assemblage of people. From here I went to Pittsburgh, Pa., and gave an exhibition before about 800 ex-rioters of that cloudy city. Thence to the New York State Tournament at Buffalo, where I spent three days watching the shooting. It was one of the finest tournament I ever witnessed, everything being conducted in the most satisfactory manner by the worthy and courteous gentlemen in charge of the arrangements. Every one here seemed anxious for me to shoot, and I had consented to do so, when the proprietor of the park asked the sum of $125 for the use of the same for two hours, and as I was not buying race-tracks, I proceeded without further delay to Cleveland, Ohio, where I gave a successful exhibition, and by special request journeyed to Logansport, Ind., to attend a tournament there. I was met by Mr. McShea, editor of the *Chronicle*, and Mr. Messinger, President of the Logansport Gun Club. I remained here three days, and gave two remarkably successful exhibitions, joining in the general shooting—altogether having a jolly time. Here I met Mr. W. W. Stennett, the crack shot. I found this gentleman true blue and a first class marksman. From Logansport I proceeded to New York, the home of all sportsmen, and went directly to the office of the FOREST AND STREAM AND ROD AND GUN.

Here true friends waited to receive me. It is here in this office where a man receives the true sportsman's grip. The office of the FOREST AND STREAM is the harbor of peace and comfort, where the weary sportsman, arriving from a long and tiresome journey, is certain to find rest. To my many friends scattered over the country from the Pacific to the Atlantic Ocean I wish to say, do not fail to make the acquaintance of its editor and business manager, Messrs. Hallock and Banks. I feel deeply grateful for their unremitting attention, which contributed so much toward making my stay in New York a pleasant and profitable one.

Accepting a kind invitation from Governor Winchester, President of the Winchester Arms Company, I proceeded to New Haven, Conn., where the extensive works of that company are located, as his guest. All of my friends know that, in my practice and during my public exhibitions at rifle shooting, I use the Winchester rifle; and here I wish to testify to the fullest extent of my power in favor of this remarkably perfect and complete weapon, as being above and beyond all others the acme of success in every particular in the way of a reliable and accurate rifle. From San Francisco to New York I used in all my shooting a pair of Winchester Rifles, calibre 44, and up to this time these rifles have been shot 40,000 times by me. I have put them several times to a greater test as to their perfection in mechanism, accurate adjustment, and the quality of the material used in their construction than I verily believe any other rifle was ever subjected to. One case in particular I must mention, where I had discharged the piece in rapid succession so long that the barrel was hot enough to blister my fingers through a very thick pair of buckskin gloves, and it singed the wood of the table upon which I laid it. Yet these same rifles are to-day in perfect order and thoroughly reliable.

I am about to publish the story of my life in book form, together with other interesting matter pertaining to rifle shooting, and I trust those perusing this letter, who are seriously interested in obtaining the most perfect rifle for use, will read that work when published and learn more particularly of the excellent qualities of the Winchester rifle. To Governor Winchester and his son W. W. Winchester, Esq., I feel very grateful for my delightful visit to New Haven. To Col. Smith, President of the New Haven Rifle Club, and others I am indebted for many courtesies. To the public press everywhere I am deeply indebted for their universal kindness and the flattering encomiums heaped upon me; and I do not forget that much of the extreme kindness I have received is due to the courteous attendance of their reporterial staff. I shall visit a few more of the prominent cities here in the East, and wind up by giving a final exhibition in New York, upon which occasion I shall attempt to break with a Winchester rifle 5,500 glass balls in 500 minutes, being at the average rate of eleven balls per minute for eight hours and twenty minutes. If successful, I shall have beaten with a rifle the best shot-gun score on record. This concluded, I shall cross the Atlantic, and after exhibiting in Great Britain, France (the Paris Exposition), Germany, and perhaps other European governments, I shall proceed to Africa on a hunt for large game. Thence to India and Australia, and back to the Pacific coast, possibly by way of China and Japan. It is my present intention to sail for Europe early in August next.

Very respectfully, DR. W. F. CARVER.

THE SPORTING RIFLE.—No. 4.

The questions of accuracy and force are, of course, the primary ones to be determined in selecting a rifle for shooting game. But I trust I have succeeded in showing that those qualities should be measured by a very different standard for the sporting rifle from that demanded for very long range shooting, and that the latter does not necessarily include the former. The powers of the long-range target rifle are no more needed in ordinary game shooting than those of a race-horse are needed for daily family service.

Both dealers and purchasers of arms ought constantly to bear in mind that the essential qualities of a rifle intended for shooting game are comprised in the elements represented by the standards I have given. Being assured of these, the next thing in making a selection is to find the gun in which they are comprised in the most simple and compact form, and which in all respects, including ammunition and all necessary equipments and appendages, involves the least possible necessity of labor and care, and the least liability to derangement or injury from accident or exposure.

As regards ammunition, I greatly prefer that which I can prepare for myself rather than being dependent upon machine-made cartridges, which can be used only once. With the former the hunter may cast his own bullets and select his own quality of powder, and indeed wherever powder and lead are to be had he is as independent as if his gun was a muzzle-loader, and the expense also is much less.

Explosive bullets are now sold in New York, the efficacy of which is attested by very strong certificates. They are simply ordinary bullets, with a hole in the front end in which is inserted a small pistol cartridge, which is exploded by concussion with the object hit. Some ten or twelve years since I tried some shells of precisely the same kind, which were furnished with a large bore, Jacobs' rifle, made by Daw, of London. The bullets weighed nearly two ounces, and the cartridges in them were much longer and larger than any I have seen of the Mead patent. On firing into a block of pine timber, eight inches square, it was evident that they exploded at the moment of impact. The block was split, but not much shattered. The penetration was not more than two or three inches, and the shell was blown into a shapeless mass of lead. I preserved a good many specimens of them, which, with a large collection of similar relics of my experiments, were destroyed in the great fire in Chicago in 1871.

Lieut. James Forsyth, of the Bengal Service, is the author of an exceedingly interesting and valuable treatise on "The Sporting Rifle and its Projectiles," in which the question of explosive shells is very fully discussed. He condemns the Jacobs shells as utterly inefficient and uncertain for sporting purposes, and cites numerous instances of his own experiences and those of others in proof of his assertions. He says: "I have fired one through a tiger at two yards' distance without any explosion, and I have seen another burst on the skin, and fly back without penetrating an inch. Even when they do burst in an animal, the effect is less than that of a similar solid bullet, for the shell does not fly to pieces, but merely opens at the tip, while, of course, its penetration is checked, and the killing effect of a through and through wound is lost."

Finding these so unreliable, he tried a great number of experiments, and finally succeeded in preparing a detonating power, which he inclosed in a hollow bullet cast in two pieces, and pressed together in a screw wedge, after putting in the powder. This was exploded by the crushing of the bullet against a bone, and proved entirely effective. The powder is a mixture of "sulphuret of antimony and chlorate of potass, pounded fine and mixed in equal parts by weight. Pound each separately, and then mix them on a china plate with a bone or wooden knife. The shells prepared with this mixture," he says, "are really tremendous in their effects. I have dropped tigers over and over again when hit in places where an ordinary bullet would have had little or no effect, and I have never known an animal hit forward in the body with one of these shells to leave the place afterward."

Mr. Edward Stabler, of Maryland, a veteran sportsman of 84, and a man of great scientific attainments, writes me a very interesting letter in reply to my inquiry relative to his experience with these missiles. He says: "I have used explosive shells on my hunting excursions for some years, even before the Mead patent, on deer and other game, and subsequently on buffalo, antelope, etc., on the plains. In no case, so far as I recollect, have they failed to explode, when I prepared them for myself, and exploding within the body of the animal usually disables it; but in no instance, I believe, unless shot in the brain or heart, was the wound immediately fatal. I have known both buffalo and deer to remain on foot for half an hour after a shell had exploded in the body, and in one or two cases have known antelopes to run half a mile and lie down, then start again, and require to be run down with a horse. The shell explodes on striking, and I have seen them strike and heard them explode in long-range shooting on the plains.

"I do not now use them, for several reasons. If used in the brush, and they strike a twig, they explode, and your shot is lost. On the open ground they answer better, but when exploded in the body, the entrails are so cut up that a disgusting mass of matter is the result. I should consider myself better prepared against an attack from a dangerous or wounded animal by my hard point or hardened lead bullets, whether using a 4-10 or a 5-10 calibre, than to use explosive bullets of same calibre, the penetration being three or four times greater. This was proved to my entire satisfaction while experimenting with both on the plains. While the shell would explode on striking, and always at the surface, the hard point bullets would pass quite through both shoulders, bones and all, of a buffalo bull at three or four hundred yards.

"I would not use the explosive bullets in a magazine or repeating rifle for fear of accident. I have six repeating rifles, two each of three models. In four of them the cartridges press on each other in the magazine, as in the Spencer and Winchester rifles, and in these I do not think it safe to use explosive shells, unless loaded singly by hand for each shot. I know they may be exploded by striking the cap with lead, for I have so exploded them, and I fear the recoil with a heavy charge of powder, and the weight of a dozen or more cartridges pressing on each other, and the spring included, might explode them. Two of my repeaters use long steel shells, and no projection of the bullet when loaded. With these the explosive bullet may be used with safety. I have used the detonating powder described by Forsyth, and prefer it to the bullet with the cartridge inserted in it, for I think the explosive power is greater and the danger possibly less. But I should not consider either safe in a magazine rifle, where they are liable to be jammed against each other by the recoil or a smart jar. I have found, after firing half the cartridges from the magazine of a Winchester rifle, that the ends of the remaining bullets were jammed out of shape by the recoil and the force of the spiral spring; indeed they were too much battered up to be reliable for very accurate shooting. Admiral Lee reported a case to me of a marine on drill exploding a cartridge in a Spencer carbine magazine by dropping the breech heavily on deck, the weight of the other cartridges forcing a bullet against the cap of the next one, and the magazine was torn to piece."

It is a proverb among sportsmen in India that one should "never go out to shoot a hare without being prepared to meet a tiger," and with such a possibility, and always at close quarters, it is obvious that large bores and explosive bullets may be essential to comfort, but except the grizzly bear we have no game on this continent for which such appliances are necessary. For any game that is found east of the Missouri it is certain that a 4-10 calibre rifle is enough, with a supply of hard pointed bullets in case there is liability of meeting moose or bear. With the rifle I have heretofore spoken of I have shot a cylindrical bullet with a zinc point through seventeen inches of green cedar—a force sufficient to smash or penetrate any bones it might encounter.

Boston—Walnut Hill, June 5.—As the shooting progressed a stormy, blustering wind, changing from nine to twelve o'clock in a way that baffled the rifleman's best calculations:

W H Jackson.

800	5	5	5	4	5	5	4	5	4	3	5	5	5	4	5	—69
900	0	0	4	5	5	5	4	5	5	5	5	5	4	5	5	—61
1,000	4	5	4	5	3	4	5	5	5	5	4	5	5	5	5	—69—199

W C Howard.

800	5	5	5	5	4	5	5	3	3	3	5	5	5	4	5	—69
900	5	3	5	4	4	5	5	0	3	5	5	5	4	5	5	—63
1,000	5	3	5	3	5	3	3	3	5	5	5	5	3	5	4	—61—193

S Wilder.

800	4	5	5	4	5	5	5	5	5	5	4	3	5	5	—70	
900	5	5	5	4	4	5	5	A	2	3	5	5	3	5	5	—68
1,000	4	4	5	3	4	5	3	2	4	4	3	5	5	3	5	—59—192

J F Brown.

800	5	3	5	5	5	5	5	5	2	5	5	5	5	5	5	—70
900	0	5	3	5	3	4	5	3	5	4	3	4	5	5	5	—59
1,000	3	3	4	5	2	5	3	3	4	5	0	0	4	5	4	—51—180

J C Chadwell

800	4	3	5	5	5	5	5	5	4	5	9	5	5	5	4	—79
900	5	3	4	4	3	4	4	5	5	5	4	5	4	4	4	—93
1,000	4	A	4	0	0	4	2	4	3	5	3	3	5	4	7	—46—179

A Hebbard.

800	3	2	5	2	3	5	4	5	4	5	2	5	5	5	4	—50
900	4	4	3	3	3	5	3	2	2	3	2	3	5	3	4	—50
1,000	0	5	5	4	5	5	4	5	4	4	5	3	3	0	5	—57—166

H L Lee.

800	5	5	5	3	5	5	5	5	5	5	5	4	4	0	—66	
900	5	4	4	5	0	0	3	4	3	5	4	0	5	3	9	—48
1,000	6	5	3	4	3	5	0	5	4	6	3	4	0	0	2	—48—162

E Williams.

800	5	5	0	2	2	4	4	4	5	4	3	5	5	5	5	—59
900	4	0	3	3	3	3	4	0	3	5	3	5	5	3	3	—49
1,000	3	3	3	3	5	0	4	4	5	0	5	0	0	3	3	—41—149

J S Sumner.

800	5	4	3	4	5	3	4	5	5	5	5	5	4	5	5	—67
900	4	5	4	4	5	4	4	3	5	4	4	5	3	4	5	—63
1,000	Withdrawn.															

J. Smith.

800	4	4	3	5	5	3	5	5	5	5	5	5	3	5	5	—66
900	0	3	2	5	5	3	4	3	4	5	3	5	4	5	0	—51
1,000	Withdrawn.															

CONNECTICUT.—At the regular monthly shoot of the New Haven Rifle Association, at Quinnipiac range, last Friday, the all-comers' medal was won by Mr. Ruickoldt by a score of 40 out of a possible 50. This match was 10 shots at 200 yards off hand. The military match, seven shots each [at 200 and 500 yards, was won by F. J. Colvin with a score of 47 out of a possible 70.

—The Bridgeport Rifle Association will have their opening on Friday, June 14th. There will be four competitions. At Willowbrook on Saturday the rain interfered with good work, Mr. W. H. Binns only completing a full score at all the ranges. This rifleman won the mid-range match. The military match at 200 and 500 yards was won by Lieut. W. M. Clark with a score of 57 out of a possible 70. Mr. J. D. Marks carried off the all-comers' match with a score of 31—three bulls and four centres. The next matches will be held on the 24th of June, when the Sharps Rifle Company have offered a handsome prize.

CREEDMOOR.—Monday, June 10th. Ninety-nine members of the Seventh Regiment qualified Saturday for the marksman's badge. Various other regiments during last week were on the range, and a fair proportion secured their badges.

SYRACUSE—SPRING MEETING—*Wednesday, June* 5.—The opening of the range took place with the greatest *eclat.* Matches were numerous and well contested, while the management was excellent. Directors' match; distances, 200 and 500 yards.

	200 yards	500 yards.
Lieut Col A C Chase	3 4 4 4 2—17	5 2 5 4 3—19—36
Col Jas Manning	3 5 3 3 3—17	2 0 2 0 4— 8—25
Capt M C Pierce	4 0 3 2 3—12	0 0 3 3 4—10—22
Capt P Birchmeyer	2 3 3 0 3—10	2 2 0 3 4—11—21
Major F B Chapman	0 4 0 3 4—11	2 2 0 0 2— 6—17
Lieut Col G N Crouse	3 2 2 0 2— 9	2 0 2 0 2— 6—15
Major J A Nichols	0 0 withdrew.	

Short range match; 200 yards.—We give the leading scores:

Kirby	5 4 4 5 4 4 4—30	Eaton	4 5 3 4 3 4 4—27
Gates	5 3 4 4 5 5 4—30	Hyde	4 4 4 3 3 4 4—26
Talladay	4 5 3 4 4 5 4—29	Stafford	3 3 3 5 4 4 4—26
Barton	4 4 4 4 4 4 4—28	Reamer	4 4 2 5 4 3 3—25
Barnes	4 4 4 3 4 4 5—28	Nicholson	4 3 5 4 4 3 2—25
Jones	4 4 5 3 4 4 4—28	White	4 0 4 4 4 4 4—25
Blakeley	5 4 4 4 4 3 4—28	Post	3 3 3 4 4 3 4—24
Bruce	4 4 5 3 3 4 5—28	Kelly	3 4 4 4 3 4 2—24
Rowley	4 4 4 3 4 4 4—27	Storke	4 0 4 4 4 4 4—24
Warner	4 4 4 4 3 4 4—27	McCartin	4 4 4 4 4 0 4—24

Sixth Division National Guard Match.—This interesting match was represented by two teams from the Forty-ninth Regiment, one from the Forty-eighth, and one from the Fifty-first. We give the full score of the winning team:

Forty-ninth Regiment—First Team.

	200 yards.	500 yards.
Chas Talladay	3 4 5 4 3—19	5 5 5 5 6—25—44
H A Van Gulder	4 5 4 4 5—22	3 4 4 4 5—20—42
Jas Rowley	5 4 4 4 5—22	5 5 3 3 2—18—40
Sergt P H Stafford	4 4 3 4 4—19	3 4 4 4 5—20—39
J H Westover	4 4 3 4 4—19	5 4 2 4 5—20—39
J L Mills	4 3 4 3 4—18	5 4 4 3 4—20—38
Corp J McCartin	4 5 4 4 4—21	2 4 4 3 4—17—38
J C Reamer	4 4 0 3 3—14	2 3 2 0 0— 7—21
Total		301

The Forty-eighth team made 289; the second team from the Forty-ninth, 252, and the Fifty-first, 247. Mr. C. Talladay, with 44, won the individual prize.

For the second short-range match there were thirty entries. We give the leading scores:

Jones	4 4 4 4 5 4 4—29	Gates	4 5 4 3 4 3 3—26
Barton	4 4 5 3 4 5 4—29	Reamer	2 4 4 4 4 4 4—26
Hart	4 4 3 4 5 4 4—28	McCartin	4 4 4 4 5 3 2—26
Stafford	4 4 5 4 4 4 3—28	Blakely	3 3 5 4 4 3 3—25
Mandeville	4 5 3 4 3 4 5—28	Hyde	4 4 4 3 3 3 4—25
Bruce	4 3 3 4 4 5 5—28	Perkins	5 4 4 3 3 3 3—25
Warner	4 5 3 3 3 5 5—28	Talladay	2 4 3 4 4 4 4—25
Storke	4 2 4 4 5 4 5—28	Nicholson	2 3 4 4 5 3 4—25
Wright	4 4 2 4 3 5 5—27	Westover	3 4 3 5 3 3 3—24
Rowley	3 3 5 4 4 3 4—26		

The Dyncan Badge Match was next in order. Distances, 200 and 500 yards.

Lient Col C V Houghton	3 5 4 3 4—19	5 4 4 5 5—23—42
J C Rearner	4 4 4 4 4—20	4 4 4 4 5—21—41
Blakeley	5 4 3 3 4—19	3 5 3 6 4—20—39
Capt R G Post	4 3 4 5 4—20	3 4 4 3 5—19—39
O G Jones	3 3 4 3 4—17	4 5 2 3 4—18—35
M B Nicholson	2 4 5 3 4—18	3 3 2 5 4—17—35
Sergt L L Barnes	4 3 4 4 4—19	2 2 4 4 4—16—35
D H Bruce	4 3 3 5 3—19	3 4 0 4 4—15—33

The Dyncan match concluded the first day's shooting.

June 6.—There was a good deal of pleasurable excitement as Mr. Frank Hyde, of the Sharps Rifle Company, had offered a fine Military Sharps rifle, new model, as a prize. Conditions, 200 yards. The officers' match was called promptly on time, and resulted as follows.

Post	5 5 4 4 3 4 4 4 4 4—41	Eaton	3 0 3 2 4 5 3 3 3 5—31
Barton	4 4 4 4 4 4 4 4 4 4—40	Chapman	4 3 0 3 4 3 5 3 3 2—30
Stoke	4 4 4 4 4 5 4 2 5 5—40	Pierce	2 3 2 5 0 3 4 4 4 3—28
Houghton	4 5 4 3 4 4 3 4 4 3—38	Sylvester	3 3 4 2 3 0 3 0 5 0—23
Nicholson	4 5 3 3 3 4 3 4 4 4—37		

Now came the special short-range match, offered by the Sharps Rifle Company, ten shots at 200 yards.

Hyde	4 4 4 4 4 5 5 5 5 4—44	Eaton	4 4 4 5 3 3 3 3 5 3—37
Jones	4 4 4 4 5 3 4 4 4 5—41	Wood	3 5 3 3 3 3 3 3 4 5—37
Barnes	4 3 4 4 5 4 4 4 5 4—41	Wright	3 5 3 5 3 3 3 3 4 4—36
Warner	3 4 4 4 4 4 4 4 4 4—39	Lefever	2 2 4 4 3 4 4 4 4 4—36
Hart	3 4 4 4 5 3 4 4 4 4—39	Hudson	4 3 3 4 4 4 4 2 4 4—36
Servis	3 5 4 5 3 4 4 4 4 3—39	Nicholson	4 4 3 4 2 4 5 4 3 3—36
Barton	4 4 4 4 5 4 3 5 4 2—39	Houghton	4 4 4 4 2 4 4 2 3 4—35
Bruce	4 4 4 3 4 4 3 4 4 4—38	Gardner	3 3 4 4 2 3 4 4 4 5—35
Smith, Jr.	3 4 4 4 4 4 4 3 4 4—38	Chapman	3 3 0 4 4 5 4 4 3 5—35
Post	3 4 3 4 3 4 4 4 4 3—38	Gates	4 3 3 3 3 4 4 3 3 4—34
Storke	4 4 4 4 4 5 4 3 3 3—38	Mandeville	3 4 3 4 4 4 3 3 2 4—34
Andrews	4 3 4 3 4 4 4 3 4 4—37	Eggleston	4 4 3 4 4 4 4 3 0 4—34
Salder	3 3 3 4 4 4 3 4 4 5—37	Yates	3 4 4 5 3 3 3 w
Reamer	3 3 3 5 4 5 4 3 3 4—37		

If there was a little disappointment that the rifle did not leave the donor of the prize, still as it was won with a handsome score, no one compla[illegible].

The long-range m[illegible] to a[illegible] comers, 800 and 1,000 yards, was also won [illegible] Hyde. We ap[p]end the whole scores, as interestin[g] [illegible] contest between breech-loading and muzzle-loading rifl[es].

Fran[k] Hyde, Sharps Creedmoor Rifle,

800	5 5 5 4 5 5 5 4 5 5—48	
1,000	5 3 4 5 5 5 5 5 3 4—44—92	

D M Lefever, Muzzle-Loader.

800	5 5 5 4 4 5 5 5 5 5—48
1,000	5 5 5 0 5 5 3 4 5 5—42—90

W Isbell, Remington Rifle.

800	5 5 5 3 5 4 4 5 0 5—41
1,000	4 4 5 4 5 5 4 5 5 5—46—87

R [illegible] Yates, Remington Creedmoor.

800	[illegible] 5 5 5 [illegible] 5 4 5—48—86
1,000	[illegible] 4 [illegible] 3 5 3—33

W [illegible]

800	[illegible] 5 5 5—49
1,000	[illegible] 3 3 5—35—84

H W [illegible]

800	[illegible] 4 5 5 5 5—46
1,000	[illegible] 4 5 5 5 5—36—82

S A Servis, Muzzle-Loader.

800	5 5 5 3 3 5 5 4 5 5—45
1,000	4 5 0 3 3 3 3 3 5 4—33—78

J W McElroy, Muzzle Loader.

800	3 3 3 4 4 5 5 5 5 5—42
1,000	4 3 4 0 3 4 3 0 0 0—21—63

H F. Hart, Muzzle-Loader.

800	3 5 5 5 3 0 3 5 0 0—29
1,000	0 3 2 4 5 3 3 5 5 5—33—62

W S Mandeville, Remington Creedmoor.

800	0 3 3 4 2 3 5 0 5 5—30
1,000	0 0 0 5 2 5 4 4 4 4—28—58

James Manning, Remington Creedmoor.

800	3 5 5 5 3 4 4 0 2 5—36
1,000	3 5 0 0 3 0 4 3 2 2—22—58

M J Blakeley, Muzzle-Loader.

800	3 4 4 5 5 4 4 5 4 5—43
1,000	4 5 3 5 0 0 4 3 5 4—33—76

L Eggleston, Muzzle-Loader.

800	5 5 5 5 0 0 5 5 3 3—36
1,000	0 3 5 5 4 5 5 5 3 3—38—74

O G Jones, Muzzle-Loader.

800	5 3 3 2 3 4 5 5 5 5—40
1,000	4 3 3 0 5 4 3 5 0 5—32—72

A O Gates, Remington Creedmoor.

800	2 4 3 5 5 5 5 4 4 5—42
1,000	3 0 0 2 5 5 3 5 5 0—28—70

F Gardner, Muzzle-Loader.

800	0 4 3 5 3 0 2 5 4 2—30
1,000	2 0 0 3 4 2 0 3 5 0—19—49

MOHAWK VALLEY RANGE.—Meeting at the Utica Range on Friday last. Directors' and officers' match, 200 yards, two sighting shots, 25 possible: Kincaid, 16; Flower, 9; Wright, 14; Hill, 17; Dering, 9; Murray, 10; Griffiths, 15; Tallman, 15; Hepburn (Vice-President and formerly of American Team) 15 on four shots, and generously declined to win the match. Five hundred yard match; possible 25; scores: R. Omand, 21; F. Armstrong, 14; A. C. Seamons, 20; C. A. Howard, 15; R. Winegar, 15; H. Ohrismore, 19; S. Thistlewaite, 22; E. A. Tallman, 0; F. L. Partiss, 7; D. E. Pomeroy, 18; L. N. Walker, 19; W. I. Martin, 19; L. L. Hepburn, 25; H. D. Jennings, 18. Military team matches at 200 yards were next called—five men in a team. Total scores: Adjutant Bacon Cadets, 84; Utica Citizens' Corps, 74; Utica Veteran Zouaves, 87. Military match, 200 yards; five shots. The best scores were made by F. I. Myers, 20; F. W. Partiss, 20; D. E. Pomeroy, 18; F. Ferris, 18.

PROSPECT HILL RIFLE CLUB.—This new club of New York city has been organized with the following officers: Pres., Col. J. R. S. Smith; Vice-Pres., G. McL. Jones; Sec., J. L. Paulding; Treas., Lieut. J. J. Reilly. The club headquarters are at 1,516 Third avenue. The club will practice at Harting's Park, 132d street, and at Creedmoor. The N. R. A. rules have been adopted. Regular meetings the first Saturday of each month.

STATEN ISLAND, *June* 5.—Travelers' Command opened their first match of the season on May 30, at their range on Staten Island. The weather was unfavorable to good scores. The prize was the valuable club badge, which was carried off by Captain Fred Bucher, with a score of 36 out of a possible 50. Distance 150 yards. F. P. H.

GEORGIA—*Augusta, June* 3.—Our German fellow-citizens enjoyed a pleasant time during their Fest, which was held at the Platz a short time ago. Considerable interest was taken in the military rifle contest. The Volunteer Battalion, Augusta Rifle Association and visiting German societies participated in several contests at 200 yards. The highest score made was by the Augusta Rifle Association, 33 out of the possible 36. On the 29th of May an individual rifle match took place at the range of the A. R. A. between two of the best marksmen of the association. The rifles used were .50 calibre Springfield armory guns. Distance, 200 yards; rounds, 20; off-hand. The score stood, 88 to 80 out of the possible 100; Creedmoor target. Two prizes are contended for every month at the A. R. A. meetings, and the shooting is very well attended. A rifle tournament is arranged to take place on the 4th of July, under the auspices of the association, and the programme will afford an opportunity for the military and rifle organizations of the State to participate. More anon. ADAIR.

GEORGIA.—The members of Co. C, Savannah Volunteer Guards, have organized the first rifle club of Savannah. It bears the title of the "Rifle Club of Company C, S. V. G." The officers are: President, Captain H. C. Cunningham; Vice-President, Lieutenant W. P. Hunter; Secretary and Treasurer, Sergeant J. M. Bryan.

FREE FERRIAGE FOR SHARPSHOOTERS.—This is the law of February 27, 1878, and a refusal to comply with its provision may be punished with a fine of $20:

"Any member or members of the National Guard, when in uniform, going to or returning from any parade, encampment, drill or meeting which he or they may be required to attend in compliance with orders from any competent authority, shall, together with such conveyances or military property of the State as he or they may be in charge of, be allowed, without any hindrance or delay, to pass through all toll-gates and over all toll-bridges and ferries within the State."

THE CANADIAN WIMBLEDON TEAM.—The team which sails next Saturday for England to represent the Dominion of Canada at the Wimbledon meeting is made up as follows:

Sergeant J. F. Pallen, Thirteenth Garrison Artillery, Chatham, N. B.; Bugler J. T. Hartt, Engineers, St. John, N. B.; Sergeant Riddle, Garrison Artillery, Montreal, Q.; Trooper G. Langstroth, Eighth Regiment Cavalry, French Village, King's County, N. B.; Private J. M. Kinnear, Seventy-fourth Battalion, Sussex Vale, N. B.; Captain Thomas, Fifty-fourth Battalion, Melbourne, Que.; Major O. R. Arnold, Seventy-fourth Battalion, Sussex Vale, N.B.; Sergeant Holtby, Garrison Artillery, Montgomery, Q.; Sergeant C. W. Weyman, Eighth Regiment Cavalry, Apohaqui, King's County, N. B.; Sergeant R. Power, Sixty-third Battalion, Halifax, N. S.; Ensign T. G. Loggie, Seventy-first Battalion, Fredericton, N. B.; Captain Gibson, Garrison Artillery, Toronto, O.; Private J. D. Perkins, Seventy-first Battalion, Gibson, York County, N. B.; Sergeant J. Shand, Garrison Artillery, Halifax, N. S.; Trooper J. J. Ryan, Eighth Regiment Cavalry, Sussex Vale, N. B.; Lieutenant B. Weston, Sixty-sixth Battalion, Halifax, N. S.; Corporal F. Newby, G. G. F. Guards, Ottawa, Ont.; Captain Nelson, Seventy-eighth Battalion, Halifax, N. S.; Sergeant J. H. Edwards, Victoria Rifles, Montreal, Q.; Corporal G. F. Thompson, Engineers, St. John, N. B.

THE AMERICAN RIFLE TEAM.—The members of the team met on Tuesday, June 11. There were present Messrs. Jackson, Jewell, Allen, Bruce, Blydenburg and Weber in the chair. Mr. Weber was elected Captain of the team. After a slight discussion, the following resolution was passed:

Whereas, while this team recognize the fact that it has been the custom for the National Rifle Association and the Amateur Rifle Club, by joint action, to select the American rifle teams for international matches, they being heretofore almost the sole representatives of the interest taken in this country in long range rifle shooting, yet in the last few years other large organizations have grown up in different parts of the country, who should be hereafter represented in the election of teams of a national character; and, as a majority of this team have entertained the opinion that, by virtue of the representative character which it acquired by the method of its organization and selection, it could, with more propriety than any local organization of riflemen, undertake the selection of the next international team; and for these reasons, believing that they would be supported in their action by the riflemen of America, and without any desire to perpetuate themselves as a team, or coveting a trust which could not prove otherwise than onerous, they issued the programme for the selection of the teams of 1878. But as no foreign team has entered within the time required (June 1), and there will be no long range match this year, therefore be it

Resolved, That the programme heretofore adopted and issued by this team for the selection of the team of 1878 be and hereby is rescinded and withdrawn.

When the match will be held is not yet decided.

A WICKED REPORT.—We are in receipt of numerous letters from anxious friends of Mr. Dudley Selph, requesting us to give particulars of an accident said to have occurred to this well known rifleman. In our last issue, when we noticed the rumor, we were careful to write "we forbear mentioning further particulars until we have the fullest statement of the nature of the accident, if any accident there is, and the arm used on the occasion." We are in receipt to-day of the following letter:

Forest and Stream and Rod and Gun, New York:

GENTLEMEN—The report that has been pretty well circulated and made the subject of an editorial in one of our sporting papers, "that the famous rifleman, Dudley Selph, Esq., has been permanently injured by the explosion of a Remington rifle," I find to be untrue, having seen a letter written by Mr. Selph, dated the 3d inst., in which he denies it. He shoots his rifle now, and is making his usual fine score. I am heartily glad that the report is not true.

Yours truly, W. H. JACKSON.

Boston, June 11, 1878.

Evidently the rumor was started for the worst of purposes, in order to cast discredit on the Messrs. Remington and their very excellent arms.

Sea and River Fishing.

FISH IN SEASON IN JUNE.

FRESH WATER.	SALT WATER.
Trout, *Salmo fontinalis.*	Sea Bass, *Centropristris atrarius.*
Salmon, *Salmo salar.*	Sheepshead, *Archosargus probatocephalus.*
Salmon Trout, *Salmo confinis.*	Striped Bass, *Roccus lineatus.*
Land-locked Salmon, *Salmo gloveri.*	White Perch, *Morone americana.*
Black Bass, *Micropterus salmoides; M. nigricans.*	Weakfish, *Cynoscion regalis.*
Muskalonge, *Esox nobilior.*	Bluefish, *Pomatomus saltatrix.*
Pike or Pickerel, *Esox lucius.*	Spanish Mackerel, *Cybium maculatum.*
Yellow Perch, *Perca flavescens.*	Cero, *Cybium regale.*
	Bonito, *Sarda pelamys.*
	Kingfish, *Menticirrus nebulosus.*

FLIES IN SEASON IN JUNE.

Hawthorn, No. 11.—Body, shining black; feet and head, black; wings bright hyaline.

Shoemaker, No. 10.—Body, ringed alternately with light and gray salmon; feet, dark ginger; wings, the mottled gray of the mallard and the mottled of the woodcock mixed; setæ, mottled woodcock.

Black June, No. 10.—Body, peacock's herl; feet and wings black.

Dark Stone, Nos. 8 *and* 9.—Body, dark brown; feet, yellow brown; wings, luteous.

Governor, No. 10.—Body, peacock's herl; feet, dark red hackle; wings, made of the darkest part of the bittern's wing or brown hen.

Green Drake, No. 7.—Body, white posterior, half ribbed with black, green yellow, mottled with brown; setæ, dark brown.

Brown Drake, No. 7.—Body, feet and wings, a golden yellow brown; setæ, dark brown.

Raven, No. 11.—Body, feet and wings, black.

Wren Fly, No. 9.—Body, clay yellow; feet, made from the scapulary feathers of the English wren or quail; wings and setæ, mottled widgeon.

FISH IN MARKET—RETAIL PRICES.—Bass, 18 cents; blue fish, 12; salmon, 10 to 18; mackerel, 20; shad, 50; weakfish, 10; Spanish mackerel, 15 to 25; green turtle, 12; halibut, 15; haddock, 6; king fish, 18; codfish, 6; black fish, 12; flounders, 8; porgies, 8; sea bass, 15; eels, 18; lobsters, 8; sheepshead, 15; Canada brook trout, 50; Long Island brook trout, $1; white bait, per pound, $1; smoked salmon, 18; soft crabs, per dozen, $1.50.

Salmon still continues to arrive in large quantity, but the indications are that, the first rush being over, the fish in the Restigouche will decrease. Mackerel are arriving in small quantity. Sheepshead are plenty from Long Island. Bluefish rather scarce. At Mr. Blackford's we saw a good specimen of the ribbon fish (*Trichiurus lepturus*—DeKay). This fish is rather rare in our waters, the fish we noticed having been caught in Gravesend Bay. The ribbon fish has an extensive geographical range, and is most numerous in the Caribbean Sea. The fish measures some twenty-eight inches.

SALMON IN THE CONNECTICUT.—Wm. M. Hudson, Esq., Fish Commissioner of Connecticut, has kindly given us the following information as to the salmon in the Connecticut River:

"Salmon have been taken at almost every fishing place on the river below Hartford, and one has been taken at the

Gregory fishing place above the Enfield dam and near the Massachusetts line. The majority have probably been taken in gill nets within a few miles of the mouth of the river. About two weeks since, Mr. Joseph Tilden had taken nine salmon in his seine at Brookway's Beach, just below Deep River Station, and Mr. W. C. Hough, at Essex, had taken ten in the same manner. Next week I shall go to Holyoke and inquire whether any salmon have yet been seen at the foot of the dam."

James Bill, Esq., the Commissioner of the State at Lynn, has also kindly given us additional facts. Mr. Bill writes:

"At one landing I have counted up to 8 and 12 salmon caught in a night by the gill net men, then the catch is by the pounds outside first, the gill nets that drift for 30 miles up the river by hundreds, and then the hauling seines from the mouth of the river to Holyoke, and all have got their share. In a number of cases I have known the same drift net to catch two salmon per night. The seines caught several in a day. As to the pounds outside of the river, I have not known as much about them. From the mouth of the river to Hartford salmon have been taken in numbers and a few still higher up the river."

The number of salmon caught has not yet been fully estimated. So far it is our opinion that over five hundred fish have been marketed from the Connecticut. The study of these statistics leads us naturally to speculate as to how soon anglers will seek the Connecticut River for sport, at trifling expense, with privileges unrestricted, instead of taking interminable journeys to fish the high priced tributaries of the lower St. Lawrence. Even now, we opine there is rare sport at our very doors. We wonder that the anglers who dwell in the vicinity of the Connecticut and other New England rivers have not tempted the salmon with fly before this. We are not familiar with the character of the water between Hartford and the Holyoke dam, but we infer that there must be some localities where the broken water weaves itself into an eddy and a pool, so that a cast of the fly would be likely to be rewarded. Next year we hope to angle for salmon within the territory of the United States, just as we did twenty years ago in Maine; and we predict that the day is not far distant when the rare and much coveted sport of fly-fishing for salmon will be a common pastime in our rivers.

CANADA.—*Montreal, June* 5.—Mr. John Robinson, of this city, has just returned from two days' fishing at Matipedia. His catch was 6 salmon ranging from 23 to 32 pounds each.
STANSTEAD.

Montreal, June 6.—A few days ago a friend of mine was bait fishing in Fairfield Lake, a beautiful sheet of water in the Northwestern part of Old Vermont. He was using the common angle worm for bait and caught a 2½ pound land-locked salmon, which was one of the number that this lake was stocked with two years ago. In its stomach were found several half digested minnows. Is it a common occurrence for these fish to take bait? If so, they need protection.
STANSTEAD.

[Both the true salmon and the land-locked salmon take the red worm. Worm-fishing for salmon is very common in Great Britain—ED.]

Montreal, June 10.—The Gaspe Rivers—the St. John, York, and Dartmouth—are full of salmon, which are unusually large. C. S.

NEW HAMPSHIRE.—*Nashua, June* 6.—Trout fishing is giving us more sport this season than for years. Fine string brought in June 4. Caught within a mile of town. Biggest weighed one pound fourteen ounces. Salmon have commenced running up the Merrimack. One was seen last week at Martin's Ferry, estimated to weigh twenty pounds. A shad was hooked up in the Nashua a few days ago. The fishways here will be commenced as soon as the water is low enough. Pickerel fishing opened on the first of the month, but as yet have heard of no brag strings. Pouts and perch are plenty; more so than usual. WEBB.

MOVEMENTS OF THE FISHING FLEET.—The whole number of fishing arrivals reported at this port the past week has been 88—11 from the Banks, 49 from Georges, and 28 from mackereling trips. The receipts of mackerel have been small, about 700 bbls., and the prospects of a good shore catch being unpromising, it is probable that a large fleet will soon fit away for the Bay of St. Lawrence. Mackerel have made their appearance at their usual northerly haunts, and some 2,000 bbls., of the new catch have already been marketed in Boston from Nova Scotia. The halibut receipts for the week have been larger than the previous week, some 130,000 lbs., but fair prices have been obtained. Receipts of Georges codfish, 1,075,000 lbs; Bank codfish, 80,000 lbs.—*Cape Ann Adverser, June* 7.

CONNECTICUT.—*Wethersfield, June* 5.—Mr. Babcock, of this town, caught a striped bass in the Connecticut on Monday that weighed nearly fifty pounds.

Hartford, June 1.—Trout fishing has been exceptionally good this season in the neighborhood of our city, a number of fine strings, taken not further than twelve miles from here, bearing witness. In the Connecticut black bass have made their appearance in large numbers some time ago. At certain localities and certain times hundreds of them can be seen rising in the pursuit of small fry. The latter is probably the reason why bass have thus far refused to take angle worm, live bait, trolling spoon or fly. P. X.

FLY FISHING FOR SHAD IN THE HOUSATONIC.—*Mr. Editor:* The past few years, the writer and several other gentlemen have visited the dam (at Birmingham) on the Housatonic River, for the purpose of catching shad with an artificial fly, which many of your readers are doubtless aware is fine sport. The first year we tried this kind of fishing, shad were comparatively plenty, and our catch averaged good size (from one and a half to four pounds), since then there has been a marked decrease, both in the size and numbers of this fish. I was at the dam yesterday, and had very poor success, fish being scarce, and the five taken weighing but little over half a pound apiece. The question naturally arises, as to the cause of this steady decrease of the fish, which fact is so marked this year that, half a dozen of the seines on the river have been withdrawn, and the catches of others so small as to afford but little encouragement to the parties working them. In my opinion the want of a fishway over the dam causes the scarcity. While fishing yesterday I was much surprised to see a man and two boys row up the river within about eighty yards of the dam, and draw a seine twice (but much to my satisfaction without success); and on inquiring why such operations were allowed, was told that the Company or Corporation did not dare raise a question of law in the matter, as it would call the attention of outsiders to their violation of same in having no fishway. Where are the State Fish Commissioners, and why is this matter not investigated and attended to at once? All the fish culturists in the country cannot keep the Housatonic River stocked either with salmon (which have commenced to show themselves this season) or shad unless some facilities are given the fish to reach the upper spawning beds of the river. I call on the anglers of Connecticut (especially shad anglers whose numbers are steadily increasing) to give their attention to the matter, and to you, Messrs. Editors, who are always ready in a good cause, to so urge the matter, that the parties whose duty it is will oblige those owning the dam and water privilege to build a good fishway at the Housatonic or Derby Dam. A. J. H.

NEW YORK—*Niagara Falls, June* 4.—We have black bass, pickerel, muskalonge, pike-perch and many other varieties of game and food fishes to furnish sport, among the many islands in the river above here. Through the efforts of our newly elected game constable we have nearly done away with pot-fishermen's devices on this part of the river. There is talk now of fish and clam chowder parties camping on some of the numerous islands above here. DOC.

ADIRONDACKS—*Ordway House, Blue Mountain Lake, June* 1.—Beautiful weather, cool nights, crisp mornings, warm sunny days, bracing breezes. Many parties in the woods; fresh arrivals every day. Fishing fair for lake and speckled trout; improving every day. A "laker" was caught at Raquette a few days since weighing 19½ pounds. This is much larger than they generally run. The route to the North Woods via Adirondack R. R., is the quickest and most economical from points South and East. One can leave New York by evening boat or train for Albany connecting with morning train for Saratoga, there with Adirondack R. R. (time 9:30 A. M.) At the terminus of the road North Creek stages are in waiting to convey passengers direct to Blue Mountain Lake (dinner at North River) arriving about 10 P. M. Expense of trip will not exceed $10. Those who prefer to make the trip by daylight can stop over night either at Indian or Cedar Rivers, at both of which places are good hotels, and conveyances can be obtained at reasonable rates. At Blue Mountain the terminus of the route by stage, are two excellent hotels, the "Ordway House" and "Holland's." Splendid bass fishing to be found in some parts of the Raquette, particularly in the South Bay off Hathorn's Camp. They were put in some years since by Seth Green. They afford fine sport with fly or troll. PATCH.

MRS. HAYES' TROUT.—It is, to say the least, very ungallant in Mr. Adirondack Murray to hint to the newspaper men that the fifteen-pound trout caught by Mrs. Hayes in the Adirondacks the other day, was a pickerel. We should have expected such an intimation from the *Sun*; but, we believe, Mr. Murray edits a paper called *The Golden Rule*. There's no golden rule in discounting another man's, or woman's, fish story. Believe others' fish stories as ye would that others also should believe your fish stories.

Lake Port, Avon House, June 12.—Seventy-five or ninety pounds of fish are taken here daily. Good accommodations at this house. J. J. D.

Greenwood Lake, June 12.—Mr. Sandford E. Gee and Robt. R. Van Vleick caught, Saturday and Monday, ninety bass.

—Messrs. Andrew Clerke, Charles Imbrie (Abbey & Imbrie) and Griffith Rowe, left this city on Saturday for the Grand River, Canada, in quest of salmon.

—If it's wicked to fish on Sunday there's a pile of wickedness on the New York docks every Sunday. But is better to be fishing than stealing.

NEW JERSEY—*Forked River, June* 7.—The first sheepshead of the season was caught with hook and line yesterday.
ARTHUR.

Kinsey's Ashley House, Barnegat Inlet, June 8.—Sheepshead commenced biting on the 5th. Captain Jack Soper had the honor of catching the first fish. Boats took thirty-three on the 6th, one person taking twelve. P. Gustine, J. P. Malseed, and J. Freeze, of Philadelphia, took eight before breakfast to-day. Bluefish plenty off the inlet. Two boats came in yesterday loaded; they run about six pounds. Blackfish and sea bass biting good. B.

PENNSYLVANIA.—Very good trout fishing at Waterville, Lycoming Co. Go to Jersey Shore Station (next beyond Williamsport, on P. & E. R. R.), and drive two hour's ride to the "Forks," where you will find a comfortable hotel at the junction of Little and Big Pine Creeks. There are a dozen streams, affording good fishing, within eight or ten miles around this point, some within a mile. The landlord, "Sam," is an excellent fisherman, very accommodating, and will put you on the best stream at almost any time. C.

Erie, June 1.—Fishing is the finest we have ever had, on account of the removal of the pound nets from our shore.
SNIPE.

VIRGINIA—*Alexandria, June* 9.—Shad angling at the Great Falls of the Potomac is the sport *par excellence* at present. Fine catches reward the patient bobber. WENY.

NORTH CAROLINA—*Beaufort, June* 6.—A party of Richmond anglers have been trying their luck at enticing the fishes of the great deep, and their efforts have met with very creditable success. Trolling is not quite in season yet, but the returns are moderately fair. SEQUID.

TENNESSEE—*Columbia, June* 1.—Trout (bass) have deposited their spawn, left their beds and are now biting. Fishing parties are as numerous as at the first of the season. A party returned from Swan Creek last week with successful creels; another party starts for Shoal Creek this week.
VAL.

Nashville, June 10.—Messrs. William Duncan, C. E. Hillman, J. P. Jones, F. Downville and others have organized for a trip to Northern Michigan and the States for a few days' fishing and hunting. The rates are exceedingly low. Tickets for the round trip, from Nashville to Traverse City, Petoskey and return, a distance of 789 miles, only $38. J. D. H

MISSOURI—*Fayette, June* 2.—We have good trout fishing in the Shenandoah River here. They run between two and three pounds. I'm a girl, but I enjoy fishing perhaps as much as your masculine readers do. H.

A WISCONSIN FISHING RESORT.—Piscatorial advices from Neenah, Wis., are of the most favorable character. The route is over the Chicago and Northwestern Railroad. The angler will find the best of fun at the house of Mr. John Roberts, and the fishing in Lake Neenah, both in quantity and quality, will well reward the angling pilgrim.

Madison, June 3.—The beautiful city of Madison is located just half way between Lake Michigan and the Mississippi River, one hundred and thirty-one miles northwest of Chicago. The city is beautifully located upon high land, and has a commanding view of the surrounding country. On account of its delightful location, its beautiful lakes—there being one on each side of the city—its romantic surroundings, and, not least, its fine fishing grounds, it has become quite a favorite summer resort. There are four lakes in the immediate vicinity—Mendota, Monona, Regonsa, and Waubesa. Lake Mendota is the largest and the favorite for pleasure seekers, although Monona is the most beautiful of this chain of lakes. All of these lakes furnish first class fishing and hunting grounds. Madison has always been a favorite resort for Southern people, being especially attractive to New Orleans and St. Louis. The hotels are of the best and no means left undone to make the tourist feel at home. ROVER.

MINNESOTA—*St. Paul, June* 8.—Fishing is superb. J. S.

TROUTING ON A TRICYCLE.—If you would be independent of livery bills and Shanks' mare, get thee a bicycle and fly to the haunts where the finny recluses dwell. A correspondent who, with his tricycle, penetrated to the heart of a Pennsylvania forest in quest of sport, writes enthusiastically of the success of this style of locomotion in the woods. And then the Children of the Forest regard your flying vehicle somewhat as the red-faced Los looked upon Fulton's steamboat puffing along up the Hudson.

STILL IN THE FIELD.—We have been in the habit of referring to Mr. William Mitchell as one of the old time rod makers, and to ascribe to his rods some of that excellence which is commonly attributed to the superior workmanship of the days of our fathers. But, as may be seen in our advertising columns, Mr. Mitchell is still in the field, and now shows a rod which, in addition to the good points of his old style of work, has an adjustable handle fourteen inches in length, the advantage of which will be readily recognized by experienced anglers.

A NEW GAR.—While Professor Brown Goode one day this week was looking over the extensive collection of fish which Mr. Blackford always shows, a new species of the *Belone*, or gar, attracted Mr. Goode's notice. If we understand Mr. Goode rightly it is identical with a species found near the Bermudas, and has not yet been known on our own coast. These gar were caught off North Carolina. The gar is another of those fish which prejudice condemns. There is no better fish in the market than the gar. One peculiarity of this fish is that it has green bones.

THE JELLY FISH'S JAMBOREE.—The Jacks who fish from junks adjacent to the jetties of Jersey, Jerusalem and Japan, jaculate in jagged jargons ejaculations concerning the jocose jelly-fish which jam into their pound-nets. The slightest joggle, jerk or jostle by the Jew in the jigger jeopards his job. At the July adjournment of the jejune jelly-fish, the jolly Jacks will join in a jiggamaree with the juice of the joy-giving jug, which the just jury will adjudicate justifiable.

KILL THE FISH YOU CATCH.

PALATKA, Florida, June 1, 1878.

EDITOR FOREST AND STREAM:

Looking over an old scrap-book of 1835, I find the injunction—"Kill the Fish you Catch"—which has not spoiled in keeping. We all know, while it is quite certain not a quarter of us know anything about it, how much superior is a fish prepared for the pan as it is caught, compared to one that is allowed to die. Few, however, are aware of the difference. The reason is this: The fish transferred to the pan from the water is killed before it is cooked, while the one that dies is diseased, and his body is not in proper condition to eat when brought to market. The difference between them is exactly that between an animal killed by the butcher and one that dies of fever, for the supply of oxygen that the fish secures when taken out of his native element is so great as to induce fever, of which he perishes.

The superiority of the fish of Holland is remarked by all who eat them, and the reason is that as soon as they are caught the Dutch fisherman sticks an awl in their heads, and they are not brought to market with flabby, fevered flesh, as in England and in this country. Not only is the flavor of the fish thus killed far superior to those that die of fever, but the effect upon the human system is not injurious. How common it is to hear the remark that fish make people feverish! So they do, as would the flesh of any animal that dies of fever. We trust that some of our fishermen will see this article and profit by it. Let the fish they take be killed with an awl driven into the brain. It will not take a second to do this, and it will be found that the flavor of their killed fish will be so far superior to that of those which die of fever that they will be bought in preference, and that after a while people will buy no fish but those that have been killed.

I would now suggest, is not this a proper time and subject to bring up which is the best way to preserve the fish after being caught and killed? A basket should be provided beforehand filled with fresh grass or leaves; lay your fish out in layers, grass or leaves alternately, till your good luck or expertness fills your basket. We are apt, while in boats, to throw the fish on to the bottom of the boat, then subject to the effects of the sun and weather and kicks, or to have a string of them dangle along against our legs and in the dirt, and to be soused into the drink, to keep them fresh, at every hole we stop to fish.
N. P. W.

The American Club List and Sportsman's Glossary is just out Carry the news to Mary!

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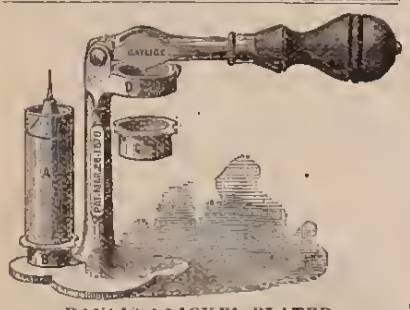

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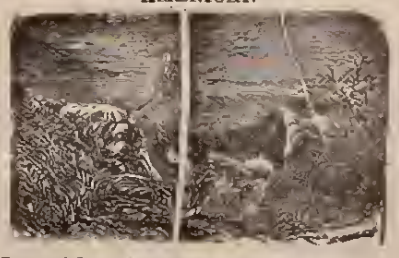

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Miscellaneous

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Prizes on 34 Targets, amounting to $25,000, and Bowling Prizes to the amount of $1,400 will be distributed.

PROGRAMME.

FIRST DAY, SUNDAY, JUNE 16.

Reception of guests by the Reception Committee. During the afternoon Grand Sacred Concert by fifty of the best musicians, under the direction of Mr. F. Wannemacher. Popular entertainments and prize-bowling in the Schuetzen Park.

SECOND DAY, MONDAY, JUNE 17.

Grand procession of all sharpshooters and their guests, accompanied by military organizations, rifling clubs, singing and gymnastic societies, sharpshooters' cadets, and other organizations. Line will be formed at 8 o'clock A. M., in Bowery, between Second and Seventh streets, under command of Col. Carl Jussen. The procession will move at precisely 10 o'clock to City Hall Park, and pass in review before His Honor the Mayor and Common Council of the city of New York. From City Hall Park to Barclay street ferry and over to Hoboken, whence extra cars will convey the procession to the Schuetzen Park. The arrival at the Park will be announced by the firing of salutes. The guests will then be officially welcomed, and the Union and societies' banners received with appropriate ceremonies by the President of the Union. The shooting commences at 2 P. M. and closes at 7 P. M.

THIRD DAY, TUESDAY, JUNE 18.

The shooting commences at 8 A. M. and closes at 7 P. M. Festival Banquet of the Sharpshooters at 8 P. M. in the Grand Hall.

FOURTH DAY, WEDNESDAY, JUNE 19.

The shooting commences and closes as on the third day. In the afternoon Grand Vocal Concert of the Singing Societies of New York and vicinity. At 8 P. M., Meeting of the Delegates at the Festival.

FIFTH DAY, THURSDAY, JUNE 20.

The shooting commences and closes as on the previous days. In the afternoon Grand Exhibition of Gymnastic Exercises, for which liberal prizes will be awarded to the successful competitors.

SIXTH DAY, FRIDAY, JUNE 21.

The shooting commences and closes as on the previous days.

SEVENTH DAY, SATURDAY, JUNE 22.

The shooting commences at 8 A. M. and closes at 3 P. M. At 10 o'clock P. M. Prize Shooting of the Sharpshooters' Cadets.

EIGHTH DAY, SUNDAY, JUNE 23.

In the afternoon Grand Sacred Concert and Distribution of Prizes. Coronation of the best marksman as Champion of the Festival, with appropriate ceremonies.

MONDAY, JUNE 24, 11 A. M.,

Grand Competition for the "Forest and Stream and Rod and Gun" Gold Medal, and Cash Prizes.

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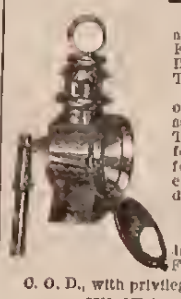

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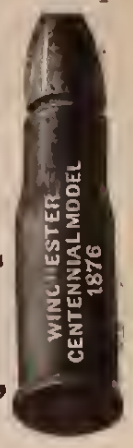

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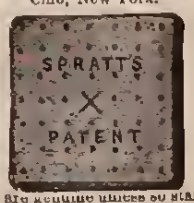

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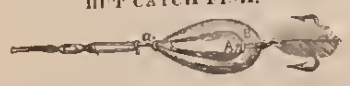

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At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £100, and a money prize of £105, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondeley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

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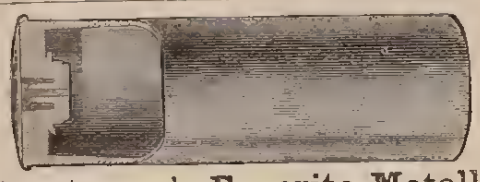

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Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of 1 lb. *only*.

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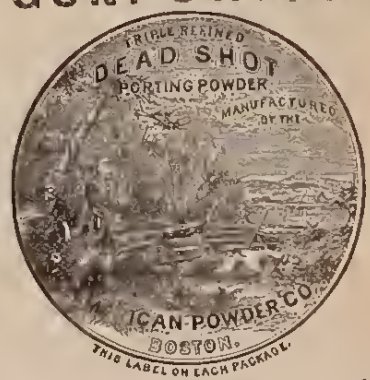

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Laflin & Rand Powder Co.

No. 26 MURRAY ST., N. Y.,

Sole Proprietors and Manufacturers of

Orange Lightning Powder.

No. 1 to 7, strongest and Cleanest made, in sealed 1 lb. canisters. Higher numbers specially are recommended for breech-loading guns.

Orange Ducking Powder,

For water-fowl, strong and clean. No. 1 to 5 in metal kegs, 6¼ lbs. each, and canisters of 1 and 5 lbs. each.

Orange Rifle Powder.

The best for rifles and all ordinary purposes. Sizes, FG, FFG and FFFG, the last being the finest. Packed in wood and metal kegs of 25 lbs., 12½ lbs. and 6¼ lbs., and in canisters of 1 lb. and ½ lb.

All of the above give high velocities and less residuum than any other brands made, and are recommended and used by Capt. A. H. BOGARDUS, the "Champion Wing Shot of the World."

BLASTING POWDER and ELECTRICAL BLASTING APPARATUS. MILITARY POWDER of all kinds on hand and made to order. Safety Fuse, Frictional and Platinum Fuses.

Pamphlets, showing sizes of the grain by wood cut, sent free on application to the above address.

Sportsmen's Routes.

Chesapeake & Ohio RR.

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
Richmond, Va.
ap

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 3, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 12:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:40, 8:18, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 6:30, P. M. trains from New York and to the 7:45, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sep18 1y H P BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

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TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing, Wing Shooting, and Still Hunting,

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent,
FRANK THOMSON, Gen'l Manager. feb17-tf

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St. at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

PROVIDENCE LINE.

Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

L. W. FILKINS, G. P. Agent, D. S. BABCOCK, Pres.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 29 South Delaware Avenue, Phila.

Dec14-1y

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ash and or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

HENRY PRATT, G. T. A.

my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound.

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.

GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

A. B. LEET, G. P. A.,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.

mar28 4mos

TAKE THE

People's Line Steamer,

FROM PIER 41, N. R., foot of Canal st., daily, including Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the Office on the pier, at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. E. MAYO, Gen'l Passenger Agent.

St. Louis, Minneapolis
AND
ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids. C. J. IVES,

E. F. WINSLOW, Gen. Passenger Agent.
General Manager, tf

LONG ISLAND RAILROAD, MAY, 27, 1878—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avennes, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc, at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M., Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 2 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.
J. CRITTENDEN, Gen'l Pass. Agent. jc6 tf

FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

NIGHT LINE—The Elm City leaves New York at 11 P. M., connecting with passenger train in waiting on wharf at New Haven, leaving 5:15 A. M. Tickets sold and baggage checked at 944 Broadway, New York, and 4 Court street, Brooklyn. Excursion to New Haven and return, $1.50. Apply at General Office, on the pier, or to RICHARD PECK, General Agent.

Sportsmen's Routes.

HUNTING

FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad.

FISHING

FOR PIKE, PICKEREL, BASS, Etc.,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

Shooting season expires December 15. For information as to routes, ratio and best points for the various kinds of game, etc. Apply to

A. B. LEET, Gen. Pass Agent,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.

Nov22 tf

Hotels and Resorts for Sportsmen.

Invalids' and Tourists' Hotel,
BUFFALO, N. Y.

A new and elegant summer resort; overlooks Lake Erie and Niagara River, and is in the midst of beautiful parks. The Canada shore and the spray from Niagara Falls may be distinctly seen from its Tower. Trains run to the Falls every hour. Climate delightfully cool, equable, and invigorating. The cool lake breezes so temper the atmosphere that no summer day is too warm for comfort, while the temperature at night is appreciated by all who have sojourned here during the warm months.

What man with a family, having once been crowded into some small "sky parlor" in that hottest of all hotes places—Saratoga—or has been continually jostled and elbowed by the metropolitan throng that rolls alternately in dust and surf at Long Branch, but that has vowed never again to repair to summer resorts? And yet with each returning season, comes the query, where shall we go? No place on this continent possesses more advantages for the tourist, pleasure seeker, or those in search of rest and relaxation from the cares of business, than this hotel. 1st, its accessibility. 2d, Its cool, bracing and salubrious climate; the thermometer ranging in summer from 65 to 75 degrees Fahrenheit. 3d, The attractions of the hotel and its environs. All these combine to render it the most desirable resort for those in search of relaxation and rest. The architectural features and interior finish of the house are said, by good judges, to be the finest of any hotel in the world. Its furnishing is unique, and superbly rich. Table unsurpassed. Elevator, hot, cold, Turkish, Russian, electric, needle, and other baths; billiard room, bowling alley, speaking pipes communicating from every room with the office; telegraph and R. R. ticket office, and all modern conveniences are provided. Advantages for fishing and boating are unsurpassed. Terms, $3.00, $3 50 and $4.00 per day, according to location of room. Address,

MANAGER INVALIDS' AND TOURISTS' HOTEL,
Buffalo, N. Y.

Ashland House,

Fourth Avenue, corner of Twenty-fourth St.

NEW YORK CITY.

Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

H. N. BROCKWAY, PROPRIETOR.

Mer7 tf

Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. jc6 tf

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HOPKINS HOUSE, Waretown, N. J. The proprietor, formerly of Harvy Cedars, would hereby inform his friends and the public generally that he has removed to the Hopkins House, Waretown, where he is prepared to accommodate all who wish to give him a call. Every facility for boating and fishing will be found in readiness.

N. B.—Stages connect with trains at Waretown Junction. CHAS. MARTIN, Sr., Prop'r. jc6 4t

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CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

Hotels and Resorts for Sportsmen.

Sportsmen's Headquarters.

Bromfield House,
AND
LADIES' AND GENTS' DINING ROOMS,
55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER, Proprietor.

apr4 tf

Wild Fowl Shooting.

SPRINGVILLE HOUSE OR SPORTSMEN'S RETREAT, SHINNECOCK BAY, L. I.,

By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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Salmon Angling.

Two first-class salmon rivers, situated on the north shore of the St. Lawrence, seven hours from Rimouski Station. For particulars, address S., P. O. Box No. 446, Montreal. jc13 1t

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"AVON HOUSE," LAKEPORT, N. Y.

Lakeport is handsomely situated on the banks of Onelda Lake, four miles north of Chittenango Station, on the New York Central Railroad. Bathing, boating, fishing and hunting in season. Experienced guides. Steam, sail and row-boats to let; good bathing. Special inducements for families by the week. For further particulars apply to or address, J. J. DEMPSEY, Lakeport, N. Y; formerly of Union Club, also Windsor and Union Square Hotels, N. Y. jc13 1t

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NEW SUMMER BOARDING HOUSE!

Situated three miles from Bethel Station, in the vicinity of good brook trout fishing. Healthy location and pleasant drives. Address H. R. GODWIN, North Bethel, Maine. jc13 7t

Greenwood Lake.

MONTCLAIR & GREENWOOD LAKE RAILWAY.

THE ONLY THROUGH ROUTE TO GREENWOOD LAKE.

Splendid Bass and Pickerel Fishing—Beautiful Lake and Mountain scenery.

Trains leave New York, foot of Cortlandt and Desbrosses streets, daily (Sundays excepted) at 8:20 A. M. and 4:30 P. M.

Leave Brooklyn, via Annex boats foot of Fulton street, at 8 A. M. and 4 P. M.

Pullman Parlor Car on 4:30 P. M. train.

Through coach daily between Hackensack, Paterson and Greenwood Lake.

Excursion fare from Brooklyn, New York or Jersey City, $2 75. Parties of fifteen or more persons, $2 20 each.

J. S. MACKIE, Gen. Pass. Agent.

Notice to Anglers.

THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle.

Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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St. George Hotel,

Cooper, Greenwood Lake, N. J.

S. W. GEORGE, Proprietor,

P. O. address, Greenwood Lake, Orange Co., N. Y. may2 3m

BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y. Splendid bass fishing, good boating and bathing. Telegraph office in house. Take Montclair and Greenwood Lake Railway.

TRAPHAGEN HOUSE, GREENWOOD LAKE, Orange County, N. Y., L. Y. JENNESS, An excellent family hotel. Also good accommodations for the sportsman. Good boats and every facility for fishing. je13 2m

Sportsmen's Goods.

NEW YORK

SHOOTING COAT.

Made of Waterproof Velveteen, Corduroy and Fustian, in Brown, Drab, or the Dead Grass Shade.

SUITS COMPLETE, WITH HAT OR CAP.

ALSO MAKE A SPECIALTY OF CANVAS GOODS,

for $5 a suit, of good waterproof 8 oz. canvas (not drill), made in the most thorough manner. Warranted the best in the world for the price.

For $8 a fine suit of duck, superior in quality to any Eastern or Western make, which usually sells at $10. Also the best duck suits at low prices.

My goods sold by the trade in preference to any goods in the market.

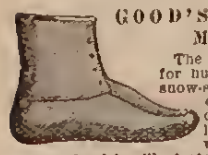
A LIBERAL DISCOUNT MADE TO THE TRADE.

For sale by dealers in guns and sportsmen's supplies.

F. L. SHELDON, RAHWAY, N. J.

March21

Sportsmen's Goods.

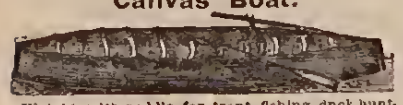


GOOD'S OIL TANNED MOCCASINS.

The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S. HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

PRINCIPAL AGENTS—W. Holberton & Co., 119 Fulton street, New York; Jos C. Grubb & Co., 712 Market street, Philadelphia, Pa.; Bradford & Anthony, 374 Washington street, Boston, Mass.

Osgood's Portable Folding Canvas Boat.



Weight, with paddle for trout fishing, duck hunting, ex loring, etc., 20 lbs; weight, with bottom board, oars, paddle, etc., everything complete, 40 lbs. Manufactured by OSGOOD & CHAPIN, Battle Creek, Mich. Send for illustrated circular.

my23 4t

For Rifle & Shot-Gun Practice.

DENNISON'S TARGETS.

25 to 1000 yds. range.

Target Pasters and Score Cards.

ALSO,

Targets & Pads

For testing the pattern and penetration of SHOT-GUNS

Sold by Dealers in Sporting Goods.

On receipt of Ten Cents a 100-yd. Target will be sent by mail, with Circular, containing *Major Henry Fulton's* RULES FOR PRIVATE PRACTICE, by

DENNISON & CO.,

Mar14 3m 196 BROADWAY, NEW YORK.

A New American Paper Shell.

Superiority of the Howard Shell over all others

First—Having a metallic reinforce it is gas tight.

Second—The flat anvil used in the primer will not cause the expeller pins to break.

Third—The paper is of the best quality, and can be reloaded many times. Prices as low as any American shell. The heads of the shell are uniform to a gauge.

Try them. For sale by the gun trade generally.

SCHOVERLING & DALY, SOLE AGENTS,
84 and 86 Chambers St., New York.

LOST

BECAUSE HE HAD NO

COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

SCHUETZENFEST

The FOREST AND STREAM AND ROD AND GUN having given a gold medal for team shooting at the

SCHUETZENFEST

of the Sharpshooters' Union of the United States of North America, the Executive Committee of this Union take pleasure in informing their American friends that they will make all arrangements for team shooting for this medal. The match will take place at the Schuetzen Park, Union Hill, on

Monday, June 24, 1878,

at 11 A. M. Each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of each team must belong to the same society, and must have been members of it for ninety days previous. The entrance fee is to be paid on or before June 19, 1878, to Mr. F. HARENBURG, Treasurer of the Sharpshooters' Union, No. 190 Greenwich street, N. Y. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union. Any communication directed to the secretary will be promptly replied to. OEO. AERY, President.

J. H. BEEKENS, Cor. Sec., 37 Bowery, New York.

United States Cartridge Company,

LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and in use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

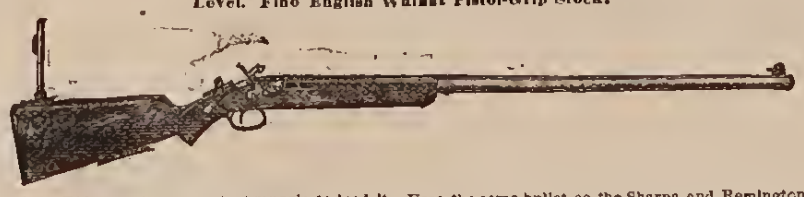
Cartridges for Target Practice.

Send for Illustrated Catalogue.

FOWLER & FULTON, General Agents, 300 Broadway, N. Y.

Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.

BARTON & CO.,

337 Broadway, New York.

IMPORTERS AND MANUFACTURERS OF

GUNS, PISTOLS, POCKET CUTLERY, FISHING TACKLE, Etc., WHOLESALE AND RETAIL.

REDUCED PRICE LIST OF SPLIT BAMBOO RODS, WARRANTED THE BEST IN THE MARKET FOR THE PRICE.

Reduced Price List of SPLIT BAMBOO RODS, warranted the best in the market for the price.

Six-strip hexagonal, three-joint, extra tip and tip case	$18 00
Six-strip hexagonal, three-joint, extra tip and tip case, solid reel plate	25 00
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Also the following of LEONARD'S MAKE:	
Two-joint light fly rod, extra tip	17 00
Six-strip, three-joint, extra tip and case, waterproof ferrules and solid reel plate	30 00
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Russia-leather fly-book, with the "Hyde" clip, large size, each	5 00
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Best enameled waterproof fly lines	6c. to 10c. per yard
A large assortment of trout and black bass flies from	$1 to $2.50 per dozen
All kinds of Snelled Hooks tied to order. Also Flies dressed to any desired pattern.	
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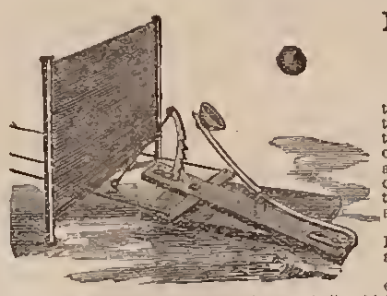

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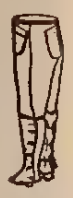

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Craige's Full-Length Fly Book

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No. 1 book, stiff cover, holding 1 gross flies,		$7 00
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Pocket Scale for Sportsman.

A very handsome article, entirely rust proof, being made of the best hard brass, heavily nickel-plated, only measures 3in. in length by ⅝in. in diameter, and of which the annexed cut is a true illustration. This balance scale has been designed especially as a useful and convenient pocket companion for sportsmen, for the purpose of weighing fish and game. Registers as high as 16 pounds, and graduated to 2 ounces by standard weights. Sent by mail, postpaid, on receipt of 75 cents.

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The Only Reliable Hook Made.

We challenge the world on black bass, salmon and trout. Impossible for the fish to cast this hook. Guaranteed not to break. Try them. Trout hooks Nos. 2, 3 and 4, Bass Nos. 5, 6 and 7, Salmon Nos. 8 and 9, sent by mail for 10c. each; 3 for 25c., 15 for $1, 50 for $2.75; assorted sizes, 100, $5. Trout flies, 75c.; salmon and bass, 50c.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, JUNE 20, 1878.

Volume 10.—No. 20. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

COPPERHEAD.

BESIDE our path and just ahead he lay,
The hated thing!
A base assassin in the sunny ray,
Coiled, waiting for a step to come his way,
To turn and spring!

The coppery blotches on his flattened head,
The leering eyes,
And forked tongue, create a sense of dread,
But treacherous silence in the path we tread—
That we despise,

Alert in ambush on his devious trail,
More human like,
The rattlesnake with crepitating tail,
To give the warning signal will not fail,
Though quick to strike.

But *T. Contortrix* is a different beast,
'Tis well to know;
He's ever watchful for a fight or feast;
Of warning sound he never gives the least
To friend or foe.

And there he lay, coiled, trembling in his rage,
A thing despised;
Grim murder couchant ready war to wage—
An enmity that time can ne'er assuage—
Hate symbolized!

'Mong vicious things we classed him with the worst,
And ere he fled
We taunted him as foe of man the first,
As foe of man by every man accursed,
And crushed his head!

—J. C. BURNETT.

For Forest and Stream and Rod and Gun.

The Nepigon.

WE found ourselves upon a very warm Thursday morning, late in July, speeding over the Northern Railway of Canada, *en route* for Collingwood, on the Georgian Bay, where the steamer Cumberland awaited us. Emerging from the heated, suffocating atmosphere of the cars, we landed on the Collingwood wharf at five o'clock, and met with a lively sense of relief—the sweep of the cool west wind that came fresh and strong from the Province of Kelwatin, across some hundred miles of cold, clear inland seas.

Shortly after six o'clock we got under weigh and steamed out into the rather vigorous play of waves on the open bay. We enjoyed the freshness and novelty of the situation until certain uncomfortable qualms reminded us of one of the greatest of the multitude of ills that humanity inherits. We retired to our berth before night had laid nature's counterpane over the forms of drowsy life.

The early dawn of Friday morning showed us in dim outline the ghastly shapes that stud the channel to the north of Manitoulin, which the increasing light caused us to think resembled pretty closely the charming scenery of the Thousand Islands. Upon one of the little islets, a dark granite rock covered with bright green foliage, we observed one of the singular rites or conditions of sepulture that accompany the setting out of a forest child for the happy hunting grounds. Within the sound of the everlasting murmur of the waters we discerned an Indian grave that seemed to contain the bones of some noted chief, and near it, formed of bark and brush, the small hut of the watcher, wherein sat an aged Indian—the living watched and waited on the dead. The Indian mission on the Grand Manitoulin Island was among the first missions established in Upper Canada for the conversion of the heathen Indians, and, although doubtless this man had dwelt in the light of the gospel for many years, the old traditions of his race were strong within his breast, and the mystery of the later faith had for him nothing of the strength of his simpler belief in the Manitou and a spirit-land where the conditions of life were free from the pain, the cold and hunger that he suffered here, but not utterly changed and beyond his realization. There was meaning for him in the running, shady brook, and the whisper of the forest trees, and the music of falling water was in his heart; but there was no meaning in the splendor of the heaven preached by missionaries. His buffalo, and fish, and fields of waving corn would interrupt the grand choruses of the angelic choir, and without these things no Indian could be happy.

We passed from the Sault Ste. Marie Canal out upon the calm waters of Superior on the evening of Saturday, and before sunset the air on deck became so cool that one after another of the passengers donned warmer wraps, and we who had so lately exerted our ingenuity to avoid heat were thankful to encompass our chilled bodies in all the top covering available. The stars came out looking bright and eager for a frolic in the clear depths above, and we Cumberland passengers, close huddled under the saloon awning, settled ourselves for a hearty chat, the nearest land far behind us in the gloom, the thudding push of the vessel alone disturbing the solemn tranquillity of the situation.

One of the passengers was an old-time H. B. *voyageur* whose stories were exceedingly interesting. In his early life he had made several voyages in charge of fur-laden canoes, freighted in the Far West, and bound for the ancient City of Montreal. Then all was solitude, rarely interrupted, from the Fort Range on the Red River to the St. Lawrence. Upon one occasion his canoe and freight were lost in crossing Black Bay (Lake Superior). He and his ten *voyageurs* were thrown upon the storm-beaten rocks near the mouth of the Black Sturgeon River. After four weeks of weary toil, half-starved and fainting, they reached a small post of the company only in time to avoid death. The night was passed in story telling.

In our three-days' companionship we had become tolerably well known to each other, and now that mutual study had diverted most of the interest from external finish, some of the few passengers began to long for the journey's end. For our own part we had just found our sea legs and would not have objected to accompany the steamer to Duluth. However, the captain informed us that we would reach the mouth of the Nepigon shortly after one o'clock on Monday morning. We shook off the hand of "habit" that bears so strongly upon bachelorhood, and, putting together our traps on Sunday evening, prepared to cut adrift.

At two o'clock in the morning the stoppage of the steamer and the hurried stamping and general excitement upon deck awoke us to the dim consciousness that we were to get up and dress. Obeying the impulse, and with only a half notion of the wherefore, we were soon shivering at the gangway, while the ship hands, seemingly in half delirium, furiously tossed our luggage into the boats alongside, cursing the while in the ordinary naval fashion. A surveying party in one boat and we, with their and our personal effects, in the other boat, were rowed away from the lighted ship into the fog and darkness of the morning. The discomfort of our condition was not lessened by discovering that our boat from long disuse was leaking sadly. After drawing out of the water some of the flour bags and sacks of bacon, and with much squeezing and gymnastic exercise, we succeeded in getting thoroughly soaked and out of temper, and, fortunately, in time managed to get command over the leak. The steamer dared not venture up the river on account of sand bars, so that we had a pull of about two miles to reach the wharf of the H. B. Co at the Red Rock landing, where we arrived after an hour's patient toil. The cry of a bittern, as he rose from the marsh and flew across our bow, alone disturbed our drowsy ascent of the river.

In the gray chill morning we stand upon the wharf shivering and even yet but half awake. Before us waved the mist-enshrouded river; the noise of the rapids above us sounds in our ears, together with the faint song of the boats' crews fast receding down the river. We try to realize that we are at last within the realms of adventure so graphically pictured by Washington Irving and Ballantyne, whose writings had strongly colored our young life's hope. We shiver with the raw morning air, and thankfully accept the invitation of the H. B. trader who leads the way into the company's store house. Here we occupy a couple of rough shakedowns, slumberously thank our benefactor, and fall asleep. The sun is some five hours high when we are awakened by a stir in the store below us. The daylight discovers to our consciousness a strange looking bed-chamber, the walls and rafters hung with the varied assortments of a general store. After a plunge in the icy waters of the river and a substantial breakfast at the trader's house, we pitch tent on the high ground looking toward the rapids and Lake Helen. The bright sunlight falls upon a beautiful scene this July morning, and with a deep sense of thankfulness and chest expansion we open our lungs to the fresh breeze and our hearts to the bounteous good, and set about putting our house in order. Some Indians and two half-breeds are lounging about, and the hearty voice of the porter, a fine, muscular half-breed, comes ringing up from the store in laugh or loud jest as he holds forth to his customers, some of whom we saw coming down the river from a far off post an hour or two before. They looked exceedingly picturesque as they careered, shouting and laughing, down the rapids, eight or nine of them in one of the large canoes. They were company servants, and were returning from Norway House where they had delivered a load of supplies. As they neared the landing we walked down to meet them. They came in swiftly and silently with rather a bravado of speed to impress the two strangers, probably. However, they apparently took not the slightest notice of us. The moment the canoe touched land it was lifted out of the water, tipped up to relieve it of leakage, and on the shoulders of four Indians carried lightly up the bank and deposited in the boat-house. It is extraordinary the weight these Indians will "pack" across portages. During the survey of the Canada Pacific Railway there were no less than seven deaths on one portage, the result of excessive straining.

Day after day we fished with almost unvarying success, but as we had no means of preserving our catch we were content to leave in the river all fish that we could not conveniently eat. Across the river from the H. B. store rise the perpendicular rocks that give the post its name, lying parallel with the river's course. They form a striking background in their dark solemnity shadowing the fresh green of the valley. It is a difficult undertaking to scale the bold front of the cliff; and for the pleasure of feeling the fresh breeze about three hundred feet above the water level we were incapacitated from exerting ourselves upon the following day.

The trout in the Nepigon range in weight from one-quarter to more than six pounds, and afford gentle exercise and excitement in introducing them to terra firma, especially if the water be rapid. Some distance up the River, trout are taken in great quantities by the Indians and with the most uncouth tackle; indeed, we were told that the common custom at the foot of some of the upper rapids was to attach a half-dozen bear hooks to a strong line and draw out from two to four fish at every cast. This is only at certain seasons. When the ice forms on the Bay at the mouth of the Nepigon many Indians with their families move down to the coast from the interior and catch through the ice salmon trout and white fish sufficient to keep them from starving during the winter. These, with rabbits and what they can buy from the H. B. store, form their food during the winter, with an occasional beaver and musk rat, and sometimes they are fortunate enough to shoot a cariboo or bear.

The rations of an Indian in the service of the H. B. Company are, three times a day, a double handful of flour, a small piece of pork, and occasionally a little tea and salt. They are not particular as to the latter article, and even when eating fresh meat do not grumble at its absence. Boiling the pork in a large kettle they mix flour and water into a thick paste which is then rolled into long strings of about an inch diameter, cut into three or six inch lengths, and boiled for twenty minutes with the pork. When all is cooked the contents of the pot are turned out upon a bed of balsam boughs, and with knife and fingers the *voyageurs* proceed to dine at their own sweet will, seated around the "pile." Not tempting, perhaps, still we have found ourselves able upon occasion to enjoy this rough meal. This should invest with fresh charm for the dyspeptic the pie crust that stomach-conscience has been driven to reject, through a perusal of Hall's "How to Live Long," or otherwise. No liquor is permitted to be sold to the Indians on the North Shore of Lake Superior, a regulation that is rigidly enforced. They are thus thrown upon their own resources to enjoy the æsthetic charm of intoxication, and they meet the necessity promptly with a horrible mess of chewing tobacco, R. R. R., or Perry Davis' Pain Killer, and water, a decoction that throws them into the seventh Heaven of delirium very speedily.

One evening at sundown, while enjoying our ease before the tent-door after a comfortable meal, we observed two canoes cross the river, each containing five or six squaws. The night was just of the temperature calculated to lend a charm to indolence, and to stir up in one's memory the shadows of songs and music that we love. Languidly we watched the strangely freighted *chemans* as the rapid strokes of the paddlers hurried them across the river. They entered the trees upon the low bank opposite, and were lost to sight. Dimly conscious that this was something unusual and outside our experience of the weaker vessel, European or American, to be thus moving in amicable concert unless for some very definite purpose, we smoked on and waited further developments. We had not long to wait, for almost immediately after their disappearance there came swelling across the water about as mournful a chant or dirge as it was ever our fortune to hear. Stronger and stronger grew the tones of the chant as the passion of the singers seemed to awaken, and now, full, passionate and mournful, into the growing night, sounded the voices in a melody that might almost have been the wail of the lonely Irish widow and her friends over the corpse of "Con, the Shaughran." In a half hour or thereabouts the canoes recrossed the river, the paddlers keeping up the while an alternate sobbing and wailing that positively seemed heart-breaking. We ascertained from one of the H. B. officials that the squaws had been lamenting the death of two children carried off by fever some days previous. Whatever the moving cause of this manifestation of grief, it was saddening to witness and had the effect of sending us to our blankets with the uncomfortable sensation that visible misery always inflicts upon the innocent beholder. We ventured no further up the river than to Lake Helen, where capital trolling may be had for pike and pickerel, etc. The expense of the trip and want of time alone deterred us from hiring a couple of Indians and exploring Lake Nepigon, rather more than forty miles from Red Rock. The lake is said to be beautiful; is dotted with innumerable islands, and from the depth and number of its bays is perplexing to the inexperienced navigators. The Indians about the Red Rock Post were, without exception almost, good natured, simple and honest, with a wonderful faith in the prowess of the white men, whom they look upon as magicians, possessing an extraordinary agency for good or evil. They can, with a few exceptions, be trusted implicitly. We were told that in 1872 a *cache* of provisions had been left in the woods bordering Long Lake, about sixty miles from Lake Nepigon, for the use of a surveying party who were expected to arrive at the *cache* some time in September, but for some reason failed to follow the route originally marked out. During the winter months the Indians in the neighborhood were unable to kill any game on account of the

great depth of snow, and were consequently in a state of starvation for nearly two months, subsisting on the scantiest gleaning, and yet, although destitute and dying, they refrained from touching a morsel of the food that lay hid under a mound of logs, moss and snow, in the midst of their fever-stricken lodges. The provisions were never removed, but allowed to mold and rot away the following summer.

None of these Indians speak English. Some of them have mastered the trading vocabulary of Franco-Indian that is used by the officers of the H. B., but which is as unintelligible as Chippewayan to the ordinary speaker of English. We would gladly have remained for a month longer on the beautiful Nepigon, but our leave expired early in August, and very reluctantly we bade adieu to the pleasant scene of our holiday, hoping at some future time to return with more time at our disposal. It was a cheap trip, and we felt amply reimbursed for the outlay in greatly improved spirits and health.

R. ANDERSON.

[For additional information of Nepigon River, see FOREST AND STREAM for Aug. 14 and 21, and Sept. 4, 1873. Also later files of the paper.—ED. F. & S.]

Fish Culture.

SHAD HATCHING.

WORK OF THE UNITED STATES FISH COMMISSION AT HAVRE DE GRACE.

QUITE near the head water of the Chesapeake Bay lies the little island of Spesutia, near to where the Susquehanna and Elk rivers empty into the bay. Some six miles from Spesutia is the town of Havre de Grace, in Maryland. Just there, at the narrows, in a quiet channel, are anchored the spacious barges which serve as the hatching houses, the dormitories and offices of the U. S. Commission. At the invitation of the Secretary of the Smithsonian Institution, the Hon. Spencer F. Baird, and of the Assistant Commissioner of Fisheries, Prof. J. W. Milner, a representative of this paper paid, one day last week, quite a lengthy visit to the hatching establishment. Now, theoretically, your writing fishculturist may be quite well informed, but really, practically, he may be said to know nothing at all. Such confessions are always the wiser to make at once. It is much better for one whose profession it is to write about what he sees, when in the presence of experts, to declare his utter ignorance, and beg for the most rudimentary information. The art of the journalist—carried somewhat to an extreme—is to bring into prominence—into the foreground, what he does know, and to expatiate on that alone, and with literary cunning to conceal his ignorance of what he does not know. Now, as fish culture in its grandest, most comprehensive plan is carried on near the island of Spesutia, it will be wiser for us to go as far as possible into careful details and tell plainly, in popular style, if you please, just what we did see, and to endeavor to explain as clearly as possible how it was all done.

We believe we are only giving to T. B. Ferguson, Esq., Fish Commissioner of Maryland, his due, when we state that with this gentleman first originated the idea of floating fish breeding establishments. Before Mr. Ferguson conceived the present plan, when spawn was taken it was carried, of course, to water near the shore, and those employed in the business were not in close connection with the hatcheries. Time was lost in transferring the fish eggs, and many inconveniences arose. The present method is to have floating houses on barges, where all the necessary apparatus is ready at hand. Here all the details of sending out parties for collecting the eggs, of hatching them, of distributing them, can be systematically carried on. The work, then, no longer straggles; there are no loose ends. Everything is directly under the supervision of the chief. Another most important point is that these fish hatcheries become mobile. The whole establishment can be moved at an hour's notice. Portions of this same fish hatching station were in North Carolina early this year and were removed to Maryland in May. If necessary, any fish which might be thought worthy of propagating can be first taken in extreme southern waters and followed up with the season to the North. It is this power of locomotion which is so valuable. This flying fish establishment then (we want to be serious and intend no jokes) has two steam launches attached to it. In the present case they may be too light to move all the barges, but their use is to take out parties to the fishermen who capture the shad, and to carry the fish to certain stations where there are railroad facilities. Starting, then, with these floating barges, another inspiration has come which, we trust, may be carried into positive practice. It is the natural sequence of these first attempts. Now, the question is this: Would it not be less expensive and much more convenient to have a single government vessel of convenient size, which could go where it wanted to, having on board of her all the apparatus for fish culture? As mechanical adjuncts now play a prominent part in fish culture, such a steam vessel would have her engines ready for such work. Such a plan has been proposed, and, doubtless, before long, the method first suggested by Major Ferguson on his own small steamer will be carried out in all its completeness.

The entire object of the United States Fish Commission being that of obtaining the largest number of ripe fish, the locality near Havre de Grace has been especially favorable for this purpose. About May the shad run up Chesapeake Bay, making into all the rivers emptying into it in order to spawn. In the neighborhood of Spesutia, where the Susquehanna and Elk rivers flow into the bay, the U. S. Hatching Station has been placed, only some mile or two from the best fishing grounds. In the afternoon innumerable gillers set out on their labors to get the best positions, in order to commence their netting some short time after sundown. Then there is bustle and work at the hatching house. A small steam launch is in readiness, and out she goes, dragging after her some seven or eight boats, the most of them having two men in them who are attached to the station. The object is to be on the ground just as soon as the fishermen cast their nets. In a long line, of some four miles or more, are the fishermen, observing a certain fixed distance between them, so that when their gilling nets are in the water they shall be far enough apart from one another so as not to foul. The steam launch nears them, the tow-rope is cast off, and away paddle the spawn-takers.

Now, as shad sell when plenty at fifteen to twenty cents a piece, it is quite an object to the fishermen to receive fifty cents from the assistant commissioner for a ripe female shad. A half a dollar is then the award for a gravid female, providing her eggs are in good order, but nothing is paid if she is not fruitful. The milt of the male is not paid for. Now, a fisherman may take from his nets quite a number of fine female fish, and not one of them may produce eggs exactly good for fertilizing. The eggs may be too hard, the fish will not strip, or the spawn may be in that peculiar condition which is called "rotten." As to the male shad, at certain seasons they are hard to procure, and are quite as much in demand for their fertilizing milt as are the eggs of the female.

Off, then, go the spawn gatherers, remaining in the neighborhood of the gillers. The launch occupies a position in the immediate neighborhood, ready to pick up the boats belonging to the station when they are all through with their work, or to start off on her own account to some group of gillers, which may be too distant for the boats of her own party to reach. There is no end of laudable rivalry in collecting the eggs, and the man or boat who can bring together the most good eggs is the hero of the night. The night is coming down now, fast on the bay. The gilling boats all lie in a long line, and, as yet, not one of them has put overboard his net. The fishermen are waiting for some one of their own party to begin. No one will take the initiative. At last, one boat, away off, far down the line, lowers carefully his lantern, for each end of the gill-net has a buoyed light to it, for otherwise at night they could not tell their own nets, and the light dances on the rippling waters of the bay. Then all follow his example, and, in a few minutes, at regular distances, a hundred soft lights are floating on the waves. The gill-net, a wall of meshes, as it were, maybe a hundred fathoms long, floated with corks, goes down with the stream, and the shad heading up stream from the channels, making for the flats, get caught in it. Now the gillers row up and down their line of nets, taking out the shad. The spawn-catchers make for the men who are tending their nets and secure the fish. In busy times, when the shad are running free, one boat will serve about four gilling boats. The cry all along the line is: "Got any spawners? I say, I want a mitter."

The spawn takers thus ply their labors in boarding the fishermen. But their labors do not end here. Just as soon as the ripe fish are procured the stripping must take place, and the milt must be had. One milter to three spawners may do for a pinch, but an abundance of the male fertilizing element, one for one, is the better. The manipulation of the eggs in the boat must be carefully attended to. Though it may storm and blow, and the rain may come pelting down, it is the eggs which must be cared for. Professor Milner has given us about the actual process. Having secured the milt, which is taken in an almost dry pan (the pans most in use being those which have a granite glazing), the spawn is introduced. At first it is a gentle mixture, with but a few tablespoonfuls of water added. This is allowed some twelve seconds of repose. Then more water is carefully added, taking always heed that the water shall not be poured with any violence on the eggs, as the concussion would kill them. This is done by placing the ladle on the side of the pan and letting the water flow gradually. Then there are some twenty to twenty-five minutes of quiet allowed. Now the water is decanted and fresh water is added. After a while a perceptible increase in the size of the egg is apparent. The egg swells about 9-20ths in size, or almost fifty per cent. If the eggs are felt carefully with the fingers when first introduced, before fertilization, they are scarcely perceptible to the touch; but when in contact with the spermatozoa of the male, as they are made fruitful, the eggs are granular and feel on the tips of the fingers like shot. This, in practical fish culture technology, is called "the rising" of the egg. The vitality of the spawn and milt under the abnormal condition of stripping, is both an interesting and important question. For practical purposes, the eggs are believed to retain their vitality for half an hour, the milt for some five minutes. Of course, when eggs and milt are within a dead fish—one recently captured—the time may be longer. It may be understood from this how active the spawn takers must be, not only in collecting, but in fertilizing their eggs. About 25,000 is a good yield of eggs from a ripe female, but 20,000 is an average. The milt, from what is called a good "squirter," is about two thirds of a drachm. One curious fact is that in the day time no good spawners can be had. They must be caught at night. Can this arise from the fact that the fish withholds its spawn or that it is not in proper condition in the day time? These questions, we believe, will be solved hereafter.

Holding off and on, the steam launch hovers in the neighborhood. After a while the lights on the nets, which have floated away down with the tide, are being clustered. Some two or three hours—perhaps all night—has been passed on the waters. Now the fishing is over, for the gillers are putting out their double lights, and having collected their harvest, are preparing for the run home. Now the launch sounds the whistle for the recall. The spawn takers answer the signal by flashing their lanterns, which are half red and half white. These they blaze all around the points of the compass. Here is one right on our bow, two on the port side, and the rest all scattered. The steam launch herself has been busy, and the Assistant Commissioner, who is on board of her, though the water is rough, has clambered into a half dozen boats and has stripped several shad, and has been fortunate enough to secure some fine spawners and milters. One by one the spawn tenders' boats have been picked up. A long line of tows is made, and away goes the little launch, doing her best, her screw swirling through the water, for the great shad nursery. It is pitch dark. The gleam of the lantern shows 11 o'clock when the narrow channel is threaded, and the steady puff-puff of the little engine on the hatching barge is heard. In a minute we are tied up fast. The boats are made secure, and the tired men, who have been rowing for three hours, emerge with their buckets and turn over the eggs to Mr. F. N. Clark, the expert, who is all ready to nurse the eggs and produce the fish.

The hatching barge has an engine which keeps on working a pump night and day, and she has also a mechanical attachment for a purpose we shall presently describe. Along both sides of the barge, under cover, are the cone-shaped hatching cans, due to Mr. Charles Bell and Mr. Fred Mather, an account of which was first given in the FOREST AND STREAM (See report of U. S. Fish Commissioners 1874-5, p. 372.) Briefly described, these are cones in which a steady flow of water enters at the apex below. The wider portion of the cone is protected with a rim of wire. This allows the overflow of the water to enter into a circular gutter and to pass off. In these cones the eggs are placed. An up movement of the eggs, a quiet and gradual one, caused by the upward flow of water, takes place, of not more than six or eight inches. The eggs are coming up all the time from the centre and falling, constant motion being necessary for the hatching of the shad eggs. There are seventeen of the hatching cones always going. On looking into these cones one sees most conspicuously the bad eggs, which are white, opaque and floconous, with a fungoid growth. A person ignorant of such things would imagine that the bad eggs were in majority, as the good eggs, perfectly sound and looking at first like transparent pearls or water bubbles, escape the eye. The bad eggs, being lighter and rising to the surface, are the more conspicuous. This is really not the case, as the good eggs, in much larger quantity, being rather hard to make out remain at the bottom and escape detection. All day and all night the water passes incessantly through the cones. The bad eggs are being constantly taken away by a net skimmer. The hatching of the eggs depends very much on the temperature. At 56 deg. fish appear from the ninth to the tenth day; at 64 deg. from the fifth to the sixth day; at 72 deg. from the third to the fourth day. When the fish break the shell and swim about with their sacs, Professor J. H. Rice gives their measurement to be ⅜ of an inch. The little fellows are wonderfully active and skip and dart about in all directions, the water being alive with them. To this hatching house, outside, protruding from the hull, are the levers to which the Ferguson hatching buckets are attached, a full description of which, with cuts of the apparatus, has been already placed before our readers. (See report of Commissioners of Maryland for 1878). The principle is that of making the movement of the eggs by means of the receptacle itself. By cams and levers the buckets of iron, protected at the bottom with gauze, are lifted up and lowered in the water. Under certain circumstances the Ferguson method could be used with marked advantage, and when, at the present station, the cones were full of eggs, the Ferguson buckets were employed with marked advantage. This apparatus marks a new method in fish culture, though it may be capable of further improvement. Though perfectly simple in construction, it might be liable to the objection of too great wear and tear on the buckets, and consequent loss of fish by accident. But the Bell and Mather cone is also capable of some amelioration, such as the automatic running off of the young fish as soon as hatched, which would prevent their being bruised by being drawn by the current of water against the wire rims. Such an improvement has been made at the U. S. hatching house. It is believed that the greatest benefit could be obtained by the use of glass instead of copper-lined cones, and it is quite likely that before long this change will be made. The real advantage will be that the whole process can be seen. The main point of excellence, putting aside ease in manipulation of the Ferguson jars, is that the transparent medium allows everything to be visible. It may be stated in very positive terms that the United States has developed no end of inventive skill in devising simple and cheap apparatus for fish hatching. We are inclined to give great prominence to the hatching cone due to Bell and Mather, as having produced the most remarkable results, though at the same time great credit must be given to Mr. Ferguson for the apparatus he has produced.

The capacity of each cone of hatching apparatus is some 150,000 eggs; of the Ferguson hatching buckets, some 100 000. After hatching, the young fish, when transported in quantity, will live some eleven or twelve days when due precaution is taken. After that time they die, probably from starvation. When in small quantity in an ample supply of water, their lives are considerably prolonged. This matter of transportation, thanks to Professor Milner, having been carefully studied, quantities of fish in cans for shipment are thus graduated: For short trips of only a few days, some 25,000 young fish can be put in the ordinary shipping can containing fifty gallons of water; for moderate distances, 16,000 fish; but for long trips, such as to California, only some 10,000 fish. The duties of the gentlemen attached to the commission do not consist alone in securing spawn, but in their distribution. The person who has been collecting eggs all night may be required to-morrow to take charge of a hundred thousand fish for Texas. Then two men have the little fish under their care, and may be said to wet nurse the fish during the whole trip, changing their water, guarding them from accident, until finally they give their foster fish their liberty in some far off stream which may find its way to the Pacific Ocean. The eggs this year collected near Havre de Grace have been something like 13,000,000, by far the largest collection of shad eggs ever made. In one day almost 2,000,000 were collected. The total hatch of fish has not yet been made up. In Pamlico Sound, this season, some 10,000,000 eggs were collected. The largest number of shad stripped in a single night was 97 females, which were fertilized by about as many males. Shipments have been made this season from Havre de Grace to Iowa, Texas, Arkansas, Louisiana, Georgia, South Carolina, Illinois, Indiana, Kentucky, Tennessee, Maryland, Virginia, Missouri, Ohio and Mississippi. This week the third shipment made by the government was sent to California under the charge of Mr. F. N. Clark.

To undertake this large work, by far the most important ever undertaken, quite a large *personnelle* is necessary. Under charge of their most thorough chief—Professor Milner—as many as forty men were at one time employed; at the conclusion of the season it was some thirty. It must be understood that there are parties being constantly detailed, who are traveling over the country distributing the fish as soon as they are hatched. While the practical work is going on, full opportunity is given to students who are desirous of making scientific research. Professor J. H. Rice, of the Hopkins University, whose microscopical work on the report of the Commissioners of Maryland on the smelt (1877) was of such interest, we found hard at work with his instruments, studying the wonderful embryology of the shad. Of course the fullest opportunities were afforded of examining the egg and fish in all its stages of development. From Mr. Rice we had the curious fact that monstrosity, so common in the trout, was exceedingly rare in shad, but one single case having ever been presented to his notice. It became interesting for us to form some idea of the growth of shad, comparing them with the growth of fowl. This data we thought would be advantageous if obtainable, in order to show that of all creatures the growth of fish was the most astounding. If such growth was comparatively expressed and well understood, we should suppose it would go far to allay popular impatience. People—stupid people we must say—might be better satisfied then in allowing fish to grow. Professor Rice, having weighed some fish just from the egg, comes to this conclusion: that while the difference between a chick just from the egg and a full grown pullet would be about in the proportion of 1 to 100, in a shad it would be 1 to 10,000; in other words, that a shad which would weigh one grain when free from the shell, when matured would probably have increased 10,000 times. It would be exceedingly curious to follow out some researches of this kind, and as Professor Rice has kindly promised to make some drafts of young shad for us, we trust to be able to present to our readers the actual results of his labors.

It may be positively asserted that there has been no work of any kind undertaken by the General Government which has yielded such remarkable results as that of the Fish Commission. The benefits obtained by the country have been very far beyond the small amount of money expended. Under the careful and systematic management of the Commissioner-in-Chief, Professor Spencer F. Baird, aided by such a zealous lieutenant as Professor Milner, work of the most thorough and comprehensive character has been accomplished. It has taken, then, but a very few years to create an entirely new science, and from speculative theory to have produced the most practical usefulness. The position held by the Fish Commission was fully recognized a few days ago by a visit paid by Mr. Hayes to the hatching works off Spesutia Island, where, for the first time in the history of the country, a President of the United States received explanations in practical shad hatching.

FISH CULTURE IN NEW HAMPSHIRE.—*Manchester, N. H., June* 1.—I sent you a month since a copy of our annual report to the G. W. Council, which was necessarily prepared before our work was entirely completed, in order to have it printed for the June session of the Legislature. Since then we have completed our labors for the year by planting 6,000 land locked salmon in Sunapee Lake; 4,000 in Star Pond, Springfield; 5,000 in Silver Lake, Madison, and 5,000 in Merry Meeting Pond, New Durham, and have also placed 5,000 blue backed trout (*Salmo oquapa*) in Sunapee Lake, and 25,000 in Lovewell's Pond, Wakefield, and the same number in Cook's Pond, Brookfield. The above are all natural trout waters, and we hope to get favorable results in due season. We have also prepared, with the aid of Commissioner Brackett, of Mass., plans for new fishways on his pattern at the two dams on the Nashua River in Nashua, to be followed up in Massachusetts by fishways at Pepperell and Groton, so that the young shad and salmon, which the Mass. Commissioners have planted in the headwaters of that river at Lancaster and Clinton, can return to their starting point. We have also matured a plan for a Brackett fishway at the Amoskeag Falls in this city, for which ground will be broken next week, of ample width and gentle slope to permit the ascent of shad as well as salmon. The latter fish have ascended the old Foster fishway last year in large numbers, but we have doubts of its practibility for shad. I saw a fine shad in the Laurence fishway on the 20th ult., two-thirds of the way up, in company with a number of alewives, bass and suckers, and an innumerable multitude of lamprey eels. We have reports to-day of a fine salmon, estimated at twenty pounds, seen four miles above here at the mouth of a once celebrated trout brook, now nearly depopulated. This fish was above all the dams with his way open to the Pemigiwasset, where we shall probably hear from him in due season. We are making good progress in excavation of the storage ponds at the State Hatchery at Livermore Falls, and preparing our nets, boats and lines to capture spawners by and by, and are accumulating a stock of trout for breeders. SAMUEL WEBBER.

AN EARLY RECOGNITION.—*Land and Water*, in its last number, acknowledges the receipt of a letter from our well-known fishculturist, whom it calls *Maitre*, which communication, as it is dated "Newark, N. J., Feb. 11," must have taken not quite three months to reach England. Possibly our much esteemed friend, Fred Mather, Esq., will keep on writing to *Land and Water*.

ILLINOIS—*Charleston, Coles Co., June* 12.—Fish Commissioner Haines put 75,000 shad, eight days old, into the Embarass River this morning, two and a quarter miles east of this city. Mr. Haines thinks shad will do well in this river because it is fed principally by springs. J. B. D.

MINNESOTA.—The State Fish Commissioners have put 5,000 brook trout in the head waters of the little Iowa river this pring. V. A. N.

APPRECIATIVE MISSISSIPPI.—*Vicksburgh, Miss., June* 8.—*Editor Forest and Stream:* Please return thanks to the Hon. Spencer F. Baird for the prompt manner in which he complied with our request in stocking some of the Southern streams with shad, notably, Yallowhusha, 120,000; Cold Water, 120,000; Sun Flower River, 120,000; total, 360,000 All placed nicely and in good condition. We also thank him for his promise to assist us in building and stocking a hatchhouse here for the propagation of California salmon this coming fall. MAROONER.

EELS IN MICHIGAN.—We venture to print the following extract from a private letter to the editor of this paper from Supt. Geo. H. Jerome of the Michigan Fisheries Commission:

"At present I am terribly busy in the labors and anxieties of our annual eel campaign, having already captured and removed into our State from the Hudson at Troy, in the neighborhood of 500,000. Our people will have eels—they are enthusiasts—yes, more; they are monomaniacal on the subject of their introduction into Michigan waters, and we have to humor the disorder. Whether it shall prove fitful or chronic I dare not prophesy."

Natural History.

PET SKUNKS.—There are few animals more beautiful than the skunk, although they are "very desaving," as the Irishman said when he attempted to pick one up in the road. But for one trait they would make pleasant pets. That there are immaculate skunks, our correspondent, who writes below, abundantly testifies:

A few months since the writer noticed at a herdsman's camp in Texas several skunks playing around the hut. "You needn't slope 'em, the're all doctored," gracefully explained my host. "How do you do that?" "We just take out two little sacks when they're pups," quoth he, taking up one and showing a minute cicatrice each side of the anus.

These inoxious skunks wandered around the camp foraging on whatever they could pick up, and repaying their protectors by consuming beetles, cockroaches and spiders without number, and, as the herdsmen said, keeping away all snakes. They made their nests in little holes in the corner of the hut, and lived in gentle amity with the dog, who seemed to regard them with disdain.

One was given to me and I brought it to New York in a basket nd turned it out in my back-yard, where it soon dug a hole and a covered way into the adjoining yard and drove away the cats from the neighborhood. At eventide it could be seen prowling about daily, picking up bugs and looking for bits of meat. When playful it would elevate its big flag-like tail and strut up and down the path with the manners of a black and white turkey cock. His favorite food was a fresh egg. If given to him whole he would carry it to the edge of the stone wall, and then taking it in his front feet, pound it on the stone until he had broken a hole in it, and then would put in his nose and eat the contents. Unfortunately about this time I read Col. Dodge's "Life on the Plains," and the numerous instances there given of hydrophobia following the bite of the skunk lead me to doubt my pet, although I handled him freely and he had never attempted to bite. I did not care to experiment further, and so presented him to the Aquarium, where he still leads a happy life. WHITEHEAD.

AN AMERICAN JURASSIC MAMMAL.—The first mammal ever found in American rocks of Jurassic age has just been described by Prof. Marsh in the *American Journal of Science* for June. The remains preserved include the greater portion of the right lower jaw, and one of the teeth is still in place in the socket. *Dryolestes priscus* was about the size of a weasel, and was apparently a marsupial allied to the existing opossums. The fossil was found in the Atlanto saurus beds of the Jurassic of the Rocky Mountains, and the associated fossils are mainly Dinosaurs.

ANOTHER KIRTLAND WARBLER.—Our correspondent, H. Ernst, writes us from Cleveland, Ohio, under date of May 4, saying:

"Last evening Mr. John Hall, of Rockport, near here, shot a fine male specimen of that rarest of rare warblers, the Kirtlands. This is the third instance, if I am not mistaken, of its having been taken in the United States."

CURIOUS, IF TRUE.—The Springfield (Mass.) *Union* of June 10, says:

"A most singular affair recently happened near Lynchburg, Va. As Col. A. H. Fulkerson was riding over his farm he was attacked by about one hundred swallows, who assailed him with great chattering and pecked away lustily at his face and clothing. He was at first amused at the puny assaults, but the wounds which they inflicted on his face and neck convinced him that he had nothing to laugh at, and he barely escaped with his life. It is feared that he will lose the sight of both eyes, and his nose is so badly mutilated that, in all probability, it will have to be amputated."

If the statements in this extract are true, the case is a most extraordinary one, and deserves investigation. Do any of our Virginia readers know anything about it?

MORE TESTIMONY ON THE OLD SUBJECT.—A correspondent who signs himself "Prairie," and who writes from the Creek Nation, Indian Territory, confirms by his experience what other Western contributors have so often asserted in these columns about deer burying their horns. "Prairie" has hunted deer in New Mexico, Colorado, Nebraska and the Nation, and had never heard of deer burying their horns until he read Mr. Cassel's letter in the columns of FOREST AND STREAM. Our correspondent believes that there is a wide difference in the time of shedding, and states that on the 11th of May last, when hunting cattle, he rode up in one day twenty-seven deer, two of which still carried full horns. We give the remainder of this interesting note in "Prairie's" own words:

MUSKOKEE, Indian T.

EDITOR FOREST AND STREAM:

Hunting is done here in the saddle. Deer are to be found in the prairie branches and sloughs, and seldom go to timber for cover, except in winter or when started from their range by the gun and dogs. Their horns are to be found on their grazing grounds, near their cover, where they come out at night to seek grasses along the spring branches. I have shot deer under a lamp at night, and having failed to kill my game outright, I went to the spot in the morning with my dogs and picked up a full head of horns, dropped by the sudden start of the animal by the discharge of the gun. I have also *seen deer drop their horns in the velvet*, and have been informed by old Indian hunters in the latter case they eat them; but I have yet to be convinced that they ever bury them. If any of your numerous readers wish to see deer horns, or enjoy a rare chase, let them come to the Indian Territory.

SPARROW AND STARLING.

CHICAGO, April 27, 1878.

DEAR EDITOR: I am glad to see that some of our naturalists can speak a word for the English sparrow, even though he may be a trifle pugnacious about equatter rights. When a boy, through a mistaken prejudice, I have robbed their nests, trapped them, and when old enough to carry my first gun, have shot them by scores. Some of the farmers gave us premiums for taking their eggs, while others gave us a good thrashing for our pains. This, combined with an occasional thrashing at home for torn pants, jackets and shirts, while shinning up trees for the nests, soon taught us that birds'-nesting was a losing game. At one time we made sparrows pretty scarce, so vigorous was the war we waged against them. I think it was the winter of 1856. A very mild one, and in early spring the gardens were overrun with snails, grubs and caterpillars, and every other squirming thing that attacks vegetables. What a time we boys had of it! It was snails and grubs from early morn until dewy eve. When not in school we were picking, picking, until we were nauseated, yet everything green was alive with these parasites. Cabbage, broccoli, garden turnips, asparagus, kale, cress, radishes, in fact everything green, was more or less eaten, while the strawberries were ruined. The currant bushes hung in festoons of caterpillar life, while the apple blossoms had been eaten off so early that the fine summer apple crop failed. Did not we boys curse our folly as day by day through that season we had to take our pan of salt and dose these "critters."

How we wished the sparrows had been let alone. I need not say it was not healthy for a boy to be seen hunting for sparrows' nests during that summer and the next spring. Since that time I have had many opportunities to see something of sparrow life, and though sometimes they would help themselves to the currants, yet oftener we would see them bringing grubs or young caterpillars from the trees.

I remember at one time our beautiful lawn was made unpleasant and unsightly by numbers of large worms continually casting up hills on it. It was fun to see a little cock-sparrow pounce down on these long worms and pull as for dear life, never giving up until he bore off the prize wriggling and squirming to a nest full of open mouths. I believe many other birds are more destructive to vegetation than the sparrow. The bullfinch—indeed all the finches—is destructive to all kinds of buds, while even the red-breast is a very scamp when cherries are ripe. That there is a great deal of antagonism between the sparrows and some other birds I never dispute; they will hold to their own and fight fiercely before giving up. But for fifteen years I have never knowingly shot a sparrow. I think them too useful to vent a little spite upon, and don't want to see them driven out because they are imported birds.

To correspondents from Texas: Get the starlings, by all means. They are handsome birds, and from personal knowledge I would say are useful, too; they are fond of insect life—worms, snails and grubs. I have seen a flock of fifty picking around the sheep and cows; have seen them industriously working through the thick wool on a sheep's back to pick out ticks, jumping from one sheep to another, while the sheep were quietly grazing; or lie on the cows you would find a starling on the back of every one in the pasture.

They are not pugnacious, but are very difficult to keep in confinement, because they are very wild; but if taken from a nest quite young can be tamed to stay around the house, coming to your call. My mother once raised one that had fallen out of the nest. Even after it had grown and mated and built its nest in the trees fronting the house, if mother was seen at the front door or on the lawn the bird would instantly jump for the topmost branch of the tree and send out its fine flute-like note of greeting. Mother had only to say, "Pretty Jack," when down he would dart, circling around her head, uttering short clear notes expressing his joy; but though he knew us all, to no one else would he act in this manner. Every returning spring would he thus greet mother, until one day some one shot him. He came to the old tree badly wounded, sat on the top twig, uttering short, piercing notes to call us out. When he sailed down on the grass mother picked him up, and in a few minutes he died in her hands. The bird was the handsomest starling I ever saw, and I have counted them by thousands. Mr. Editor, it may seem foolish, but it is a fact, that when "Pretty Jack" died we all felt we had lost something that had given us a great deal of pleasure in our daily life, even though he was only a handsome starling. Yours, respectfully, NORMAN.

THE MIGRATORY QUAIL AT HOME.

MALAGA, Spain, April 30, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

I have read with much interest several articles which have recently appeared in the FOREST AND STREAM respecting Migratory Quail, and thinking it might be acceptable to you to know something of them and their movements in this part of the world, I beg to offer you a little information. This bird is known here as the Codornix (Latin, *Tetrao coturnix*), and resembles the American quail very much, being, however, of a much lighter color, and only about one-half the size. Its habits are identical with those of the American quail, except as regards its semi-annual migrations. Its winter home is in northern Africa, in the plains south of the Atlas Mountains, whence it takes its departure in large bodies in the month of April, crossing over to Spain at points from Tarifa on the Atlantic coast to Cape St. Martin on the Mediterranean in the province of Alicante; and their flight occurs generally at night and near the time of the full moon. If the wind should be strong from either the west (Poniente) or from the east (Levante), at such time they seek the narrower points between Africa and Europe, near Gibraltar, to cross. They usually alight upon some hill or mountain, where they rest one day, when they again continue their journey *en masse* and in such a complete manner that the following day not one can be found. Their next resting place is on the northern slopes of the Sierra Morena Mountains, from whence they descend to the plains throughout Castile, Aragon and Estremadura, and scatter for breeding, and remain until the young birds are strong enough to bear the return journey to Africa in the months of September, October and November; but this is accomplished in smaller detachments than during their entrance into Spain. Stray birds may be found all the year, both in Spain and in Africa, but not in numbers sufficient for sport out of their regular season. They are hunted in this country with the old Spanish pointer (not one in a hundred, however, being guilty of any proper field training), are shot sitting, caught in traps and slaughtered ruthlessly in any manner possible by wretched pot-hunters who have no idea of what true, manly field sport is, and, as there are no game laws in Spain, were it not for the beneficence of an All-Wise Providence in causing these periodical migrations there would be no such thing as a game bird to be had in all this land for the invalid, or the epicure. Were it not that I fear I have exhausted your patience already I could give you some idea of the capital shooting, boar hunting, etc., to be had in Morocco, twenty to thirty miles from Gibraltar; but, *basta!* I will leave the pleasant theme, and if I have told you ought of interest I am pleased, and you can say with the poet, "That old man went back to his old wild and lived on grass and vanished, and his book came down to me."

Very truly yours, ORTYX.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING TUESDAY, JUNE 11.—Four ruffed grouse, *Bonasa umbellus*, born in garden; one white rabbit, *Lepus cuniculus var. albino*, presented; one spotted cavy, *Cœlogenys paca*, presented; one milk snake, *Coluber obsoletus conjinis*, presented; one mule deer, *Cervus macrotis*, born in garden.

A FREAK OF MEMORY—*Nashville, Tenn., June* 5.—A man living in this city received during the war a severe wound in the head which affected his mind. Upon a close examination by several surgeons, it was decided to perform an operation, with the hope of relieving the sufferer. As the case was a peculiar one, the operation was performed at the medical college before a class, the operator at the same time lecturing upon it. The poor fellow was not benefited, and since has been subject to violent attacks of pain and delirium. Last night, during one of these paroxysms and in the presence of one of the surgeons who assisted in the operation, strange to say, he repeated *verbatim* the lecture delivered at the time, although several years have elapsed. J. D. H.

This instance has many parallels in medical and psychological annals equally curious. We recall a well authenticated incident of an ignorant servant girl, in her delirium reciting *verbatim* whole pages of Greek and Latin, which she had casually overheard read aloud while she was sweeping in the mornings. From facts of this character it is argued that we never really forget anything.

FLY TIME.—The New Haven *Register* says:

The "Buck Fly" is the heading of an article in a sporting paper. We must confess that in all our experience with flies we have never been able to tell a buck fly from a doe.

The most favorable field for enlightenment is a cheap restaurant. Our friend with proper application will soon be able to recognize a dough fly when he sees it.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston	
	H.	M.	H.	M.	H.	M.
June 21	3	52	0	36		
June 22	4	44	1	18	0	26
June 23	5	32	1	59	1	11
June 24	6	22	2	42	1	59
June 25	7	14	3	34	2	53
June 26	8	06	4	29	3	47
June 27	8	57	5	25	4	43

YACHTING NEWS.

EMPIRE YACHT CLUB REGATTA.—The regatta of this club, June 18, proved unsuccessful on account of light winds, and will be sailed again. There were a large number of entries.

EASTERN NEWS.—*Boston, June* 15.—After trying for several days, the clerk of the weather finally succeeded in giving us one fine one throughout, and that was yesterday. The *Halcyon*, Mr. Brooks, has left for Swampscott, where she is to be this summer. *Fleur de Lys* came in last evening at about six o'clock; boats out to tow the last hundred yards; Mr. Boucicault and son on board. *Brenda*, Mr. Little, anchored off the flats, fitting for a short cruise to Provincetown. *Shadow* preparing for race on the 17th, and has a new set of sails, which, however, the owner, Mr. Bryant, is, I understand, not satisfied with. *Shadow* has always had a good record. Let us hope she will keep it up. *Narragansett, Thistle, Nautilus* and *Ianthe* are off Rowe's wharf. There is to be a rendezvous of the Eastern Club off Swampscott the 17th, and race at Marblehead, open to all, so that things look encouraging for flyers. The moonlight regatta off City Point is said to have been a great success, the bay being alive with small craft. The *Foam*, Com. Boardman, which has been lengthened, has not as yet put in an appearance in the harbor, though we are anxiously keeping our weather eye open to take in all her new wood, and hope it may be the improvement that is desired. CRUISER.

NAHASSETT YACHT CLUB.—This club, with headquarters in Boston waters, numbers forty-five members, and thirty-eight yachts. Their time table is reduced to the amount allowed by a yacht 111 feet long to those of less dimensions for one mile. The amount multiplied by the number of miles in the course, and subtracted from the total time occupied by each yacht gives the corrected times. This rule is very much more equitable than the hard and fast ones, which allow a fixed amount, irrespective of the relative sizes of different yachts, and apply the same allowance among small or large craft alike, and often also without regard to the length of the course.

HAVERHILL REGATTA—*Haverhill, June* 17.—The nineteenth regatta of the Haverhill Yacht Club was held this P. M., on the Merrimac over the club course—viz., from stakeboat anchored off the club house to buoy at Groveland Bridge and return. Distance, five miles. The wind was light from the south and west, very baffling, at times trying the patience of the skippers. During the race the yacht *Emma L.* twisted her rudder-post head off just after turning the first buoy, thus rendering her tiller useless, but quickly repaired the damage, by rigging tackle to the end of her rudder and steering with lines:

FIRST CLASS.

Yacht.	Owner.	Length Water Line.		Cor. Time.
Emma L.	Texbury & Heath	26	9	1 01 45
Lizzie Warner	W. F. Titcomb	24	9	1 12 52
Empress	J. E. Meadowcroft	21	9	1 18 34
SECOND CLASS.				
Liante May	A. L. Reed	19	4	1 13 22
Magic	L. H. Spaulding	19	4	1 21 34
Novice	J. E. Heath	19		1 32 51
THIRD CLASS.				
Sultana	W. Mark Ford	16	10	1 44 06
Phasma	J. W. Dow	17	7	1 53 46
Vixen	E. E. Brown	17	7	1 56 39
Vision	J. S. Collins	17	11	Not taken.

The prizes, which were in cash, were awarded to the first and second boats in each class.

A yacht club has recently been organized in New Market, N. H., called the "New Market Yacht Club." Their race course is in Gnat Bay, a most beautiful sheet of water, about six miles in length and four miles in width, with easy access to the ocean through Portsmouth Harbor. They have two catamarans in the club, which, report says, have made wonderful time over the club course. WEATHER HELM.

NEW YORK Y. C. REGATTA.—Thursday, June 13, had been designated for the annual race of the leading club of America, and, though almost unheralded, the goodly number of entries drew together a large fleet of yachts of all classes in the lower bay and a number of steamers, which went over the course. The morning broke overcast, with a fine breeze from the westward, which died out, however, before the gun fire, and left the boats becalmed. *Rambler, Vision* and others had to be towed to windward of the line, and finally a start was effected. *Active* was inshore, to leeward, with her red-capped crew at work stowing her balloon jib and her club and jib header aloft. *Christine* next, looking handsome since her lengthening, her pot-leaded sides glistening in the sun and looking like business. Among the schooners, *Rambler* was first to cross the line, with *Nettie* and *Restless* close together, about 4m astern. *Estelle, Peerless* and *Clytie* some time behind, the latter being the last of the fleet to get away. Light sails were whiskered out on the sloops, and the schooners were wing and wing, or had their booms to starboard. The wind almost completely died away, and the whole affair turned into a mere drifting match, in which slants and est'a-paws did unequal work among the fleet, so that any detailed account of the tedious drift down to the spit buoy would be without object. The catamaran *Nereid*, against which several protests had been lodged, dropped astern and kept *Rambler* company until near the buoy, where she crept up well on the leading schooners, and managed to round the hook among the first. *Rambler* did not show to any advantage, but it could hardly be expected that so large a craft would be able to hold her own with the smaller ones in such weather. *Clytie*, on the contrary, had more than made good her late start, for she had overhauled the ruck, and when the Hook was reached, she was third among the schooners, with *Peerless* and *Tidal Wave* a quarter of a mile ahead. What little there had been in the way of occasional cats-paws now died out completely, and it became evident that the course could not be made in the prescribed time, so *Tidal Wave* hailed the judges' boat and signified her wish to put about for home. At this point *Peerless* was leading, with the smart *Regina* close aboard, *Active, Christine, Vixen, Vision, Tidal Wave, Clytie, Estelle* and *Nereid*, with the ruck inside the Hook nipped by the strong flood tide and unable to make way against it. The fleet had hardly headed for home when a squall from the westward struck the boats, and after landing light sails, gave them something to run home with. The judges decided that the race should be sailed over again the next day, Friday, June 14.

Twelve of the thirteen boats entered the day previous were ready when the first gun gave them warning to prepare. To several yachts, including *Estelle, Clytie* and *Nettie*, much praise is due to the spirited manner in which they took hold of the second day's sport, as their crews were hard worked the night before trying to get to the line in season. The course was the usual one of the club, and the prizes and Bennett Challenge Cup have been noticed in the columns of another issue. The regatta committee lost no time in getting the vessels away with the first of a nice southerly breeze, which sprung up in the nick of time.

KEEL SCHOONERS.

Name.	Owner.	Cubic Contents. Feet.	—Allowances— Class Prizes. M. S.	Challenge Prizes. M. S.	Start. H. M. S.
Restless	Com Kane	8,029	Allows	8 55	11 47 38
Nettie	F. P. Osborn	5,518	1 45	10 21	11 54 17
CENTREBOARD SCHOONERS—FIRST CLASS.					
Tidal Wave	Daniel Cook	9,175	Allows	Allows	11 55 00
Clytie	W. L. Brooks	7,100	4 49	4 42	11 48 00
CENTREBOARD SCHOONERS—SECOND CLASS.					
Estelle	J. D. Smith	5,795	Allows	10 21	11 50 40
Peerless	J. R. Maxwell	3,843	10 52	20 41	11 53 40
Nereid	A. D. Stokes	7,183	26 50	36 40	11 53 00
SLOOPS—FIRST CLASS.					
Vision	R. Com Alexandre	3,922	....	Allows	11 50 17
SLOOPS—SECOND CLASS.					
Active	F. W. J. Hurst	1,903	Allows	12 35	11 55 00
Regina	W. A. W. Stewart	1,875	21	19 55	11 50 00
Vixen	F. C. Lawrence	1,818	1 04	20 29	11 51 05
Christine	F. T. Brown	1,732	2 06	21 41	11 51 05

Both schooners and sloops, in their respective classes, sailed for the challenge prizes without classification.

The Commodore's schooner led across with working topsails and the usual cruising complement only. The other schooners had main clubs set, the sloops their clubs and jib topsails. From the time of passing the line it will be seen that *Tidal Wave* was handicapped 45s., *Nereid* 2m., and unfortunate *Active* 3m. 32s. The wind was still light, and *Active* got caught in the tide while in stays, and there hung "in irons" for some time. *Christine, Active, Nereid* and *Nettie* stood across to the Long Island shore on the starboard tack, the rest of the fleet hugging the Staten Island side. *Regina*, who had shown of what smart stuff she and her crew were made of the day before, again took the lead among the sloops, while *Clytie* proved that Boss Ketchum knew what he was about when he gave her that long floor and easy swell forward. *Vixen* and *Peerless* did wonders, the sloop evidently being in something like her old form when in the hands of Mr. Livingston, and as for *Peerless*, her splendid record this season will not likely be eclipsed by that of any craft of her size. The way she has been disposing of *Estelle* wherever the two have met is something to be proud of. *Vixen* weathered on *Regina*, blanketed her and went to the fore. The fleet stood over toward the Coney Island shore, and with a long leg stood for the Spindle Buoy, *Active* having done well in making up for a bad start. The Commodore's schooner, too, with ordinary canvas and crew, was showing a noted racing craft the way, much to the surprise of many, a fact which goes far to prove that a good, honest and reliable boat is not a thing to be despised, but may even show some of the machines how to do the very work they were built for. *Peerless* weathered on *Clytie*, and the fleet turned the buoy in the following order:

	H.	M.	S.		H.	M.	S.
Vixen	1	27	40	Restless	1	45	54
Regina	1	30	48	Active	1	46	20
Christine	1	35	47	Tidal Wave	1	50	35
Peerless	1	36	35	Estelle	1	52	30
Vision	1	38	23	Nereid	2	01	00
Clytie	1	45	20	Nettie	2	19	30

The run up the Hook was close hauled, the wind having come out from S. S. W., and pretty fresh at that. *Vixen* led the ruck a lively dance with pretty *Regina* a mile astern, the rest maintained their relative positions, and the Light Ship was rounded as under:

	H.	M.	S.		H.	M.	S.
Vixen	2	49	46	Tidal Wave	3	06	46
Regina	2	59	30	Active	3	12	34
Peerless	2	59	51	Restless	3	15	03
Vision	3	02	32	Estelle	3	20	53
Christine	3	02	47	Nereid	Not timed		
Clytie	3	04	31	Nettie	Not timed		

Clytie seemed to want more wind, for that she is a speedy one will not be questioned, but she failed to close the gap between herself and *Peerless* in the rougher water outside as had been expected. Kites were set by all hands on the run home excepting orthodox *Restless*, who had it pretty much her own way in her class anyhow. *Tidal Wave*, in the reach, showed the worth of a steamboat bow and went through the water in fine style with as little fuss as a Harlem boat. She dropped *Clytie*, with a fuller bow, as we had predicted of the latter in these columns. *Vixen* led round the spit again, with *Peerless* a mile in her wake, and *Tidal* half a mile astern of the pride of the Atlantic Club. *Regina* a good fourth, with *Clytie* close aboard, *Vision* and *Christine* a minute apart, and the rest pretty much out of the hunt. Owing to the last of the ebb still setting, the ruck caught up somewhat on the reach up to the narrows, and the leaders were bunched pretty well. The judges made their final report as under:

KEEL SCHOONERS.

Name.	Start. H. M. S.	Finish H. M. S.	Elapsed Time. H. M. S.	Corrected Time. H. M. S.
Restless	11 47 38	5 24 26	5 36 48	5 36 48
Nettie	11 54 17	Not timed.		
CENTREBOARD SCHOONERS—FIRST CLASS.				
Tidal Wave	11 55 00	5 08 43	5 13 43	5 13 43
Clytie	11 48 00	5 07 51	5 19 51	5 15 02
CENTREBOARD SCHOONERS—SECOND CLASS.				
Estelle	11 50 40	5 24 15	5 33 35	5 33 35
Peerless	11 53 40	5 02 11	5 08 31	4 57 39
Nereid	11 55 00	Not timed.		
SLOOPS—FIRST CLASS.				
Vision	11 50 17	5 08 13	5 17 56	5 17 56
SLOOPS—SECOND CLASS.				
Active	11 55 00	5 11 05	5 16 06	5 16 06
Regina	11 50 00	5 09 21	5 19 21	5 19 00
Vixen	11 51 05	4 59 47	5 08 42	5 07 38
Christine	11 51 05	5 10 26	5 19 21	5 17 15
BENNETT CHALLENGE PRIZES—SCHOONERS.				
Tidal Wave	11 55 00	5 08 43	5 13 46	5 13 48
Clytie	11 48 00	5 07 51	5 19 51	5 15 02
Restless	11 47 38	5 24 26	5 36 48	5 28 13
Estelle	11 50 40	5 24 15	5 33 35	5 23 45
Nettie	11 54 17	Not timed.		
Peerless	11 53 40	5 02 11	5 08 21	4 47 49
Nereid	11 55 00	Not timed		
SLOOPS.				
Vision	11 50 17	5 08 13	5 17 56	5 17 56
Active	11 55 00	5 11 08	5 16 08	5 55 31
Regina	11 50 00	5 09 21	5 19 21	4 50 25
Vixen	11 51 05	4 59 47	5 08 42	4 48 03
Christine	11 51 05	5 10 26	5 19 21	4 57 49

Restless takes the prize for keel schooners, and *Tidal Wave* for first class centreboards. *Peerless* for second class centreboards, and also the Bennett Challenge Prize for schooners. *Vision* had a "walk over" in her class, and *Vixen* takes the prize for second class sloops as well as the Bennet Challenge Prize for sloops.

ATLANTIC YACHT CLUB REGATTA.—Owing to the vascillating wind, the annual match of the enterprising Atlantic Club, Monday, June 17, turned out only partially successful. There was a fine lot of entries, including such noted windjammers as *Undine* and *Orion* among the first class sloops, and the famous *Peerless* in the schooners, while *Kaiser* and *Lizzie L.* promised to make an interesting time among the smaller ones. The *Cyclops*, with the judges, and the *Americus*, with the guests, went over the course with the fleet. Not until noon could the yachts be got into position, and, with a light, southerly breeze, they were sent across the line as follows:

Name.	H. M. S.	Name.	H. M. S.
Orio	11 59 30	Kaiser	12 08 45
Dolphin	12 00 30	Stella	12 03 00
Sadie	12 00 40	Genia	12 11 15
Undine	12 01 10	Nomad	12 12 00
Triton	12 02 00	Hope	12 12 20
Peerless	12 04 45	Nimbus	12 12 45
Lizzie L.	12 07 00	Imperia	12 13 30
Intrepid	12 07 45	Mab	12 15 00
Alma	12 08 20		

The courses for the different classes have been given in a previous number of FOREST AND STREAM. Schooners were to go around the spit and light-ship, likewise the first class sloops. Second class sloops round the spit and Gedney Channel buoy, and the third class sloops only round the southwest spit and return. *Triton* led off in the schooners, and, as expected, *Orion* and *Undine* had a luffing match, in which Mr. Cooper's famous wind-squeezer came out second best. *Undine* then picked up her accustomed place ahead of the entire fleet, big or little, and did some fine work in screwing out to windward as long as the breeze lasted. *Peerless* weathered *Triton* off Coney Island, when the wind suddenly chopped round and reversed positions. *Kaiser* led her class as long as the wind held out, when the race resolved itself into a drift, with the lee tide to help them along to the spit. The Spindle Buoy was fetched as under.

Name.	H. M. S.	Name.	H. M. S.
Undine	2 23 15	Sadie	2 33 30
Triton	2 24 45	Stella	2 37 00
Orion	2 25 15	Kaiser	2 43 00
Peerless	2 25 20	Hope	2 46 30
Dolphin	2 26 15	Nomad	2 50 15
Lizzie L.	2 28 18	Genia	2 50 30
Imperia	2 30 00	Alma	2 51 30
Intrepid	2 30 45	Mab	2 51 30
Nimbus	2 33 00		

The smallest class here put for home, while *Lizzie L.* led the way in hers to the Gedney, tacking round the same, while *Imperia*, at some risk to her sticks, jibbed over, thereby gaining materially. *Lizzie L.* at 3:20; *Imperia*, 3:23; and *Stella*, 3:28. The rest distanced. On the run to the light-ship, with the wind S. S. E., *Orion's* fine lines began to tell, and she dropped *Undine*, while *Peerless* obtained and held the lead of the fleet. The ship was rounded as follows:

Name.	H. M. S.	Name.	H. M. S.
Peerless	3 48 30	Triton	3 55 00
Orion	3 50 00	Dolphin	4 00 00
Undine	3 51 30	Sadie	4 05 00

With sheets eased, balloons were in order, the schooners setting club topsails, main-topmast staysails and jib-topsails, and the sloops their ballon-jibtopsails. Both *Undine* and *Orion* got in a snarl doing this. *Undine* got hers under the bows and had to round to before she could hand it, and in so doing sprung her topmost above the cap and snapped it off short after the sail had finally been set. The fickle breeze died away entirely when the yachts reached abreast of the Romer and the ruck closed the gap, bringing the tail end of the breeze outside with them. Finally, after some tedious drifting, the flood tide began to make and brought in all bands, the slowest craft in the van and the fastest in the rear:

Name.	Start. H. M. S.	Finish H. M. S.	Elapsed time. H. M. S.	Corected time. H. M. S.
Peerless	12 04 45	8 01 00	7 56 15	7 56 15
Triton	12 02 00	7 56 00	7 54 00	7 48 54
Sloops—Class C.				
Undine	12 01 10	8 17 45	8 16 35	8 16 35
Orion	11 59 30	8 09 30	8 50 00	8 09 10
Sadie	12 00 40	8 23 00	8 22 20	8 18 54
Dolphin	12 00 30	8 12 30	8 12 00	8 08 32
Sloops—Class D.				
Imperia	12 13 30	6 34 50	6 21 20	6 21 20
Kaiser	12 08 45	6 51 30	6 42 45	6 39 49
Lizzie L.	12 07 00	7 33 40	7 26 40	7 22 50
Genia	12 11 15	7 37 30	7 25 15	7 21 45
Hope	12 12 20	7 20 30	7 08 10	7 01 04
Stella	12 09 00	6 42 20	6 40 20	6 31 28
Sloops—Class E.				
Nimbus	12 12 45	5 21 42	5 08 09	5 02 04
Alma	12 08 30	6 03 10	5 54 40	5 42 43
Intrepid	12 07 45	5 15 05	5 07 20	5 05 18
Nomad	12 12 00	5 46 14	5 34 14	5 27 18
Mab	12 15 00	6 25 30	6 10 30	5 56 00

Thus the *Triton* wins the schooner prize; the *Dolphin* wins the first-class sloop prize; the *Imperia* wins the class sloop prize, also the Livingston Memorial prize as the first sloop in of her class; the *Intrepid* wins the third-class sloop prize.

GREAT DAY WITH THE CORINTHIANS.—Under the auspices of the Seawanhaka Yacht Club, the Corinthian race of Saturday, June 15, proved an undeniable success. In fact, so far as results to be deduced from regattas are concerned, the race was more eventful and pregnant with suggestions than any other of the season. That the interest in yachting of the genuine sort is not by any means on the wane was amply proven by the large number of volunteers that came to the line, more yachts having entered than for any similar event previously, and all but one putting in an appearance in good time. The rules under which the match was sailed have been published in a previous issue, and it will suffice to say that all the crews were composed of amateur sailors, and the yachts steered and handled by their owners. The morning broke calm, and hardly a breath of air was stirring at two bells in the forenoon watch; but fortunately a favoring ebb brought the craft together off Stapleton from the various anchorages where they had come to for the night. The club steamer *Americus*, with the regatta committee on board, went over the course and timed the yachts. It is but just to give a word of praise to the gentlemen composing the committee—Messrs. M. Roosevelt Schuyler, James H. Elliott and C. Wyllys Betts—for the admirable manner in which they conducted the whole affair, and the regard shown by them to the

claims of the smallest yachts in the fleet. The steamer was invariably kept to leeward of the vessels in the race, and when once the *Petrel* was brought slightly under the steamer's lee, the latter was hacked to clear her wind. Old Proh. himself seemed to look with high favor upon the Corinthian tars, and by the time all hands were ready for the start, sent them a nice breeze from S. S. E., which soon increased to a wholesale wind, and finished up the day with a brisk blow and a lumpy sea, about all that the smaller craft had hargained for. The entries and crews of each vessel were as below, the *Eddy*, schooner, being the only one which failed to put in an appearance:

SCHOONERS.

Estelle, Captain J. D. Smith, with Mr. W. H. Scott as chief officer, and W. D. Smith, A. H. Smith, "Jack" Oddie, B. Foulke, E. Brown. A. A. Drake, John Meday, A. R. Whiting and Chas. Thompson as crew. Her area is 1,881.60 square feet; her allowance of time 1m. 29s. minus.

Peerless, Captain J. Roger Maxwell; J. H. Divron as chief officer and W. D. Steele, W. T. Lawrence, H. Earle, G. Mann, R. C. Field, C. Leland, A. Farrington, W. H. H. Beebe, H. S. Washburne, S. Barton, R. S. Church and R. T. Timpson as crew. Her area is 1,331.64 feet; her allowance of time 9m. 54s. minus.

SECOND CLASS SLOOPS.

Active, Captain F. W. J. Hurst, with E. E. Chase as chief officer, and J. Van Buskirk, W. L. Catlin, C. H Meigs, H. G. Asten, M. Nicoll, S. Griswold, S. Wood, Jr., L. Gladwin, W. Weston, Langdon Ward and Governeur Kortright as crew. Her area is 870.37 feet; her allowance, 19m. 48s. minus.

Imperia, Captain C. T. Pierce, with George W. Moffat as chief officer, and F. T. Peet, E. B. Clarke, Maxwell Wrigley, Frank Williams, E. M. Haydock, P. M. Brasher, W. M. Tileston, Thomas L. Arnold and Percy Meeker as crew. Her area is 652 34 feet, with 26m. 32s. allowance minus.

Regina, Captain Wm. A. W. Stewart, with J. F. Tams as chief officer, and William Foulke, Frederick De P. Foster, Periere Meigs, E. Roosevelt, Thomas S. Young, Jr., Wm. G. Didrickson, G. A. Irving and Howard Mitchell as crew. Her area is 780.2; her allowance 22m. 32s. minus.

Schemer, Captain C. S. Lee, with A. B. Alley as chief officer, and W. S. Alley, A. P. Montaut, R. C. Cornell, Philip Timpson, A. Simmons, H. Blood, Jr., and F. L. Blood as crew. Her area is 551.87; her allowance 30m. 25s. minus.

Wave, Captain E. B. Underhill, with R. M. Munroe as chief officer, and M. Tynan, Morris Betts, Geo. W. Clark, Wm. T. Jacobs, James Millon, Harry Bailey, John O'Neil and James King as crew. Her area is 581 74; her allowance, 28m. 19s. minus.

Undine, Captain Henry Bryant, with G. E. Cromwell as chief officer, and C. G. Peters, E. M. Cook, Chas. Leland and J. C Davidson, T. A. Bronson and G. L. Rives as crew. Her area is 889.73; her allowance, 19m. 9s.

THIRD-CLASS SLOOPS.

Blanche, Captain C. H. Grundy, with Francis Scott as chief officer, and E. G. Lentilhon, T. H. Pratt, E. S. Pratt, L. G. Henderson, M. Campbell and J. Proudfit as crew. Her area is 544.95 feet; her allowance, 30m. 46s. minus.

Dudley, Captain J. W. Russell, with A. W. Russell as chief officer, and B. R. Hamilton, H. L. Morris, Wm. Remsen, W. T. Talboys, M. Mitchell, R. Rutherford and D. Henry as crew. Her area is 549.36 feet, with an allowance of 30m. 41s. minus.

Midge, Captain W. E. Iselin, with Giraud Foster, Alfred Roosevelt, Herman L. E. Emmet, R. W. Emmet and Daniel Lord, Jr., as crew. Her area is 308.47 feet; her allowance 47m. 53s. minus.

Petrel, Captain J. Hpslop, with C. B. Kunhardt as chief officer and W. H. Simons and Richard Ogden as crew. Her area is 240 feet; her allowance, 56m. 20s. minus.

Volante, Captain I. Hitchcock, with Robert Centre as chief officer and J. E. Roosevelt, J. Grenville Kane and F. R. Hitchcock as crew. Her area is 509.5 feet; her allowance, 32m. 25s. minus.

At 11h. 55m. the gun for the start was given from the *Americus*, when the fleet made for the line and crossed in the following order: *Undine* at 11h. 55m. 49s., followed by the *Estelle* at 11h. 56m. 25s.; the *Petrel*, at 11h. 56m. 50s.; *Wave*, 11h. 57m. 15s; *Schemer*, 11h. 57m. 39s.; *Regina*, 11h. 58m. 14s.; *Active*, 11h. 58m. 34s; *Imperial*, 11h. 59m. 31s.; *Dudley*, 12h. 0m. 2s.; *Peerless*, 12h. 0m. 45s.; *Midge*, 12h. 1m. 23s.; *Volante*, 12h. 2m. 18s; and *Blanche* at 12h. 2m. 49s. The tide was about half ebb, and all crossed on the port tack heading toward Dix's Island. *Volante*, having crossed the line high up to windward, made a short tack to the northeast, and then laid a course for Hoffman Island, while *Undine*, *Petrel* and *Active* followed up the main channel in short boards in order to benefit by the tide as much as possible. The rest of the fleet went about and stood into Gravesend Bay with the wind to starboard, and after several boards trimmed in for Buoy No. 10. *Undine* went to windward in a style that was remarkable even for such a well known windjammer as she. Rather ungainly and unlikely in outward appearance, she caused a flutter among the Corinthians who knew her record, when her racing flag appeared in the lower bay with Mr. G. E. Cromwell to toot her. Apparently she looked a quarter point higher than any other sloop in the fleet, and with well sitting sails she soon eat out to windward of the lot, and below Hoffman Island led by a long stretch. The yachts that had stood to the northward at the outset got the first of the freshening breeze, and upon nearing the spit buoy were found to have profited by their manœuvre. *Volante* had been doing wonders in the meantime and was certainly in exceedingly fine form, for we have never seen her do so well before. Her canvas set like the proverbial board, and, as for appearances, she was decidedly the smartest looking craft in the race. She outsailed all of her class, and was handled in a masterly manner by Mr. Centre, well known as the designer of both *Vindex* and *Volante*. The same can be said of *Peerless*. This schooner was not only well managed throughout by her amateur crew, but must have been in good shape this year, or else there is something wrong with *Estelle*, for the latter did not certainly come up to expectations or her past record. To us she seemed a little too deep in the water, and as though she would do better if lightened up an inch or so. Though *Peerless* went across the line four minutes astern of Mr. Smith's schooner, she outwinded her and outran her by some seven minutes when the spit was reached. Buoy No. 10 was rounded as under:

Name.	H.	M.	S.	Name.	H.	M.	S.
Undine	1	09	30	Estelle	1	17	56
Wave	1	13	14	Volante	1	20	04
Peerless	1	14	23	Dudley	1	25	08
Regina	1	14	50	Petrel	1	29	34
Imperia	1	15	29	Midge	1	30	31
Schemer	1	15	43	Blanche	1	32	38
Active	1	16	24				

The sailing of *Volante* and *Petrel* calls for more than passing notice. Both of these are of the modified cutter type, of large displacement and comparatively narrow, the former having a length of 42ft. on load line, with 12ft. beam, and the latter 28ft. with 8ft. beam. *Volante* out-sailed everything in her class, including *Blanche* and *Dudley*, both of which measured larger, while the sailing of the little *Petrel* must be considered even more remarkable, for she led the *Midge* and *Blanche* the entire stretch to the Spit by a long distance, and fairly out-weathered them. The latter two somewhat closed the gap just before rounding the buoy on account of *Petrel's* running out of the breeze for a minute or two. When clear of the Hook Mr. Hyslop's little cutter sprung her masthead, and her topsail had to be doused and the boat put off her course, enabling *Midge* and *Blanche*, boats twice her size, to run up even. Finally, when it was discovered that *Petrel's* masthead would go by the board if kept at it, she was put off and run inside to examine damages. Had it not been for this accident she would have given some of her big sisters a bad beating, as she was doing splendidly in the seas, taking them as easily and dry as can be imagined. The doings of both *Volante* and *Petrel*, with craft much beyond their size, points a moral, and will go far to convince the skeptical of the value of a narrow model and lead on the keel in a seaway. Somehow *Estelle* did not seem to improve in the rougher water off shore, for *Peerless* continued to increase her lead. The lightship was rounded as follows:

Name.	H.	M.	S.	Name.	H.	M.	S.
Undine	2	14	30	Estelle	2	29	01
Peerless	2	18	30	Imperia	2	33	16
Active	2	24	34	Volante	2	36	06
Regina	2	17	10	Dudley	2	51	39
Wave	2	27	51	Blanche	2	57	54
Schemer	2	28	10	Midge	3	03	30

On the run home they had the wind free, and jib topsails and such kites as the rules allowed were set. *Regina* carried away her stick aloft, but fished in the wreck, keeping her topsail aloft in a bag to catch what wind it would. *Wave's* steering wheel gave way, and she flew up into the wind. Her mainsail was lowered and a temporary steering gear rigged with spare gear, when, with her peak dropped, she was again put upon her course, coming home through the Swash without rounding the spit buoy. *Active* snapped her booming-out pole and lost the use of her jib in the run home from the buoy. *Peerless*, with her boom over the starboard quarter, continued to increase her lead, and went over the line between the club steamer and Fort Wadsworth, a winner in fine style, having beaten *Estelle* by over twenty minutes. The results of the day's race are appended:

	Start. H. M. S.	Finish. H. M. S.	Elapsed Time. H. M. S.	Corrected Time. H. M. S.
Peerless	11 60 45	4 10 31	4 09 46	3 59 52
Estelle	11 56 25	4 18 43	4 22 18	4 20 49
SECOND CLASS SLOOPS.				
Undine	11 55 49	4 16 29	4 20 40	4 01 31
Active	11 58 34	4 23 58	4 25 24	4 05 36
Schemer	11 57 39	4 35 54	4 38 15	4 07 50
Imperia	11 59 31	4 42 18	4 42 45	4 16 13
Wave	11 57 15	Disabled.		
Regina	11 58 14	Disabled.		
THIRD CLASS SLOOPS.				
Volante	12 02 18	4 53 31	4 51 13	4 18 48
Dudley	12 00 02	5 04 51	5 04 49	4 34 03
Midge	12 01 23	Not timed.		
Blanche	12 02 49	5 18 46	5 15 57	4 46 11
Petrel	11 56 50	Disabled.		

Peerless takes the prize for schooners, *Undine* that for the second class sloops, having been pretty closely pushed at times by *Active*, and *Volante* bearing off the palm in the third-class by long odds, having shown the light drafts what a sea-going cutter ought to be.

CORINTHIAN PRINCIPLES.—During the *Fidget-Victoria* match no shifting of ballast was allowed, as noticed in our last issue. The crew was limited to six, besides the owner, and Corinthian rules were observed throughout. We commend similar action to the many small craft of other clubs, believing that a close adherence to amateur rules will be vastly more interesting and of much greater benefit than lowering the sport of yacht racing to the level of mere machine tooling and jockeying. The wind in the match referred to was very fickle, varying frequently as much as eight points, and consisted of puffs and calms interspersed, otherwise the result might have been different. *Fidget* was sailed in her usual cat-rig only, and the correct dimensions of her sail are 33ft. on boom, 19ft. on gaff, and hoist only 24ft. She carried no jib, as erroneously stated in some of the reports of the race. Mr. Grinnell has again challenged the *Victoria* to sail for the champion pennant on the day after the annual match of the Central Hudson Y. C., the rules allowing any yacht of the first class of the club to challenge the holder of the pennant once during each season. In this race *Fidget* will come out for the first time as a sloop in her existence of eighteen years, with a 22½ foot jib in addition to her present sail.

NEWS FOR THE SEAWANHAKAS.—A correspondent in a contemporary thinks the Seawanhaka and the Atlantic clubs will soon be swallowed up by their larger sisters. Nonsense. It is not necessary to a club's existence that it should have any special anchorage or make a show in the way of club houses at all. The life of any organization depends upon the spirit animating its members individually and the purposes kept in view at its foundation. The Seawanhaka and Atlantic are the two most essentially *yachting* clubs in New York waters. They are composed not simply of yacht owners, but of yacht sailers, which is, by far, more important to a successful and lengthy existence than big boats and a common anchorage ground. On the contrary, the Seawanhaka and Atlantic clubs are growing every year, and their influence to-day among American yachtsmen is more strongly felt than ever before. Clubs which contain a dozen members capable of designing the craft they propose to own as well as skippering them in man-of-war style when built, are not likely to be swallowed up by others less energetic or influential. We look upon those two clubs as destined to a bright future and great prosperity, while their influence, cast in favor of Corinthian principles, is doing more to popularize and extend the sport than anything ever before done by wealthier and larger clubs. The Seawanhakas occupy in America the enviable position of the Royal Alfreds in Great Britain.

BROOKLYN UNION REGATTA.—Tuesday, the 18th inst., broke overcast and damp, with a moderate wind from the westward. The sorry outlook brought only eight yachts out of the fourteen entries to the start, and that only after the judges' boat, *Fletcher*, had steamed up to Gowanus and brought out some of the laggards. To some the absence of the Commodore in the *Columbia* seemed a disappointment, but for our part we fail to see why any commodore in a cruising craft should be expected to put in an appearance on regatta days unless he so chooses for his own pleasure. A yacht match is not gotten up as a circus entertainment for the guests, but as a matter of business between the racing craft, and guests must rest content with what they happen to find going on. Toward noon several sails were made out running down to the line. *Comet*, off Bay Ridge, also loosed and hoisted, Mr. Langley going over the course out of courtesy to his only competitor, the Vice-Commodore's *Mystic*. He kept his boats at the davits and added to his ordinary crew a few ladies, who, in nautical storm rig, put to shame many a would-be yachtsman in long togs aboard the club steamer, by the gallant manner in which they remained on deck throughout the race, unmindful of wind and rain. The yachts went across the line, with the smart little *Brown*, from Newburgh waters, showing the way at 12h. 49m. 47s.; *Susie S.*, 12h. 51m.; *Mystic*, 12h. 52m. 20s.; *Kate*, 12h. 53m. 7s.; *Schemer*, 12h. 54m. 18s.; *Comet*, 12h. 55m. 10s; *Annie*, 12h. 55m. 30s.; *Lizzie L.*, 12h. 56m. 13s. Poor *Susie S.* came out in her storm rig; but old Proh., being in a mild sort of humor, failed to rouse Boreas, and so *Brown* had it all her own way. But she not only led her *Beas*, but the entire fleet in a most remarkable way, when she was breeze enough for some of the bigger ones, too. First round the buoy at the spit, she trimmed aft and made a short board for the stake boat, and then eased sheets again for home. Among the big sloops *Kate* stood over to the Long Island shore, and led through the Narrows, making a short leg into Gravesend Bay, and there lying down to work on a long one for the spit buoy. Her only antagonist, *Annie*, one of Bob Fisher's famous turnouts, was not long in weathering and headreaching on the black sloop, and although the latter was sailing well with her stern spun out, alongside of such a crack as *Annie* the task was almost a hopeless one. The way in which *Annie* disposed of the fleet, including even *Comet*, was something quite as remarkable as the recent performances of *Undine* and *Orion*. No doubt much of this was due to the handling she received from Ellsworth and his crack crew, but for all that *Annie* must be counted in among the three fastest wind jammers in America, and a match with *Orion* and *Undine*, in a breeze of wind free from tidal flukes as far as possible, would form perhaps the most interesting race for yachtsmen that could be arranged. She had a long lead of the big ones down to the Spit buoy, and in the beat up the Horseshoe weathered all hands in a style that was wholesome to look at. The fleet rounded the buoy in the following order: *William R. Brown*, 2h. 33m. 11s.; *Annie*, 2h. 33m. 35s.; *Mystic*, 2h. 37m. 47s.; *Schemer*, 2h. 38m. 20s.; *Comet*, 2h. 39m. 28s.; *Kate*, 2h. 40m. 05s.; *Lizzie L.*, 2h. 43m. 43s.; *Susie S.*, 2h. 47m. 40s. *Schemer* hung to *Mystic* all the way down and back, often receiving a bad blanketing from the schooner, but as Dr. Johnson's craft was well astern, owing to a late start and loss of breeze, it did not matter much. Vice-Commodore Hall's schooner seemed to be under a very scant rig, barring her balloon jib topsail, which set exceedingly well and did good service over the entire course almost. A few cloths more to fore and mainsails and piecing on the foot would do *Mystic* no harm In the livelier breeze outside *Comet* weathered on *Mystic* and led her a long stretch after rounding the stake-boat at the Outer Romer, which was made in the times given below: *Annie*, 3h. 38m. 37s.; *Comet*, 3h. 40m.; *Schemer*, 3h. 44m. 37s.; *Mystic*, 3h. 45m. 3s.; *Lizzie L.*, 3h. 53m. 38s.; *Kate*, 3h. 59m. 19s. But the wind played the Brooklyn Club the same trick it did the others, and left the yachts almost becalmed when the rain ceased. Catspaws from the northward hardly enabled them to hold their own against the last of the ebb, and the match, so favorably begun, ended in a hopeless drift and a series of flukes. *Mystic* crawled ahead of *Comet* through a favorable slant, and *Annie*, hugging the shore to the north, managed to cheat the tide enough to hold her long lead, working up homeward while the rest were nipped about the Romer Beacon. She crossed the winning line at 9h. 04m., or 7m. 47s. too late to make the race. The little *Brown* was the only one to make it in time, and thus takes the prize in her class, having given *Susie S.* in her storm rig a very bad beating. The race was declared off, and probably will be re-sailed later in the season.

INCREDIBLE BUT TRUE.—The catamaran *Tarantella*, on her way out to Rockaway, performed some remarkable feats of speed, which, however, seem to be quite common to the catamaran species. Lying in wait for the steamer *Columbia*, she trimmed aft upon her approach and ran by the steamer as though the latter was at anchor. The *Columbia* must have been making about twelve knots at the time, and the speed of *Tarantella* could not have been less than fifteen to sixteen knots, or about eighteen miles an hour, and this with a reef down and the sprit on the jib carried away. Had it been blowing a little stronger the catamaran would have reached twenty miles readily, or railroad time. The marvellous exhibition of speed by the *Tarantella* called forth rounds of applause from the two thousand passengers aboard the *Columbia*. On the way back the catamaran sailed three times around the steamer *Twilight*, and then stood for home, and was soon out of sight ahead!

MAGGIE B.—This well known yacht, once the property of General Tom Thumb, but more recently known as belonging to Mr. W. Tumbridge, who sailed her himself all the way to Jacksonville, Fla., has been heard from favorably. The pilots who bought the sloop from Mr. Tumbridge express great satisfaction with her. She recently beat the opposition boat nearly eight miles in a sail of eighteen miles.

NEW JERSEY YACHT CLUB.—The seventh annual regatta of this club took place June 12, over the regular course, from Elysian Fields, Hoboken, to Eighty-sixth street, N. R., and return, sailed three times over. Time allowance, 2m. to the foot. *Estelle* won in the first class in 4h. 59m. *Meteor* won in second class in 5h. 4m. 22s., with *Dare Devil* second and *Charm* third. *Pauline* won in third class, and *Freddie* a long distance astern.

TRENTON YACHT CLUB.—The race on the 18th inst. at Trenton was a partial failure, owing to want of wind. The *E. S Ellis* won over a course of about twenty miles. Fifteen boats were entered.

SOUTHERN YACHT CLUB.—Mr. O'Brien has been elected Commodore of the club. New members are rapidly being added, add over $1,200 has been collected. The club has adopted a harbor at West End between the revetment levee and Hoyt's House.

ON THE LAKES.—*Belleville, Ont., June* 6.—The yachtsmen of this northern section begin to enjoy their favorite pastime. Belleville now possesses the largest, and on the whole I may say the fastest, fleet of yachts on fresh water; for while of the three first-class yachts around here there may be some faster, yet, in the second-class, competition can be successfully defied, and the third-class craft can hold their own with anything of their inches. The fleet consists of 3 first-class, over 10 tons; 7 second-class, 10 tons and over 5; and 6 third-class, 5 tons and under. The sport is controlled by the Bay

of Quinte Yacht Club, a flourishing young organization with some seventy members of the right stamp, and which has already acquired a very high standing in the Province of Ontario. Kingston, once a conspicuous centre of yachting sport, but which of late years had been indifferent in the matter, has at length been aroused into activity by the numerous defeats which its boats have met with from those of the first fleet, and seems likely to revive its ancient reputation. Five second-class and a considerable number of third-class yachts are now owned there. An event of much interest will occur here on the 20th inst., namely: a twenty-mile sailing match between the *Katie Gray*, of the local fleet, and the *Surprise*, of Trenton. Both are very fast craft of 10 tons each, and both were built by the well known builder, Cuthbert, formerly of Coberg. A daring attempt was made one night last week to rob the champion yacht *Annie Cuthbert* at Hamilton. Doyle, the sailing master, who sleeps on board, was awakened by a noise, and going on deck saw three men with masks or blackened faces attempting to make away with some property stolen from the yacht. He fired on them, and one, evidently hit, fell into a boat alongside in which they had come. They fired in return, doing no damage to the brave Doyle, and made off as fast as they could. There has for several years past been a gang of pirates operating among the yachts at Hamilton, of whom these rascals were doubtless a portion. The culprits have not yet been discovered. The *Brunette*, a 24-ton yacht, formerly owned by Mr. Harry Stinson, of Hamilton, who was suddenly cut off with brain fever last autumn, is offered for sale in Toronto. She is both staunch and speedy. Catamarans seem to be coming into favor on the lakes, two having lately been built, namely, one in Oswego and one in Hamilton, both of which have shown immense speed. As, however, these flying craft are not adapted for cruising, they will never become generally popular. A regatta, in which $100 are to be given in prizes to second-class, and $50 to third-class yachts, is to be given at Trenton, twelve miles west of this place, on the 26th inst., and the entries are likely to be numerous. The *Katie Gray* and the *Surprise*, which are to sail their match race on the 20th, have been put into complete trim, both craft having received a thorough overhauling and being fit to sail for a man's life. The winner of the match will not unlikely be challenged by the *Kathleen*, one of the three yachts which dispute for supremacy in the 10-ton class in these waters. PORT TACK.

DETROIT YACHT CLUB.—The course for the regatta, July 4, will be from a stake-boat off the Excelsior Club house through Canadian channel to Lake St. Clair, a distance of 12½ miles, and return. Second-class yachts to the Gross Point Light House and return, and third-class yachts to go around Belle Isle.

WESTERN NEWS.—*Madison, Wis., June* 13.—The grand regatta of the season will take place on Lake Mendota July 17; open to all yachts, no matter from where they come they are cordially invited to participate in the sport. There will be two prizes in the first class and two in the second. The first prize in first class will be $150; the other prizes have not yet been decided upon. From letters received we learn that the entries will be numerous. ROVER.

OGRANIC YACHT CLUB.—*Lillie* beat four other yachts in the match of this club, Tuesday, June 18; course, 25 miles; no time taken.

—Owing to the crowded condition of our columns further details of the above matches have been unavoidedly postponed, as well as other matter.

CENTRAL HUDSON REGATTA.—In the race of this club off New Hamburgh, Tuesday, June 18, *Flyaway*, *Freak* and *A. S. Ring* were declared winners after a drifting and uneventful day.

OAR AND PADDLE.

SCHUYLKILL NAVY.—*Philadelphia, June* 1.—*Mr. Editor:* Since leaving Baltimore your correspondent has been "doing" the watering-places. Fishing is tolerably good at the inlet in Atlantic City, though sport is tame yet, and tamely participated in. I was out at the spring meeting of the Schuylkill Navy on Friday and Saturday afternoon of last week. The regattas this spring were very good, though pronounced inferior to the fall regatta of '77. On Friday afternoon we had the trial heats in the four-oared race. The water was a little rough, but not sufficiently so to be damaging to any extent. The starters for this event were the Quaker City in the western position. Crew: Messrs. Carlisle, Dunton, West, and Henderson stroke. Crescent Club, east; crew: Messrs. Seele, Harper, Phillips, and Hinchman stroke. College Club, centre; crew: Messrs. Stewart, Bond, Hart and Kennedy stroke. For nearly half the course the boats kept close together, when the Quaker boys fell back, and the College boys and Crescent boys had it to themselves; but there was very little tugging for the mastery, although the College boys did pretty well, an easy victory was gained by the Crescents. Time: Crescents, 9m. 40⅘s.; College, 9m. 54⅘s., and the Quaker City, 10m. 7⅘s. The first day's regatta closed with the second trial heat. Entries: Undine, who had the western position; crew: Messrs. Hart, Barnes, Stile and Cheston stroke. Pennsylvania, centre; crew: Messrs. Barr, Thomas, Hartley and Rennert stroke. The Philadelphia crew held the eastern position; crew: Messrs. Lee, White, Kay and Richards. There was a good deal of spurting done, especially by the Pennsylvania crew, but the contest was a poor one, and the Undine won in 9m. 33⅘s.; Pennsylvania, 9m. 43s.; Philadelphia, 10m. 9s. On Saturday the day was a gala one, and the annual regatta of the Schuylkill Navy drew an immense audience, who completely thronged the banks, making a strikingly animated and picturesque scene. The final heat, continued from the race of Friday, was the first thing on the programme, and was hotly contested by the Undine and Crescent clubs, the latter being victorious in 9m. 33⅘s. This gives the Crescent Club the champion four of the river by three consecutive races. The second race was for pair-oared shells between the University and Undine crews, which was a close and interesting race. Time: 9m. 50s.; Undine, 9m. 51s. The next event was a gig race, the entries being Quaker City, Pennsylvania and University crews. Won by the latter club. The event of the day was the single scull race, on which considerable interest was centred. The entries were four in number, viz: Messrs. Calhoun, Megargu, of the College; G. Hartlege, of the Pennsylvania, and Geo. W. Young and Charles P. Tasker, of the Crescent Club. After a lively pull, especially between the two Crescent men, the race was won by Young. Time: 10m. 59s.; Taskes, 11m. 15s.; Hartledge, 11m. 29s. The closing race of the day was the barge contest between selected crews from the Pennsylvania, Undine and Crescent clubs. The Undine fell out almost at the start, but the race between the other two crews was quite interesting, the Pennsylvania winning by about three and a half lengths. TRAYMORE.

BALTIMORE NEWS.—The Baltimore and Canton Yacht Clubs held their annual regattas June 10. The wind was light, but freshened after the start, and outside of Fort McHenry the little craft had enough of it. The course of the Baltimore Club was from the Point to Seven Foot Knoll and return for first-class, for the fifth to Fort Carroll and return, and for the others to White Rocks and return. The *John Milroy* won in the first class, the *Jo. Hebb* in the second, the *Rooney* in the third, *Dauntless* in the fourth and *Silver Star* in the fifth class. Of the Canton yachts the *Slater* won the first-class prize, the *Mattie* the second and the *Clinch* the third.

HAVRE REGATTA.—The "Societe des Regates du Havre" announces two yacht races for July 18 and July 22. They are open to yachts of all nations, the course being about fifty miles, and the time allowance fifteen seconds per ton. Schooners, yawls and cutters will sail in separate classes. First prize for all classes 1,250f., second prize 500f. and a silver medal. A special prize is offered by the Yacht Club de France of 1,000f. for the first French yacht in, and the Prix d'Honneur, a Sevres vase worth 1,000f., will be sailed for by the three winning yachts of the different classes. For this prize schooners count at three fifths their tonnage, yawls at three-fourths and cutters full tonnage. For the second races, there will be two classes: for yachts above 35 tons, and for those under 35 but above 10 tons. First prize in first-class, 1,200f. and a telescope, offered by the Admiralty; second prize, 500f. and a barometer. First prize in second-class, 1,000f. and silver medal; second prize, 300f. and silver medal. A special prize for French built yachts is offered, worth 1,000f. and a marine glass by the Admiralty. Yachts tonnage will count as above mentioned. Course for second day twenty-five miles. Entrances to be sent to the Secretary, Mr. H. P. Champeaux, 55 Quai d'Orleans, Havre. The annual sailing and rowing matches will take place July 21 and 22. It is not likely that any American yachts will enter, or we might with reason expect the Stars and Stripes to show the British and French lead droguers over the course. As it is they will have things to themselves.

THE HANLON-ROSS RACE—*Toronto, June* 8.—This race will take place at St. John's, N. B., over the Kennebeccasis course, Thursday, July 25; distance five miles, for $1,000 a side, Hanlon receiving $250 expenses. The articles of agreement have been forwarded to Toronto for signature....Brockville single scull race on 1st July; distance, four miles, for $1,000. The secretary has received letters from Hanlon, Luther, Johnson, Reilly and McKen, intimating their intention to enter. Morris says probably he will be there. AH—MIK.

THE PEORIA REGATTA.—This event has attracted a large number of entries from the West, and promises to be a brilliant success. There are four entries for the senior four-oared race, six junior fours, two senior doubles, one junior double, two senior singles, five junior singles, two six-oared barges and two four-oared gigs. Prizes of elegant design have been manufactured by M. S. Smith & Co., of Detroit. The regatta takes place June 19 and 20. The barge race will be one and a half miles straight away; all others, one mile and return. The officers of the Mississippi Valley Amateur Rowing Association are: J. C. Osgood, Pres.; J. A. St. John, Vice-Pres.; R. G. Thwaites, Secretary, Madison, Wis.; F. M. Staples, Treas.; C. L. Williams, Commodore; L. D. Powers, Vice-Commodore; and P. C. Wheeler, Ensign.

ALBANY CITY REGATTA.—The city authorities of Albany have determined to offer $2,000 in support of an amateur regatta, July 4, under rules of the N. A. of A. O. Entries close June 29, and must be sent to the Chairman of the Fourth of July Committee. Races will be for four-oared shells, pair-oared shells, double sculls, single sculls and six-oared gigs.

NATIONAL ASSOCIATION OF AMATEUR OARSMEN.—At their last meeting, Tuesday, June 11, the following rule was adopted: "A junior sculler is defined to be one who has never been winner in a sculling race open to more than one club, nor pulled in such a race, unless it was distinctly announced as a junior sculler's race." The Annual National Regatta will be held at Newark, N. J., August 20 and 21.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and tips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

INTERNAL CANKER OF THE EAR.

OUR column of questions and answers contain so many of our replies as to the treatment of canker that we have made an abstract of a very thorough paper on this disease which we find in the *Live Stock Journal*, written by Dr. Gordon Stables:

Canker of the ear in the dog is a name given to an inflammation, usually chronic, sometimes acute, of the lining membranes of the ear passages, or of the flap of the ear. It is rather a troublesome complaint to deal with, hard to get rid of, as it has a tendency to recur.

Causes and Pathology.—Anything that obstructs the passage of the blood into the auditory canal may produce canker. The lining of the ear is very thin and vascular, and contains the glands which secrete the wax. If primary cause, as from over heat of the system, or from gross feeding, this secretion becomes dry and hard, canker is likely to show itself. A chill may produce the attack, cold from exposure, especially if during such exposure the dog is tired and hungry. It often occurs from no appreciable cause. (We believe ourselves that canker is often inherited. We have known of sires having a progeny, all of which were predisposed to develop canker.—Ed.) Water dogs, such as spaniels and Newfoundlands, are said to be more frequently afflicted with canker, though Dr. Stables thinks this fact is not fully established. (From our own experience derived from the innumerable cases brought before our notice, we are inclined to think that spaniels are more likely to have canker than any other breed of dogs. The long flap which covers the auditory canal seems to us to give a predisposition to canker. In prick-eared dogs we think canker is rare. It might be curious to find out whether crop-eared dogs have canker. We should like to have our readers give us some cases.—Ed.)

Symptoms.—The first discernible symptom of canker in the dog is the shaking of the head. (In nine cases out of ten when the question is put to us by those who write us as to symptoms, the letter begins: "My dog has been lately shaking his head a great deal."—Ed.) The dog does this in a pained, anxious and troubled way. If the ear is taken between the finger and thumb a crackling sound is heard. A fœtid odor is quite diagnostic of the disease, although no discharge may be visible. Acute cases of canker are comparatively rare, but in this case the animal appears in great distress and pain, and howls in agony, the seat of the mischief being apparent by the dog rubbing his ears with his paws. Canker generally is quite gradual in its appearance, and the head shaking is almost always indicative of the disease. On examination a slight redness is seen, and the offensive odor is smelt. There is an increased flow of wax mixed with the product of inflammation. In long standing cases the discharge lessens, giving place to pus of a yellow color. Ulceration then sets in and the disease seems to be more deeply seated. The wax secreting cells are destroyed. These are the more difficult cases to deal with. Dr. Stables advises that the ears be moistened every day with a drop of pure oil, and occasionally washed, but not syringed. In old cases of canker deafness inevitably follows. Too strong astringent lotions Dr. Stables very rightly condemns.

Treatment.—In mild cases of canker a few drops of oil may be introduced, plugging up the ear with cotton, and hot fomentations of poppy-heads, if there be much pain, can be used. (We have known the disease entirely cured with a fomentation made of hops, the lupuline in the hops acting like a charm). The system of the dog must be cared for, and Epsom salts, from one to three drachms, with half the quantity of glauber, can be given with advantage. An old plan was to use gunpowder as a drink. A lotion of lead, zinc and even alum is useful. (In an early case of canker, taken at the start, though we have never advised alum, we should think from its well known properties that it would be found quite useful. We have always recommended sulphate of zinc—ED.) Dr. Stables used nitrate of silver, two grains to the ounce of water; of sulphate of zinc, three grains, or of alum four, and of Goutard's water, one pint to three of water. These lotions must be applied tepid. About a teaspoonful is to be poured into each ear twice a day, retained for a minute, and then discharged, having previously carefully washed and cleansed the ear with tepid water using a strong rag. (We have generally found the zinc lotion efficacious. In extreme cases, such as of ulceration of the ear, where the parts were being eaten out, such as on the edges, we have found the use of stick lunar caustic, to touch them only, to effect a rapid cure, of course using the zinc lotion for the inner ear—ED.) Dr. Stables warns those treating dogs not to use any devices to secure the ear, such as a canker cap. (We do not lay as great stress on this adjunct for the method of treatment as we formerly did. It has been recommended in our columns to use strips of adhesive plaster to secure the dog's ears. We are inclined to think that on the very beginning of canker it may be useful and prevent over-irritation from the constant flapping of the ears, but as it is an unnatural position for the ears, it should not be used after the first day or two. If taken early, and there is no disease of the dog so readily seen, the cure of canker seems to be quite easy. We differ somewhat with Dr. Stables as to its persistence—ED.)

A CURE FOR DISTEMPER IN DOGS.

Our readers will remember a charming sketch of the European starling which appeared in FOREST AND STREAM of April 14, from the pen of R. O'C., of Dublin, Ireland. We are once more indebted to Mr. O'C. for the following letter, which will interest all lovers of the dog. The remedy for that dreaded disease, distemper, is so simple that if in this climate it will effect what it does in India, our Irish friend will have earned for himself the gratitude of all American sportsmen.

The following note will explain the letter to our readers. It is pleasant for us to believe, from the concluding sentence, that the high appreciation in which FOREST AND STREAM is held by gentlemen sportsmen is not confined to this country alone. Our correspondent says:

"I inclose a copy of a letter from my friend, Mr. B. W. B., a shikari, well known in the jungles of Bengal, giving an account of a remedy which he used with marked success in the treatment of distemper in dogs in India. It occurs to me that it may prove of interest to some of your readers, and if you think so, Mr. B. (who is here on leave, and who takes a great interest in FOREST AND STREAM) and I would be glad to see it in a paper which gives us both so much pleasure.

Yours very sincerely, R. O'C.

The letter referred to runs as follows:

My Dear R.—About twelve years ago, while bear shooting in the lower ranges of the Himalaya, I met and joined camps for a few days with Captain R., Bengal Staff Corps, from whom I learned a treatment for distemper in dogs, which I have since very frequently used and have never found to fail. Before my meeting with Captain R. I had lost four valuable dogs, and a fifth was in distemper and would in all probability have died. But fortunately the dog was brought up for inspection while we were together, and Captain R. remarked that it was rather a bad case of distemper, and asked me how I cured the disease. I told him that I was at my wit's end; that I had lost four good dogs, and that I feared this would also die. I tried everything I could hear of, to no purpose. "Ah!" he said, "I can tell you a cure. It is very simple—so simple indeed, that I have known men to refuse to try it. Shall I show you how to proceed?" "Certainly," said I, "I shall be very glad if you will. You can't do worse than I am doing even if you kill the dog." He at once administered a tablespoonful of ordinary dry table salt, and let the dog go. The salt acted as an emetic; but a few minutes afterward I was surprised to find that the dog was able to eat his food. Next morning Captain R. gave the dog a teaspoonful (liquid measure in both cases) of Epsom salts; next day again the table salt as before, and then upon the following day the Epsom salts, and so on upon the alternate days, giving all the time liquid food only. After about a fortnight of this treatment the dog was perfectly cured, and rapidly gaining his proper condition. He completely recovered, and lived to be taken from under my bed by a leopard a year afterward. The dog was an Irish red setter. The same quantities will suit a greyhound or slumber spaniel; for young puppies, of course, less should

be given. I cured in 1870 all of a batch of six greyhound puppies, six weeks old, which, when placed in my hands, were nearly skeletons.

Yours ever sincerely, B. W. B.

DOGS ON RAILROADS.

We agitated some time ago the question of transportation of dogs on railroads. We are more positive than ever that a regular tariff of charges should be made, and that animals should not be left to the tender mercies of baggage-masters. Now, before the fall shooting commences the matter should be settled. A correspondent who has been mulcted writes as follows:

EDITOR FOREST AND STREAM:

I think a small space in your valuable paper can be well occupied by calling attention to a matter in which most sportsmen are interested, particularly if they travel with their dogs upon the railroads of the country. The way we are bled by railroad employees, if we are so unfortunate as to have a dog along, is outrageous and impoverishing. I traveled with a dog from here to Florida last winter, and was compelled to pay, of course, whatever was demanded. The Lake Shore has the matter in the best shape, and if other roads would adopt the same rule a person could then deal with a responsible and known party. You are required upon this road to go to the baggage-room before putting your dog upon the car, pay for him as for extra baggage, get a receipt showing the amount paid, and the destination. This is delivered up to the baggageman in the car where you take your dog, and there is no chaffering about the matter. [Good! Ed. F. and S.] All sorts of prices may be demanded by the baggage-masters upon other roads. From Toledo to St. Louis, one night's ride, I paid $3.50. This ought to have entitled my dog to a berth in the sleeper. Many times in the night I was called upon when asleep by the vigilant baggageman, when the route was upon short lines of roads, for pay, as he would leave the train before morning. $1.50, $2 or $2.50 were sums frequently demanded for a few hours' ride for the dog in the baggage car. Sometimes when I went to feed and water him I would find him chained, where he was in great danger from trunks and baggage falling upon him. One time I found him tied in a car beside a hogshead of fresh shad, packed in ice, the floor of the car covered with water and slime from the fish. No chance for the poor fellow to lie down, and too slippery for him to stand up, with danger of catching cold, and for that ride of eighty miles I was charged $1.50. From Baldwin to Jacksonville, Fla., where we rode in a freight car, and our party had our baggage for seats, twenty-two miles, the gentlemanly conductor charged for the dog fifty cents—over two cents per mile. Of course he returned the amount collected at the end of the route to the company. I wish that railroad officials who manage these things would take the matter in hand. Either do as the Lake Shore people do—collect the fare themselves, or if they give dog's fare to their employees as perquisites—fix a reasonable compensation, and not allow their patrons to be extorted from in this matter as they are. I do not write these lines believing that I shall ever travel with another dog South. I never will, unless he has rabies, and I wish to get rid of him. The climate, water and food down there will use up any Northern dog. He loses his vitality for want of his fine fresh air and water, and does not like sweet potato skins, and cold palmetto cabbage for regular diet; and such was offered my dog in Florida.

Erie, Pa., June 10, 1878. H S.

WESTMINSTER KENNEL CLUB STOCK FOR SALE.—As fine stock as was ever produced in the country is now offered for sale by a gentleman directly connected with the Westminster Kennel Club. Such choice pointer puppies as those bred from Sensation and Daisy II and from Mr. Orgill's Flake out of Lilly can be had. The progeny of Whisky by Sleaford is also offered. For further particulars see advertisement. Such a chance is rarely met with.

HUNTING NOTES—*Columbia, Tenn., June* 8.—A gentleman living near here, better versed in farming than fox chasing, borrowed a trained hound to run with his young dogs and teach them how to hunt. He carried old Blue home and locked him up in the smoke house, which had several hams hanging therein. Imagine his dismay upon opening the door next morning and finding Blue like a frog that had swallowed a handful of shot. His hams, oh, where were they? He now contends that a hound's appetite is unlimited. The tornado that swept over this country a few weeks ago made such havoc among our forests that fox hunting is almost impossible, owing to the fallen timber. There is one fox, however, that has been chased two or three times a week for the past year, and still remains free. He will give good run for the dogs, and when blowed, will run into a crevice of rocks on the river bank, where he is safe. He has been chased so much, taking nearly the same course every time, that he is known as "the trained fox." VAL.

NAME CLAIMED.—Mr. John H. Meyer claims the name of Smiler for his lemon and white pointer pup, out of the Westminster Kennel Club May, by Sensation; May by Dr. Corcoran's Bess.

NAME CLAIMED—DART.—R. T. Greene, of Jersey City, N. J., claims the name of Dart for his liver and white cocker spaniel, whelped Oct. 27, 1877, out of Walker's Witch and Princess, June 14, 1878.

VISITS.—Champion bitch Grace to Theo. Morford's Quail, of Newton, N. J.

—Max & Wenzels Doe to their Irish setter Jack.

SUMMER ON LONG ISLAND.—The Long Island Railroad publishes a valuable little pamphlet, giving a very full list of the summer resorts on Long Island. Routes, accommodation and all desirable information may here be found.

CAZENOVIA, N. Y., June 13, 1878.

EDITOR FOREST AND STREAM:

I had serious thoughts of asking you to take out my adv., but have found a young man who is quite clever with the pen, and think he will be able to answer all the inquiries caused by the same, which will be no small job, as every mail brings a good many letters. W. H. C.

Game Bag and Gun.

JUNE IS A CLOSE MONTH FOR GAME

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson Snipe, $3 per dozen; wild pigeons, flights, $1. fed do, $1.75; Philadelphia squabs, $2.50; wild do $1.

Poultry.—Philadelphia and Bucks County dry picked chickens, 22 cents per pound; do fowls, 16 cents; do turkeys, 16 cents; do ducks, 30; do geese, 15; State and Western chickens, 15; do turkeys, 15 cents; do fowls, 15; spring chickens 20 to 30 cents.

RHODE ISLAND—*Newport, June* 12.—Woodcock are reported plenty on their breeding grounds. T. J. F. F.

PENNSYLVANIA PIGEONS.—A correspondent sends us an timate of the number of pigeons sent from points in Pen sylvania to New York, Boston and other cities: From She field, 1,100 barrels, 700 crates; Kane, 306 barrels, 150 crates Tionesta, 115½ barrels, 39 crates; Tidioute, 110 barrels, 20 crates; Hickory, 48 barrels, 6 crates; Ridgway, 20 barrels, 6 crates. Averaging 350 dead birds to the barrel and 75 live birds to the crate, this amounts to a total of more than 650,000. This is probably the largest shipment from one roost ever recorded for Pennsylvania.

TENNESSEE—*Columbia, June* 14.—A larger number of quail this year than usual. We have heard of a great many nests being broken up by cutting grain. One gentleman destroyed three nests, averaging twenty eggs each. As a general thing, farmers here try to prevent the nests being disturbed.

VAL.

TEXAS—*Corpus Christi, June* 8.—Quail are abundant—from one to two weeks of age. This is the first brood. We frequently find whole bevies of the young birds dead and lying in a bunch. Can you or any of your readers account for that? Chickens are dying with cholera quite extensively. Can the disease have attacked the young broods of quail? or can it be that some poisonous weed is doing the mischief? There is an animal found on these prairies called by the Mexicans "campo mucho." It is the size of the caterpillar and resembles it somewhat; is green in color, and when eaten by cattle while grazing is fatally poisonous. Could such an animal, of the same nature, but small enough to be captured by the young quail, be the cause of the extensive mortality which exists among them? SNILVAH.

MINNESOTA—*Hokan, June* 10.—We have just returned from a trip over the Southern Minnesota Railway, and find the prospects for fall shooting unusually good. Along the Eastern division of the road, among the hills and bluffs, quail and partridge were never more abundant, but farmers reported deer very scarce. Along the "west end," the prairie division of the road, chickens were seen in large numbers, and plover and jack snipe reported plenty, and, comparatively speaking, but little hunted. Ducks were seen in small numbers. FINE SHOT.

SPORT IN KANSAS.—*Mr. Editor:* I trust that a few lines from this part, of what was once called the Great American Desert, will interest its readers. Abilene, the county seat of Dickinson County, was once noted far and near as the great shipping point of Texas cattle, and was one of the hardest towns on the line of the K. P.; but now all is changed, and with a population of some two thousand, good schools and churches, we have what is called one of the best towns along the road. The prairies are now covered with waving fields of grain, which at the present time bid fair to make one of the best crops we ever have had. But what I wanted to speak of was the game. In the fall we have fine quail shooting. The birds are found along the many small streams. All streams here have high and steep banks, which are usually covered with close underbrush and trees. To shoot quail in such a place requires a keen eye and quick shot, but often by good management we are enabled to run the birds out into the open field, and then with a steady dog it is fine sport. The past winter, a very open one, with but little snow or severe weather, almost insures plenty of quail and chicken next fall. The duck shooting is nothing to brag of. We have but little low or marshy land and few ponds. Still we are able to bag a few mallards and teal along the river every fall and spring. We sometimes have good shooting at geese and brant on the wheat fields. The usual method of hunting them is to drive up in a buggy, and when they rise pour in your BB. It is impossible to approach them on foot, as they are usually found on level fields; they do not seem to mind a buggy. In the spring, from about April 1 for two weeks, we have the upland plover to try our guns on. They are hunted in much the same manner as I have described for geese, and it is no unusual thing for a party of two or three to drive out and in two or three hours return with forty to fifty. In nearly all flocks of plover you find a few sickle bill curlew. Within the last few weeks the shootists of this place have purchased a Bogardus glass ball trap, and we have a little weekly practice to keep our hands in until Aug. 1, when the close season for prairie chicken will be off, and which time we wait with impatience. There has been so much written about chicken shooting out West, and Mr. Hallock has given such a good description of it in his letters, that I will only say this: To those who have never tried it, come out and see how it is yourself. Some may say, "It must be hot work." My friend, we walk but little. Comfortably seated in a buggy or spring wagon, with dog ranging ahead on the stubble or grass, we get out when he winds the birds, and then after all are flushed, in again and follow up until the dog finds those that got away from the gun, or another covey. This way of hunting, and the fact that there is almost always a good breeze blowing, makes it about as pleasant to shoot chickens as to do anything else in August. The fact is, that if a man loves a dog and gun, and the dog works well and the chickens are plenty, he has little time to think about the weather. Don't forget a keg of water for the dogs, for they will need it. Also, a good long rest at noon if it is an all-day hunt. The expense of chicken hunting is light. Horses and double-seated spring wagon, with driver, can be had at any of the towns along the K. P. at from four to five dollars. Some of the finest chicken grounds in the West can be found along the line of the Kansas-Pacific. All the members of the club I sent for F. AND S. for are much pleased with the paper, and say they could not get along without it. And now, Mr. Editor, if you will come out on or after August 1 we will shoulder our Parker and help you shoot some chickens. DIRIGO.

Abilene, May 22, 1878.

PIGEON MATCHES.

HOW TO PREPARE SCORES.—To insure insertion in current issues of this paper, scores should be sent so as to reach us on Tuesday, and earlier if possible. These particulars should be given and these only: Place, date, name of club, name of competition, kind of trap and balls used, distance of rise, boundary, rules governing, and weather. Scores are valueless without these.

* An asterisk signifies dead out of bounds.

☞ Reports of many shooting matches crowded over until next week.

CANADA—*Montreal, June* 15.—Match between A. Bonneville, 10 birds, 21 yds., 80 yds. boundary, Montreal Gun Club rules, and R. Blackwood, 10 glass balls, 18 yds., Paine's rules:

Bonneville	0 1 1 1 1 1 1 1 1 1—9
Blackwood	1 1 1 0 1 1 1 1 0 1—8

Same day—Side shoot; 21 yds; 80 yds boundary; Montreal Club rules:

Normandeau	1 1 1—3	Tevers	0 0 1—1
Poplu	1 1 1—3	Strachan	1 1 1—3
Guy	1 1 1—3	Blackford	1 1 1—3
Bonneville	1 1 1—3	Hamilton	1 1 1—3
Total	12	Total	10

CAMBRIDGE GUN CLUB—*Belmont, Mass., June* 14.—Club shoot.

E W Law	1 0 0 1 1 0 0 1 0 0 1 1 1 1 1 0 1 1 0 1—13
C Estabrook	0 1 1 1 1 0 1 0 1 0 1 0 1 1 0 1 1 1 0 0—13
A L Danielson	1 0 0 1 1 0 0 0 0 0 0 0 1 1 1 0 1 1 0 1—9
G O Rollins	1 1 1 0 0 1 0 1 1 0 1 1 1 1 0 1 0 1 1 1—14
W H Harrison	1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 0 1—17
F Billings	1 1 1 1 1 1 1 0 1 0 0 1 1 1 0 1 1 0 1 1—15
Wm Evans	0 1 0 1 1 1 1 1 1 1 0 0 0 1 1 0 1 0 0 1—12
A S Harriman	1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1—18
J S Sawyer	1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1—18
R Mann	1 0 1 0 1 1 1 0 0 1 1 1 1 1 0 1 1 1 1 1—15
C R Newhall	0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 1 0 1 1 1—6
A H Hebbard	1 1 0 1 0 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1—16

ONONDAGA CO. CLUB.—Match Syracuse, June 14, for gold medal; 3 double rises 18 yds; 5 singles at 21 yds; ties shot off at 26 yds:

Thomas Kimber Jr	10	11	10—4	1 0 1 1	0—3—7
Fred W Deesz	11	10	11—5	1 1 0 1	1—4—9
Ed Lodder	10	11	10—4	1 1 0 1	1—4—8
William Fage	11	11	10—5	1 1 1 1	1—5—10
George Luther	11	11	01—5	1 1 0 1	1—4—9
R B Strong	10	00	10—2	1 0 0 1	1—3—5
Ed Crouch	11	11	01—5	1 0 0 1	0—2—7
Ed Mann	11	10	11—5	1 1 1 1	1—5—10
C R Steves	11	00	11—4	1 1 0 1	1—4—8
George Lodder	10	11	10—4	1 1 1 1	1—5—9

Ties on ten—26 yds:

Fage........11—2 1 1 1—3—5 Mann........11—2 1 1 1—3—5

Ties on five—31 yds:

Fage........11—2 1 1 1—3—5 Mann........10—1 1 0 1—2—3

Sweepstakes, at 21 yds

Tom Kimber	0 1 1 1 1 1 1—6	Ed Lodder	1 0 1 1 1 1 1—6
Ed Crouch	1 1 1 1 1 1 1—7	Brown	0 0 0 1 1 1 0—3
George Luther	1 1 1 1 1 1 1—7	Ed Mann	0 1 1 1 1 1 1—6
William Fohley	1 1 0 1 1 1 0—5	Chas Parker	0 1 1 1 1 1 0—5
George Lodder	1 1 0 1 1 1 1—6	C H Finch	0 0 1 0 0 0 1—2
R B Strong	0 0 0 0 0 0 1—1	F W Deesz	1 1 1 1 1 1 1—7
William Fage	1 1 0 1 1 1 1—6	C R Steves	0 1 1 0 1 0 0—3

Ties on seven—26 yds:

E Crouch	0 1 1—2	F W Deesz	0 1 1—2
George Luther	1 1 1—3		

Ties on six—26 yds:

Thomas Kimber Jr	0 0 1—1	Ed Lodder	0 1 0—1
William Fage	1 1 1—3	Geo Lodder	1 1 1—3
Ed Mann	1 0 1—2		

Fage and Lodder moved back to 31 yds:

Wm Fage..........0 1 1—2 Geo Lodder..........0 1 0—1

Ties on five—26 yds:

Chas Parker..........1 0 0—1 Wm Fowley..........1 0 0—1

Ties on one—31 yds:

Chas Parker..........1 1 1—3 Wm Fowley..........0 0 0—0

LEATHERSTOCKING CLUB.—Match at Oswego, June 7, at 18 birds each, 21 yards rise:

H C Tanner	12	F Johnson	10
H Stevenson	11	C Tanner	1
C Coe	9	A A Wellington	7
W Lyman	10	W A Falling	7
O S Osterhout	9	I B Poucher	7
J G Skinner	2		

NEWARK GUN CLUB—*Saturday, June* 15.—At 25 Kay's plaster balls; at 20 yds.; Coster, 14; Hobert, 13; Duston, 17; Kay, 15; Leroy, 17. Sixteen yards—Breintall, 17; Miller, 7. Breintall won the shoot off.

SEMPER FIDELIS CLUB—*Philadelphia, Pa., June* 10.—18 yards rise, 30 glass balls, Bogardus screened trap and rules:

Dr C T Smith, Capt—1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 0 1 1 1 1 0 1—25.

H Wright—1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 0 1 0 1 1 1 1 1 1 0 1 1 1 1 1—25.

E Young—1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 0 1 1—25.

T Barnewitz—0 1 0 0 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0—23.

Dr M A Wood—1 0 0 0 0 1 1 0 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—22.

Ties—H Wright, 2; C T Smith, 1; E Young, 1.

A RISING SHOT.—Charles Marsden, of Philadelphia, is ten years of age, and some of his friends want to see if there is any boy now in the United States under fourteen who can beat him breaking glass balls. It is proposed that forty-five glass balls shall be shot at. Of these, fifteen balls are to be pulled from a trap by anybody, fifteen more to be pulled by the friends of the boy, and fifteen of the balls to be pitched, all the balls to be thrown away from the shooters. Address Jonathan Marsden, care of T. Haywood, 52 Laurel street, Philadelphia.

ILLINOIS STATE ASSOCIATION.—The fifth annual tournament of the Illinois sportsmen opened at Singleton Park, Quincy, June 11, and continued three days. The several matches were as follows:

First Match—Ten single rises, 21 yards; class shooting:

Hauworth	1 1 1 1 1 1 1 1 1 1—10	Brown	1 0 1 1 0 1 1 0 0 1—6
Mills	1 1 1 1 0 1 1 0 1 0—7	Wilson	1 0 1 1 1 1 0 1 1 1—8
Partington	1 1 1 1 1 1 0 1 1 1—9	McManus	0 0 1 0 0 0 1 0 1 1—4
Babcock	1 1 1 0 0 1 0 1 1 1—7	Engle	1 1 1 1 1 0 1 1 0 1—8
Hopkins	1 0 0 1 1 1 1 0 1 1—7	Brooks	0 1 0 1 1 0 1 1 1 0—6
Root	0 0 1 0 0 0 0 1 0 0—2	Delaney	1 1 0 0 1 1 1 1 0 1—7
Ruggles	1 1 1 1 1 1 0 1 1 1—9	Cornell	1 1 1 1 0 1 1 1 1 0—8
Ha further	1 0 0 1 1 1 1 1 1 0—7	Austin	1 1 0 1 1 1 1 0 1 0—7
Mayne	0 1 0 1 1 1 1 0 1 1—7	Sluzg	1 1 0 1 1 1 1 1 1 1—9
Morris	0 1 1 0 1 0 1 1 0 1—6	Stockwell	1 0 0 1 0 1 0 1 1 0—5
Elesser	1 1 1 0 1 0 1 1 1 1—8	Roche	0 1 1 1 0 1 1 1 1 1—7
Price	1 1 1 1 1 1 0 0 1 1—8	Felton	0 0 1 1 1 1 1 1 1 1—8
A Kleinman	1 1 0 1 0 1 1 1 1 1—8	Kern	1 0 1 1 1 1 0 0 1 1—7
Merrill	1 0 1 0 1 1 1 1 1 1—8	Johnson	1 0 1 1 1 1 1 0 1 1—8
Turrill	1 1 1 1 1 1 1 0 0 1—8	C al	1 1 1 0 1 1 0 1 1 1—8
Gmohundro	0 1 0 0 0 1 0 1 1 0—4	Sherwood	1 1 1 1 1 0 0 1 1 1—8
Hamlin	1 1 1 1 1 1 0 0 1 1—8	Rowe	0 0 0 1 0 0 0 0 0 1—2
Batcheler	0 0 1 0 1 1 0 1 1 1—6	Thompson	1 1 1 0 1 1 1 1 1 1—9
Hinsdale	1 1 1 1 1 1 1 1 0 1—9	Wilcox	0 1 0 1 1 0 1 1 1 1—7
Krb	1 1 1 1 1 1 1 1 1 1—10	Lee	1 1 0 1 1 1 1 1 1 1—9
Victor	1 1 1 1 1 1 1 0 0 0—7	Miller	1 1 1 1 0 1 1 1 1 0—8
Crawford	1 1 0 1 1 0 1 1 0 1—7	McWhorter	0 0 0 0 1 1 1 1 1 0—5
J Kleinman	1 1 1 1 1 1 1 1 1 1—10	Bates	1 1 0 1 1 1 1 1 1 1—9
Deaderick	1 1 1 1 1 1 1 1 1 0—9	Abby	1 0 1 1 1 1 1 1 1 1—9
Wiley	1 1 1 1 0 1 1 0 1 1—8	Tucker	1 1 1 0 1 1 1 0 1 1—8
Neidhardt	1 0 0 0 1 1 1 1 1 1—7	Edgar	0 0 0 0 1 1 0 1 1 1—5
Kimball	1 1 1 1 1 0 1 1 1 0—8	Jones	0 1 0 1 0 1 0 1 0 1—5
Willard	0 1 1 1 1 1 1 1 1 1—9	Reed	0 1 0 0 0 0 0 1 1 1—4
Lewis	0 0 0 1 0 1 0 1 1 1—5	Tunnicliff	0 1 0 0 1 1 1 0 1 1—6
Johnson	1 1 1 1 1 1 1 1 1 1—10	Kay	0 0 1 1 1 0 1 0 0 0—4
A Brown	1 1 1 1 1 1 1 0 1 1—9	Hollister	0 1 1 1 1 1 1 0 0 0—6
Stock	1 1 0 1 1 1 1 1 1 0—8	Farrar	0 0 1 1 1 1 0 1 0 0—5
Lanoix	1 1 1 0 0 1 1 1 0 1—7		

Ties on ten.

Hauworth..............1 1 1 1 1—5 Kleinman..............0 w
Erb....................0 w Johnson..............0 w

Hauworth took the first money. His gun was made by E. C. Green, Cheltenham, Eng., and procured through their agent at Jacksonville, Ill.

Ties on nine.

Partington............0 1 1 0 0—2 Willard...............1 1 1 0 0—3
Ruggles...............1 1 1 1 0—4 Brown.................0 1 0 0 0—1
Binsdale..............1 1 1 1 0—4 Stagg.................1 1 1 1 1—5
Deaderick ....1 1 1 1 0—4 Thompson..............1 0 0 0 0—1

Ties on eight.

Johnson...............1 1 1 0 0—3 A Kleinman...........0 w
Coal ....1 w Merrel.................1 w
Sherwood..............1 1 1 0 0—3 Turrill...............1 1 1 1 1—5
Tucker................0 w Hamlin.................1 w
Miller.................1 w Wiley.................1 1 1 1 1—5
Elesser ....1 w Kimball,..............1 1 1 1 1—5
Price..................0 w

Second tie.

Turrill.................0 w Kimball...............1 1 1 1 1—5
Wiley...................1 1 w

Ties on seven.

Stock..................0 w Lanoix.................1 1 w
Wilson.................0 w Delaney................0 w
Engle..................1 w Austin.................0 w
Cornell................0 w Roche..................0 w
Taylor ....0 w Wilcox.................1 1 1 1 1—5

Second Match—Ten single rises, 21 yards. First prize, 4.0 brass shells and 2,000 primers, donated by A. O. Hobbs, of Union Metallic Cartridge Co., Bridgeport, Conn., valued at $50; second prize, fish rod and reel, donated by F. T. Taylor, gundealer, Chicago, valued at $20; also ten bags of shot, $20; third prize, gun case, $20, and six bags of shot, $12; fourth prize, a wall tent, $20.

Hauworth...1 1 1 1 0 1 1 1 1 1— 9 Neidheidt ..1 1 1 1 0 1 1 0 1 1— 8
Pierson.....1 1 1 1 1 0 1 1 0 1— 8 Crawford...1 1 1 1 1 1 1 1 1 1—10
Turrill......1 1 1 0 1 1 0 1 1 1— 8 Omohundro 0 1 1 1 0 1 1 1 1 0— 7
Reed........1 1 1 1 1 0 0 1 0 0— 5 Lee... ... .0 1 1 1 1 1 1 1 1 1— 9
Felton......1 1 0 1 0 1 0 0 1 1— 6 McWharton0 1 1 0 0 1 0 0 1 0— 4
Johnson....0 1 1 1 1 0 0 1 0 1— 6 Austin......1 1 1 1 1 1 1 1 1 1—10
Roche......1 1 0 1 1 0 1 0 1 1— 7 Farrar.... ..1 0 1 1 1 1 0 1 1 1— 8
Batcheler ..1 1 0 1 1 1 1 1 1 1— 9 Hamlin.....1 1 1 1 1 1 1 1 0 1— 9
Stockwell ..1 1 1 1 1 0 1 1 1 1— 9 Miller.......0 1 1 1 1 1 1 1 1 1— 9
Mills....... .1 1 1 1 1 1 0 1 1 1— 9 Wright.....0 1 1 1 1 0 1 1 0 1— 7
Lewis..... 0 1 0 1 1 1 1 1 1 1— 8 Kay.........0 1 1 0 1 0 1 0 1 0— 5
Johnson....1 0 1 1 1 1 1 1 1 1— 9 Hostetter...0 1 0 0 0 1 1 0 0 0— 3
Price...... .1 1 1 1 0 1 1 1 1 1— 9 Brooks.,....1 0 1 0 1 1 0 1 0 1— 6
Willard.....1 1 1 0 1 1 1 1 1 1— 9 McCune... 0 0 1 0 0 0 0 1 0 0— 2
Brown......0 1 0 0 1 1 1 0 1 1— 6 Tunnicliff....1 1 1 1 1 1 1 1 0 1— 9
Hinsdale....0 1 1 1 1 1 1 1 1 1— 9 Keifer......1 1 1 1 0 0 1 1 0 1— 7
Jones ...... 1 1 1 1 1 0 1 1 1 1— 9 Bartelston..0 0 1 1 1 1 1 1 1 0— 7
Hasfurther.1 1 1 1 1 1 0 0 1 1— 8 Delaney.....1 1 0 1 1 0 1 1 1 1— 8
Kleinman ..1 1 1 1 1 1 1 1 0 0— 8 Brown......0 1 1 1 1 0 1 1 0 1— 7
J Kleinman 1 1 1 1 1 1 1 1 1 0— 9 Erb.........0 1 1 1 1 0 1 1 1 1— 8
Woodruff.. 1 0 1 1 1 0 1 1 1 1— 8 Taylor......1 1 0 0 1 1 0 1 1 1— 7
McManus...1 1 1 1 0 1 0 1 1 1— 8 Murrell.....1 1 1 1 1 0 1 0 1 1— 8
Partington..1 1 1 1 1 1 1 1 1 1—10 Johnston...1 1 0 1 0 1 0 1 1 0— 6
Bopkins....1 1 0 1 1 1 1 1 0 1— 8 Dr Lanoix..0 0 1 0 1 1 1 1 1 1— 7
Babcock....1 1 1 1 1 1 1 0 1 1— 9 Wilson......1 1 1 1 1 1 1 1 1 0— 9
Kimball....0 1 1 1 0 0 1 1 1 1— 7 Stagg.......1 1 1 1 0 1 1 0 1 0— 7
Tucker.....1 1 1 1 1 1 1 1 1 1—10 Ruggles....0 1 1 1 1 0 1 1 1 0— 7
Mayne......0 1 0 1 1 0 0 1 1 1— 6 Cool........1 1 1 0 0 1 1 1 1 0— 7
Miller.......1 0 1 1 1 1 1 1 1 1— 9 England....1 1 0 1 1 0 1 0 1 1— 7
Kern....... .1 0 1 0 1 1 1 1 1 1— 8 Morris......1 0 1 0 1 0 1 0 0 1— 5
Abby.......1 1 1 1 0 1 1 1 0 0— 7 Deaderick...1 1 1 1 0 1 1 1 1 1— 9

Ties shot off—Crawford and Austin tied again on four, and divided money. Hauworth won second with nine birds; Neidheidt third with five birds; Ruggles fourth with eight birds.

Third Match—Ten single rises, 26 yards; class shooting. First prize, gold medal, donated by the Audubon Club, Chicago, value $150, and 12 bags of shot, $24; second prize, $75, and 12 bags of shot, $24; third prize, a hunting dog, $50, and 12 bags of shot.

Mills........1 1 1 1 1 0 1 0 1 1— 8 Felton......1 1 1 0 1 0 1 1 1 0— 7
Babcock....1 0 0 0 0 1 1 0 1 1— 5 Partington..1 1 0 1 1 1 1 1 1 1— 9
Turrill .. ..0 0 0 0 1 1 1 1 1 1— 5 Whitcome..0 1 0 0 1 0 0 0 0 1— 3
Tucker. ..1 1 0 1 1 1 1 1 1 1— 9 Austin......1 1 0 1 1 0 0 1 1 1— 7
Brown......0 1 1 1 1 1 1 1 1 1— 9 Wheatly....1 1 0 1 1 1 1 1 1 1— 9
Hauworth .1 0 1 0 1 1 1 1 1 1— 8 Tayton. . ..0 0 0 1 1 0 0 1 1 1— 5
Wiley ....1 1 0 1 1 1 1 1 0 1— 8 Wilson......0 1 1 1 : 0 0 0 1 1— 6
Stockwell...0 1 1 1 1 1 1 1 1 0— 8 Pratt.......1 0 1 1 1 1 1 1 1 0— 8
Laudon.....0 1 1 0 1 1 1 1 0 0— 6 Mayne......0 1 1 0 1 1 0 1 1 1— 7
Hanly.......0 1 0 0 1 1 1 1 1 1— 7 Batcheler...1 0 0 0 0 1 1 1 1 1— 6
Hall........1 0 1 1 0 0 0 1 1 1— 6 Work........1 1 0 1 1 1 1 0 0 1— 7
Merrill......1 1 0 1 1 1 0 0 1 1— 7 Cool.........1 1 1 1 1 0 1 1 1 1— 8
Wood...... 1 1 1 1 1 1 0 0 1 1— 8 Wright......1 0 0 1 1 1 1 0 1 0— 0
Rinsdale.. .0 1 1 1 1 [illegible] 1 1 1— 9 Kimball....1 1 1 1 1 1 1 1 1 1—10
Kleinman ..1 1 1 1 1 1 1 1 1 1—10 Thompson..1 1 1 0 1 1 1 0 0 0— 6
Hasfurther.1 1 1 1 1 1 1 1 1 1—10 Engle ......0 1 1 1 1 1 0 1 1 1— 8
A Kleinman1 1 1 0 1 1 1 1 1 1— 9 Omohundro 1 1 1 1 1 1 1 0 1 0— 8
Furgurson..1 1 1 1 1 0 0 1 0 0— 6 Roche ....1 1 1 1 0 ' 1 1 1 0— 7
Lee.........0 1 1 1 1 1 0 0 1 1— 7 Delaney.....1 1 1 0 1 1 0 , 0 1— 8
Hamlin... .1 1 0 1 1 1 1 1 0 0— 7 Wilcox......1 0 1 0 1 0 1 1 1 0— 6
Stagg.......1 1 1 1 0 1 1 1 1 0— 8 Stock.......1 1 0 1 1 1 • 0 1 1— 7
Cherrill.....1 0 1 1 1 0 1 0 0 0— 5 Shurtliff. ...0 1 0 0 1 1 1 1 1 1— 7
McManas...1 1 0 1 1 1 1 1 1 0— 8 Turrill.......0 1 0 0 1 1 0 0 0 0— 3
Hopkins....1 0 1 1 1 0 1 0 1 1— 7 Woodruff...1 1 1 0 1 1 1 0 1 1— 8
Erb ....1 1 0 1 1 1 1 1 1 1— 9 McWhorter.0 0 0 1 0 0 1 0 1 0— 3
Crawford...1 1 0 1 1 1 0 1 1 0— 7 Ruggles.. ..1 1 1 1 0 1 1 1 1 1— 9
Johnson....0 0 1 1 1 0 1 1 1 0— 6 Brooks......0 0 1 0 1 1 0 1 0 1— 5
Brown......0 1 1 1 0 1 0 1 1 0— 6 Henry.......1 1 1 1 1 1 1 0 1 1— 9
Lewis ....1 1 1 1 0 1 1 1 1 1— 9 Morris......1 1 1 1 1 0 1 0 1 1— 8
Johnson....0 1 1 1 0 1 1 1 1 1— 8 Bates.......1 1 1 1 0 1 0 1 1 0— 7
Price.......0 1 1 1 1 1 1 1 1 1— 9 Bartleston..0 1 1 0 1 1 1 0 1 0— 6
Willard... .1 1 1 1 1 1 0 0 1 1— 8 Tunnicliff ..1 1 0 0 1 1 1 1 1 1— 8
Organ.......1 1 0 1 , 1 0 1 1 1— 7 Farrar......1 0 1 1 0 1 1 0 1 0— 6
Kern........1 1 1 1 1 0 1 0 1 0— 7

Shoot off of ties—Hasfurther won first with four birds; Tucker and Ruggles divided second with five birds each; Hauworth won third with twelve birds out of sixteen; Shurtliffe and Bates divided fourth with eight birds each.

Fourth Match—Team shoot of four members from any club in the United States:

Audubon Club, Chicago.

Price..............................1 1 1 1 1 1 1 1 1 1 1 1 0 1 1—14
Johnson............................1 1 1 1 1 1 1 1 1 0 1 1 1 0 0—12
Felton.............................0 0 1 1 1 1 1 1 1 0 1 1 1 0 0—10
Turrill.............................1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—14—50

Quincy Shooting Club.

Hauworth...........................1 1 0 1 1 1 1 1 1 1 1 1 1 1 1—14
Austin.............................1 1 0 1 1 1 1 1 1 1 1 0 1 1 1—13
Brown..............................0 1 1 0 1 1 1 1 1 1 1 1 1 0 1—12
Deaderick..........................1 1 0 1 0 1 1 1 1 0 1 1 1 1 1—12—51

Chicago Club, Chicago

Willard............................1 1 0 1 1 1 1 1 1 1 1 1 1 1 1—14
Kleinman...........................1 1 1 0 1 1 0 1 1 1 1 0 1 0 1—11
Taylor.............................0 1 1 1 1 1 1 1 1 1 1 1 1 0 1—13
A Kleinman.........................1 1 1 1 1 0 1 1 1 0 1 1 1 1 1—13—51

Evanston Gun Club.

Pierson............................1 1 1 1 1 0 1 1 1 1 1 0 1 0 1—12
Abby...............................0 1 1 1 1 1 1 0 1 1 1 1 1 1 1—13
Reed...............................0 1 1 0 1 1 1 0 1 1 1 1 1 1 0—11
Hinsdale...........................1 0 1 1 1 1 1 0 1 1 1 1 1 1 1—13—49

Audubon Club of Jacksonville.

Henry..............................1 1 0 1 0 1 1 1 1 1 1 1 1 1 0—12
Benson.............................1 1 0 1 1 1 0 1 1 1 1,1 1 1 0—12
Tinsmore...........................0 1 1 1 0 0 0 1 1 0 1 1 0 1 0— 8
King...............................1 0 1 1 1 1 1 1 1 1 1 1 1 0 0—12—44

Gem City Gun Club, Quincy.

Phelps.............................0 0 , 0 1 1 1 0 1 0 1 1 1 1 0—10
Manning............................1 0 0 1 1 0 1 1 1 0 1 1 0 1 0— 9
Slepker............................1 1 1 1 1 0 1 0 0 1 0 1 1 1 0—10
Shucking...........................0 1 0 1 1 1 1 0 1 1 1 1 0 1 0—10—39

Macomb Shooting Club.

Delaney............................0 1 0 1 1 0 1 1 1 0 1 1 0 0 1— 9
Keefer.............................1 1 1 0 1 0 1 0 1 1 1 1 1 1 0—11
Bartleson..........................1 0 1 1 1 1 1 0 1 1 0 1 1 0 1—11
Tunnicliff.........................1 1 0 ' 1 0 1 1 0 0 1 0 1 1 1— 9—10

Galesburg Shooting Club.

Brooks.............................1 1 0 1 1 1 1 1 1 0 1 0 1 1 0—11
L Weekley..........................1 1 1 1 0 1 1 1 1 1 1 0 1 1 1—13
Pugh...............................1 0 1 1 1 1 0 0 1 1 1 1 1 0 1—11
P Weekley..........................1 1 1 1 1 1 1 1 1 1 1 1 1 0 1—14—46

Peoria Shooting Club.

Kimball............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Stock..............................1 1 1 1 1 1 1 1 0 1 0 0 1 0 1—11
Cornell............................0 1 1 1 1 1 0 1 0 1 1 1 1 0 1—11
Wiley..............................0 1 1 1 0 1 1 1 1 1 1 0 1 0 1—12—49

Sycamore Shooting Club.

Pratt..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Bates..............................1 1 1 0 1 0 1 1 1 0 0 0 1 1 0— 9
Roche..............................1 1 1 1 1 1 0 1 1 1 1 1 1 0 1—13
Wilcox.............................0 1 0 0 1 0 0 1 1 1 1 1 0 1 1— 9—46

Ties for first.

Quincy Shooting Club.

Hauworth.............1 0 1 1 1—4 Brown.............0 0 1 1 1—3
Austin...............1 1 1 1 1—5 Deaderick.........1 1 0 0 1—3—15

Chicago Shooting Club.

Willard..............1 1 0 1 1—4 Taylor............0 1 1 1 1—4
J J Kleinman.........1 1 1 1 1—5 Abe Kleinman......0 1 1 1 *—3—16

Ties for third.

Evanston Shooting Club.

Pierson..............1 1 1 1 1—5 Reed..............0 0 1 0 0—1
Abby.................0 1 1 1 0—3 Hinsdale..........0 0 0 1 1—2—11

Galesburg Shooting Club.

Brooks...............1 0 0 0 1—2 Pugh..............0 1 1 1 1—4
L Weekley............0 1 0 0 1—2 P Weekley.........0 1 0 1 1—3—11

Peoria Shooting Club.

Wiley................1 1 1 0 1—4 Cornell...........1 1 1 1 1—5
Stock................0 1 0 1 1—3 Kimball...........1 1 0 0 1—3—15

Shoot-off for medal—best average score.

Pratt, Sycamore..................1 1 1 1 1 1 1 1 0 1— 9
Kimball, Peoria..................1 1 1 1 1 1 1 1 1 1—10

Fifth Match—Ten birds, 21 yards; class shooting:

Turrill......1 1 1 1 1 0 1 1 1 0— 8 Basfurther..1 1 1 0 0 1 1 1 1 1— 8
Hauworth..1 1 1 1 1 1 1 1 1 1—10 Lewis......0 1 1 1 1 1 0 1 0 1— 7
Price.......1 1 1 1 1 1 1 1 1 1—10 H S Brown.0 1 1 1 1 1 1 0 1 1— 8
Organ......0 1 1 1 1 1 0 1 0 0— 6 Heniger.. ..1 1 1 1 1 0 1 1 1 1— 9
Mayne......0 1 1 1 1 1 0 1 1 0— 7 Erb.........1 1 0 1 1 1 1 1 1 1— 9
Partington .0 1 1 1 1 1 1 0 1 1— 8 Tucker.....1 0 1 1 1 0 1 1 1 0— 7
Mills........1 1 0 1 0 0 1 1 1 1— 7 A Brown ...1 0 0 1 1 0 1 0 w
Graham.....1 1 1 1 1 1 1 0 0 0— 7 Hopkins....1 0 1 0 0 1 0 1 1 1— 6
Whitcomb..1 1 1 1 0 1 1 1 0 1— 8 J S Wood...0 0 0 1 0 1 1 1 1 1— 6
Roche......1 0 1 1 1 0 1 0 0 0— 5 J Kleinman 1 1 1 1 1 1 1 1 1 1—10
Ruggles.....1 1 1 1 1 1 1 1 1 1—10 A Kleinman 1 1 1 1 1 0 1 1 1 1— 9
McManus..." 0 1 1 0 0 1 1 1 1— 6 Wilcox.....1 1 1 1 1 1 1 1 1 1—10
Wilson .....1 1 0 1 1 1 1 1 1 1— 9 Thomas ...1 1 1 1 1 1 1 1 1 1—10
Delany......1 0 1 1 1 1 1 1 1 0— 9 Willard.....1 1 1 1 1 1 1 1 1 1—10
Kiefer......1 1 1 1 1 1 1 1 0 0— 8 Sherwood ..0 1 0 1 0 1 1 1 1 0— 6
Webster....0 1 1 1 1 0 1 0 0 0— 5 Cool.......0 1 1 1 1 1 0 1 1 1— 8
Tunnicliff...1 0 0 0 1 0 1 0 1 1— 5 Cook ......1 1 0 1 1 1 1 1 1 1— 9
Merrill......1 1 1 1 1 0 1 0 0 1— 7 Babcock....1 1 1 1 0 1 1 1 0 0— 7
Stockwell...1 1 1 1 0 1 1 1 1 1— 5 Pratt.......1 1 1 0 1 0 1 1 0 1— 7
Anatin......1 1 1 1 1 0 1 1 1 1— 9 Kimball. ...0 1 1 1 1 1 1 1 1 1— 9
Weekly.....1 1 1 0 0 1 0 0 0 1— 5 Morehouse..0 1 1 1 0 1 1 1 1 1— 8
James......0 0 1 1 1 1 1 1 1 1— 8 Stagg.......0 1 1 0 0 1 1 1 1 1— 7
Crawford...1 1 1 1 1 1 1 0 0 1— 8 Morris......1 0 0 0 1 0 0 1 1 1— 5
Johnson....0 0 0 1 1 0 0 1 0 0— 3 Stock.......1 1 1 1 1 1 1 1 0 1— 9
Work ......1 1 1 0 1 1 1 1 0 0— 7 Brooks .....0 1 1 0 0 0 w
Mills........1 1 1 1 1 1 1 1 1 1—10 Thompson..1 1 1 1 1 1 1 1 1 0— 9
Ferguson...1 1 0 0 1 1 1 1 1 1— 8 Brinkner ...1 1 1 1 1 1 1 1 1 1—10
Ball.........1 1 0 1 1 0 1 1 0 0— 6 Hamlin.....1 0 0 1 1 1 1 1 1 1— 8
Pepper.....1 0 0 1 1 1 1 0 1 1— 7 Buckner....1 1 1 1 1 1 0 1 0 1— 8

Ties on ten won by Hauworth with ten birds straight; ties on nine won by Austin with twelve birds out of fifteen; in ties on eight, Turrill, Keifer and Partington divided with five straight birds each; Babcock won ties on seven with nine out of ten.

Sixth Match—Open to teams of two from any organized club in the United States; ten single birds, 21 yards:

Audubon Club, Chicago.

Turrill..........................1 1 1 0 1 1 1 0 1 1— 8
Price............................1 1 1 1 0 1 1 1 1 0— 8—16

Quincy Shooting Club.

Hanworth.........................0 0 1 1 1 1 1 1 1 1— 8
Crawford.........................0 1 1 1 1 0 1 1 1 1— 8—16

Quincy Shooting Club.

A Brown..........................1 1 1 1 1 1 1 0 1 1— 9
Sherwood.........................0 1 1 1 1 1 0 1 1 1— 8—17

Quincy Club.

Webster..........................1 0 1 0 0 0 1 1 1 1— 6
Corley...........................1 1 1 0 0 1 1 1 1 0— 7—13

Chicago Club.

J J Kleinman.....................0 0 1 1 1 1 1 0 1 1— 7
A Kleinman.......................0 1 1 1 1 1 1 1 0 1— 8—15

Quincy Club

Miller...........................1 1 1 1 1 1 1 1 1 1—10
Woodruff.........................1 1 1 1 1 1 1 1 1 0— 9—19

Peoria Club.

Kimball..........................1 0 1 1 1 1 1 1 1 1— 9
Wiley............................1 1 0 1 1 1 1 1 1 1— 9—18

Quincy Club.

Graham...........................0 0 1 1 1 1 1 1 0 1— 7
Wood.............................1 0 0 1 1 1 1 0 1 0— 6—13

Chicago Club.

Taylor...........................1 1 1 0 1 1 0 1 1 0— 7
Willard..........................1 1 1 1 0 1 1 1 0 1— 8—15

St Louis Club.

Hasfurther.......................1 1 1 1 1 1 1 1 1 1—10
Ferguson.........................1 1 1 0 1 0 1 1 1 1— 8—18

Galesburg Club.

Anatin...........................1 1 1 1 1 1 1 1 1 1—10
P Weekley........................1 1 1 1 1 0 1 1 1 0— 8—18

Kansas City Club.

Work.............................0 1 1 1 1 1 1 0 1 1— 8
Mills............................1 1 1 0 1 1 1 1 1 1— 9—17

South End Club, Chicago.

Cook.............................1 1 0 0 1 1 1 0 1 1— 7
Roche............................1 1 1 1 1 1 1 1 1 0— 9—16

St Louis Club.

E Johnson........................1 1 0 1 1 1 1 1 1 1— 9
Lewis............................1 1 1 1 1 1 1 1 1 1—10—19

Atchison Club.

Stockwell........................1 1 1 1 1 1 0 0 1 0— 7
Buckman..........................1 0 0 1 0 0 1 1 0 1— 6—13

St Joe Club.

Batcheler........................0 1 1 1 0 1 1 0 0 1— 6
Erb..............................1 1 1 1 1 1 0 1 0 1— 8—14

Henry Club.

Morris.......0 1 0 0 0 0 0 0 0 0—2 Ruggles..1 1 1 1 1 1 1 1 1 0—9—11

Audubon Club.

Stagg........1 1 0 1 1 1 1 1 1 1—9 Abby....1 1 1 0 1 1 1 0 0 1—7—16

Galesburg Club.

Pugh......1 0 0 0 1 1 1 1 1 1—7 Weekley.1 1 1 1 0 1 1 1 0 1—8—15

Ties for first:

Quincy Club.

Miller..............0 1 1 1 1—4 Woodruff.......1 1 1 1 1—5—9

St. Louis Club.

Johnson.............1 1 1 1 0—4 Lewis..........0 1 0 0 1—2—6

Ties for second:

St. Louis Club.

Hasfurther..........1 1 0 1 1—4 Ferguson.......1 1 0 1 0—3—7

Galesburg Club.

Austin..............1 1 1 0 1—4 Weekley........1 1 1 1 1—5—9

Ties for third.

Kansas City Club.

Work................1 1 0 1 0—3 Miles..........0 1 1 1 1—4—7

Quincy Club.

A Brown.............1 0 1 0 1—3 Sherwood.......0 1 1 1 0—3—6

Ties for fourth.

Audubon Club.

Turrill..............1 1 1 1 1—5 Price..........1 1 1 1 1—5—10

Quincy Club.

Hanworth............1 1 1 0 1—4 Crawford.......0 1 1 1 0—3—7

Ties for fifth.

Chicago Club.

J Kleinman ....1 0 1 1 1—4 A Kleinman.....1 1 0 1 1—4—8

Chicago Club.

Taylor..............1 0 0 1 w—2 Willard........1 0 1 1 w—3—5

Shoot off for the Forest and Stream and Rod and Gun Medal, presented by Mr. S. H. Turrill:

J Miller......1 1 1 0 w Austin.....1 1 1 1 1 1 0 1 1 1—9
Hasfurther..1 1 1 1 1 0 0 1 1 1—8 Lewis......1 1 1 0 0 w

Match No. 7.

Philips......0 1 1 1 0 1 0 1 1 1— 7 Roche .. ...1 1 1 1 1 0 0 0 0 1— 7
Johnson....0 1 1 1 1 0 1 0 1 1— 8 Wright.....1 1 1 1 0 1 1 0 1 1— 8
Miles.......1 1 1 1 1 1 1 1 0 1— 9 Hauworth ..1 1 1 1 0 1 1 1 1 1— 9
Sherwood ..0 1 1 1 1 1 0 1 1 1— 8 Turrell.....1 1 1 1 1 1 1 1 1 1—10
Work.......1 1 0 1 1 1 1 1 1 1— 9 Austin......1 0 0 1 0 1 1 0 1 6— 6
Kleinman ..1 1 1 1 1 1 1 1 1 1—10 Wilcox.....1 0 1 1 1 0 0 1 1 1— 7
Wiley.......1 0 1 1 1 0 0 1 0 0— 7 Hasfurther.1 1 1 0 1 1 1 0 1 0— 7
Stanton.....1 1 1 1 1 1 0 1 1 1— 9 Woodruff...1 1 1 0 1 1 1 1 0 1— 8
Brinker.....0 0 1 1 1 0 1 0 1 0— 5 Engle.......1 1 1 1 1 1 0 1 1 1— 9
Strawn......1 0 1 1 1 1 0 1 1 1— 8 Thomas ....0 1 1 1 0 1 1 1 0 1— 8
Partington..1 1 1 0 1 0 1 1 1 0— 7 Babcock....1 1 0 1 1 1 1 1 0 0— 7
Tucker......0 0 1 1 1 0 1 1 1 0— 7 Merrell... 1 1 1 0 1 1 1 1 1 1— 9
Abby.......1 1 1 1 1 1 1 1 0 1— 9 James......1 1 0 1 1 1 1 1 0 1— 8
Cook ....0 1 1 0 1 0 1 1 1 1— 7 Farrar......1 1 1 1 1 1 1 1 1 1—10
McKenzie..1 1 1 1 1 0 1 1 1 1— 8 Turrill......1 1 1 1 1 1 0 1 1 0— 8
Heberling ..1 1 1 0 1 1 0 1 1 1— 8 Heninger...1 0 1 1 0 1 1 1 1 0— 7
Brown......1 1 1 1 1 0 0 1 1 1— 8 Willard ....1 1 1 1 1 1 1 1 1 1—10
Furgeson...0 0 1 1 1 1 1 1 1 1— 8 Hamlin.....1 1 1 1 1 1 1 0 1 1— 0
Thompson ..1 1 0 1 0 0 1 1 1 1— 7 Taylor......1 1 1 1 1 0 1 1 1 1— 9
Rowo.......1 1 1 0 0 0 1 0 1 1— 6 Crawford...0 0 0 1 1 1 1 1 1 0— 6
Stagg.......0 1 1 1 1 1 1 1 1 1— 9 Mills ....1 1 1 1 1 1 1 1 0 0— 8
Corley......1 1 0 1 1 1 1 1 1 1— 9 Kleinman ..1 1 1 1 1 1 1 1 1 1—10
Cool.........1 1 1 1 1 0 1 1 1 0— 8 Weekly.....0 1 1 1 1 1 1 1 1 1— 9
Miller.......1 1 1 1 0 1 0 1 1 0— 7 Weekly.....1 1 0 0 0 1 1 0 1 0— 5
Neidhart ...1 1 1 1 1 0 1 1 0 1— 8 Miller.......1 1 1 0 1 1 0 1 1 0— 7
Wood.......0 0 0 0 0 0 w Stockwell ..1 0 1 0 1 1 1 1 0 0— 6
Pipino......1 1 1 1 0 0 0 1 1 1— 7 Kimball.....1 0 1 1 1 1 0 1 1 0— 7
Ruggles....1 1 1 1 1 1 1 1 1 1—10 Bates.......1 0 1 1 0 0 1 1 1 0— 6
Brown......1 1 1 0 1 1 0 0 1 0— 6 Price.......1 1 1 0 1 1 1 1 1 1— 9
Crooker.... 1 1 0 1 1 0 1 1 1 1— 8 Victor......1 1 1 0 1 1 1 1 0 0— 7
Graham ....1 1 0 1 1 1 0 0 1 1— 7 Henry......1 1 0 1 1 1 0 1 1 1— 8

In shooting off ties, J Kleinman won first with 14 out of 15; Stagg won second with five straight; Strawn third with 7 out of 10; Hasfurther, Tucker and Graham tied a second time on 5 straight; for fourth, Hasfurther winning second shoot-off with 3 out of 5; Crawford, Bates and Stockwell tied on 3 out of 5; for fifth, Crawford and Bates again on 4 out of 5, Crawford winning finally with 2 straight.

Match No 8—18 yds.; 5 double rises:

Sherwood....00 10 11 11 11— 7 Kleinman. ..11 11 11 11 11—10
Erb...........11 11 11 11 11—10 Thompson...11 11 10 10 10— 7
Crawford. .10 11 11 11 10— 8 Willard......11 10 11 10 11— 8
Wood.........00 10 10 10 11— 5 Partington...10 10 10 11 01— 6
Austin ....10 10 10 11 00— 5 Mills.........00 10 11 11 00— 5
Turrill ....11 11 11 11 11—10 A Kleinman.11 01 11 10 10— 7
Price.........10 11 10 11 11— 8 Crocker.... .10 11 11 10 10— 7
Hauworth....10 10 10 10 11— 6 McKenzie.. .10 00 11 00 10— 5
Roche.........11 11 11 10 11— 9 Tucker.... ..10 11 11 10 11— 8
Engle.........11 11 11 11 11—10 Work.........00 10 00 11 11— 5
Ruggles..... .10 11 11 11 00— 7 Henry....... .10 11 11 11 10— 8
Beberling.. .10 10 10 11 10— 6

In shooting off ties Turrill won first with 3 pairs straight; Tucker third with 14 birds straight; Ruggles fourth with 10 out of 12.

TENNESSEE—*Nashville June* 14.—1st match; 21 yds rise; spring traps:

Maskey............0 1 1 1 1—4 Gilbert..............1 1 1 1 1—5
Bush............ ..0 ·1 1 1 0—3 Ridge.................1 1 0 1 1—4

Second Match—21 yds:

Maskey............1 1 0 0 0—2 Gilbert............ ...1 1 0 1 1—4
Bush............ ..1 1 1 1 1—5 Ridge.................0 1 1 1 1—4

Third match—18 yds rise:

Phillips.............1 1 1 1 1—5 Maskey...............1 1 0 1 1—4
Turner..............1 0 0 1 1—3 Bush..................1 1 1 1 1—5
Gilbert..............1 1 1 1 1—5 Noble.................1 1 0 1 1—4
Carter...............1 1 1 0 1—4 Massey...............0 0 1 0 0—1
Nicholson..........0 1 1 1 1—4

Fourth match—21 yds:

Waterman...... ..0 1 1 1 1—4 Turner.... ....1 1 0 1 1—
Burkholz...........1 1 1 0 0—3 Noble................1 0 0 1 1—2
Phillips.............1 1 1 1 1—5 Stone................0 1 1 1 1—4
Maskey ....1 0 0 1 1—3 Ridge................1 1 1 1 1—3
Bush.................1 1 1 1 1—5 Carter...............1 0 0 1 0—4
Gilbert.............1 1 0 1 1—4 Nicholson.... ......0 0 0 1 1—5

Team matches—21 yds rise:

Ridge...............0 1 1 1 1— 4 Gilbert..... ......1 1 1 1 1— 5
Buckholz...........1 1 1 1 1— 5 Phillips............0 1 0 1 0— 2
Maskey.............0 1 0 1 1— 3 Turner.............1 1 1 1 1— 5
Bush................1 1 1 1 1— 5 Waterman.........1 1 1 1 1— 5
Noble...............1 1 1 1 1— 5 Carter........... .1 0 1 1 1— 4
Stone...............1 0 0 1 1— 3 Nicholson...... ..1 1 1 1 1— 5

Total................................25 Total..................................26

Second match—21 yds:

Ridge.............1 1 1 1 1— 5 Gilbert.............1 1 1 1 1— 5
Buckholz.........1 1 1 1 1— 5 Phillips...........0 1 0 1 1— 3
Maskey...........1 0 1 1 1— 4 Turner..............0 0 0 1 1— 2
Bush..............0 1 1 1 1— 4 Waterman.........0 1 1 1 1— 4
Noble.............1 1 0 1 0— 3 Carter..............1 1 1 1 0— 3
Stone.............0 1 0 0 0— 1 Stone...............1 1 0 1 1— 4

Total.................................22 Total..................................21

Third match—21 yds rise:

Ridge..............1 0 1 1 1— 4 Gilbert............1 1 1 1 0— 4
Buckholz.........1 0 1 1 1— 4 Phillips............1 1 1 1 1— 5
Maskey............1 0 1 1 0— 3 Turner..............1 1 1 1 0— 4
Bush...............1 1 1 1 1— 5 Waterman.........1 1 1 0 1— 4
Noble..............1 1 1 1 0— 4 Carter..............1 0 0 1 1— 3
Stone..............0 0 1 0 1— 2 Nicholson..........1 1 1 0 1— 4

Total.................................22 Total..................................24

Match for sweepstakes—21 yds rise; the highest ties to shoot off for the purse:

Turner..............1 1 1 0 0—3 Phillips.............0 1 1 0 0—2
Buckholz...........1 0 1 1 0—3 Waterman..........1 0 0 0 1—2
Noble...............1 1 1 0 1—4 Gilbert..............1 1 1 0 1—4
Carter..............1 1 0 1 0—3 Nicholson..........0 1 0 1 1—3

The ties on fours shot off; the first to miss a ball to lose:

Noble...........1 1 1 1 1 1—6 Gilbert..........1 1 1 1 1 0—5

J. D. H.

National Pastimes.

BERGEN ARCHERS.—The first meeting of the Bergen Archers of Hackensack, N. J., last Saturday, was well attended, some thirty members appearing equipped for sport. Mr. W. Wells and Miss Lizzie Wells were the champion shots of the day. If archery clubs will send us their scores we shall be happy to afford in our columns an opportunity for comparing notes.

ORION GAMES.—The second annual meeting of the Orion Rowing and Athletic Association of Jersey City, at West Side Driving Park, June 15, included the following events:

One hundred yards run. Winners—First heat—D. Jardine, Stevens Institute; 11s.; J. B. Value, 12s. Second heat—R. L. La Montagne, of N. Y. A. C., in 11¼s. In the final heat La Montagne, 10¾s.; Jardine 11s.

One mile walk. Six entries, the winners of which were F. A. Mott, H. A. C.; time, 6½ minutes; J. V. Woolcott, M. A. C., 6 min. 2¼s.

Half mile run. Twelve entries. Winners—F. Banham, H. A. C., 2m. 11⅛s.; F. E. Hough, Hudson Boat Club, 2m. 11⅝s.

Running high jump. Five entries. Winners—H. E. Ficken, N. Y. A. C., 5 ft. 3⅝in.; A. H. Oakes, 5 ft. 3 in.

Two hundred and twenty yards run. First heat, six entries. Winners—W. O. Wilmer, 24 seconds; R. L. La Montagne, 24½ seconds. Second heat—W. O. Franco, Jr., only started; no time taken. Final heat—Wilmer's time, 23¼ seconds; La Montagne, 23¾ seconds.

One mile run; four entries. Winners—Richard Morgan, H. A. C., 5m. 14s.; C. Hoe, 5m. 19¾s.

Quarter mile run. First heat, four entries. Winner, D. Jardine, Stevens Institute, 57½ seconds. Second heat, four entries. Winner, E. C. La Montagne, 57¾ seconds. Final heat—La Montague, 53¼ seconds; Jardine, 55½ seconds.

Three mile walk. Six entries and two starters. Time—E. C. Holske, H. A. C., 25m. 5s.; J. V. Woolcott, M. A. C., 26m. 27¼s.

One hundred yards run, club handicap. First heat, five starters. Winners—J. H. Drew, 12s.; J. H. Van Loan, 12¼s. Second heat—W. F. Meyers, 12s.; C. Hoe, 12¼s. Final heat—Meyers, 11½s.; S. Drew, 11½s.

The game closed with a tug of war between the members of the club led on one side by W. F. Meyers, who commanded, W. Aymar, E. H. Bowley, M. Livingston and H. R. Adams; the opposite side was commanded by George Coughlin and consisted of J. H. Van Loan, Will Coughlin, Frank Hill, and M. Goodsen. The first trial was won easily by Coughlin's team. The second, after a hard fight, was won by Meyers' team, and in the final heat the team commanded by Meyers outpulled the others, and the match was given to Meyers' team. Time: 3,32½.

PRINCETON ATHLETICS.—The annual spring meeting of the Princeton Athletic Club was held June 15. The games were participated in by representatives of Princeton College, the Univ. of Pa., American Athletic Club and the Elizabeth Athletic Club. The events were as follows:

100 yard run—A. Hunt, P. C. A. A.; Duffield, P. C. A. A.; H. B. Emmons, Princeton, and F. Dennis, P. A. C. Won by Hunt, Duffield second. Time, 10 2-5 seconds.

Throwing the hammer. F. Larkin, P. C. A. A., first; 102 feet 7 inches. Blackwell second, 98 feet

220 yard race. L. P. Smock, P. C. A. A.; F. McKaig, P. A. C.; F. Dennis, P. A. C., and J. S. Shriver, P. C. A. A. Won by Smock. Time, 24½ seconds. McKaig second, 25½.

Running long jump—William Wyckoff, P. A. C., S. P. Withington, P. C. A. A., and Frank Van Dyke, P. A. C.; F. McKaig won; 17 feet 6 inches. Wyckoff second, 17 feet 5 inches.

Mile walk—G. D. Phillips, Hudson Boat Club; E. B. Wall, American A. C.; George Slayback, P. A. C., C. W. Lyndi, Princeton. Am Phillips' time, 7m. 30 2-5s.; Wall, 7m. 40s.

Forty-yard race—McKay first; Lanier, P. C. A. A., second.

Vaulting with pole—Frank Duke first, height 9 feet 5 inches; B. F. Harrah, University of Pennsylvania; second, 9 feet 1 inch.

The mile run—E. E. Gibson and J. V. Cruser, P. A. C. Cruser won. Time, 5m. 17s.

Putting the shot—F. Larkin, first; distance, 34 feet ¾ inch.

Half-mile run—J. Stewart, P. C. A. A.; J. M. Woodbury, P. C. A. A.; R. M. Fielder, P. A. C. Stewart first, Woodbury second. Time, 2m. 24½s.

Running high leap—J. P. Whiting, F. I. Haines, H. B. Emmons, F. Duke and F. McKaig. Whiting, 5 feet; Haines second, 4 feet 10½ inches.

The games ended with a hurdle race, in which there were but two entries—F. Dennis, P. A. C., winning, Emmons being second.

PRINCETON ATHLETIC ASSOCIATION.—Annual games, June 17:

Three broad jumps—Three entries; won by F. Larkin, '79, 32 feet 4 inches.

One half-mile run—Three entries; won by J. Stewart, '79, 2m. 9 1-5s.

In the running high leap, J. P. Withington, '80, cleared 5 feet and won.

In the pole vaulting Larkin was first—7 ft. 10 in. —and Withington second—7 ft. 8 in.

In the one mile run, D. Wilson was the winner in 5m. 55½s.

In throwing the hammer (14 pounds lbs.) Larkin cleared 101 ft. 4 in., C. Dodge cleared 96 ft. 5 in.

The quarter-mile run was won by Stewart; J. F. Lanier, '80, second. Time, 92 2 5 seconds.

Running long jump—A. C. Hunt, '78, 20, ft.

Putting the cannon ball—Larkin, 33 ft. 8. in.; Dodge, 32 ft. 11½ in.

In the hurdle race, Brown came in first, Dodge second. Time, 18 1-5 seconds.

In the standing high jump Larkin cleared 4 ft. 6½ in. and Haines 4ft. 4in.

In the 220 yards dash H. L. Smock, '79, came in first, Stevenson second. Time 25 4-5 seconds.

The games ended with a graduates' 100 yard dash, in which J. Duffield, '76, came in first and J. Wood second. Time, 10 1-5s.

RACKETS CHAMPIONSHIP.—The second rubber of the American Championship games of racket between Oscar Manning of Philadelphia and James Keating of New York was concluded at Hoboken last Saturday. The first two games were won by Keating, the third and forth by Manning In the fifth game when the score stood 11 to 0 in his favor, Keating sprained his ankle and withdrew. This would have given the rubber to Manning had he claimed it, but he declined it. A new match has been made, in which eleven games will be played.

HARRIMAN'S WALK.—At Haverill, Mass., last Saturday, Harriman the pedestrian completed his walk of 400 miles in 127h. 36m. 45s.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

G. F. H., Bridgeport.—Could not decide unless you gave us the full scores.

W. N. W., Portsmouth, Va.—For wild pigeons see our advertising columns.

A. N., Johnstown, N. Y.—Write to Orange Judd & Co. for books on Architecture.

F. H K., Pittsfield, Mass.—The woodcock and partridge season opens in New York Aug. 1.

R. A. C., Rookland, Me.—From all that we hear the trap you mention is giving satisfaction.

G. H., Philadelphia.—In his former trip to England Bogardus was not defeated by any English shooter

J. D. H., Mayton.—Please tell me the shooting qualities of the —— breech-loading shot-gun? Ans. Very good.

J. E. P., Buffalo, N. Y.—The open season for woodcock in Penn., according to the law just passed, begins July 4.

W. A. McC., Milwaukee.—The shell is the *Scalaria Groenlandica* and it is found from Greenland to Massachusetts.

E. L., 171 E. Eighty-seventh st.—Write to John Bonnell, Forked River, N. J., or to G. Mercer, William's Bridge, N. Y.

J. M., care of G. H, Philadelphia.—Check for $25 has been received, and you have been written to. See this week's paper.

H. H. F., Portland, Maine.—The crooked tail on your dog is a defect on the show bench, but he may be a capital animal in the field.

W. A. McC., Milwaukee—Very sorry, but all our material was turned over to Mr. Burges for the forthcoming kennel book. Write to him: Hillsdale, Mich.

H. K., Albany, N. Y.—Pointer puppy four months old has a breech at navel size of a walnut. What shall I do? Ans. A good surgeon will be able to remedy the defect.

I. B. H., Buffalo.—Could not inform you of the standing either of the parties or their dogs. We never can guarantee advertisers. The deer claw is no sign of poor breeding.

J. P., Midland, Mo.—Which is the best dog for turkey, quail, pheasants, ducks and squirrels? Ans. A good sized cocker for ducks and squirrels, and a setter for the other game.

J. S. W., Taneton.—Is a setter good as a watch dog? Which would be the better, a setter or a pointer? Ans. Either setter or pointer make good watch dogs. See advertisements.

G. N., Stony Hollow —To "Break shot" is to rush for game the moment it is killed. To "Drop to shot" is to drop to the ground at the report of the gun. "Hold up," to rise after dropping to shot.

J. B. T. and F. C., of Boston, and some half dozen others.—See last week's issue of the paper. You will find that the accident to Mr. Dudley Selph never occurred, and that it was a malicious falsehood.

M. S. C., Newark.—My pointer 3 months old has tape worms. What shall I give her? Ans. Try powdered pumpkin seeds, followed three hours after by a dose of castor oil. Doubtful if you are correct in your diagnosis at that age.

M. H., N. H.—I have a cocker spaniel about two years old that does not seem to have much scent; hardly any. His nose is hard, harsh as a file and dry. Can he be helped? Ans. Give plenty of exercise and don't feed him too high.

P. O. S., Cincinnati.—1. Is the —— a first-class rifle? 2. What size calibre, length of barrel and weight would you advise me to get for target practice at 400, or 500 yards? Ans. 1. An excellent rifle. 2. .40 calibre, 70 grains, 30 inches, 9 pounds.

READER, Erie.—With a 12 bore breech-loader, and with 4 drs. powder and 1¼ oz. No. 6 shot, I put into a square, 14x15, at 40 yds., with right barrel 186, and with left barrel 188 pellets. Is that a good average? Ans. Very good indeed.

CRITIC, St. Augustine, Fla.—Your criticism is very sensible. The matter will be very fully discussed by Dr. Carver, the rifleman, in an early issue. Our artist has never been on the plains, and never saw a buffalo, except the stuffed one of the museum.

W. H. B., Pontiac, Mich.—We think for your one-armed friend the Wesson rifle would be the better. It could be better managed and loaded than any other we know. We could not give you the name of any correspondent of this paper without his consent.

A. D. B., Carlisle.—My setter 3½ years old strains very much and passes a little blood. Have given him castor oil and laudanum without effect; he shows no signs of illness. Had him out yesterday, when he showed a 2:40 gait. Ans. Repeat castor oil and laudanum.

M. B. A., Phila.—Have a pair of poppies six months old, the dog half the size of the ditch. Dog has been sickly Is weak across the hind quarters and staggers when he runs. Ans. Probably suffering from worms, unless he has a nervous disorder. Give areca nut and castor oil.

∞, B. W., Waltham.—If a cocker spaniel dog pup is castrated will it interfere the slightest with his hunting qualities? At what age should the dog be altered? Ans. It generally deprives a dog of high courage and he tires sooner, though it does not effect his scent. The operation should be done before six months of age.

J. F. C., Portsmouth —1. Does Sensation receive visits? If yes, what is the fee and owner's address? 2. What would be the cost in your city of a 12 bore paragon Tolly breech-loader, with case and appurtenances complete? Ans. 1. Yes. $35. Address Dr. Webb, Secy. Westminster Kennel Club, N. Y. City. 2. Some $225.

R. L. G., Louisville, Ga.—The gun Mr. Squires has for sale is 12 bore, 30 inch. It would be difficult for you to find the 14, 16, or 20. Schuyler, Hartley & Graham import them made by Scott, and they cost $150 They weigh from 5¾ to 6¾ pounds. (We are afraid your queries have been overlooked, or would have been replied to.)

H. J. G., Sabula, O.—We published a full list of works on taxidermy in our answers for June 6. From repeated demands for just this information we infer two things: First, that the country is full of amateur collectors; second, that if these amateur collectors read this paper more carefully they would save themselves a great deal of unnecessary trouble.

RIFLE, Newark.—What is the best kind of canoe for general use? also its price and where procured? Ans. Buy a Canadian bass wood, or cedar canoe; price $25 to $35. Send to Peterboro for an English canoe, to Lakefield for a Gordon, or to Gore's Landing, Rice Lake, for a Herald. See all late numbers of FOREST AND STREAM, which you have evidently failed to read.

A. C. W., City, New York.—Do striped bass when hooked ever jump from the water, as the black bass do? Are not black bass acknowledged by one and all to be the king of fish? What kind of shooting do wild pigeons afford from the trap? Ans. Yes; it is very common. 2. Many salmon anglers would dispute this point. 3. The best practice next to shooting in the fields.

J. A., Franklin Falls.—1. Why does a gun make a better pattern after it has been shot two or three times than it does the first time it is shot when it is clean and smooth? 2. What kind of a pattern is 110 No. 5 shot in a target 16 by 26, 3½ drs. of powder, 1¼ oz. shot at 40 yards? Ans. 1. We cannot admit that it does. You merely get used to the gun. 2. Remarkably good.

S. I. H., Salem.—1. I have a double gun, choke-bore, 12 gauge, 28 inch barrel. Will you please tell me the proper charge and what reputation the maker has? 2. What kinds of game and fish at Blue Hill, Maine? Ans. 1. Do not know the name of the maker. 3½ drs. powder and 1¼ oz. shot. 2. Trout fishing and deer shooting within easy traveling distance. Grouse, shore birds, etc.

M. E. L., Frederick City.—I have a double-barrel breech-loading gun 12 gauge laminated steel barrels, cylinder, —— make, which scatters too widely to do any good shooting. Can I have this gun rebored so as to shoot closely? If so please recommend a reliable firm that will benefit the shooting qualities of my gun. Ans. Send it to Clark & Snelder, Baltimore, Md., who make a specialty of such work.

A. J. S., Brooklyn.—I want to take a long tramp; have tender feet. Where shall I get shoes? Ans. We can recommend you to no other person than McSwyny, 419 Broadway. Suffice to say McS. makes O'Leary's walking shoes, and the great pedestrian insisted, in our presence, that good shoes were half the battle. It is a higher art to make a well fitting, snug, yet easy shoe, than to build a coat.

H. F. F., Augusta.—The first of the two names you ask us about we believe to be perfectly responsible. As to the second one we have no reason to suppose that he could not do exactly as he represented. But we cannot guarantee anything. We would, however, buy dogs from either of the persons. Could not further advise you about a dog. We have often declared that we are not responsible for advertisers.

H. E. S., Sparta, Mich.—1. How much space should the shot cover at 40 yards from the gun for a good gun for shooting on the wing? 2. How heavy should a pair of shot barrels ⅝ inch bore be to stand charge of 3 drs. powder and 1 oz. shot, and what the weight of a pair with ⅝ inch bore, charge 3 drs. powder ¾ oz. shot so as not to give unpleasant recoil if both barrels are fired at the same time? Ans. 1. A space 36 inches square. 2. For the first, 3¾ pounds; for the second, from 3 to 3¼ pounds.

J. A. J., Jersey City.—My setter pup is 5 months old and has bad disposition for the last month. He turns his head and snaps on the air. He is not troubled with fleas and vermin. Gave him castor oil for worms, but he has not passed any. Appetite good as are his spirits, though his eyes run a little. What shall I do for him? Ans. The snapping is evidence of nervous disorder. Give 2 grains of quinine and ¼ grain of nux vomica three times a day for a week. Do not let him bite you.

M. V. Y., M. D., Geetingsville, Ind.—How old are gold fish when they take on their golden colors? I have a lot in my ponds one year old and they are of a brown color yet. Also, can I get some of the European carp from Washington this fall? Ans. Send to the U. S. Fishery Commission for carp. Your brown fish are but as dross and never will become gold fish. Get some new stock. These cyprinoids hatch of many different hues from the same stock; golden, brown, crimson, red, white, pink, black, etc.

LENOIR, N. C.—My pointer dog, 3 years old, frequently has violent spasms once a week. Perfectly helpless when in that condition. Seems to suffer great agony. The fits last half an hour; sometimes longer. What shall I do? Ans. The length of time during which your dog has been subject to fits renders it improbable that a cure can be effected through medicines. Keep his bowels open by giving sulphur and castor oil every week, and if not strong give 2 grains of quinine three times a day for a short time.

M. C. B., Monson, Me.—We have shot a duck in Hebron Pond whose like was never seen in this country before. It is a smallish duck with a red spot on bill, white near each eye, one half the body black, the other white; yellowish spot on back Tail like that of any duck, with the exception of two long-peaked feathers in the centre. Please give us the name of the duck? Ans. Your description is very meagre, but we opine that the bird was a long-tailed duck, or old squaw, a male, in summer plumage; scientific name, *Harelda glacialis*.

J. H. N., Mamaroneck, N. Y.—At the last session of the board of supervisors of Westchester county a law was passed making the close season for woodcock extend to October 1. The State law makes the close season expire August 1. Is this supervisor's law making the close season until October binding and in force? Ans. We have before this replied to a similar question. The supervisors have no power to make any game law which contradicts the State law. The law of the supervisors, when it clashes with the State law, is not binding.

J. W., Pittsburgh.—1. How does the $100 —— gun compare with the ——, or ——? 2 What would be a good pattern of No 6, 8 and 10 chilled shot at 30 inch circle, 40 yards? 3. How many sheets of brown paper should they penetrate? 4. Whose paper shells are the better, American compared with English? 5. Would it be safe to use wire cartridges in a choke-bore? Ans. 1. Compares most favorably. 2. 200, 300 and 450 pellets. 3. There being no fixed standard of brown paper, we can give no idea of penetration. 4. American are just as good. 5. Unsafe.

G. E B., Rochester.—I have a .44 cal. breech-loading rifle and am using Hazard's FG rifle powder. Would it flatten the trajectory to amount to anything for 100 to 150 yards to use a hollow bullet and quicker powder? What would be the best powder to use in such case? Are "Express bullets" hardened, and if so how many parts of lead are put to one of tin? Ans. Yes, but hardly enough to be perceptible in your shooting, but would not advise it, unless specially made for heavy charges and light bullets; your arm would probably shoot wild. The Express bullet is made of soft lead.

NIBS, Avoca, N. Y.—1. Where should we clerks in the central part of the State of New York go for a few days' recreation and fishing and, last but not least, where we can have the most sport for the least cash? 2 Is there a book or map that gives a good description of the lakes, rivers and villages of the United States? 3. What kind of hook and bait should be used in our lakes? Ans. 1. Take the Adirondack R. R. to North Creek and beyond. 2. The "Sportsman's Gazetteer" tells it all. For sale at this office. Price $3. 3. Use a No. 6 or medium sized hook for small fish, and a cod hook for the big ones. See "Gazetteer" as above.

A. W. G., York, Pa —Please inform me where I can buy a well bred great St. Bernard pup—probable cost for male as well as female? Which is the larger and gentler, the rough or smooth-haired? Are they suitable for children in their rough tumblings? If I am not mistaken, the St Bernards are eminently affectionate and good-natured. Ans. In Philadelphia in 1877 there were some very fair St. Bernards shown there. Write to Wm. Bub, Philadelphia, or to J. D. Patterson, Norton, Del. Co., Pa.; or to John P. Haines, 378 Broadway, N. Y. We could not give you price. It would be better to get puppies, and bring them up. The St Bernard is decidedly the most sagacious and affectionate of all the canine species. The smooth-coated run a trifle heavier than the rough-haired St. Bernards. Perhaps an advertisement would help you.

C. W., Brooklyn.—My Gordon setter puppy has been sick, though improving. When walking she seems distressed, carrying her hind legs under her body. When I feel her hind legs from the hock down she seems to suffer pain, though I can see no swelling. Her eyes are running a little. Coat glossy and in good condition. Have given her nux vomica. She has passed some worms. As my bitch took first prize at New York I am anxious about her. Ans. You do not speak of the condition of the bowels. Many dogs at the show suffered from dysentery. The symptoms as described point mainly to rheumatism. Would recommend you to leave off the nux vomica. Give a little sulphur once a day and a small dose of castor oil each alternate day for a week. Also two grains of quinine three times a day. If there is rheumatism a small teaspoonful of bicarbonate of soda dissolved in a little water given in the evening will be beneficial. Be on the watch for distemper at her age.

CHESS CORRESPONDENTS.

——, New Haven, Conn.—Send us your address.

W. Steinitz, Chess Editor *Land and Water* and Dr. Gold.—Shall we exchange?

Westminster Papers.—The FOREST AND STREAM has been sent you regularly.

C. Jacobus, New Brighton, Pa.—Should like to publish one of your correspondence games.

C. E. Minard, Syracuse, N. Y.—Solutions received. Contributions to this department requested.

Rev. C. E. Ranken.—Kindly furnish us with the January and February exchange numbers of the *Chronicle*.

W. A. Briggs, Montpelier, Vt.—That correspondence game long overdue has been received and will shortly appear.

W. D. Mills, Savannah, Tenn.—Has the chess board ordered been received? We shall expect a tourney set from you soon.

C. Schwede, Leipzig.—We have not received a copy of the *Schach Zeitung* from January to June. Shall we continue the exchange?

G. Reichelm, Philadelphia, Pa.—Your 121-mover in the *Times* is a big gun. Shall send you a set for thorough examination very soon. Thanks for past favors.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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All transient advertisements must be accompanied with the money or they will not be inserted.

No advertisement or business notice of an immoral character will be received on any terms.

, Any publisher inserting our prospectus as above one time, with brief editorial notice calling attention thereto, and sending marked copy to us, will receive the FOREST AND STREAM for one year.

NEW YORK, THURSDAY, JUNE 20, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, June 21.—Creedmoor: Eighth and Sixty-ninth Regts. marksmen. Union Hill Schuetzen-Fest. Regattas: Quincy, Mass., Y. C. Champion; Columbia Club Annual; Nova Scotia Y. Squadron. Base ball: Cricket vs Tecumseh, at London, Can.; Live Oak vs Lowell, at Lowell. Trotting: Beacon Park, Boston; Grand Rapids, Mich.; Akron, O. Running Meeting at Pittsburgh, Pa.

Saturday, June 22.—Creedmoor: Soldiers' Match for Olyphant Trophy; Champion Marksmen's Badge; Seventh Regt. Shells. Union Hill Schuetzen-Fest. Regattas: Seawanhaka Open Ocean; Chicago Club Annual: Alcyone Boat Club (Brooklyn) Annual; Harlem Rowing; Passaic Am. Rowing Ass. Manhattan Athletic Club Open Games; Harding-Ennis 100 miles walk, N. Y. Cricket: Belmont vs Germantown, at West Philadelphia; Merion (2d) vs Young America (2d), at Ardmore; Longwood vs St. Georges, at Longwood. Base ball: Indianapolis vs Providence, at Prov.; Cincinnati vs Boston, at Boston; Chicago vs Milwaukee, at Milwaukee; Cricket vs Buffalo, at Buffalo; Lowell vs Live Oak, at Lynn; Rochester vs Star, at Syracuse. Running Meeting as above.

Monday, June 24.—Creedmoor: First Div. Cavalry for Marksmen's Badges. Base ball: Cricket vs Allegheny, at Allegheny; Live Oak vs Springfield, at Springfield.

Tuesday, June 25.—Base ball: Boston vs Chicago, at Chicago; Providence vs Milwaukee, at Milwaukee; Cincinnati vs Indianapolis, at Indianapolis; Cricket vs Allegheny, at Allegheny; Live Oak vs Hartford, at Hartford. Trotting: Oil City, Pa; Seneca Falls; St. Louis, Mo.; Newark, O.; Mystic Park, Medford; East Saginaw, Mich.

Wednesday, June 26.—Creedmoor: Ballard Rifle Dirty Match. Eastern Yacht Club Regatta off City Point, Boston. Cricket: Manhattan vs Staten Island, Prospect Park. Base ball: Tecumseh vs Star, at Syracuse. Trotting as above, also at Norwich, Conn., and Sodus, N. Y.

Thursday, June 27.—Creedmoor: Fifth Regt. Practice. New York Bay Open Regatta. Base ball: Cricket vs Buffalo, at Buffalo; Manchester vs Hartford, at Hartford; Tecumseh vs Utica, at Utica. Trotting as above. Running Meeting at Kansas City, Mo.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

THE VOICES OF CRUSTACEANS.

UNDER this title Prof. G. Brown Goode contributes to the last number of the "Proceedings of the U. S. National Museum" a series of most interesting observations made by him recently, while collecting in the Bermudas. That crustaceans possess certain organs which may be used for the production of sounds has been known for some time, Hilgendorf, in Von der Decken's "Travel in East Africa," having been the first to bring the fact to the notice of the scientific world. Quite recently Mr. Saville-Kent and Mr. Wood-Mason have published a number of valuable notes on the same subject.

It appears, from what is now known with regard to these structures in the crustacea, that they are paired organs—that is to say, there are organs working perfectly independently of each other, on each side of the body. Their position, however, seems to vary greatly in the different members of the group. And similarly, the sounds emitted by the different species are very diverse, in some sharp "clickings," resembling, but much louder than, the ticking of a watch, are heard, while others produce a shrill, stridulating noise. In some forms of crustacea the sound-emitting organs are partly on the body and partly on a pair of appendages, while in others they are seated wholly on the appendages. *Matuta*, for example, has the scraper on the body and the rasp on the appendages, while *Macropthalmus* has the rasp on the body and the scraper on the appendages. When the sound-producing organs are wholly on the appendages, the two parts of the structure may be either on different parts of the same appendages, as in *Ocypode*; or, as in the genus *Platyonychus*, the rasps may be on one pair and the scrapers on another.

We may conjecture that the sounds produced by these organs serve two purposes. They are, no doubt, in part protective, for Prof. Goode, speaking of a species of *Alpheus*, which emits a loud, clicking noise, says: "When one of them is taken between the fingers by an inexperienced collector, the sudden, convulsive snap almost invariably causes him to drop it." Doubtless the sound may serve, too, as a call between the sexes during the breeding season.

Prof. Goode's paper contains so much that is interesting that we take pleasure in giving a brief abstract of a part for the benefit of such of our readers as may not have access to it. Some small species of *Alpheus* inhabit in great numbers the cavities of a large aplysine sponge, found abundant on the reefs of the island, and when one of these sponges is "taken in the hand, the quick succession of clickings reminds one of the sound of instruments in a large telegraph office." The noise emitted by one of these creatures when put in a vessel of glass or earthenware is much louder. The sound, in the animals of this genus, is produced by a convulsive snapping of the last joint of the large claw. The sudden movement resembles that of the snapping beetles (*Elateridæ*), and the noise emitted is similar. Another crustacean, which, from its power of wounding by means of a sharp claw, is locally known as "split thumb," produces a similar but louder noise, apparently in the same manner as *Alpheus*.

The "Bermuda lobster" (*Palinurus americanus*) is, on the other hand, provided with a stridulating apparatus, the sounds being produced by a peculiar modification of the lower joints of the antennæ. Broad, elevated ridges, one at the base of each of the antennæ, are closely embraced by processes from the latter, and when the antennæ are moved backward and forward, "the close contact of the hard, smooth chitinous surfaces produces a shrill, harsh stridulation, like the sound of filing a saw." This sound has not been heard while the animal is under the water, although the characteristic movements of the antennæ have often been observed. Prof. Goode believes, however, that these animals can in this manner produce vibrations which may be perceptible to their mates at great distances.

WILLIAM CULLEN BRYANT.—The honored and venerable man who passed so peacefully from us on the morning of June 12th while the bright sun was illumining the path of his exit, was the oldest of American poets. Born in Cummington, Hampshire County, Massachusetts, on Nov. 3d, 1794, he was in his 84th year when he died. Had it not been for imprudent exposure to the sun, he might have lived a century, for both his mental and physical powers were well preserved. Of the latter he was especially proud. When a lad he was a pupil of the Rev. Moses Hallock, who, with Rev. Mr. Snell, fitted him for college. The son of Rev. Moses Hallock (Rev. Wm. A. Hallock, uncle of the writer,) is still living, and also 84 years of age; and it had been for several years previous to Bryant's death a matter of some emulation between the two veterans as to which best held over the other. Only last spring Mr. Bryant, in conversation with the writer, jocularly referred to what he considered an advantage in his own favor. Alas! for human chances at 84! Mr. Hallock is now engaged in writing a biographical work on which he has been several years employed, and is in better health apparently than for three or four years past. Mr. Hallock's brother, Leavitt Hallock, and Bryant married daughters of Mr. Snell. Bryant's literary ability was manifested early in life. At ten years of age he made elegant translations of the Latin poets; at eighteen his most celebrated poem, one which is read to-day with exceeding pleasure, Thanatopsis, was written. In 1815 our poet was a lawyer, and in ten years stood high in his profession. In 1825 his first entrance into journalistic life commenced. In 1826 Mr. Bryant became editor of the *Evening Post* of New York, and for over half a century he has been connected with this paper. For vigor of intellect, even up to the time of his death, there was no decline. There is no name in the United States better known or more revered than that of the great old man who is now dead. No line of poetry did William Cullen Bryant ever write which was not pure and chaste. It was a masculine mind which, though it bade men do their duty, inculcated love and taught sympathy. Truly has a grand old singer passed away. His memory will long be cherished.

THE AMERICAN CLUB LIST.—That the criticism of our conscientious contemporary, the *Country*, is just, as respects defects in the Club List just printed, stands confessed in the preface of the book. We have first to construct a thing before we can discover its defects. Then we perceive where omissions can be supplied. If the World had been made in a day, it would probably have been a worse and wickeder world than it is; but the Creator paused to inspect the work at the close of each day's labor, and when He felt satisfied that it was "good," He continued until the whole was completed to His satisfaction. We trust that all secretaries and members of Clubs will send us such corrections and additions as they discover are needed, and also the names of the President and Secretary of each respective Club. We are convinced, as the *Country* suggests, that the usefulness of the book will be much increased by supplying the names of these officers, and as we have not published the book on speculation, we will send a copy of the revised "Club List" *gratuitously* to every one who has purchased a copy of the first edition; to this end we are keeping a list of their names. Meanwhile we will call the *Country's* attention to the fact, that of the four omissions with which he charges the "Club List," only one exists.

SHOOTING A CHICKEN THIEF.—A gentleman residing at Linden, N. J., has had the misery of seeing several fine broods of chickens almost exterminated through some agency which it was impossible to discover. The newly fledged were taken, until few or none were left, and then those of a larger growth gradually disappeared. Talking the matter over with a neighbor, he found that others were suffering in like manner, so that the attempt to raise fowl seemed most discouraging. Last night, however, he took a gun and watched by moonlight for cats, weasels, or whatever might turn up. Soon after nine o'clock a dark object was seen moving across the field toward the barn. The trigger was pulled and a skunk fell dead. The whole mystery was solved; and besides there was a dreadful smell.

FLOWERS AND MUSIC.—Gilmore's Garden offers rare attractions just now with the magnificent floral display of the New York Horticultural Society and the music of Theodore Thomas' orchestra. The opening entertainment last evening was all that could please in an æsthetic sense.

CUSHNOO HEIGHTS GUN AND FISHING CLUB—*Augusta, Maine.*—We beg to acknowledge the courtesy extended to us by the above-named Club, in making our managing editor an honorary member. We wish it success as long as fish swim and game runs; and bad luck to all poachers and pot-hunters to the end of time.

—Professor D. G. Elliott, F. R. S., etc., widely and favorably known in scientific circles for his labors in ornithology, arrived in this city from Paris last week, and has taken up his residence for a year to come at New Brighton, Staten Island.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2 Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

HOW A COMMA VIOLATED THE MASSACHUSETTS GAME LAW.—A man's life was once saved because the lawyer who drew up his indictment for murder did not know how to punctuate. It was a quibble, but his life was preserved all the same. A less fortunate error in punctuation marks has been the means of bringing some undeserved odium upon our estimable correspondent, R. L. N., of Salem, Mass. In his notes for May 30 he recorded having shot some "robin-snipe," which was all right. But the birds appeared in the Game Bag and Gun column with *disjecta membra*. In the place of the hyphen was a comma, and, instead of "robin-snipe," was read "robin, snipe." This was at the same time very bad grammar, and a most unfortunate imputation upon the character of our law-abiding correspondent. Of course vigilant Massachusetts sportsmen were quick to note those two words, and the result was the communication published last week with our own comments upon the same, all of which was, as the sequel shows, powder and shot wasted upon a straw man. Trusting that this explanation will set matters right once more, we append a note from our correspondent under date of June 14:

EDITOR FOREST AND STREAM:

In your issue of June 13 I find myself severely handled by a

Springfield gentleman, Mr. E. H. Lathrop. If what he read was true, his raking would be in order, but when we consider that types and punctuation marks are the cause of it all, I think you should, in justice to me, do what you can to set this affair right. Just read Mr. L.'s letter and your editorial ending, and see if your blood wouldn't start a bit. For my reputation's sake be kind enough to publish this, and thus apologize for your Salem correspondent,

R. L. NEWCOMB.

TWO UNSPORTSMANLIKE DEEDS.—One, that of a party of Rockville, Conn., gunners who have been shooting herons on their nests. The other, that of the correspondent, who writes to us giving the names of the Rockville offenders, but withholding his own.

RAILROADS AND GAME LAWS.—The enlistment of the co-operation of railroads, steamboat lines and express companies, in enforcing the game statutes, is one of the most efficient means of defeating the law-breaking of market hunters. We have had occasion to condemn the action of corporations for acting as abettors of violation of the laws by transporting game killed out of season. We take pleasure in commending, also, the action of those companies who, by instructions to employes, have forwarded the efforts of game societies. A case in point is that of the Philadelphia, Wilmington and Baltimore Railroad, which has just issued a notice to its agents and employees forbidding the shipment of game in the close seasons. If all companies should take a similar stand it would materially assist in breaking up an illegal traffic.

ILLINOIS STATE CONVENTION.—The convention of the sportsmen at Quincy, Ill., was a pleasant interchange of sportsmen's views and marksmen's skill. That the meeting was one of the most satisfactory ones ever held in the State was due in large measure to the forethought and efficient management of President W. B. Hauworth. The next convention will meet at Peoria next year. Mr. P. M. Lincoln is the newly elected President.

PENNSYLVANIA STATE ASSOCIATION.—The convention at Wilkesbarre last week endorsed the new game law. The officers for the ensuing year are: President, A. F. Dorrance, Wilkesbarre; Mr. W. U. Dorris, of Huntington, secretary, and W. C. Macrum, treasurer.

NATIONAL ASSOCIATION.—The meeting of the National Sportsmen's Association at Wilkesbarre, last week, was well attended by delegates from the different States. The old officers held over, and the meeting adjourned to meet at Philadelphia in December.

NEW JERSEY.—At the meeting of the Hackensack Association for the Protection of Fish and Game last Friday, it was resolved to offer rewards for the conviction of law breakers, and a number of game constables were appointed. Both game and song birds are unusually plenty this season, showing that the efforts of the society have not been vain.

SETTING LOOSE THE MESSINA QUAIL.

RESTOCKING CONNECTICUT WITH GAME BIRDS.

We are indebted to the Secretary of the Salisbury Game Club, of Lakeville, Conn., for information in regard to the importation of Messina quail, and are glad to notice this most praiseworthy effort to stock our country with game birds:

LAKEVILLE, Conn., June 12, 1878.

EDITOR FOREST AND STREAM:

Our consignment of migratory quail reached us on the 8th inst. and we have been waiting ever since for a fair day on which to set the little wanderers adrift to shift for themselves. To-day being fine we have turned out the whole shipment, 207, every bird coming to hand in good order after over six week's confinement in the coops, as they were obliged to keep them two weeks at Messina waiting for a steamer to bring them. Leaving that port on May 8 they reached us June 8. We imported the birds through Mr. Carl J. Braun, who is connected with the U. S. Consulate at Messina, and we can recommend him to fellow sportsmen as an honest and obliging gentleman to deal with. The boys all like the appearance of the birds very much, and we sincerely hope that they may do well and be spared to multiply for a few years until they are thoroughly established in this country.

The flight of the birds when first turned out very strongly resembled that of our woodcock, and the spread and shape of the wing seemed to me very much the same, and I fear that some may be shot by mistake for woodcock if they are found in the same cover.

A member of our club just home from Vermont says that a number of migratory quail have been seen near Rutland within the past week by Dr. Goldsmith and that confidence is felt there in the success of the experiment. Our 207 birds cost us, delivered in our village, $60.59. Will keep you posted as to their movements. W. H. WILLIAMS.

Secy. Salisbury Game Club.

—The Mt. Kineo House, at Moosehead Lake, is now open under its old and popular management.

The Rifle.

WALNUT HILL—*Boston, June* 15.—Day was fine, though with fish-tail wind. For the amateur series a fine match was shot, with handsome scores. Possible 50.

Lowell	4 4 4 5 4 5 5 5 5 4—44	Soother	4 5 4 3 4 4 5 4 4 4—41
Meiggs	4 5 4 5 4 4 5 4 4 4—43	Bennett	4 4 4 4 5 5 4 3 4 4—41
Borden	4 4 5 4 4 4 4 5 5 4—42	Green	4 4 4 4 3 4 4 4 4 5—40
Andrews	5 4 4 4 4 4 4 4 5 4—42	Lee	3 3 5 4 4 5 3 4 4 4—39
Poland	5 4 5 4 4 4 4 4 4 3—42	Pratt	4 4 3 4 4 4 3 3 4 4—37
Chadwell	4 4 5 5 4 4 3 4 3—42	Stanley	5 4 5 3 3 4 3 3 3 2—35
James	4 5 3 4 4 4 5 4 4 4—41		

For the "shot-gun match" there were but two entries. Possible 35.

Hubbard	5 4 5 5 4 4 5—32	Howard	3 4 4 3 5 4 5—30

Mr. Wm. Poland still retains the lead in the competition with his fine score of 33 out of a possible 35, made two weeks since.

In the "dirty gun match" there was but one rifleman who, with his seven shots at 200 and 500, made the following:

Towell	4 5 4 4 5 4—30	4 5 4 4 3 5—29—59

Later in the day the Roxbury Guards arrived, and made excellent practice at 200 yards, scoring with the Springfield 36, 37 and 38.

MASSACHUSETTS—*Boston, June* 12.—Shot-gun match and third competition for the Frank Wesson Rifle; 800, 900 and 1,000 yards. The following is the score:

William Poland.																
800	5	3	5	4	2	4	5	5	5	5	5	5	5	5	5	—68
900	5	5	5	4	4	4	3	5	5	5	5	5	5	5	5	—70
1,000	4	3	5	5	3	5	5	3	5	5	3	4	5	5	5	—65—203
J S Sumner.																
800	5	3	5	5	5	3	4	5	4	4	5	4	5	5	5	—67
900	4	3	5	5	4	5	3	5	5	5	5	5	4	3	5	—66
1,000	3	3	5	5	5	5	5	5	3	5	5	3	5	5	5	—69—202
E W Law.																
800	5	5	5	6	4	5	5	5	4	5	4	4	4	5	4	—70
900	5	4	4	5	4	5	5	5	5	5	5	5	3	5	5	—68
1,000	5	5	2	3	3	3	5	4	5	5	5	3	5	5	4	—63—201
J Smith.																
800	5	5	5	3	5	5	5	5	5	5	5	5	4	4	5	—71
900	2	0	3	4	5	5	5	4	5	5	5	5	5	5	5	—66
1,000	4	3	4	4	4	5	4	5	5	4	4	4	5	4	3	—62—199
A Hobbard.																
800	5	5	4	4	5	5	5	5	4	5	5	3	4	5	5	—69
900	3	5	4	5	4	4	4	5	4	5	5	3	5	3	4	—63
1,000	3	0	3	3	4	5	4	5	5	4	5	4	0	4	5	—59— 19
H Taylor.																
800	4	5	4	4	3	4	3	4	5	5	5	5	5	5	0	—61
900	5	4	4	5	4	5	5	5	4	5	5	3	4	5	5	—64
1,000	3	5	5	4	5	4	5	5	5	4	4	5	3	5	3	—64—189
H L Lee.																
800	5	5	5	5	5	5	5	3	5	5	5	4	5	5	5	—72
900	5	5	4	4	3	5	5	4	3	5	5	0	0	5	4	—57
1,000	3	4	3	5	3	3	4	4	5	4	4	4	4	4	5	—59—188
D Kirkwood.																
800	0	4	3	4	5	5	3	5	5	3	3	5	5	5	2	—57
900	5	4	4	4	3	3	5	5	5	4	4	5	4	5	5	—65
1,000	5	5	3	4	3	4	3	5	3	4	4	3	5	5	4	—60—182
J F Thompson.																
800	5	5	4	4	5	5	4	5	4	5	5	5	3	3	5	—67
900	4	5	3	5	3	5	0	4	4	5	5	3	4	0	3	—58
1,000	4	5	3	5	4	3	5	3	3	4	4	3	5	5	5	—61—181
S Wilder.																
800	4	4	3	4	5	5	0	5	3	4	4	5	5	5	5	—61
900	5	5	4	5	4	5	3	0	3	5	5	5	5	3	4	—61
1,000	5	4	4	0	5	4	3	4	4	4	4	3	5	5	4	—58—18

At the conclusion of this match the 1,000-yards competition was shot, five riflemen completing their scores with the following excellent result, Mr. Gerrish's being the best record yet made in this match:

W Gerrish	5	5	5	4	5	5	4	5	5	5—48
J S Sumner	4	4	4	5	5	5	5	5	5	5—47
J F Brown	5	3	5	5	5	5	4	5	5	5—47
W Poland	5	3	5	5	3	4	5	3	5	5—43
S Lewis	5	4	5	4	5	2	0	4	5	5—39

CONNECTICUT—*New Haven.*—On the 12th the Independent German Rifle Company had their annual contest at the Schuetzen Park. In bull's-eyes, Joseph J. Sweeny made 4. Diedrich Corves and Wm. Knoth, 2 each, and Franz Doerschuck 1. In the general shooting Mr. Sims made 45 points, Diedrich Corves 41, J. J. Sweeny 37, George H. Vollhardt, 33, John Gulow 32. In the military match the scores completed were: Charles Gerner 41, Diedrich Corves 39, Philip Hugo 29, Frank Hugo 25, Franz Doerschuck 24, George Vollhardt 24, Frederick Buckholz 23, Henry Rubsamen 20, William Knoth 19, Charles Stahl 19.

BRIDGEPORT RIFLE ASSOCIATION.—The spring meeting took place on the 14th with the following result:

All-comers, 200 yards match, possible 25 points: G. F. Hall, 23, 23, 23; J. F. Teackle, 25, 22, 22; C. Z. Gordon, 23; W. E. Story, 23; Conrad Becker, 22; W. H. Sandford, 22; Hugo Borchardt, 22; S. V. Nichols, 22; Norman Provost, 22; Geo. D. Phillips, 22; Wallace Gunn, 22. Military match, 200 yards, possible 25 points: E. F. Latham, 22; Z. H. Teackle, 22; C. Z. Gordon, 22; S. C. Kingman, 22; F. J. Colvin, 22; Wallace Gunn, 20; C. E. Beers, 20; Philip Trinkhaus, 19. All comers, 500 yards, possible 25 points: W. C. Dole, 25; Wallace Gunn, 24; H. Nichols, 24; N. S. Warner, 24; R. S. Basset, 24; J. C. Curtiss, 23; F. D. Bennet, 23. Military match, 500 yards, possible 25 points: Wallace Gunn, 24; F. J. Colvin, 20; J. H. Teackle, 18; Philip Trinkhaus, 16; S. C. Kingman, 16; J. L. Moore, 15. Messrs. Hill and Teackle made the highest three scores in the aggregate, and the ownership of the Howe Sewing Machine lies between them to be decided by the National rules. Six of the prizes were won by New Haven marksmen.

CREEDMOOR—*Wednesday, June* 12.—The postponed match for the Sharps prize was continued by four out of the eleven who had entered into the contest. The following is the score, the highest attainable number being 225:

	800 yds.	900 yds.	1,000 yds.	Total.
W H Jackson	73	61	65	198
R Rathbone	64	68	60	192
H Fisher	58	48	61	167
T Lamb	57	45	56	158

The second competition for the Appletons' prize—a copy of "The American Cyclopedia"—took place; open to all comers; distances, 200 and 300 yards, seven scoring shots at each range. There were thirty entries. Following are the scores:

E E Lewis	59	N O'Donnel	52
Dr M M Maltby	58	J W Todd	54
D C Pinney	57	J S Conlin	53
W M Farrow	57	J E Irwin	51
F H Holton	56	S T G Dudley	51
A M Miller	55	H Fisher	51
F W Leavitt	55	J R B Bayley	50
J W Mangam	53	J I C Clarke	50
D F Davids	53	J S Case	40
W H Dunlap	53	A J Howlett	46
J Finlayson	52	A Anderson	41

A detachment of the Forty-seventh Regiment of Brooklyn qualified for marksmen's badges. Of 262 men shooting at the 100 and 150 yards range, 134 qualified to shoot at 300 and 400 yards. At these last distances fifteen qualified.

June 14.—The Thirteenth Regiment of Brooklyn, 172 of them qualified at the 100 and 150 yard ranges. Shooting, though the day was fine, was first-class *poor*. Out of 222 men 172 men were qualified. In the second class, at 300 and 400 yards, some 38 men qualified.

June 17.—The marksmen of the Eleventh and Seventy-first Regiments shot at Creedmoor in order to qualify, and it is with regret that we mention that there were certain cases of fraud in procuring high scores reported. Previous to regular practice, the troops were exercised in the 200-yard range, volley firing. The target used is 6x4 feet. The bull's-eye is a black strip painted across the target and two feet in width. The "centre" is a white strip one foot wide above and below the bull's-eye. The rest of the target is "outer." The bull's-eye counts 4 points; the centre, 3; the outer, 2. In the Eleventh Regiment, out of 108 men only eight men qualified; in the Seventy-first, out of 133, some 54 qualified.

—On the Fourth of July, at Creedmoor, there will be a grand celebration. There will be orations, rifleatious, and rations.

GENERAL DAKIN.—The following suggestion was published in the Brooklyn *Eagle* of the 15th inst:

"To no man is the honor more due of the inception and establishment of the magnificent rifle range at Creedmoor, and the great success to this country and abroad of our long-range riflemen, than to our late fellow townsman, Major General Thomas S. Dakin. Would it not be a proper tribute for the National Guard of this city and the different rifle clubs to procure a memento in the shape of a prize, to be called the Dakin Memorial Cup, to be shot for annually at Creedmoor, under such regulation as might be prescribed by the National Rifle Association. The prize should be held by the winner for the year, or until the next annual meeting. A popular subscription for the object stated, under the auspices of the National Guard, would, I am sure, prove eminently successful. A FRIEND OF THE NATIONAL GUARD."

This idea meets with our warmest approval. When we sorrowfully recorded General Dakin's death we proposed that one of the main avenues of the range at Creedmoor should be named after the General, so that his memory might not be forgotten. A Dakin Memorial Cup, to be shot for annually—the trophy to be obtained by a popular subscription—would serve the best of purposes. If this measure receives the sanction of the numerous friends of General Dakin, we shall be very glad to receive subscriptions for the purchase of such a cup at the office of the FOREST AND STREAM AND ROD AND GUN.

THE GREAT SCHUETZEN-FEST.—On Sunday, June 16, there was grand gala held at the Park. It was a preliminary to the opening of the serious work on Monday. People enjoyed themselves in that rational way for which our German friends are so celebrated. The Park looked lovely, with its flowers and shrubs. The grand centre of admiration was the "Prize House," where all the trophies were exhibited. On Monday, June 17, there was a grand parade, and though it rained a little early in the morning, it did not in the least disturb the turn-out. There were five divisions, each with its band of music. At City Hall his honor Mayor Ely passed the German riflemen in review. At the *Staats Zeitung* office targets were in place, ready to record by telegraph the winning riflemen. The city was resplendent with flags. At the Park at 1 o'clock, the fine ceremony of transferring the flag of the Inter-State Association from the president to the present presiding officer, Captain George Aery, took place. At 2 o'clock all arrangements having been completed, the shooting commenced. There were thirty-six targets; distance, 200 yards. The first bull's-eye was made by the worthy President Aery at the Association target. J. D. Reutschler, of Philadelphia, made the first bull's-eye on the Bull's-eye target. Mr. W. Hayes, of Newark, won the first goblet, and Mr. L. Dreyer, of the Helvetias, the second goblet. The following received prizes of silver goblets and cups:

J. L. Dreyer, of Helvetia, N. Y.; William Hayes, of Newark; William Farrow, Zettler Rifle Club; J. A. Bauer, California Rifle Club; W. H. L. Koenig, California Rifle Club; A. G. Hellwig, Helvetia Rifle Club; William Ehrenpfort, California Rifle Club; N. Crusins, New York Schuetzen Corps; Albert Meyer, Helvetia Rifle Club; George Schalk, Newark Schuetzen Association; George Schilling Baltimore; M. Gran, Chicago; S. Gassert, St. Louis; A. Jeugwer, Jersey Schuetzen Corps, Greenville; Ed. Ruegger, Northwestern Rifle Club.

The following received silver medals of honor: R Weldemann, Helvetia Rifle Club; J. T. Morris, Baltimore; Ph. Klein, New York; F. Kramer, Baltimore; F. W. Fliedner, Helvetia Rifle Club; Charles Ritter, Brooklyn, E. D.; John Brinnerhop, New York; F. Laudolf, Hoboken; Claus Paulsen, Brooklyn; Archy Paul, Helvetia Rifle Club; Henry Miller, Brooklyn; H. Bergmann, Hoboken; Theo. Kliesrath, Zettler Rifle Club; B. Kuhlmann, New York City Schuetzen Corps; Charles Horney, Brooklyn, E. D.; J. T. Tabler, Helvetia Rifle Club; G. Budelmann, Brooklyn; Leopold Manndorp, Brooklyn; M. B. Engel, Zettler Rifle Club; H. Oehl, do.; Henry Kuchel, Brooklyn; Charles Zeigler, do.; A. J. Dittman, Jersey City.

Target of Honor.—William Hayes, Newark, 66 rings; L. G. Beatse, Zettler Rifle Club, 49 rings; H. Oehl, Zettler Rifle Club, 45 rings.

Stich Target.—L. G. Beatse, H. Ochl and William P. McLeaud, each a bull's-eye.

Public Prize Target.—William Farrow, Zettler Rifle Club, 71 rings; D. Miller, Zettler Rifle Club, 64 rings; William Hayes, Newark Schuetzen Association, 64 rings; H. L. Koenig, San Francisco, 63 rings, and H. Ochl, Zettler Rifle Club, 62 rings.

Man Target.—William Hayes, Newark Shooting Association, 89 points; William Farrow, New York Zettler Rifle Club, 79 points; H. Oehe, New York, 75 points; H. L. Koenig, San Francisco, 73 points; T. M. McLean, Newark, 64 points.

Creedmoor Target.—Peter Meyer, Helvetia Rifle Club, 22 points; R. Zaber, Helvetia Rifle Club, 21 points; Homer Fisher, Zettler Rifle Club, 20 points.

Premiums were given in the following order: William Hayes, F. F. Rathgin, W. Farber, N. Lewis, ff. Hergman, W. Hahn, F. Laudolt, F. Fabler, A. G. Dittmar, H. Herrmanu.

Tuesday, June 8th.—Though it rained and was cold and disagreeable, it made no matter to our German friends, who under cover must have fired some 14,500 shots. There was a grand dinner, President Aery in the chair. It was A. M. Koenig of San Francisco who made the first bull, and Mr. A. M. Leitres of Baltimore who made the last.

Target of Honor.—William Klein, 63 rings: C. Y. Zettler, 60, Phillip Klein, 63; William P. McClean, 56; Thomas Broadway, 64; J. Bartel, Bridgeport, 51; Charles Horney, 59; R. Weidman, 61; Valentino Loewer, 60; A Schwarz, Baltimore, 59

Stich Target.—D. Muller, 1 bull's-eye; C. Judson, 2; E. F. Colzmann, 1; C. G. Zettler, 2; L. Lane, 1; Emil Berger, 1; Albert Seitz, 1; H. E. Koegel, 1.

Volksfest Target.—C. Zettlers, 69 rings; G. Horney 68; Ph. Klien, 67; P. Fanning, 68; E. Holzman, 64; W. Klien, 65; J. W. Schneider, 61; F. W. Fliedner, 63, C. Ziegler, 63; Theodore Kliesrath, 60; F. Kessler, 64; President G. Aery, 58; A Zenzner, 59.

Man Target.—William Klein, 88 points; J. W. Fliedner, 88; Dr. A. Schwarz, Baltimore, 90; D. Miller, 86; P. Meyer, 76; D. Ward, 80; A. Zengall, 75; P. Klein, 90; J. Otten, 75; Captain A. Ermisch, 75; F. Zeller, 74; C. F. Beck, Newark, 74; P. Kliesrath, 73; C. Zettler, 73; C. Babcock, 73; J. R. Grohman, 72; F. Schubarger, 68; A. Holzman, 67; Jacob Heintz, 67; P. Fenning, 67; L. Shendorf, 67; C. Muller, Philadelphia, 66,

Goblet Target.—Jacob Hertz, John R. Grohman, William Goelzer, Philadelphia; George Spangler, North-western Rifle Club.

Gold Medals for 300 Points.—William Hayes, Newark; F. Landoer, F. C. Oehle, W. Farrow.

The following named persons received silver medals:

A. J. Dittmar, H. Polksberg, R. Geilfuss, Charles Scholte, Chicago; H. Dohrmann, N. Lewis, P. Stockert, Stillwater; D. Miller, W. Gelzer, A. Holzmann, Philadelphia; W. Cowden, W. H. L. Koenig, Fricke A. Seitz, George Seitz, E. Graff, Northwestern Rifle Club; F. Abel, St. Louis; Christopher Molter, Philpdelphia; W. Keller, Chicago; J. R. Grohmann, John Schneider, P. Fenning, E. Berger, F. Ritschie, Troy; C. Gunchlin, F. Fabarius, Edward Ruegger, J. P. Delahunty, S. D. Rentschler, John Monnior, H. W. Cordts, N. D. Ward, W. Farrow, William Klein, A. Knopfle; William Schnaufter, L. Lane, W. Ehrenpfort, George Schilling, F. Satterson, George Quittmeyer, F. Zeller, Victor Schobinger, William Hayes, George Schalk, Edward Englander, Frieseo R. Faber, J. Cook, W. P. McLead, Charles Beckmann, F. Kessler, Charles Babcock, S. P. Wright, H von der Linden, Henry Kroger, C. Judson, F. Blumenberg, F. Bertschy, Govert Pape, G. Hartmann, C. Mahnken, Henry R. Koegel, F. W. Ems, S. Hohmann, C. Becker, P. Tobin, E. F. Beck, R. Spitz, Jac. Heintz, John A. Bauer, F. H. Jacobi, L. Wagemann, F. Harrison, C. Keller, Jr., C. Heintz, W. N. Bonesteel, H. Fischer, John Thice, K. Ruppel, W. H. Cleveland, J. Meyer, P. Bartel, H. Neumann, F. Hansen, G. A. Kundahl, John H. Raschon, M. M. Hollwig, C. W. Stremnec, J. Gasser, E. Holzmann, A. Zongner, L. G. Beatse, C. Riebsam, G. Spangler, H. Rumpf, W. T. Kloe, M. L. Riggs, G. Toiner, Capt. A. Ermisch, J. Rheinfrank, F. Shroeder, W. Mohn.

Most Bulls'-eyes.—First, William Hayes; second, T. P. Delahantz; third, C. Zettler; fourth, W. Farrow; fifth, William Hahn; sixth, Geilfuss; seventh, C. Shotte; eighth, Oehl; ninth, J. Landolt; tenth, E. Kulgger.

On Monday the 24th the team match for the FOREST AND STREAM AND ROD AND GUN medal takes place.

THE CANTON ROD AND GUN CLUB.—This club was organized last October for the protection of fish and game as well as for rifle practice. It has now a good 200-yard range, shooting house and canvas target covered by roof and working from a pit. Creedmoor rules govern, but to encourage close shooting use the Mass. target. The Executive Committee are: John D. Andrews, Pres; G. F. Lewis, M. D., Sec.; J. H. Bidwell, Treas.; with fifteen members only. Practice meetings of the club are on Thursdays. Score for May 16 (better than our average) made at 200 yards, off-hand, Creedmoor rules:

	Mass.	Creed'r.		Mass.	Creed'r.
O B Hull	99	44	Bidwell	86	41
J D Marks	99	43	Andrews	81	40
Dr Lewis	90	43	Lanbenstein	78	38

B.

SOUTH CAROLINA—*Charleston.*—The Carolina Rifle Battalion celebrated, a few days since, the completion of a fine hall on the Shooting Range. A large number of ladies were present, and the day was spent in dancing and target-practice, both by the Carolinas and their fair friends. The building is plain, but very roomy and comfortable, and is only a few steps from the shooting-shed. It commands a splendid view of the entire range and targets. The rifle contest was for the "Company Gold Medal," held by Mr. P. H. Lynch, on a score of 23. As no one made any higher than 21 during the day, Mr. Lynch still holds the medal, and as he is one of the best shots in the company, will probably continue to hold it for some time to come. The shooting on the whole was not good, owing to a strong breeze. The following good average score was made by a few members of the Carolinas in a private match on their range June 1; army rifles, 200 yards, six-pound pull, off-hand: Paul H. Lynch, 21; T. Williams, 19; C. J. Walker, 21; W. J. Jervey, 20; E. H. Sparkman, 19; W. McCormack, 21; J. P. Lesesne, 19; C. O. Campbell, 21.

LADIES' MATCH—*Salt Lake City, June 7.*—Perhaps the first regular match in which the fairer sex showed their skill with the rifle took place at Lake Point, near Salt Lake City, on the 7th of this month. Dr. Carver having visited Salt Lake City quite lately, undoubtedly fired the Mormon ladies with the desire to become riflewomen. Fully forty contestants were in the field, and two targets were set up at fifty yards. The local paragraphist says that all hands were as cool as veterans, though some of the ladies "squinting with the wrong eye made it lively for the target keepers." We are very sure that no chronic strabismus had to do with it, and that the term "sighting" should have been used for squinting. We give the leading scores:

Miss Childs	4 4 4 5 4—21	Mrs Slater	4 2 4 3 3—16
Mrs J Sharp	3 5 4 5 4—21	Mrs Marden	4 0 4 4 4—16
Mrs W F James	5 4 5 3 4—21	Miss Z Cohn	3 3 3 3 3—15
Miss Cadd Young	3 5 4 4 4—20	Mrs Popper	2 3 4 4 2—15
Mrs Lawson	5 3 4 4 4—20	Mrs Reese	3 4 0 3 4—14
Miss Chambers	5 4 5 4 2—20	Mrs Thompson	0 4 4 3 3—14
Mrs Meears	5 4 3 3 4—19	Mrs Cummings	4 2 4 0 4—14
Mrs Wilson	4 4 3 4 3—18	Mrs Strickland	4 4 0 3 2—13
Miss Musser	3 5 3 3 4—18	Mrs Roberts	0 3 2 4 3—12
Mrs Lindsey	2 4 4 5 2—17	Mrs Whittemore	2 2 0 5 2—20
Mrs Durant	3 4 2 3 5—17	Mrs Clark	0 2 0 4 4—10
Mrs W F Raybould	3 4 2 3 4—16		

There was a pigeon match and glass ball shooting, and the amusements were to have ended in a tub race, but the two Bishops, Lannan and Walsh, having no inclination toward baptism, did not come up to time, and so this orthodox amusement did not occur.

MISSOURI—*Sedalia.*—The Sedalia rifle team had their first practice on Saturday, the 8th inst. A large company of the business men and citizens witnessed, with a great deal of interest, this initial ceremony. The target was a reduced Creedmoor size; bull's-eye, four inches; distance, 100 yards off-hand. First score as follows:

F Houston, .40 cal. Remington	3	3	3	2	5—16
Dr Trader, .32 cal. Whitney	3	4	3	5	4—19
J C Parmerlee, .44 cal. Whitney	2	2	4	4	4—16
A B Dempsey, .44 cal. Winchester	3	4	5	4	3—19
John Cullom, .38 cal Remington	5	3	2	0	4—14

Dr. Trader and Mr. Dempsey having tied on nineteen, they decided it by shooting three shots off-hand. The following is the score:

Dr Trader	5	4	4—13	A B Dempsey	4	4	4—12

Second score, same distance:

F Houston	2	4	3	4	3—16
Dr Trader	4	4	3	4	4—19
J C Parmerlee	3	3	4	3	3—16
A B Dempsey	5	4	4	3	4—20
J Cullum	2	2	2	3	4—13
Mat Robinson, .38 cal. Remington	3	2	3	3	4—15
E N Small, .40 cal. Remington	3	3	3	3	4—16

Third score, same distance:

F Houston	3	3	4	4	3—17	J Cullum	5	4	4	4	5—22
Dr Trader	4	4	3	3	4—18	Mat Robinson	3	3	3	3	2—14
J C Parmerlee	4	4	2	3	4—17	E N Small	4	2	2	3	4—15
A B Dempsey	4	4	4	4	4—20						

The team expect soon to be ready for 800 and 1,000 yard practice. The members are all amateurs, and some of the rifles were shot for the first time. OCCIDENT.

DR. CARVER'S SHOOTING.

WONDERFUL SKILL AND PRECISION—1,000 GLASS BALLS BROKEN WITH A RIFLE IN 72½ MINUTES!

NEW HAVEN, June 15, 1878.

At last Dr. Carver, the great marksman, had favorable weather for his exhibition at Quinnipiac Range. At half-past two at least 5,000 people had gathered there, and the Doctor began preliminary practice at a little before three by breaking a few single glass balls thrown in air by an attendant. Next he astonished people by smashing balls thrown directly at him from a point fifty feet away. These he broke just before they reached him. Then some balls were thrown high in air, and they were broken by the rifle balls. He began work by attempting to break eighty-five out of one hundred balls, thrown up in air thirty feet away. He succeeded in breaking ninety-three of the hundred, breaking twenty-five and twenty-six in succession. Two days ago, under the same conditions, he broke one hundred and twenty-eight consecutive balls. To-day the wind was in his face, and falling pieces of glass sometimes struck his eyes. Next came practice upon trade dollars. These were thrown up ten feet in air ten feet away. Of forty-five thus thrown, he hit twenty-six. Each piece of money hit flew from two hundred to five hundred feet with a loud buzz, and at once a hundred boys were digging in the grass for it. Most of the dollars had holes clean through them. This exhibition was a benefit for the crowd. After breaking two balls thrown up at the same time, he shot three times at the same ball, missing purposely twice and then breaking it. He then began the feat of breaking one thousand balls in eighty minutes, thrown up twenty feet away. The first two hundred were broken in ten minutes and thirty seconds, the first five hundred were broken in exactly thirty minutes, and in sixty minutes he had broken eight hundred and fifty-six. Toward the end the Doctor's shooting was admirable, and, after working over three-quarters of an hour on this feat, he made a run of eighty-six consecutive balls without misses, thirty of which were broken in one minute. Seeing that he had time enough, this wonderful marksman would occasionally shoot at a passing swallow or fire three times at the same ball. Only seventy-two and one-half minutes had passed when the feathers flew from the one thousandth ball. He continued shooting for some time afterward at small stones thrown high in air, which the ball would break into many pieces. Then the man's skill was exhibited by hitting pennies and five-cent pieces, which generally disappeared with the bullet. The exhibition was remarkable and very satisfactory, and no one who saw it denies Carver's right to the title of the champion of the world. The rifles he used were the well-known Winchester repeating rifles, fresh from the factory. He uses no other. While in this city Dr. Carver has been the guest of the Messrs. Winchester, under whose management the exhibition was given.

DR. CARVER IN NEW YORK.—We had the pleasure of a visit from Dr. Carver on his return from New Haven. The Doctor proposes shooting in Meriden next Saturday, and later—about the week after—will give his first exhibition in New York. The famous 5,500 ball match will be announced by us in due time, and will be the last of the performances. In breaking the 1,000 balls at New Haven, the Doctor says that 72½ minutes was the best time he had yet made. He has a new pair of Winchester rifles selected for him, but will continue to use his old ones. After they have been shot some 41,000 times, on examination they were found to be perfectly serviceable and but little worn. The rifle is the model of '73, calibre .44, using a ball of 200 grains, with 40 grains powder. *The plain open sight is used.* (This is in response to a host of inquiries.) The magazine holds fifteen cartridges. In shooting three rifles are used. The gun becoming decidedly uncomfortable after thirty rapid consecutive discharges, of course, as the weight of the metal is great, the rifle would take longer to cool than a fowling-piece. An attendant loads, and cools the gun in water. In the 5,500 ball feat, which this champion rifle-shot proposes accomplishing, it must be remembered that he must raise his gun 5,500 times, twice the number of a shot-gun, as it has two barrels. Dr. Carver is determined to bring his horsemanship into play next year, and will then give a series of exhibitions, shooting when in the saddle. The Doctor expresses himself highly pleased with his reception East, and desires us to express his thanks to his many newly-acquired friends.

SIR HENRY HALFORD AND THE SHARPS RIFLE.—We promised some time ago to give our readers the result of Sir Henry Halford's experiments with American rifles. The following letter sets forth the result of the first day's shooting:

WISTOW, Leicester, May 29, 1878.

MESSRS. SHARPS RIFLE CO.

Dear Sirs:—I received my rifle in due course of time, and now send you the results of my first day's shooting. I think comment on the performance of the rifle is unnecessary. I can only thank you for the pains you have taken, and inclose you a check for amount of bill.

Believe me yours truly, H. ST. J. HALFORD.

The score was, thirty shots, distance 1,000 yards:

4 4 4 5 5 5 4 5 5 3 5 5 5 5 5—69
5 5 5 5 5 5 5 5 5 4 5 5 5 4 5—73—172

Shot at Wistow by H. St. J. Halford; Sharps Creedmoor, with factory ammunition.

—Our thanks are due to the *Gazette* of Montreal for copies of the Proceedings of the Ontario Rifle Association, and for that of the Province of Quebec Rifle Association.

THE NOISE OF GUNPOWDER EXPLOSIONS.—In Professor Tyndall's recent experiments on fog signals we find the following as to the reports made by different kinds of powder. Professor Tyndall was experimenting in order to produce the greatest possible volume of sound with fog guns:

"The more rapid the shock imparted to the air, the greater is the fractional part of the energy of the shock converted into wave motion. And as different kinds of gunpowder vary considerably in their rapidity of combustion, it may be expected that they will also vary as producers of sound. This theoretic inference is completely verified by experiment. In a series of preliminary trials conducted at Woolwich on the 4th of June, 1875, the sound-producing powers of four different kinds of powder were determined. In the order of their sizes then hear the names respectively of Fine-grain (F. G.,) Large-grain (L. G.,) Rifle Large-grain (R. L. G.,) and Pebble-powder (P). The charge in each case amounted to 4½ lbs., four 24-pound howitzers being employed to fire the respective charges. There were eleven observers, all of whom, without a single dissentient, pronounced the sound of the fine grain powder loudest of all. In the opinion of seven of the eleven the large-grain powder came next; seven also of the eleven placed the rifle large grain third on the list; while they were again unanimous in pronouncing the pebble-powder the worst sound-producer. These differences are entirely due to differences in the rapidity of combustion."

Sea and River Fishing.

FISH IN SEASON IN JUNE.

FRESH WATER.

Trout, *Salmo fontinalis.*
Salmon, *Salmo salar.*
Salmon Trout, *Salmo confinis.*
Land-locked Salmon, *Salmo gloveri.*
Black Bass, *Micropterus salmoides;*
M. nigricans.
Muskalonge, *Esox nobilior.*
Pike or Pickerel, *Esox lucius.*
Yellow Perch, *Perca flavescens.*

SALT WATER.

Sea Bass, *Centropristris atrarius.*
Sheepshead, *Archosargus probatocephalus.*
Striped Bass, *Roccus linneotus.*
White Perch, *Morone americana.*
Weakfish, *Cynoscion regalis.*
Bluefish, *Pomatomus saltatrix.*
Spanish Mackerel, *Cybium maculatum*
Cero, *Cybium regale.*
Bonito, *Sarda pelamys.*
Kingfish, *Menticirrus nebulosus.*

FLIES IN SEASON IN JUNE.

Hawthorn, No. 11.—Body, shining black; feet and head, black; wings bright hyaline.

Shoemaker, No. 10.—Body, ringed alternately with light and gray salmon; feet, dark ginger; wings, the mottled gray of the mallard and the mottled of the woodcock mixed; setæ, mottled woodcock.

Black June, No. 10.—Body, peacock's herl; feet and wings black.

Dark Stone, Nos. 8 *and* 9.—Body, dark brown; feet, yellow brown; wings, luteous.

Governor, No. 10.—Body, peacock's herl; feet, dark red hackle; wings, made of the darkest part of the bittern's wing or brown hen.

Green Drake, No. 7.—Body, white posterior, half ribbed with black, green yellow, mottled with brown; setæ, dark brown.

Brown Drake, No. 7.—Body, feet and wings, a golden yellow brown; setæ, dark brown.

Raven, No. 11.—Body, feet and wings, black.

Wren Fly, No. 9.—Body, clay yellow; feet, made from the scapulary feathers of the English wren or quail; wings and setæ, mottled widgeon.

FISH IN MARKET—RETAIL PRICES.—Bass, 20 cents; blue fish, 8; salmon, 20; mackerel, 20; shad, 35; weakfish, 8; white perch, 15; Spanish mackerel, 20; green turtle, 12; halibut, 15; haddock, 6; king fish, 20; codfish, 8; black fish, 10; flounders, 8; porgies, 8; sea bass, 15; eels, 18; lobsters, 10; sheepshead, 15; frogs, 30; Canada brook trout, 50; Long Island brook trout, $1; pompano, 30; whitebait, per pound, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.50.

Restigouche salmon have fallen off very much in numbers, at least one-half. The run having been almost a month earlier, it is quite supposable that it is almost over. Salmon have no business to come when they are not wanted. The time the public expects to eat them is in July. It is quite possible that there will be more demand then than supply. Bluefish very abundant in the New England coast, weighing from 4 to 7 pounds.

CANADA.—*Montreal, June* 10.—Knights of the rod have been more than commonly active, as is certainly proved by the several very pretty fishing houses which have been built and are destined to grace the rugged shores of the Gulf, and somewhere opposite the lowest end of the Island of Anticosti. My "Lord Dundreary's" is notably the most extensive, and is to be transported by vessel chartered for that special purpose. The Fish and Game Protective Club are making efforts to alter the law affecting bass and pickerel fishing. The close season for pickerel is from April 15 to May 15; for bass, from May 15 to June 15; but as this has failed to accomplish the desired objects of real protection, an application will be made to the legislature to cause the close season for both bass and pickerel to be from April 1 to May 23. A remarkable catch was recently made at the Rock River of a ten and a half pound pickerel or dore, as we call them, with an ordinary bass rod, and without the aid of net or gaff. ROYAL H.

CANADIAN SALMON STREAMS.—The salmon catches in nets at the mouths of the rivers argue a large harvest for the angler. The rivers are already occupied by a large force of fishermen, and the sport has already commenced. The following partial list has been contributed to a New York daily paper:

"The Moise—Messrs. R. W. Cameron and Thomas J. Havemeyer, of New York; Mr. Allen Gilmore, of Ottawa, and Mr. James Turner, of Hamilton. The Grand—Messrs. Andrew Clerk, Charles F. Imbrie and Griffith Rowe, of New York. The St. Ann's—Messrs. Hogan, O'Brien and Waddell, of Montreal. Grand Cascapediac—Messrs. Stevens, Angus and Scott, of Montreal, and Mr. R. G. Dun and Collector Arthur, of New York. The Marguerite—Mr. George Dawson and Judge Headley, of Albany; District Attorney Catlin, of Brooklyn, and District Attorney Phelps, of New York. Later in the season the river will be fished by Senator Edmunds and family, Mr. Blanchard, of Boston; Messrs. Robt. Hare Powell and son, of Philadelphia; Messrs. Streit and Green, of New York, and Messrs. Willis Russel and son, of Quebec. The angling privileges on the Marguerite for the early fishing are nearly all taken, but I understand that there are a number of the best pool to let after July 10. Earl Dufferin and party are at Tadousic. The York is being fished by Mr. Reynolds, of Montreal, and a party of friends.

—Salmon are selling at four cents per pound in Montreal, and at a still lower price in Quebec.

MASSACHUSETTS—*New Bedford, June* 17.—Swordfish made appearance in markets to-day, several having been taken Saturday. Bluefish plenty. The trout fishermen have had extra luck, Capt. Wm. Nye catching five fish, weighing seven and one-fourth pounds. CONCHA.

—The Cuttyhunk Fishing Club open their club house Monday, June 24.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals reported at this port the past week have been 80—16 from the Banks, 37 from Georges, and 27 from mackereling trips. The receipts from the Banks have been 420,000 lbs. codfish and 280,000 lbs. halibut; the call for dry-cured cod

will make the Bank trips in that department remunerative, and prices have averaged fairly for the halibut fares. Th Georges fleet met with good success for the season; receipts, 925,000 lbs. codfish and about 50,000 lbs. halibut.—*Cape Ann Advertiser, June* 14.

RHODE ISLAND—*Newport, June* 15.—Bass fishing from Rough Point is very fine. Largest taken last week weighed from twenty-two to twenty-five pounds. T. J. F. F.

CONNECTICUT—*West Hill Pond.*—Lest any of our readers should be tempted by a communication in these columns, June 6, to try his hand on the bass in West Hill Pond this month of June, we append this timely warning:

"Citizens of New Hartford, together with this club, give notice that we shall prosecute to the extent of the law all persons found fishing in this pond in the month of June, as we are fully determined to enforce the laws for the proper protection of fish and game in this vicinity.

"CANTON ROD AND GUN CLUB."

New London, June 17.—Trout fishing poor. Streams for sixteen miles are fished to death. On May 30, twenty-six persons fished the Great Brook in Groton, and two of the party had a boat. Go where you will, if you catch thirty fish in a day's jaunt you do nobly. Five and six are the average catch. Fykes and pounds have destroyed all fishing in the Thames River. The river is filled with nets. Every farmer whose land borders on the river or around its mouth has his fyke, and his pigs are fed and his land manured with our best game and food fishes. Millions of small striped and sea bass are annually lost to us in this way. Many salmon have been taken in pounds off Millstone and Black Points and off Niantic. I used for bait, during the month of May, for black bass, what is called here mummy-chogs, or salt water minnows, and found them very effective. Caught 119 bass in six trips, smallest weighing twelve ounces, largest, 4½lbs., besides returning all females not badly hooked. MISAL.

NEW YORK—*Catskill, June* 15.—Bass fishing at the Point yields good returns. HOOK.

NEW JERSEY—*Forked River, June* 13.—The first blackfish of consequence were caught yesterday, Joel Barkalow and Geo. Wooley of this place taking seventy-nine with hook and line in a few hours, weighing from one to three pounds each. There are some bluefish in the bay, but they will not take the hook unless the weather gets warmer. The baymen are taking a few small ones in their nets. ARTHUR.

SPORT AT SEAGIRT, N. J.—On Sunday last at Seagirt, N. J., there was a grand rush of bluefish. They took the squid line ravenously, and large numbers were caught. The sport somewhat interfered with religious worship on that day.

Kinzey's Ashley House, Barnegat Inlet, June 16.—10th, P. P. Gustine, James Malscad, J. Freese, 38 sheepshead. 11th, Gustin & Co., 36 sheepshead; H. Schroeder and J. T. Price, Philadelphia, 25 blackfish. No guests for bluefishing, some of our captains took as high as 40 per boat. 12th, Wm. T. Bailey, Camden, H. O. Wilber and Geo. A. Perks, Philadelphia, 22 bluefish; J. T. Price, 7 sheepshead. 13th, Bailey & Co., 25 bluefish; Price & Co., 30 blackfish. 14th, Bailey & Co., 80 bluefish; Price & Co., 2 sheepshead. 15th, Col. Levi Davis & Co., of Bordentown, 22 bluefish; 75 sheepsheads by the professionals.

PENNSYLVANIA—*Bristol, June* 10.—The shad fishing season, closing to-day, has been very unremunerative to those engaged in it. The light run of fish, the multitude of nets on account of so many men being out of employment, and the trichina scare, made the average small. The salmon comes in nicely for fancy fishing, but for an all-day bread-and-butter job a poor man would rather have plenty of shad. A barrel of salt shad in the cellar during a severe winter helps materially in keeping the blood circulating until spring. S.

THE DELAWARE CATFISH.—The catfish of the Delaware are favorite game fish with many anglers who suppose them to have nine lives. However that may be, a plague has come upon them and they are dying in great numbers. An important branch of study is opened in connection with these fish epidemics which are so often reported as destroying scores of fish. We invite the fullest information from our readers who may chance to notice such fish mortality.

MARYLAND—*Baltimore, June* 11.—We are taking a few bass from Lake Roland, nine miles from this city. A party from Oakland visited the Blackwater last week and caught 300 trout. The perch have not run up Bush River this spring. WILL.

VIRGINIA—*Leesburg, June* 12.—Last Monday a little eight-year-old boy took two eleven-inch trout, and his brother, nine years old, took one about the same length; beat "Papa," who took one eight-inch trout, and "Uncle Willie," who took none. A few bass have been taken from the Potomac by parties who claim that possession in Virginia of bass taken elsewhere is not a violation of the law. J. W.

Leesburg, June 15.—Fifteen large bass yesterday taken from Potomac, largest four weighing over three pounds. Weather fine. Our law makers must try again if they want to protect the bass in spawning time. T. W.

TENNESSEE—*Columbia, June* 8.—Col. Geo. Connor and Mr. M. Dowson returned from Buffalo last week, showing a creel of thirty-five or forty trout and perch (rock bass). Messrs. Gordon, Moore, Tilford, White, McFall and Porter returned Friday night from the mouth of Blue Buck on Swan, a place familiar to Tennessee anglers, well satisfied with their catch. VAL.

Columbia, June 14.—Messrs. Tilford, Baily, Postmaster Hughes and Caldwell went to Swan Creek Monday and returned Thursday, the creek being too high. They caught 20 very nice ones during their stay. A fisherman fishing at mouth of Bear Creek caught 103 pounds of fish in one night; they were mostly blue cat. VAL.

Nashville, June 13.—Saw a catfish to-day, which was caught in the Mississippi, and weighed 110lbs.; head measured 18in. in length and 12in. in width. J. D. H.

FLORIDA—*Orlando, June* 1.—Messrs. E. A. Richards, C. F. McQuaig, and H. Burke have just returned from a trip to Lake Okechobee. They report all kinds of game and fish very abundant. HEXAGONAL.

ILLINOIS—*Chicago, June* 3.—You know the volume of water passing over the water-shed at Elk Rapids, Michigan. It has always seemed to me a place where land-locked salmon would be found. The water is cold and clear, with just enough dash and swirl to suit these fish. I know they have been caught in nets just a few miles below the rapids in the bay, weighing nine or ten pounds, yet have heard of but one being caught in the rapids, and from the description given by my friends I concluded it was a true land-locked salmon. Mr. Jerome said some time since: "They ought to show themselves in the summer of 1878." I am very anxious to try my skill against one of them, and would like to lie over there and try them. Many thanks for your kind advice regarding flies.

Since writing you I have received a letter from my Elk Rapids friends. They tell me that some fine speckled trout have been caught in the race just below the dam, and above Mr. Noble's house on the island. The fishing up there has opened very fair. Wirt Dexter, our famous Chicago lawyer, with a party of friends, are up there fishing in the lakes and streams in the vicinity. Our worthy friend, Holabird, caught a "whale" May 28. He was having a few hours' fishing, when he struck a bass measuring 21½ inches long. It made things lively for him for a few minutes. I am pleased to see Mr. Chandler has given us the promised letter on bass fishing. W. D. T.

MICHIGAN.—Messrs. Hazeltine, Nelson and Thompson, of Grand Rapids, and Mr. Fox, of Boston, had a glorious time on the Jordan—1,300 trout in six days. Northern Michigan offers unusual attractions to anglers and invalids. H.

WISCONSIN—*Neenah, June* 11.—Mr. E. W. Gillett and two ladies caught 160 bass and pike yesterday in Lake Winebago. R.

WILDERNESS WISCONSIN.—There are hundreds of localities in Wisconsin which have never been fished by the angler nor visited except by the aborigines. Even the Government Surveyor has skipped them. The officers of the Wisconsin Central Railroad, which runs through a primitive wilderness for more than half of its 350 miles of line, being enthusiastic sportsmen, are making extended investigations in the woods along the route and sending in explorers to search out the fishing places. Col. Henry Pratt, the General Passenger Agent, has permitted us to copy the following letter from one of their surveyors:

ASHLAND, Wis., June 6, 1878.

CAPT. H. PRATT:

In accordance with your request and Mr. Bacon's order, I have visited the big falls of Bad River, also English Lake, and have made very close inquiry about the small lake I spoke of as being near Silver Creek Station. This lake is claimed by all to be No. 1 bass fishing. You will see from the map inclosed that it is only two miles from Brunsweiler, where the trouting is best on that stream, and that it is only one-half mile from Trout Brook. From the lake to each of these streams Davis promises to mark a trail. He has a good boat on the lake. The trail to the lake leaves our track at the second telegraph pole north of Trout Creek Bridge. Bass fishing was found to be good on English Lake. There is a good birch canoe on the lake said to belong to some Indians—this is the only thing there is in the shape of boats. There is a good road from Penokee Station to Peter's Homestead, within one mile of the lake, and from there to the lake is a good plain trail. Distance from railroad station to lake is about three miles; much of the way up and down quite high hills. And now for the big falls of Bad River—certainly the grandest thing I ever saw. Tyler's Fork emptying into Bad River is what makes the falls. It is certainly well worth the trouble of going to see them. They are about two miles from the railroad crossing of Beaver Brook. From this point there is an old lumber road cut to within three-quarters of a mile of the falls. From this point to the falls is through about as bad a windfall as the country affords, besides being up and down high hills and without some patience and lots of Christian fortitude a man had better not make the undertaking. The falls are so located that it is difficult to get in position to make an intelligent estimate of their height, but they are certainly over 75 feet, and I would not be surprised to know that they measure 100 feet. Strangers should not try to make this trip without a guide; O. W. Davis, Silver Creek, would be a good guide.

T. M. WILLIS.

P. S. There is a path cut to the Bad River Falls, and Mr. Davis, of Silver Creek, is to make a trail to-morrow from the bass lake to the trout streams a mile or two each way from it.

HOW A FISH GROWS.—About three months ago we published a modest, unpresuming, little account of a bass, caught by a very innocent person, which weighed 58 pounds. In one week that same fisherman was said to have caught a bass weighing 85 pounds. Three weeks afterward a Western paper made that fish grow to 185 pounds, and now it comes to us from California weighing 581 pounds. A bass will increase, then, in ninety days exactly 437 pounds. Truly a Bastodon!

TROUT PHOTOGRAPHS.—When one fat trout says to another fat trout "Going to sit for your picture to-day?" it is not speaking after the manner of men. The question really means this: "Do you expect to-day to be jerked out of this aqueous sphere into a higher and more etherial one, where all good trout who have grown big and fat down here, as it is every trout's duty to do, have their photographs taken?" That was just what happened to a fish, whose years should have taught him wisdom, up in a Quebec, Ont., trout stream. He weighed three pounds ten ounces, was twenty-one inches in length, twelve inches in girth, and "took a beautiful picture." Mr. John T. Moody, Superintendent of the New York, New Haven and Hartford Railroad, tells us that there are better fish in that same stream than have yet been caught out of it, which we leave for our trout-minded reader to prove for himself.

ANGLING IN CENTRAL PARK.—The fishing season at Central Park is just now at its height. Few of the afternoon strollers in the Park ever dream of this fishing, which, from its extent and importance in the domestic economy of many interested families, may be termed an industry. That is, because ninety-nine ramblers out of one hundred keep their eyes wide open, and so see nothing. The one hundredth, if he be more astute, seeks a bench at the water's edge, shuts his eyes, and straightway beholds strange things. Creeping along with the caution and cat-like tread of the crafty redskin, silently steals the small boy, with scanty dress and capacious pockets. The gray-coated "cop" is not in sight; no one near except the One Hundredth, and he is fast asleep. The small boy's hand dives into one capacious pocket, and brings forth a string, to which is attached a cunningly bent pin-hook. Another hand dives into another capacious pocket and brings up a piece of dough. This is for bait. Then, quicker than we can tell it—a final scout-glance all around and an assuring look at the slumbering O. H.—the bait touches the water, a catfish seizes it, is jerked out, and disappears head first down into the depths of one capacious pocket. The whole operation, so far as the dozing O. H. can judge, consumes about three seconds and is repeated just four times. Then, with two squirming, wriggling catfish in each capacious pocket, the small boy, like a fishing smack with a full cargo, takes the straightest way for home, and before the somnolent O. H. has fairly finished his dream, is back again, ready for another cargo. If, just after the sixteenth catfish has found its way into the capacious pocket, the snoring O. H. suddenly opens his eyes and thinks to intimidate the small boy into going shares, there are just three thousand chances to one that there will be no small boy in the whole Park. Then the O. H. may conclude that he *was* asleep after all.

A FEW HINTS ON BASS FISHING.

CHICAGO, June 6, 1878.

Mr. Editor.—A perusal of the interesting letter in your last issue, signed "G. C.," on bass fishing, has given me and several personal friends much pleasure, and I hope you will induce him to land another bass for the delight of your readers. It has been my good fortune for many summers past, and occasionally a winter in Florida, to undergo the same experience he so delightfully detailed, and I once thought while reading I recognized the identical snarl that once ruffled my temper. He hasled his pupil through most of the scrapes a new beginner naturally falls into, and with a kindly hand sets him aright. To one who has fished for bass but little, I advise the cutting out of that article, and pasting it in his fishing hat. It is the most instructive article you have yet published. Who "G. C." is is a mystery to me, but the fraternity owes him thanks. He was so busily employed instructing his pupil that he did no fishing himself, and I thought it proper to state my experience on one point which may have been overlooked by some of your readers.

It is a well known fact that bass moving in schools have what might be termed pathways, and one in fishing over what he supposes to be good ground, often has to wait until the fish arrive at that point (I am speaking of still fishing), and after a short time of vigorous biting, a lull occurs, for the fish have gone on. Now, the point is to keep them with you as long as possible; and when two are fishing from the same boat the school can, with due judgment, be kept some time by taking advantage of their curiosity or voracity, whichever attribute it may be that causes other fish to follow almost to the surface a captive. If A and B are fishing together, we will suppose A has hooked a bass, and just about lired him out. Should A land his bass, the balance of the school, not seeing B's hook, may move off. But if—before A lands his bass, and while he has him well under control—B moves his bait near A's bass, some of the school, evidently thinking the hooked bass, in his struggles, is after B's bait, will rush up and take it. At this point, both have hooked a bass. B should keep his fish in the water until A has landed his and put on fresh bait; and then drop it near B's fish, who, probably, is still surrounded with curiosity hunters. The chances are that A will again hook a bass. I have seen this kept up until six or seven have been taken from a school. W. C. EAGAN.

—An old fisherman on the Lehigh (Pa.) tells how to catch black bass, which are now in season. "Black bass," he says, "will first nibble gently at the bait, and will frequently draw the float away under water. But wait—the float comes back. Suddenly he seizes and darts off. Don't pull—give him play. Suddenly he stops—he swallows the bait slowly. Now a quick pull and you have him." This is good advice.

THE ENGLISH TROUT FISHER.—There are two classes of trout-fishers, the one who haunts the impetuous rocky moorland and mountain-stream, and the other who affects rather the duller streams of the southern and midland districts. The pursuit of either is beautiful in its way. The former, perhaps, sees nature in her wilder and more unadorned garb, and in most cases has no need to ask for or obtain permission; though unfortunately this privilege, which formerly was very generally enjoyed by the public in the north and in Ireland and Wales, is now being rapidly curtailed, and stream after stream, loch after loch, is year by year shut up and forbidden to the public. This is greatly to be regretted, but in many instances the public has deserved it. It is a singular thing that while Englishmen are at home and in serious business costume, they have a wonderful respect for property and its rights; they recognize the laws of trespass and damage to the uttermost; but once put them into a shooting-coat and a wide-awake, thick shoes, and a generally free and easy costume, and their notions of the rights of *meum* and *tuum* become as free and easy as their clothes, and it is quite marvelous what a lot of really wanton mischief they can do, and the nuisance they can make of themselves. No one who has not lived in a tourist track can form any idea of this, and, as regards the streams, "all's fish that comes to net," and nothing in season or out of season, big, or little, comes amiss, nor any mode of fishing either. The result is that the streams are reduced to a very low ebb in the number and size of fish, where they are free to the public and at all easily approachable. Still there are localities yet where the wandering angler can, if he be skilled in the use of his weapons, and the day and water favor him, drag from the streams a respectable creel of trout, though it is harder and harder to do every year that passes, and to carry it through he has to resort more and more to bait fishing, and to trust less and less to the artificial fly. But supposing all to be fairly satisfactory, a scramble up some well plenished burn, away up among the wild hills which border the valleys on the upper part of the Tweed say, is a delightful way of passing a day; and notwithstanding the bulk of your trout will hardly run three or four to the pound, with an odd pounder or two, and a half-pounder now and then, the constant change, the heavenly air, so soft and yet so bracing, the entire surroundings of scenery and wild life well repay one for the fatigue, even though a four or five mile walk over the hills to one's inn after the sport is over should be the wind-up.—*The Week.*

A Brand-New Sporting Story.—The following is found in Lysippatus, a very little known Greek writer of the second century:

A huntsman with spear and bow intent on sport, met a countryman, who was gazing in a listless way on a herd of pigs.

"What wil'st thou make me pay, oh, Herdsman, if I launch a shaft amid that herd of swine?" asked the hunter.

"Four pieces of copper for all thou cans't kill," said the lout.

"Then by Apollo!" cried the hunter, "it is a bargain. Nerve my arm, oh Hercules! and speed my arrow, oh Diana!" Thereupon, drawing his bow string to his ear, he let fly a shaft and transpierced with one arrow three pigs.

"Here is thy money, old man," said the hunter; "but never didst thou think I should have had so cheap a bargain as three swine for four pieces of copper."

"True," said the countryman, "but the swine were not mine."

We think we have heard this little joke before.

Another Version of the Same Joke.—While the above was in the hands of the compositor the following train of incidents actually took place in this city. Besides being a noteworthy coincidence and a commentary upon the prescient management of this journal, this modern epic of the goose is an admirable illustration of Schlegel's profound remark that "History repeats itself," and Solomon's reflection that "That which has been shall be." Now for the goose:

On Thursday afternoon Gustave Schmidt, who is noted for the interest he takes in rifle shooting, entered the saloon of John Lutz, and drew from his pocket a fine revolver which he had recently purchased, and which he exhibited with pride to Lutz and to those of his friends who were in the saloon at the time. Schmidt spoke boastingly of his own powers as a marksman, and offered to make a bet of $10 that he could hit a mark at the other end of the room.

"Do you see that goose," said Lutz, contemptuously, pointing to a fowl that could be seen through the open door waddling about the back yard; "you give me a dollar and I'll let you fire three shots at her, and if you hit her once you can have her."

Schmidt accepted the offer, and fired from where he was standing, bringing down the goose. A roar of laughter greeted his achievement. He walked proudly into the yard and took the goose, supposing that the merriment was at Lutz's expense. As he re entered the saloon with the fowl in his hand, the side-door of the saloon was thrown violently open and an angry man ran into the saloon. This was Henry Steinberg, the owner of the goose. His first act was to knock Schmidt down, and his second was to explain his reasons for doing so. When Schmidt understood how he had been taken in, he knocked Lutz down and demanded the return of his money, Steinberg in the meantime busying himself in asking both of them to pay for the goose. The noise attracted the attention of Officer Wheeler, who entered the saloon. After some discussion he arrested Lutz on the complaint of Schmidt, who charged him with obtaining $1 by false pretenses; Schmidt, on the complaint of Lutz, on a charge of assault and battery, and Steinberg on a similar charge, also made by Schmidt.

When the prisoners were taken to the station-house, and the sergeant heard with wondering eyes the various complaints, he turned to Wheeler and asked if that were all. 'Why, no," was the answer; "Lutz was selling liquor without a license, Schmidt hasn't a permit to carry that pistol, and then that other man, Steinberg, hasn't got any permit from the Board of Health to keep his goose."

When the three prisoners were taken before Justice Flammer, in the Essex Market Police Court, recently, a long investigation was held, and the court room was crowded by the friends of the three prisoners. Lutz said it was all a joke, and gave back the dollar, withdrawing his charge against Schmidt. The latter, touched by this spirit of conciliation, withdrew his charges againt Lutz and Steinberg, and the owner of the goose forgave the marksman, when the latter and the saloon keeper each promised to pay half the value of the goose. Their misunderstandings being over, they expected to be allowed to go. But just then officer Wheeler and his charges loomed up like grim fate. Justice Flammer required Lutz to give $100 bail on a charge of violating the Excise law, held Steinberg in the same amount for keeping geese without a permit and fined Schmidt $5 for carrying a pistol without a permit.

No Cats, no Rats, no Mice.—Visiting the large lead establishment of Messrs. Tatham, we overheard the foreman commiserating a cat.

"She won't be here long," he said; "only came here yesterday."

"Why?" we asked.

"Because cats are gonners here."

"How?"

"Lead poison. They don't stand it five days. They get painter's colic and keel over. There isn't much use for cats, however, for the rats and mice don't find it comfortable here either, for we never see any."

Happy proprietors of lead works, we thought, who never hear any caterwauling! The remedy, evidently, for the householder plagued with cats in his back yard is of the simplest character. Let him convert his mansion into a pipe, shot and sheet lead factory.

Snakes and Horses' Eyes.—Whole volumes have been written upon the well-known phenomenon of horse-hairs which, immersed in water, turn into snakes. But here is a new field of study: What would be the effect upon the equine race if all had snakes in their eyes? A Penn Yan, N. Y., horse has a snake in his left eye. When the snake squirms the horse winks his eye. The winking is so frequent as to induce sleepiness. We might, then, reason that an ophidian-eyed variety of horses would be sleepy, sluggish and lazy. But Philadelphia street-car horses have snakes in their eyes, and lions and tigers, too. This menagerie in the eye of a Philadelphia horse, however, it has been observed, instead of making him slow and sleepy, induces in him friskiness, spirit and mettle. The way of it is this: When a horse falters and dies in Philadelphia, he is straightway carted away to be devoured by snakes, lions and tigers in the Zoological Garden. Such a fate is ever before him, staring him in the face. By these snakes in his eye the horse is impelled to suffer the woes of an outrageous fortune a year or two longer than would otherwise be possible, and the result of this is a breed of Philadelphia horses which will probably before long become famous in the great horse marts of the world.

Sealing Steamers.—Why do not some of the Arctic exploring parties equip an iron ram and fight their way through to the pole, "if it takes all summer?" The Newfoundland sealing vessels are in their way something like what is wanted for a North Pole campaign. According to the Toronto *Globe* they are armed with iron prows, with which they attack ice fields with the grit and pertinacity of bull dogs:

"The iron prow acts like a huge wedge driven by steam. Saws are used in making a way through thick ice, especially when an approaching iceberg threatens a catastrophe. The long, sloping stems of these vessels are built of solid oak and covered with inch thick iron plates, forming a ram of great weight and strength. The rest of the hull is sheathed four inches thick with a New Zealand wood almost as hard as metal."

Fish Damaging Submarine Telegraphs.—The *German Fishery Gazette* is authority for the following:

The submarine telegraph cable laid down between Portugal and Brazil, and along the eastern coast of the South American Continent, has been repeatedly subjected to the attacks of the saw-fish. Splinters of bone belonging to this fish have been found within the gutta percha and outer coverings of the cable, embedded so deeply as to damage the electric wire. Five such accidents have been reported, from which it seems probable that the saw-fish, running with his full strength against the cable, and being of a hot temper, getting angry, had attacked the cable with his saw. A yet more strange story is reported from Persia, where a short time since the submarine cable laid down in the Persian Gulf, suddenly ceased its functions. Upon examination it was found that a large whale had got entangled in the cable and broken it. The monster was covered all over with parasites, and it seems not unlikely that the whale in his attempts to rid himself of them, rubbed his body against the cable, and using his strong tail to sweep them off, had accidentally broken the cable, which immediately had coiled itself spiral like, round the body of the whale. The monster in trying to escape got yet more and more entangled and finished his efforts by being suffocated, his body presenting a terribly lacerated appearance.

Romulus Bowman.—We have here in Hart County, Kentucky, a man by the name of William Bowman, who was thrown away in the Apalache Mountains, North Carolina, when an infant, and was found by an old bear and adopted as a cub. At the age of about ten years he was captured, tied hand and foot, and then his captors found that he could not talk, nor could he be persuaded to take any food but milk, which he sucked from a bottle, showing that he had lived solely by the nursing of the bear. Bowman is now a farmer near Omega, and any one doubting the truth of this statement can have it verified by seeing him.—*Hart County, Three Springs.*

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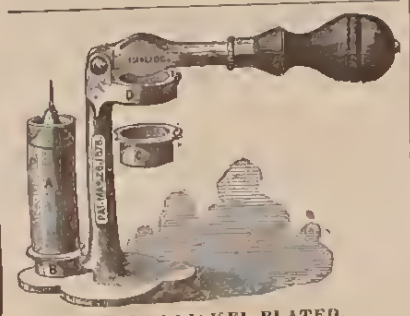

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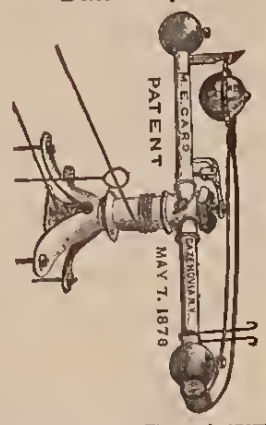

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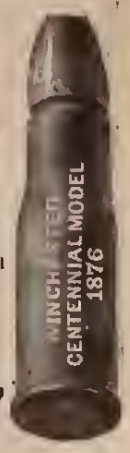

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Imported Pointer Bow, Bang, Luna—Winner of several prizes before importation, beating Wagg. Also first at New York, special for best pointer in the show, and best brace with Sleaford.

Champion Sleaford, MacGregor (694), Nina (1,253)—Winner of first at Birmingham, 1876; first at St. Louis, 1878, and Champion at New York, 1878.

Clytie, Champion Sensation, Baltimore K. C. Lily—Winner of first at St. Louis, 1878, when one year old.

Fee—Berkley, $40; Bow, $40; Sting II., $25; Sleaford, $25. Address

ST. LOUIS KENNEL CLUB, 706 Pine St.,
ST. LOUIS, MO. Je13 4t

St. Paul Bench Show,

To be given under the auspices of the

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AT

STATE FAIR GROUNDS

ST. PAUL, MINN.

SEPTEMBER 2, 3, 4, 5, 6, 7, 1878.

ENTRIES CLOSE AUG. 15.

CHAS. LINCOLN, Supt.

my9 tf

The Kennel.

Fleas! Fleas! Worms! Worms!

STEADMAN'S FLEA POWDER for DOGS.

A Bane to Fleas—A Boon to Dogs.

This Powder is guaranteed to kill fleas on dogs or any other animals, or money returned. It is put up in patent boxes with sliding pepper box top, which greatly facilitates its use. Simple and efficacious.

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ARECA NUT FOR WORMS IN DOGS

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Put up in boxes containing a dozen powders, with full directions for use.

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MARYLAND POINTERS IN THE STUD.

"PONTO."

Liver color, weighs about 57 lbs.; is a first-class field dog both on coveys and single birds; has great speed and endurance, and is not afraid of briars. Was shown at Baltimore in the same class as Sensation, and was highly commended.

"BRAGG."

Lemon and white, weighs about 60 lbs.; litter brother to Till, who took first premium for Native Pointers at New York, May, 1877.

Fee for Either Dog, $20.

As regards performances of dogs in the field, would refer to Messrs. Clark & Sneider, Baltimore; Hon. J. E. Reyburn, 1,822 Spring Garden street, Philadelphia.

FOR SALE, one liver-colored pup, by Ponto, out of Ginger, whelped in August, 1877. Price for pup, $25. Also, five dog and four bitch pups, whelped April 1, 1878, by Ponto, out of Ginger. Price, $15, at eight weeks old, or $20 per pair. Address MUIRKIRK KENNEL, Muirkirk, Prince George's County, Md. apr25 3m

FOR SALE—A number of setter dogs; broken and unbroken dogs boarded and broken; all for low prices. H. T. DAVIS, South Wethersfield, Conn. je6 4t

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Twenty-one Gold, Silver and Bronze Medals awarded, including Medal of English Kennel Club, and of Westminster Kennel Club, New York.

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For sale in cases of 112 pounds.

Rory O'More.

Pure bred red Irish Setter. The handsomest as well as one of the best bred and finest field dogs in the United States; winner of first prize at New York, 1877. Fee, $25.

W. N. CALLENDER,
je6 tf Albany, N. Y.

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Sportsmen in want of first-class cocker spaniels write at once to ROBERT WALKER, Franklin, Del. Co., N. Y. Stock and delivery guaranteed. Price, $15 each for dog or bitch or spayed bitch pups. may2 1yr

ENGLISH PRIZE, STUD, SPORTING AND NON Sporting Dogs for sale. Greyhounds, pointers, setters, retrievers, spaniels, broke for the field, £20 each; for the field and show bench, of good pedigrees, £40 each; fox terriers, bull terriers, black and tan terriers, from £10 each, all dead game, of good pedigrees, and very valuable for breeding; better quality for the show bench, £20 each. Also a few Yorkshire terriers at £10 each. The prize Yorkshire terrier, "Willie," will be sold. Winners of silver cup, Queensbury, first and silver cup Ulverston, and ten other prizes. All dogs will be sent to Messrs. Bampton & Steglish, Express Agents, 60 William street, New York. Drafts to accompany order, payable on Alliance Bank, London. Satisfaction is guaranteed by the advertiser, who is a judge and reporter of English dog shows. F. STEEL, Well Royd Farm, Stump Cross, Halifax, England. mar7 6m

SPIKE COLLARS.—Spike Collars, by means of which dogs of ANY AGE OR breed, no matter how long hunted, or what the disposition, can be taught to fetch and carry, and to retrieve game in a most perfect manner, with no play about it. Dogs broken of gun-shyness and whip-shyness, made steady before and behind, and "to heel" steadily; prevents lugging on the chain, besides a much more extended sphere of usefulness. Price, with directions for using, $3. Kennel collars, which no dog can get over his head, price $1. Address M. VON CULIN, Delaware City Del. feb7 tf

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The Kennel.

Westminster Kennel Club

POINTERS FOR SALE.

One Lemon and White Dog, two months old, by Sensation, out of Daisy II., she by Orgill's Fluke, out of Lilly, and winner of first prize New York, 1877, price $50.
Also, one Lemon and White Dog, $50.
One Black and White Dog, $40.
One Black and White Bitch, $30.
One Liver and White Bitch, $30.
All two months old, out of Whisky, by Sleaford. Order of the Secretary W. K. C., 23 West Thirty-second street, New York.

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Breeding Kennel

OF

M. P. McKOON, Franklin, Del. Co., N. Y.

I keep only cockers of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruffed grouse and woodcock shooting and retrieving. jl0 t

WANTED—Pointer or setter, well broken on woodcock; dog or bitch; not particular; if price is low, address Lock Box 36, Great Falls, N. H. je13 2t

FOR SALE, when eight weeks old, twelve fine setter whelps, seven dogs and five bitches, out of my blue belton Mell by Burges' Druid; whelped May 17. Five are black, tan and white, balance black and white. Address L. F. WHITMAN, No. 5 City Hall, Detroit, Mich. je13 10t

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FOR SALE—Pointer pups, five months old, out of my Queen, by Jesse Sherwood's imported champion Sancho; also, a red Irish setter dog, out of Moll II., by St. Patrick II. If sold at once will be sold cheap. Address N. R. BAKER, Topeka, Kan. je20 3t

FOR SALE—Two field trial or Llewellin setter puppies, over three months old. For full pedigree and price address J. N. SHAPLEY, Hazleton, Pennsylvania. je20 tf

FORTY-FIVE DOLLARS will buy a thoroughly-broken red Irish setter with a pedigree for fifty years. Address E. J. ROBBINS, Wethersfield, Conn. je6

For Sale,

FIELD, COVER AND TRAP SHOOTING.

BY CAPT. BOGARDUS.

New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Miles Johnson. For sale at this office. Price $2.

CITY AND COUNTRY PROPERTY bought, sold and exchanged. C. S. PECK, 8 West Twenty-fifth street, New York. Sept27 1y

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FOR SALE CHEAP—A fine W. & C. Scott & Son's breech-loading shot-gun and complete outfit. Address MAX LEMAINE, Detroit, Mich. je13 2t

FOR SALE—10,000 live wild pigeons for trap shooting. Address O. B. FITCH, Wilcox, Elk County, Pa. je13 2t

FOR SALE—Crystal Spring Fish Farm and Picnic Grounds, Oakland, Bergen County, N. J. Buildings cost over $1,200; five years old; gothic frame villa; all modern improvements; tenant's house, stables, etc.—in one, four horses; twenty-three acres, four acres grove, with from twenty to thirty ponds; fine garden; 100 young fruit trees; apple orchards. Address B. B. P., care this office. je13 tf

FOR SALE, CHEAP—A long-range Sharps Rifle, all complete and in fine order. Address box 120, Taunton, Mass. je20 4t

FOR SALE—A very fine London (Adams & Co.) made, 10-gauge breech-loader, choke-bored, rebounding locks, with magnificent walnut case and outer leather covering. Superb pattern and penetration. Address CHOKE, box 554, Halifax, N. S. je20 2t

FOR SALE—A Remington breech-loading shot-gun, fine laminated barrels, beautiful walnut stock, very little used, in perfect order, and warranted an extra hard and close shooter, left barrel shooting closer than right, 10-gauge, 30 inches, 8½ lbs., 2¼ drop, and 14 length stock, cost $75; will sell for $50, together with Turner-Barclay loader, etc., to close out stock. Address Dr. J. P. McCLEERY Milton, Pa. je20 1t

Wanted.

WANTED—A second-hand breech-loading shot-gun, 10 or 12 bore, 8 to 8½ pounds; must be cheap for cash, and in good order. Address C. H. S., Newark Post-office, N. J. je20 1t

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address TRUE & Co., Augusta, Maine.

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Sportsmen's Routes.

LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M., Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M. and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 338 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.

J. CHITTENDEN, Gen'l Pass. Agent. je6 tf

Auxiliary Rifle.

SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot-Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44 as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

AUXILIARY RIFLE BARREL COMPANY,

P.O. box 1,178. NEW HAVEN, CONN.

W. W. Greener's Champion Treble Wedge Fast, Breech-Loader.

THE WINNING GUN.

At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £705, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, headed 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1876, beating 102 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,328. BEWARE OF INFRINGEMENTS OR IMITATIONS.

W. W. GREENER, St. Mary's Works, Birmingham, England.

H. C. SQUIRES, Agent, No. 1 Cortlandt Street, New York City.

IMPORTANT TO FARMERS, COW-KEEPERS AND DAIRYMEN.

The Wonderful Self-Acting Cow-Milker,

PATENTED MAY 28, 1878.

THE MOST USEFUL INVENTION OF THE AGE.

Tested and approved by many of the leading **Agriculturists, Dairymen and Farmers** throughout the United States, and highly recommended by all who have used it.

WILL MILK A COW IN FROM THREE TO FOUR MINUTES and can be adjusted and used by A CHILD. Usefulness, simplicity, cleanliness, durability and cheapness combined.

PRICE, TWO DOLLARS.

Apparatus, with full instructions and pamphlet containing description of the milker and sectional views and treatise of the cow's teats and bag, sent prepaid to any address on receipt of price, $2.

READ THE FOLLOWING TESTIMONIAL:

25 LEXINGTON AVENUE, N. Y., June 5, 1878.

I hereby certify that, in company with the Superintendent of the American Society for the Prevention of Cruelty to Animals, and other officers of that society, I have witnessed the operation of the Self-Acting Cow-Milker, and that it fulfills all that is claimed for it.

(Signed) JOSEPH B. COLEMAN, Veterinary Surgeon.

Member Royal College of Veterinary Surgeons of England and Veterinary Surgeon to the American Society for the Prevention of Cruelty to Animals.

STANT & CO., Manufacturers' Agents, P. O. Box 2,997. 132 Nassau Street, New York.

Hart's Sportsman's Favorite Metallic Shells, FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left out shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

TATHAM'S IMPROVED CHILLED SHOT.

American Standard Diameters.

(RED LABEL.)

Gives **greater penetration** and **better pattern** than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found **free from shrinkage, more spherical, more uniform in size, harder, heavier** and of **brighter** and **cleaner** finish than any other. SEND FOR CIRCULAR.

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Also manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

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FOR DEER, BEAR, PARTRIDGES, DUCKS,

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EXPENSES LOW.

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Nov22 tf

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NEW YORK, HALIFAX, N. S. AND ST. JOHNS, N. F.

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CORTES, Capt. Bennett, and ALHAMBRA, Capt. McIlhtoney,

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AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. je206m

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Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

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The Only Route via White Sulphur Springs.

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Gen. Passenger and Ticket Agent,

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Chicago & Northwestern RR.

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For rates or information not attainable from your home ticket agents, apply to

MARVIN HUGHITT,

W. H. STENNETT, Gen. Manager, Chicago.

Gen. Pass. Agent, Chicago. je20 tf

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NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 3, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 1:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 12:00 P. M.

Leave Trenton for New York at 1:29 (except Monday), 6:50, 8:13, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 4:00, P. M. trains from New York and to the 7:45. A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept3 1y H P BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep 28 1y

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THE PENNSYLVANIA R.R. CO.

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Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

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also reach the best localities for

GUNNING AND FISHING

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Trout Fishing, Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent,
FRANK THOMSON, Gen'l Manager. feb17-tf

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St. at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

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Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

L. W FILKINS, G P. Agent, D. S. BABCOCK, Pres.

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FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
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Dec14-1y

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The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake Monacalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while pork fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

HENRY PRATT, G. T. A.
my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

A. B. LEET, G. P. A.,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.

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TAKE THE

People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, including Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only steamboat line selling tickets and checking baggage to places on the N. Y. C. R. R

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the Office on the pier, at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. E. MAYO, Gen'l Passenger Agent.

St. Louis, Minneapolis
AND
ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids. C. J. IVES,
E. F. WINSLOW, Gen. Passenger Agent.
General Manager, tf

FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

NIGHT LINE.—The Elm City leaves New York at 11 P. M., connecting with passenger train in waiting on wharf at New Haven, leaving 5:15 A. M. Tickets sold and baggage checked at 944 Broadway, New York, and 4 Court street, Brooklyn. Excursion to New Haven and return, $1.50. Apply at General Office, on the pier, or to RICHARD PECK, General Agent.

Hotels and Resorts for Sportsmen.

Grand Fishing.

ROBERTS' SUMMER RESORT,

DOTY ISLAND,

NEENAH, WIS.

FISHING AND ANGLING.—To the sportsman and angler no place in Wisconsin offers greater inducements, the catch of fish during the season being at all times good, and the varieties such as to make it first-class sport. Black and silver bass, muscalonge, pike, pickerel, catfish, sturgeon, rock bass and perch, are the common varieties caught, and as the best fishing grounds are within a few rods of the house, no time is lost in going or coming. Je20 3m

Hotels and Resorts for Sportsmen.

Invalids' and Tourists' Hotel,

BUFFALO, N. Y.

A new and elegant summer resort: overlooks Lake Erie and Niagara River, and is in the midst of beautiful parks. The Canada shore and the spray from Niagara Falls may be distinctly seen from its Tower. Trains run to the Falls every hour. Climate delightfully cool, equable, and invigorating. The cool lake breezes so temper the atmosphere that no summer day is too warm for comfort, while the temperature at night is appreciated by all who have sojourned here during the warm months.

What man with a family, having once been crowded into some small "sky parlor" in that hottest of all hot places—Saratoga—or has been continually jostled and elbowed by the metropolitan throng that rolls alternately in dust and surf at Long Branch, but that has vowed never again to repair to summer resorts! And yet with each returning season, comes the query, where shall we go? No place on this continent possesses more advantages for the tourist, pleasure seeker, or those in search of rest and relaxation from the cares of business, than this hotel. 1st, Its accessibility. 2d, Its cool, bracing and salubrious climate; the thermometer ranging in summer from 65 to 75 degrees Fahrenheit. 3d, The attractions of the hotel and its environs. All these combine to render it the most desirable resort for those in search of relaxation and rest. The architectural features and interior finish of the house are said, by good judges, to be the finest of any hotel in the world. Its furnishing is unique, and superbly rich. Table unsurpassed. Elevator, hot, cold, Turkish, Russian, electric, needle, and other baths; billiard room, bowling alley, speaking pipes communicating from every room with the office; telegraph and R. R. ticket office, and all modern conveniences are provided. Advantages for fishing and boating are unsurpassed. **Terms, $3.00, $3 50 and $4.00 per day,** according to location of room. Address,

MANAGER INVALIDS' AND TOURISTS' HOTEL,
Buffalo, N. Y.

Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. Je6 tf

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HOPKINS HOUSE, Waretown, N. J. The proprietor, formerly of Harvy Cedars, would hereby inform his friends and the public generally that he has removed to the Hopkins House, Waretown, where he is prepared to accommodate all who wish to give him a call. Every facility for boating and fishing will be found in readiness.

N. B.—Stages connect with trains at Waretown Junction. CHAS. MARTIN, Sr., Prop'r. Je6 4t

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CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

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THE BARNEGAT HOUSE,

Forked River, Ocean County, N. J.

The nearest house to the finest fishing and gunning of Barnegat Bay. Superior accommodations for families or transient guests at reasonable rates. Access via N. J. S. R. R. Address S. L. ATKINSON, Manager. Refer to C. SMITH, 44 West Broadway. Je20 4t

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Sportsmen's Headquarters.

Bromfield House,

AND

LADIES' AND GENTS' DINING ROOMS,

55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER. Proprietor.

apr4 tf

Ashland House,

Fourth Avenue, corner of Twenty-fourth St,

NEW YORK CITY.

Rooms, per day, $1 and upward. Room and board, $2, $2.50 and $3. Popular, strictly first-class, central. One block from Madison square; eight minutes from Grand Central Depot. Cross-Town Line, from foot of Grand street, East River, to foot of 42d street, North River; 23d street Cross-Town Line from Erie R. R. depot; and the Fourth avenue Line from City Hall to Grand Central Depot; ALL PASS THE HOTEL. Passengers from Jersey City take the Desbrosses street ferry, Desbrosses and Grand street car line to Bowery, and then Fourth avenue line to 24th street.

H. N. BROCKWAY, PROPRIETOR.

Mar7 tf

NEW SUMMER BOARDING HOUSE!

Situated three miles from Bethel Station, in the vicinity of good brook trout fishing. Healthy location and pleasant drives. Address H. R. GODWIN, North Bethel, Maine. je13 1m

Hotels and Resorts for Sportsmen.

Sherman House,

(CLARK AND RANDOLPH),

CHICAGO.

Rates reduced to $3 per day for all rooms above the parlor floor, without baths.

Rooms with baths, $3.50, $4, and $4 50 per day.

ALVIN HULBERT, Prop'r.

We challenge any Hotel in the World to show as large and as elegantly furnished rooms as those of the SHERMAN. je20 tf

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Wild Fowl Shooting.

SPRINGVILLE HOUSE OR SPORTSMEN'S RETREAT, SHINNECOCK BAY, L. I.,

By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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"AVON HOUSE," LAKEPORT, N. Y.

Lakeport is handsomely situated on the banks of Oneida Lake, four miles north of Chittenango Station, on the New York Central Railroad Bathing, boating, fishing and hunting in season. Experienced guides. Steam, sail and row-boats to let; good sprinkling. Special inducements for families by the week. For further particulars apply to or address, J. J. DEMPSEY, Lakeport, N. Y; formerly of Union Club, also Windsor and Union Square Hotels, N. Y. je13 tf

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Mt. Kineo House,

MOOSEHEAD LAKE, ME.

A delightful resort for the sportsman, summer tourist or invalid. Good trout fishing. For circulars address O. A DENNEN, Superintendent, as above, or W. L. CHENERY, 196 State street, Boston, Mass. je20 6t

Greenwood Lake.

MONTCLAIR & GREENWOOD LAKE RAILWAY.

THE ONLY THROUGH ROUTE TO GREENWOOD LAKE.

Splendid Bass and Pickerel Fishing—Beautiful Lake and Mountain Scenery.

Trains leave New York, foot of Cortlandt and Desbrosses streets, daily (Sundays excepted) at 8:20 A. M. and 4:30 P. M.

Leave Brooklyn, via Annex boats foot of Fulton street, at 8 A. M. and 4 P. M.

Pullman Parlor Car on 4:30 P. M. train.

Through coach daily between Hackensack, Paterson and Greenwood Lake.

Excursion fare from Brooklyn, New York or Jersey City, $2 75. Parties of fifteen or more persons, $2 20 each.

J. S. MACKIE, Gen. Pass. Agent.

Notice to Anglers.

THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle.

Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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St. George Hotel,

Cooper, Greenwood Lake, N J.

S. W. GEORGE, Proprietor.

P. O. address, Greenwood Lake, Orange Co., N. Y. may2 3m

THE SUBSCRIBER desires a capitalist or association of gentlemen to join him in the erection of a select family hotel or club house on the most beautiful and eligible situation at Greenwood Lake, N. Y., with from twenty to fifty acres of land, as may be desired, and will take one-third of the purchase price of the property in stock or shares in the enterprise. Choice building sites, with water fronts, also for sale, in plots to suit, on favorable terms. Circulars can be had at office of FOREST AND STREAM. Apply to or address S. CALDWELL, Greenwood Lake, Orange County, N. Y. may16 tf

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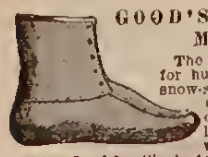
BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y. Splendid bass fishing, good boating and bathing Telegraph office in house. Take Monclair and Greenwood Lake Railway.

TRAPHAGEN HOUSE, GREENWOOD LAKE, Orange County, N. Y., L. Y. JENNESS. An excellent family hotel. Also good accommodations for the sportsman. Good boats and every facility for fishing. je13 3

Sportsmen's Goods.



GOOD'S OIL TANNED MOCCASINS.

The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article.* Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

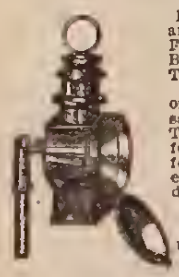
PRINCIPAL AGENTS—W. Holberton & Co., 117 Fulton street, New York; Jos. C. Grubb & Co., 712 Market street, Philadelphia, Pa.; Bradford & Anthony, 374 Washington street, Boston, Mass.

LOST
BECAUSE HE HAD NO
COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

BOUDREN'S PATENT COMBINATION
Jack, Dash and Fishing LAMP,



For NIGHT HUNTING Deer and other animals, SPEARING FISH. Indispensable on any Boating, Yachting or Camping Trip.

Not affected by Wind, Rain or Jolting. Burns kerosene safely without a chimney. Throws a powerful light 200 feet ahead. As a DASH LAMP for CARRIAGES it has no equal. Fits on any shaped dash or on any vehicle.

PRICE.

Jack and Dash.....$6 00
Fishing Lamp..... 3 00

C. O. D., with privilege of examination.

WHITE M'F'G COMPANY,
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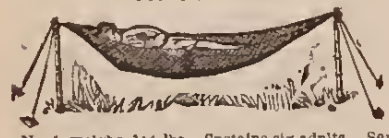
FERGUSON'S
Sportsman's Lantern.
WITH HEAD AND STAFF ATTACHMENTS.
(Patent Applied For.)

Light, Strong, Compact and very Effective. It is the BEST lantern for Sportsmen and Camping Parties yet offered. UNEQUALLED either as a CAMP lantern, HAND lantern, "HEAD JACK" or "STAFF JACK." Can be worn over any size or style of hat, and can easily be carried in the knap-sack or pack-basket. No chimney, no smoke; cannot be extinguished by wind, rain or jolting. Send for descriptive circular to A. FERGUSON, 137 Wilson street, Brooklyn, E. D., N. Y., or W. HOLBERTON & CO., Sole Agents, 117 Fulton street, N. Y. may16 2m

ASHANTEE
Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.



No 1 weighs 1¼ lbs. Sustains six adults. Sent by mail on receipt of $3.75. Obtain our circulars describing other sizes.

McCOY & SANDERS, SOLE AGENTS,
134 Duane St., New York.

Eaton's Rust Preventer.

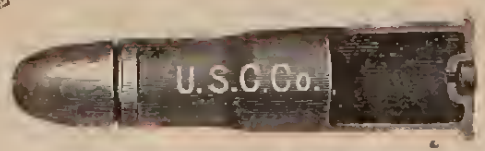
For Guns, Cutlery and Surgical Instruments. Safe to handle, WILL NOT GUM, and will keep in any climate. Sportsmen everywhere in the United States pronounce it the best gun oil in the market. Judge Holmes, of Bay City, Mich., writes: "It is the best preparation I have found in thirty-five years of active and frequent use of guns."

The trade supplied by sole manufacturer, GEO. H. EATON, 570 Pavonia Avenue, Jersey City Heights, N. J.

Sold by principal New York dealers, and by Wm. Read & Sons, Boston, Mass.; B. Kittredge & Co., Cincinnati, Ohio; R. E. Eaton, Chicago, Ill.; Brown & Hilde, St. Louis, Mo.

CANNOT BE SENT BY MAIL.

United States Cartridge Company,



LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and in use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

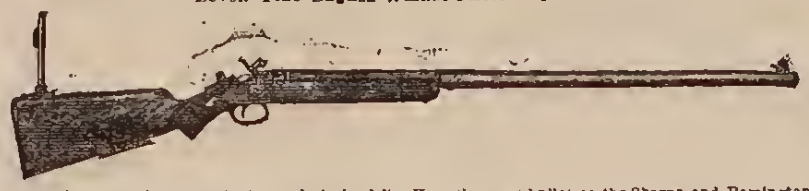
Cartridges for Target Practice.

Send for Illustrated Catalogue.

FOWLER & FULTON, General Agents, 300 Broadway, N. Y.

Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.

BARTON & CO.,
337 Broadway, New York.

IMPORTERS AND MANUFACTURERS OF

GUNS, PISTOLS, POCKET CUTLERY, FISHING TACKLE, Etc., WHOLESALE AND RETAIL.

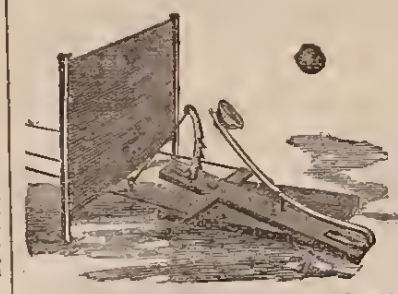
REDUCED PRICE LIST OF SPLIT BAMBOO RODS, WARRANTED THE BEST IN THE MARKET FOR THE PRICE.

Reduced Price List of SPLIT BAMBOO RODS, warranted the best in the market for the price.

Six-strip hexagonal, three-joint, extra tip and tip case	$18 00
Six-strip hexagonal, three-joint, extra tip and tip case, solid reel plate	25 00
Six-strip hexagonal, black bass, three-joint, extra tip and tip case, solid reel plate	27 00
Also the following of LEONARD'S MAKE:	
Two-joint light fly rod, extra tip	17 00
Six-strip, taree-joint, extra tip and case, waterproof ferrules and solid reel plate	30 00
Helgramite bait for black bass, each	60
Russia-leather fly-book, with the "Hyde" clip, large size, each	5 00
Russia-leather fly-book, with the "Hyde" clip, small size, each	3 50
Best enameled waterproof fly lines	60. to 10c. per yard
A large assortment of trout and black bass flies from	$1 to $2.50 per dozen
All kinds of Snelled Hooks tied to order. Also Flies dressed to any desired pattern.	
United States Arms Revolver, 7 shot, .22 cal., nickel, each	$2 50
United States Arms Revolver, 5 shot, .32 cal., nickel, each	4 50

EVERY PISTOL WARRANTED.

EVERYTHING REQUISITE FOR SPORTSMAN'S OUTFITS.



Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

A NEW IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. **Price $8. Old Style, $6.**

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

HEADQUARTERS FOR BALLS, **HAGGERTY BROS. & CO., 10 Platt Street, N. Y. City.**
FOR TRAPS, **HART & SLOAN, Newark, N. J.**

Second and enlarged edition of "Field, Cover and Trap Shooting," by A. H. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, **Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill.**
Dec6 tf

IRA A. PAINE'S
FEATHER FILLED GLASS BALL.
PATENTED OCTOBER 23, 1877.
The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade

HEADQUARTERS BOHEMIAN GLASS WORKS, 214 Pearl Street, N. Y.

Sportsmen's Goods.

INDIA RUBBER
Fishing Pants, Coats, Leggins and Boots,
RUBBER CAMP BLANKETS,

COMPLETE

SPORTING AND CAMPING OUTFITS, AND

India Rubber Goods of Every Description.

HODGMAN & CO.,

SEND FOR PRICE LIST. 27 MAIDEN LANE, N. Y

FINEST
Blue Flannel Suits,
FOR GENTLEMEN.

WARRANTED FAST COLORS,
From $12.50 to $16,

The price depending on Size and Style.

Sample of Goods, Price List and Measurement Blank furnished on request by post.

GEO. C. HENNING,
my9 Washington, D. C.

STEPHEN SUMMERVILLE,
ENGRAVER OF
FINE GUN MOUNTINGS,
111 SOUTH TENTH STREET,
je20 2t Philadelphia, Pa.

PHOTOS of Actresses, comic, etc., 10 for 25 cts. List of books, 2c. S. R. LUDDEN, E. Lincoln, Me. je13 1yr

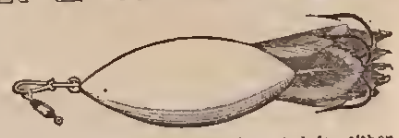
Fishing Tackle.

Craige's Full-Length Fly Book
with the "Hyde Clip," bound in fine Russia Leather and sewed.

No. 1 book, stiff cover, holding 1 gross flies,		$7 00
No. 2 " flexible " " 8 dozen "		5 00
No. 4 " " " " 6 " "		3 75

Sent C. O. D. or upon receipt of price. Steadman's Flea Powder and Areca Nut, each 50 cents per package, postpaid. TEMPLE F. CRAIGE (formerly at W. Holberton's Sportsmen's Emporium), Sportsmen's Purchasing Agent. Office, 95 Maiden Lane, N. Y.

FISH & SIMPSON'S
NEW BAIT.



The most killing bait ever invented for either black bass, pickerel, or large trout, beautifully mounted with gaudy feathers, furnished in either silver or gold plated. Sent by mail on receipt of price.

Silver plated.....75c. each.
Gold plated.....$1 "

On receipt of two three-cent stamps we will send our new 64-page catalogue, the most complete list ever published on Fishing Tackle, Camping Goods, Shooting Tackle, Pistols, Base Ball, Archery, Cricket, Lacrosse, Firemen's and Gymnasium Goods, Boxing Gloves, Foot Balls, Sporting Publications, and everything in the line of Sportsmen's Goods.

P. O. box 4,963. **FISH & SIMPSON,**
apr25 132 Nassau street, New York

EDGAR'S

Patented October 30, 1877.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

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NEW YORK, THURSDAY, JUNE 27, 1878.

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TO FLUSH, MY DOG.

Selected.

But of *thee* it shall be said,
This dog watched beside a bed
Day and night unweary,—
Watched within a curtained room,
Where no sunbeam brake the gloom
Round the sick and dreary.

Roses gathered for a vase,
In that chamber died apace,
Beam and breeze resigning.
This dog only, waited on,
Knowing that when light is gone
Love remains for shining.

Other dogs in thymy dew
Tracked the hares and followed through
Sunny moor or meadow;
This dog only, crept and crept
Next a languid cheek that slept,
Sharing in the shadow.

Other dogs of loyal cheer
Bounded at the whistle clear,
Up the woodside hieing;
This dog only, watched in reach
Of a faintly uttered speech,
Or a louder sighing.

And if one or two quick tears
Dropped upon his glossy ears,
Or a sigh came double,—
Up he sprang in eager haste,
Fawning, fondling, breathing fast,
In a tender trouble.

And this dog was satisfied
If a pale, thin hand would glide
Down his dewlaps sloping,—
Which he pushed his nose within;
After, platforming his chin
On the palm left open.

This dog, if a friendly voice
Call him now to bither choice
Than such chamber-keeping;
"Come out!" praying from the door,
Presseth backward as before,
Up against me leaping.

Therefore to this dog will I,
Tenderly not scornfully,
Render praise and favor;
With my hand upon his head,
Is my benediction said,
Therefore and forever.

—Mrs. Browning.

For Forest and Stream and Rod and Gun.

Breeches Lake.

Not a very euphonious title, certainly, but as suggestive as is the name (Spider) generally applied to Lake Maccawamack. It is situated some fifty miles N. E. of Sherbrook, and is some three to four miles in length, having its outlet at the extremity of the right leg of the breeches. Although "Stanstead" places it in the Megantic district, it is more properly in the St. Francis district, being northerly of the St. Francis Lake and river and within the judicial district of that name. Within a range of ten or fifteen miles from Breeches Lake are numerous lakes and ponds but little fished as yet with rod or troll, and literally teeming with trout, lunge, pike, pickerel and bass. I question much if either troll or fly has ever been used on Breeches Lake, the night line being the approved method of capturing the speckled and silvery sided denizens of this pretty little lake. The lake and speckled trout—a very fair sprinkling of the latter—run from three-fourths to two or three pounds weight, with a general average of about one and one-fourth pounds. Two years ago the Patriarch (W. W. Beckett, Esq.), my companion of several very pleasant fishing trips, and myself left Sherbrook *en route* for Breeches Lake. The first twenty-five miles were over the Quebec Central Railway, landing us at Marbleton in time to dine with our hospitable friend and enthusiastic fishermen, the Rev. Thomas S. Chapman. Our reverend friend, whether preaching or fishing, displays an ardent affection for his calling, and fulfills the duties thereof with an energy which knows no weariness. The Episcopal Church at Marbleton was actually to a great extent erected and internally finished off by his manual labor; for he is quite a proficient in the use of the "working tools of the craft" in more ways than one. His reverence having kindly supplied us with the use of his boat, which he made water tight for the occasion, we engaged a team for the boat and a buggy for ourselves, and about six o'clock reached the residence of Geo. Goodenough, Esq., at South Ham, about ten miles distance from Marbleton, Mr. Goodenough being an old friend of the "Patriarch," we were treated to a bed, supper and breakfast such as few sportsmen enjoy. How delicious the cream, butter and home-cured hams! Mr. Goodenough's son keeps a hotel at South Ham, quite goodenough to satisfy anybody of reasonable expectations, or any other man. We called there on our return, not feeling disposed to "ride a free horse to death." While a team was sent forward at an early hour with our boat and baggage we spent two or three hours fishing a small pond of about a mile in length, lying about half a mile from the road and distant about three miles from South Ham. Here we caught with fly some very fine trout, and I feel satisfied that an evening or two in June devoted to a careful whipping of this pond would secure good results. From South Ham to Nicolet Lake, about six miles, the road runs through a timbered, unsettled country, and as there are no wayside residents to keep the road in repair it is anything but a comfortable route in flytime. Although tolerably well macadamized, the stones are anything but uniform in size, being as nature furnished them, and seem to wax *boulder* every additional step one takes, and the black fly becomes *bolder* as the *boulders* increase in size, and the *sighs* of the wearied tourist and the *size* of the boulders and black flies continue to increase. Finally, after a few hundred yards where the road appears to have been the bed of a mountain freshet, we emerge in full view of the Nicolet Lake, studded with its rocky islets, a lake of five or six miles in length, and for its size one of the most beautiful in the Province of Quebec. The scenery around is mountainous, and grand and majestic in its state of nature. It has no regular feeders or inlets, and seems to be supplied by springs, as its waters are delightfully cold in summer and clear as crystal. When calm a pin can be seen at a depth of twelve to fifteen feet. It is a delightful place to camp out, and would make a grand resort for a two or three days' picnic. It is pretty well stocked with speckled trout, but these are difficult to catch with rod and line on account of the extraordinary clearness of the waters.

Perhaps Old Coulombe, who formerly lived near the lake, can account to some extent for its partial depletion. They were all fish that came to his net. This so nettled our fisheries' inspector that he "went for" Old Coulombe, who has probably managed to *find* a rendezvous where he is less likely to be *fined* for otherwise fishing in his particular manner. I last saw him at Breeches Lake, where he wasn't likely to be troubled with many visitors. Alongside of the road to Nicolet Lake an antimony mine has been opened, but is not worked at present, probably on account of the ante money necessary to develop it. On the hill, near the southeast of the lake, are the Ham Copper mines, at present abandoned, but in which several shafts and lots of money have been sunk. The ore is of a good grade, and will doubtless pay well for working when better communication with a market is afforded. From Nicolet Lake we have an up-hill pull of two or three miles to where the road branches off to Lake Aylmer, where we leave our team, and having engaged a French Canadian with a yoke of oxen and a *marche dans* or lumber sled, haul our boat and traps to Sunday or Indian lake, about half a mile through the woods. This lake is some three miles long, with a very steep, abrupt, northerly shore, formed of igneous or lava-looking decomposed rock. The only fish we saw here were a small kind of lake lunge, running scarcely a pound weight. As we found two Canadians fishing here with night lines, along which were strung several hundred hooks, we passed through the lake and pitched our tent at the outlet, which we made headquarters during the ten days' stay. We were unfortunately unable to portage our boat through the three quarters of a mile of woods which intervenes between Breeches and Indian lakes, while the small stream connecting the two is so small and grown up with timber that it is impossible to get a boat through it. We were therefore restricted to the occupation of an old, rotten dug-out, through any part of which I could shove my knife, and by the aid of which, with a single occupant, we managed to put out our lines and run the same when the water was tolerably smooth. From fallen tree-tops we took out some nice speckled trouts, but were unable to cast a fly. We also caught on our set lines a fair number of lake and speckled trout. That the fish in Breeches Lake are plenty there can be no doubt. In running the lines out from the shore fish frequently rose to the minnow bait, and in taking up a short line for the last time before leaving, out of six trout caught on it two were caught foul. This would look as though they must have been having a lively time below. An old lumber road extends between Indian and Breeches lakes, which could be brushed out in a few hours so that a light boat could be portaged across, when I feel confident that a skilful handling of fly and troll would meet with abundant success. The proper time to arrive there would be about June 30. Old Coulombe told us that in the left leg of the Breeches he had caught lunge nearly twenty pounds weight. The water is generally deep and clear, with beautifully smooth sand and gravel beach at the head of the lake. The high ridge or promontory which separates the legs of the breeches would be a very desirable camping spot, as from its situation flies could not be troublesome, and the dry timber standing would be ample to keep the pot boiling. A handy man for camp work can be had for $1 per day. Neither Indian nor Breeches lakes are settled. The Quebec Central Railway will pass within five or six miles, so that by next summer it is expected that a good deal of rough wagoning on this route will be avoided.

D. T.

For Forest and Stream and Rod and Gun.

AN ALLIGATOR HUNT, "EN FAMILE," ON LAKE GEORGE, FLORIDA.

Two weeks ago my father, mother and sisters paid me a visit previous to their departure for the North. As none except the first had ever been in a wild country before, they were delighted, especially at the novelty of a bachelor's home. What fishing, hunting, and riding we did have! As some of your readers may be interested in a description of an alligator hunt in which ladies took an active part, I will relate the following incident which occured during this visit:

We started out for a quiet row in my Whitehall boat about 5:30 P. M. The lake, a beautiful sheet of water about ten by twelve miles, was, for wonder, quite calm, and as smooth as glass. My father had with him a Maynard rifle, .40 cal., and I had a Stevens', .38 cal. As we slowly rowed along shore, they admired the picturesque and novel scenery; the huge cypress trees draped with the long Spanish moss, and sometimes capped with the enormous nest of the osprey; under these the cabbage palmettoes, looking very tropical, while thousands of vines climbed luxuriantly among the trees, many of them in full bloom. These, combined with the ever present perfume of the magnolias, made a *tout ensemble* that can only be appreciated in a tropical country, when the fierce glare of the sun has given place to a cool twilight and the winds and waves are hushed for the night. (In summer here the wind and sun generally go down together). I could fill a page with descriptions of birds we saw and the singing we heard. The beautiful and rare swallow-tail hawk, slowly sailing in graceful curves overhead; the osprey, anon flying screaming high in the air, and then, with wings closed, descending on some unfortunate fish. Sometimes the hawk got safely to his nest with his prey, and then we could see the necks and heads of the newly fledged young birds as they anxiously waited for their respective morsels. But oftener the osprey was met by that bold robber, the bald eagle, and after a brief and noisy chase was obliged to drop his spoil, which the eagle quickly appropriated.

While the older members of the party were quietly taking in the beauties of the scene, my elder sister suddenly exclaimed, "I see an alligator!" As soon as we caught sight of him we proceeded to business. I caught hold of the oars, and the boat, steered by my mother, slowly approached the monster. There he was, about two hundred yards off, lying at full length on the water. Suddenly he commenced to sink, and in a moment was out of sight. "Now's your time!" my father called out, and I put on a spurt that reminded me of my "Cornell" days.

"Steady," cries my father; "there he is about a hundred yards off." I drop the oars quietly and follow the example of my father, who has taken up and cocked his Maynard. At first we see nothing but the alligator's eyes and the end of his snout, then slowly up comes the top of his head about three inches out of water. Crack! goes the Maynard, striking a little high. Crack! goes the Stevens, also too high. He sinks a little; crack! goes the Maynard again, but the 'gator has gone down to rise over a hundred yards off. "Row nearer," comes from my father, but the 'gator is broadside to the boat, with head and back showing, and I have already a sight on his head; I pull the trigger; chug! he's hit. What a commotion! tail thrown five feet out and lashing the water to foam. Also imagine the commotion in the boat. My father and I each snatch up a pair of oars and lay to it. My mother and sisters, with breath held, steer straight for the 'gator. There he lies on his side, with one huge paw and leg thrust in the air. As we near him we drop the oars. My mother steers as if she had hunted 'gators all her life. I cry to my father, who is in the bow, "Catch hold of the paw and I will get a half hitch on it." "You had better put another bullet in him," says he; but, in my excitement, forgetting that a large 'gator is never *killed* by the first shot, even when through the brain, I cry "No." He reaches over the boat with the rope in one hand, and catches the paw. Good Lord! half under the boat, as the 'gator is, he springs his enormous tail around, splashing water all over the ladies and careening the boat to the water's edge, and then, his back grating on the keel as he goes under the boat, he's off. I look toward the stern; there sits my mother, leaning half over the boat, one hand clutching each girl, and the latter clinging to her shoulders. But straighten up, ladies, when you read this: Not a cry was heard, and the first words were from thirteen-year-old Mamie. "Oh! Will, he is lost, is he not?" But no; there his serrated back appears, fifty yards off. Nell and I row the boat close to him, and my father puts a bullet into his head; another commotion; I hand my father another rifle, and he repeats the dose until the 'gator has had *quant. suf.* to quiet him down. Then we had to put a half-hitch around his hind

nd forepaws; this was a hard job, as he revived frequently and required a lead pill. Then with two rowing, and 'gator held by my father in the bow, we slowly approach the shore. I had to leave my oars every few minutes and put a ball in him. He would have towed better in the stern, but my mother, although passing through the former ordeal bravely, did not exactly like to have his 'gatorship towing a few feet behind her. After getting him ashore we tried to haul him out on some lumber, but at last we had to send one of the girls after the workmen, and also for some more cartridges, as the 'gator still showed some fight, although we had put nearly a score of bullets into his head and neck. Mamie soon came back with a pitcher of cool orangeade—very thoughtful of her, as our mouths were parched. The 'gator weighed nearly 500 pounds, had a splendid set of teeth, and was about ten and a half feet long. When the teeth comes out we will have them made into charms and sleeve buttons, etc., as mementoes. The 'gator, I hope, is dead now, as after being decapitated he was put to sleep under my grapevines for their special nutriment. Had this 'gator not been an unusually large and tough one we would probably have lost him, as they either get off or sink when shot in a vital spot in deep water. I don't think the ladies will ever forget their alligator hunt. As I write this they are all on board the good steamer Charleston, on the way to New York, and I don't blush to confess I feel their absence, all alone in the wilds of Florida.

Lente's Landing, Lake George, Fla. WM. K LENTE.

Fish Culture.

SALMON CANNING IN OREGON AND CALIFORNIA.

THE accompanying cuts illustrate some of the operations of salmon canning on the Columbia River, a business whose importance as a commercial factor of the Pacific coast trade can only be estimated by its stupendous results. The exportation of salmon in cans is truly of immense proportions, having grown to it in a decade of years. Beginning in 1868, it reached the enormous production of 20,000,000 pounds in 1876. The venture was initiated on the Sacramento River, and afterward transferred to Oregon, with Astoria as its head quarters and *entrepot*, the Columbia River being the nursery of the raw material. Mr. Booth's establishment, which is the largest in the world, alone produces 2,500,000 pounds of canned fish annually. But, in addition to the 20,000,000 pounds of salmon exported in cans, the quantity of salted fish in barrels, and the great amount consumed by the Indians as their staple article of diet the year round (fresh or dried), make the grand product of the Columbia River alone fully 45,000,000 pounds, or four and a half times the whole catch of the United Kingdom of Great Britain. There are now, we believe, thirty canning establishments on the Pacific coast, and those run night and day, like a blast furnace, for 100 days in the year. Such consumption, it is reasonable to suppose, must inevitably result in depletion; and to guard against such probable contingency the United States Government established, two years ago, a hatching house on the Olackamas River, a tributary of the Columbia, capable of producing 20,000,000 of young salmon per season, which, when mature, would make ten times 20,000,000 pounds in canned weight. Of course the percentage of loss from natural causes is very great, but just now the most destructive foe to contend with is the violator of the protective law, who catches fish at all times in contravention of prudence, common sense and compunction of stomach.

So far, the barreling of salmon has not been remunerative, the business being merely an adjunct to canning, such fish only being salted as cannot be canned within twenty-four hours after being caught. Salted salmon is worth only $7 the barrel of 200 pounds, or three and a half cents per pound, which is cheap food.

The Columbia River salmon average about twenty pounds in weight, and frequently reach sixty-five pounds, having a length of nearly six feet, and a girth of over four feet, or the bulk of an unusually large man!

The heaviest catch takes place in June, and the largest factories then employ nearly 400 men.

A. BOOTH'S CANNING ESTABLISHMENT.

SECTIONAL VIEW OF SAME.

CALIFORNIA SALMON—Salmo Quinnat.

CALIFORNIA SALMON.—We still urge as strongly as possible that fishermen should carefully examine such salmon as they may catch, so that should a *salmo quinnat*—a California salmon—come under their notice, such a fact should be announced to us at once. The difference between the Atlantic and California salmon is quite marked. The California fish is heavier and coarser in build, and has greater bulk for his length, and would weigh more than an Atlantic fish of the same size. Then there are more rays in the anal fin. The Secretary of the Smithsonian Institution writes us that he hopes he shall yet have the California fish in abundance. If they come at all it will probably be in large numbers. Next year ought to be the time for them, still it is wise to be on the lookout for them.

DIRECTIONS FOR TRANSPORTING LIVING FISH FRY.—The following very useful instructions for the transportation of fish are published by Dr. R. O. Sweeny, Chairman of the Minnesota Fish Commission. They will be found especially seasonable just now:

When the water is exhausted of its oxygen, which is rapidly breathed out by the great number of fish crowded in an unnaturally small quantity of water, they become restless, gasping for air at the surface, and if not relieved in a very few minutes, fall exhausted and smother or drown at the bottom of the can.

To prevent this drowning, take a dipper or pint cup and dip up the water, pouring it back into the can from the height of eighteen inches or two feet, so as to drive the air down to the bottom of the can. The air is rapidly reabsorbed by the water, aerating and refreshening it, so that the fish will go down to the bottom to enjoy the revitalizing and refreshing stream. The dipping should be continued for several minutes, until the fish remain quietly in the lower part of the can.

When the weather is warm, it is necessary to keep the water cool by ice, one or two pieces the size of a cocoanut, replaced when melted, will keep the temperature about 50 deg. When the temperature is low the fish breathe more slowly and exhaust the water with less rapidity, but the dipper must be used freely, particularly if the cans are standing quiet. When the fish are comfortable they remain quiet and breathing easily, and without restlessness.

Always be ready with your dipper to freshen the water. Do not let fifteen minutes pass without looking at the fish.

When the cans are not in motion, the fish require *more* attention than when shaken by the moving of car or wagon, which agitates the water and keeps it aerated to a certain extent.

Never allow your fish to stand exposed to the sun, or in a strong draft, particularly if it be a warm one.

The covers may be put on the cans lightly, so as to prevent slopping, and yet to admit air, when the cans are moving; but when standing still, place covers upside down on the cans, to keep out dirt, and be readily moved for dipper work.

If ice be used, it will not be necessary to change water for forty-eight hours or more. If it should be necessary to keep them so long as that in the cans, the dirt may be drawn off from the bottom by an indian rubber tube used as a syphon.

In planting fish fry, keep toward the head of the Lake, always avoiding an outlet current, and if practicable, give them a stony or gravelly bottom, so they may have hiding places at first.

Quietly lay the can on its side, so as to allow the lake water to enter it gently, that the change of temperature be gradual and not violent; then slowly raise the bottom end so that the fish and water will gently flow out together. This should be done in deep water, away from the shore when practicable, particularly in hot weather.

—A Nashville correspondent sends the following hints on this subject:

Concerning the carrying of minnows to our fishing streams, we haul them 100 miles overland with perfect safety. I and my boys caught 400 beautiful "steel-backs" and "chubs" on the 15th day of March last. Put them into eight three-gallon buckets, each bucket being furnished with an "inside" bucket, perforated thickly with eighteen inch holes, the inside fitting loosely. As fast as a bucketful is secured, we take the inside out and tie it in running water, if convenient, and if not, we wash the minnows by pouring off the foul water, and thus frequently washing them quite clean. You see, it is the excrement in tight buckets that kills them, together with want of "aeration." We thus washed them for about a week, and then hauled them to "Piney," a beautiful, clear little mountain river, about seventy miles to the west of us, a tributary of our beautiful Tennessee. Tennessee, and especially Nashville, is noted for its accomplished amateur fishermen, and is fully up with the times in all that can be done with "Meek and Milan." Fish are not as abundant in our streams as formerly, but yet sufficiently so to give a chance for camp life for a few weeks in spring and autumn, especially to those who long to quit the busy haunts of men and quietly commune with nature during these delightful seasons. If you will read this, I will know that you are in sympathy with all the pleasure that kind nature gives.

Nashville, Tenn., June 16, 1878. JEBY MORGAN.

NEW YORK.—Seth Green placed in the river, below the lower falls, some 90,000 young shad, hatched at Castleton on the Hudson. This makes some 210,000 young shad in all which have been put in the river.

—Mr. Monroe A. Green has broken camp at Castleton and finished work for the season. The season for shad has been exceedingly cold and backward.

WISCONSIN—*Madison, June* 19.—The new Board of Fish Commissioners met in this city to-day and organized by the election of the following officers: Pres., Wm. Welsh, Madison; Sec., Moses Hooker, Oshkosh; Treas., Dr. P. Hoy, Racine. Many improvements are to be made at the Madison fish hatching house. Fifteen million white fish will be hatched for Lake Michigan. Two million brook trout, when large enough, will be distributed generally. ROVER.

THE HALIFAX STEAMERS.—Perhaps the most delightful way of reaching the famous trout and salmon streams of Nova Scotia and New Brunswick is by the popular steamers of the Cromwell Line. So long and favorably known in the New Orleans trade, Messrs. Clark and Seaman have placed two of their most commodious and reliable steamships on their Halifax and St. Johns, N. F., branch, thereby enabling tourists to enjoy a pleasant summer's trip at sea at very reasonable rates. The Ss. *Cortes* and *Alhambra* make trips on schedule time every ten days, as will be seen by reference to our advertisments.

Natural History.

THE PROCREATION OF SKATES AND STINGRAYS.

HOT SPRINGS, Ark., May 14, 1878.

Mr. Editor—Last summer, while cruising and fishing among the islands of the Gulf of Mexico, between Bay St. Louis and Pensacola, our party caught quite a number of those most villainous looking inhabitants of salt water called sting-a-rees. One day in the surf, outside of one of the Chandeleurs, a friend, with my assistance, after the detestable thing was hooked, caught one which measured about five feet from tip to tip and twenty-eight or thirty inches across the back. It was pulled upon the beach and turned upon its back and left lying there. Passing by the thing in less than half an hour, we saw lying by it two smaller ones, about the size of a very large saucer, which had evidently come from this old one. A year or two before this, Mr. Boswell, a prominent member of the Marooner Club of Vicksburg, caught one, and while an Italian was extracting the hook it gave birth to a young one, much smaller than the two young ones mentioned above. I presume all fishermen along the Gulf coast are acquainted with this habit of the sting-a-ree, but the question with me is whether this odd thing is propagated through eggs as other fishes are, and after the young are hatched, carries them in a protecting way, as many reptiles do, or whether they breed as do animals? I confess an ignorance on this point, and should like to be enlightened by you, whom we all regard as the dispenser of gospel when it comes to the denizens of the deep. MOXON.

Mr. Fred Mather, whose opportunities to observe the habits of the Raiidæ and Trygonidæ at the New York Aquarium have enabled him to gather information on this subject, has very kindly favored us with the following reply to the above:

The skates are all classed as "viviparous" because the embryo is formed before the horny covering, or "egg case," is laid, and not afterward, as in case of most fishes. I have seen the smooth skate (*Raia lævis*) lay its eggs, and have hatched several species of skate. Never did of sting-a-rees (*Trygon centrurus*), however, and know but little about them. Have looked up authorities; all silent on this. Have heard that the fish in question had been opened and the young found alive without "cases" on, but how true it may be I cannot say.

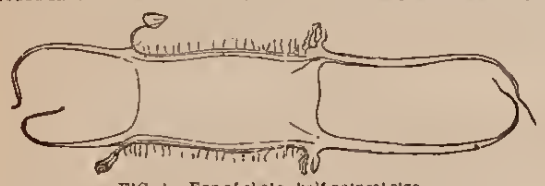


FIG. 1.—Egg of skate, half natural size.

Would very much like to see it. The "eggs" of skates, as found on the beach, are properly "embryo cases," in which the development begun in the body is completed—a pouch, and not properly an egg. The ovary is unprovided with an excretory duct in these fishes, and when the ova are set free from the ovary they fall into the cavity of the abdomen. It may be that some are retained and completely developed within the body.

Yours, FRED MATHER.

Prof. D. S. Jordan, a most eminent authority, has done us the favor to write the following opinion:

IRVINGTON, Ind., May 27, 1878.

Dear Hallock—I take it that the difference between those sharks, like the dog fish (*Squalus americanus*) and the dog-shark (*Mustelus canis*), which are reckoned "viviparous" and the ordinary "oviparous" sharks and skates is simply this: In the "oviparous" shark or skate, the young is laid in the peculiar leathery "egg case," as described by Mr. Mather above, while in the "viviparous" species the young is sent out a free swimming animal without his "swaddling clothes." I have, like Mr. Mather, examined the egg-cases and young, both *in* and *out* of the parent, of several species of skate (*Raiidæ*), but not of any of the stingray (*Trygonidæ*). I know of no record of the development of any of the latter except the following, which may refer to the same species noticed by your correspondent, "Moxon," but whether that species is our common stingray (*Trygon centrurus*), or some other member either of that family or the allied *Myliobatidæ*, I believe, is uncertain. Prof. Agassiz says (American Journ. Sci. Arts, 1835, p. 369): "Mr. Thayer S. Abert, of the U. S. Engineers, informs me that the stingray of the coast of North Carolina also brings forth living young. It is would be, as far as I know, the first example of a viviparous species in the family of Rays."

Your correspondent has, therefore, struck a good lead, and would do a real service to science if he would send to the Smithsonian the next batch of the young of "the detestable thing" which he may secure, for exact determination.

As to how the skates (*Raiidæ*) and stingrays (*Trygonidæ*) differ: The skates have in general the tail comparatively thick, not whip-like, and provided with two rayed dorsal fins and more or less of a caudal fin, and no large barbed spine, although the skin is rough with smaller prickles. The pectoral fins extend to the snout, but usually not around it.

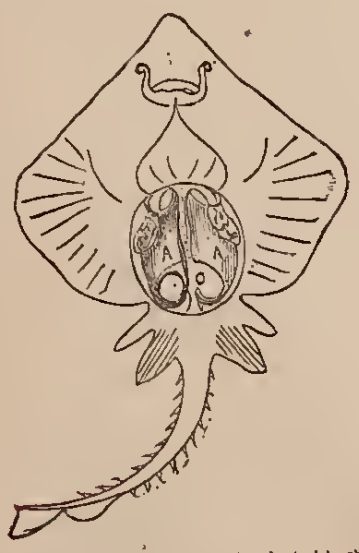


FIG. 2.—Figure of clear-nosed skate (*Raia eglanteria*), showing eggs in position in the oviducts, *a. a.*, Eggs, *b, b*, Ovaries, with immature egg, *c.*, Junction of oviducts.

The stingrays have the tail slender and whip-like, with only rudimentary fins if any, one of the dorsal fins being usually (but not always) replaced by a stout barbed spine. The pectoral fins are continued forward without interruption around the snout. They are larger animals than the *Raiidæ*, although not the largest of the rays.

D. S. JORDAN.

P. S. While on the subject of viviparous fishes, I may note that numerous small specimens of one of the famous viviparous fish of California (*Embiotocidæ*), the *Hysterocarpus traski* of Gibbons, are in a collection received at the National Museum from Brownsville, Texas. The others in the collection are a 1 genuine Gulf fishes, and unless there is some "hocus-pocus" in the matter, we have here a very interesting addition to our Gulf of Mexico fauna. D. S. J.

In reply to our prosecution of the inquiry on this subject Prof. Tarleton H. Bean, of the Smithsonian Institution at Washington, tells us of a young stringray which was taken from the inside of the mother—back uppermost—and all of the tail outside:

The stringrays have been supposed to bring forth the young alive, but I am not aware that any one has recorded the fact concerning this species. This ray was possessed of all the organs of the adult and would have been able to capture its own food in the event of separation from the parent. The pectorals were folded snugly one over the other in the uterus to economize space. The tail was proportionately longer than in the adult.

In your issue of May 30 I stated that a young ray was taken from *Ætobatis narinari* instead of from *Rhinoptera quadriloba*. We received both species, but the young was found in the latter.

TARLETON H. BEAN.

Smithsonian Inst., Washington, June 3.

Four years ago Com. L. A. Beardslee, U. S. N., commanding the steamer Blue Light in charge of the U. S. Fishery Commission, sent us the following description of the gestation of the skate, with the diagrams accompanying:

"Not one in a thousand would be puzzled to decide in what kingdom, animal or vegetable he would locate the egg, although it is found frequently on our sandy beaches, thrown up by the waves with masses of sea weed and resembling the empty husk of some curious nut. The egg of the skate is about two inches in length by one and a quarter inches broad, shaped like a sack, with four horns at the corners, each about two and a half inches long. This egg is composed of a parchment-like cover, and is of a dark green hue. Cutting one open, the little

FIG. 3.—Young skate, natural size.

skate is found within, lying quiet, as though lifeless, with its long tail coiled closely around its body and head; if very young the fish is hardly discernible at first, for he is but little more than a little transparent line, resting on an oval mass resembling the yoke of an egg (which, for that matter, it is) nearly an inch in diameter; but carefully removed to a dish of water he soon gains vitality, and with corkscrew movements of his tail endeavors to swim away, but is too securely anchored by the ovarian sac, and can only wriggle. In this state, to the naked eye, no fins are visible—simply a little line, enlarged at one end a trifle, where two specks denote the eye. A little later in life, had we left him alone, he would have presented an appearance more akin to that of the full grown skate. But between these extreme stages of his existence he has passed through many changes. At first a mere transparent line, with no fins nor gills, gradually little threads or *branchia* have formed from near to his head; he grows broader by degrees, and the tail, which at first represents nearly the whole of him, grows shorter in proportion; the *branchia* become transformed into gills, and a portion of the tail is either absorbed or dropped off, for at first there is a fair proportion of it, reaching beyond the caudal fin, and in the older fish the fin completes the creature as in other fish. These changes occur while it is still too young to cut clear of its locker of fresh provisions, which its ovarian sac supplies. But now, grown stronger, it can carry this with it as it swims. The beautiful pink and transparent straw color which marked the earlier stages of its existence have deepened into brown and yellow, and the spots and markings of the mature fish begin to appear, and finally it emerges from its egg, left thinner at one end, ready to go on its own way and seek its own living. The skate has one peculiar feature, the teeth of the female are very different from those of the male. In the former they are sharp and shaped like the teeth of a saw. In the latter, flat grinders, like those of the sheepshead. As they probably feed on the same food, the 'reason why' I can't find out."

J. D. Hill, of Nashville, Tenn., mentions having seen a very large stingray caught at Pass Christian, Lake Borgne, Gulf of Mexico, which, upon being landed, gave birth to at least a dozen young, each about the size of a man's hand.

MACKEREL.—We have a most valued and interesting paper on the "Habits of Mackerel," which we shall print in our next issue, from the pen of Dr. Bernard Gilpin, of Halifax, Nova Scotia, who is perhaps the most eminent naturalist of that Province.

DEFORMITY IN WOODCHUCKS' TEETH—THE CAUSE—*Bedford, O., June 13.—Mr. Editor:* I intended to have written an article for your paper in reference to those distorted woodchuck's teeth. I have seen the skulls of two woodchucks as badly distorted as the one shown in your paper, and I once shot a porcupine, whose upper incisors were as completely coiled as a pair of ram's horns, the points of both teeth passing completely through the upper lip. I suppose you know these distortions are caused by an accident, which is common, or likely to happen, to all of the rodents. I should suppose the beaver would be very likely to meet with this accident, but I have inquired diligently of the Indians who trapped them but never could hear of a single case in the beaver. I inquired of one old Ojibway Indian who had killed over 3,000 beavers, and he told me that he had never seen a single instance of the kind with the beaver, but that he had in a porcupine.

You know that the beaver is the greatest gnawer of all the rodents. I have seen a maple tree, of fourteen inches in diameter, that had been gnawed down by the beaver. The accident is caused by getting a piece of wood wedged in between the upper incisor teeth, and as the teeth grow, they spread apart and the animal cannot shorten them. In sharpening his teeth, as he is compelled to do in order to enable him to do his work, he sharpens his upper incisors with the under incisors and the under incisors with the upper, or superior incisors. Now, if he happens to get a piece of wood wedged in his incisors—and more especially the upper ones—and cannot dislodge it, his incisor teeth, so wedged, will spread apart, and in their growth, which is constant, and in course of not a very long time, the animal is unable to shorten his incisors by the process of sharpening them. The consequence is what you saw in that unfortunate woodchuck's skull. This sharpening and shortening the incisors is a positive necessity of all the rodents, and it is a curious provision in nature that their incisors are continually lengthening by growth, and kept to a proper length by process of sharpening.

DR. THEO. GARLICK.

CARNIVOROUS TASTES OF THE RED SQUIRREL.—Our correspondent, Mr. A. W. Greeley, of Nashua, N. H., says:

"It may be that the red squirrel does not mutilate the gray, but that he destroys young birds there can be no question, but what he does it for, I cannot conceive. Will some one explain? He certainly does not kill them for food."

[Undoubtedly it does; but just why, it is hard to say. As horses, though strictly vegetable feeders, are said sometimes to relish a slice of rare beef, so the squirrel may incline to more nutricious food than buds and tender sprouts at a season when the more substantial nuts, which forms his winter diet, are not to be obtained. There is a great variety in the diet of the different rodents, and it is difficult to say why the common rat and mouse should be carnivorous, while nearly all wild species confine themselves to an exclusively vegetable regimen. In the West various species of *Spermophilus* feed largely on grasshoppers, and we have seen *Tamias quadrivittatus*, devouring with evident satisfaction the remains of a Hesperornys—ED.]

COURTSHIP OF THE PRAIRIE CHICKEN—*Editor Forest and Stream:* On several occasions recently I have had the good fortune to be an eye witness of the pinnated grouse while going through his booming tactics. First he raises his tail vertically, stretches his neck out to its full length, and brings both body and neck to a horizontal position, he then ruffs the feathers of his neck, and runs violently in diagonal tacks of a few yards each, stopping a few seconds at the end of each run. After he has worked his temper up to the required pitch, he inflates his sacs until they stand out in purple bulbs, over an inch in diameter, on either side of his neck close to the head, then with downward and slightly inward motion of head and neck, dipping perhaps an inch or a little more, and with a longer interval between the first and second than the second and third, he produces his amorous note: boom—bom bom.

All this time the object of his affections may have been close to him, or several hundred feet off. The males seem to prefer the knolls and higher parts of the prairie, but I have seen them in large coveys, at evening, gathered around sloughs and lakes. At such times the cocks divide their time between booming and fighting, all present often joining in a promiscuous rough-and-tumble. Often several pairs will fight fiercely for several minutes, acting very much like domestic fowls in like circumstances, and then suddenly make for some neighboring cocks. VERD MONT.

Sleepy Eye, Brown Co., Minn., May 20, 1878.

VARIATION IN COLOR OF THE BALTIMORE ORIOLE.—I have recently skinned out two golden robins (*I. Baltimorensis*), one of which had a solitary white feather in the cheek; otherwise very black, as usual. The other was very high colored in breast, and running all through the black on head were feathers of much the same high color as the breast. Both the above were males. Yours. R. L. N.

Salem, Mass., May 31, 1878

A NEST FULL.—*Woodstock, Ohio, June 3.—Dear Editor:* The prospects for good quail shooting this fall were never better, the weather and feed all that could be asked to hatch and feed the young. While staking some stumps in my wheat field this week I came upon a quail nest containing forty two eggs. Now, is it common for more than one quail to lay in the same nest? It is my opinion there must have been more than one that did the laying in this instance, as the eggs seemed to differ materially in size, although there is only one bird sitting on them. T. M. OWEN.

[It is said to be a common occurrence for two hen quails to lay their eggs in the same nest.—ED.]

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING JUNE 15, 1878.—One horseshoe crab, *Limulus polyphemus*, presented by Mr. Foun, New York City; one larger-tail myna, *Gracula intermedia*, presented by Mrs. L. Grey, New York City; one gannet, *Sula fiber*, presented by Dr. Samuel W. Francis, Newport; one horned owl, *Bubo virginianus*, presented by Mr. S. E. Worel, Elyria, Ohio; one red fox, *Vulpes fulvus*, presented by Sergeant Wm. A. Rawell, New York City. Born in Menagerie: Three English pheasants, *Phasianus colchis*; one white swan, *Cygnus olor*; one fallow deer, *Cervus dama*.

W. A. CONKLIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDENS FOR WEEK ENDING TUESDAY, JUNE 18.—Two gray gophers, *Spermophile franklin* presented; two common marmosets, *Hapale jacchus*, presented; one stoat, *Putorius erminea*, presented; one screech owl, *Scops asio*, presented; one fallow deer, *Dama vulgaris*, born in garden.

We call our readers' particular attention to the advertisement of the old firm of Messrs Dodd, Mead & Co., 751 Broadway, who make a specialty of works in natural history. They solicit correspondence with libraries, reading clubs, and book buyers generally.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

NEW YORK HORTICULTURAL SOCIETY EXHIBITION.

WEDNESDAY, Thursday and Friday of last week were red-letter days in the history of this flourishing society, and we are happy to again chronicle a deserved success, more especially as the management was afraid for some weeks before, that, owing to the early season the roses and strawberries would be too far advanced to make a good exhibition. In this it was agreeably disappointed, and a better show, both of fruits, flowers, plants and vegetables, would be hard to get together at this season. Gilmore's Garden too, is probably the best hall in the world where such an exhibition could be held and, taken with Thomas' far-famed music, the splashing of cascade and fountains, and the number of visitors all either intent on music, flowers, fruits or floral designs, made the garden look a perfect paradise—if a rather noisy one. First to strike the eye on entering were the fine collections of strawberries from E. P. Roe, Cornwall-on-Hudson, and Dr. Hexamer, Newcastle, N. Y. Peter Henderson, Jersey City Heights, also made a good exhibit, but after all the palm for single sorts went to E. W. Durand, Irvington, N. J. This gentleman has been most successful in raising some of the best new varieties; his Great American (fruit of which were exhibited weighing nearly two and one-half ounces) Durand's beauty, which received a special certificate for size and flavor combined, and Jersey Queen, which for color, size and shape took every eye, were admired by every one; the latter tasted better than it looked, so it must be good. In this connection we would observe that fruit of that beautiful conical shape with good color takes the eye of the public much more than those immense coxscomb shaped varieties which look like so many monstrosities, and are only valuable, comparatively, for their great size. Gooseberries were also well shown, a dish of "Whitesmith," from Mr. Henderson, Westchester, being very large and free from mildew. In this connection also we had a point given us. Mr. Henderson uses as a preventive and cure for mildew on gooseberries, Glauber's Salts. He claims it kills mildew on the first application, leaving the berries quite clean when washed off by the rain, and if used as a top dressing under the bushes, by keeping the soil moist and cool, it acts as a preventive as well. Will some of our readers try for themselves and report? Hothouse grapes were largely represented, bunches of Black Hamburg, from Mr. Eagan, gardener to W. S. Gurnee, Esq., Irvington, N. Y., weighing 4½ and 5 pounds respectively, and two bunches of Muscat of Alexandria, from Mr. Brownson, Oyster Bay, L. I., being as perfect as to size and evenness of berry, clear, beautiful amber color, and symmetry of bunch, as any we have ever seen. Peaches also were well to the front; four trees in tubs, grown by Ed. Huckins, Mt. Vernon, N. Y., being shown loaded with fruit; as well as a number of single dishes from other growers. Quite considerable interest was manifested in the display of vegetables made by Peter Henderson from his trial grounds in Jersey City. These comprised about twenty varieties of lettuces, as many of carrots, and quite a number of beets, kale, cauliflower and peas.

Of greenhouse and stove plants, there was as usual a large and choice exhibit, Messrs. Such's and Bush's tables being remarkably fine. Principal in the former lot were Anthurium Scherizerianum, a noble plant; A. Crystallinum, Ixora Javanica flava I. Amboyense, Croton Lord Cairns, Weismanni and Majesticum, Acalypha tricolor, Dracæna hybrida, Eurya latifolia variegata, a very large plant of Phormium tenax variegata (the striped New Zealand flax), Alocasia Sedeni, Bonapartea hystrix, some lovely Gleichenias and other ferns, and a fine lot of Palms, notably Veitchia Canterburyana, the finest plant of it in the country. The rarest plants on exhibition were six seedling East Indian pitcher plants (Nepenthes vars.), raised by Mr. James Taplin, manager to Mr. Such, South Amboy. They far surpass in beauty of pitcher, marking and coloring any we have seen either here or in England, being much deeper in color than N. Sanguinea, and the shape almost perfect. He received a well deserved certificate as well as the premium offered for the best new and rare plant not before exhibited. In Mr. Bush's collection were tidy plants of Croton Weismanni, Johannis, Bismarcki and Mooreana Pandanus Veitchii, Campylobotrys refulgens, Dieffenbachia Bowmani, Sphærogyne latifolia, Arthuriums of sorts, Dracæas Youngii, nigra-rubra, amabilis, splendens, and the new and beautiful D. Casanovæ, etc.; Isaac Buchanan, Astoria, also made a fine display of Palms, Orchids, Selaginellas, etc.; W. C. Wilson, Astoria, of Ferns, Dracænas and other rare plants; Laurentz & Weigand, Astoria, and F. Roenheck, Bayonne, N. J., of Ferns, well grown and very beautiful; John Henderson, Flushing, of double zonal Pelargoniums and a fine plant of the sugar cane. Mr. Zeller, Flatbush, of monthly Carnations and a miscellaneous collection of stove and greenhouse plants; Peter Henderson, of Gloxinias, Verbenas, etc.; S. B. Parsons, Sons & Co., Flushing, a splendid display of hardy evergreens, Japanese Retinosporas and Japanese Maples, with their curiously cut and variegated foliage. Such a collection could not be exhibited at present by any English or Continental nursery man. The most interesting plant in the whole exhibition, however, was the Ouvirandra fenestralis or lattice plant of Madagascar. It grows entirely under water, and has been one of the most difficult plants to import and grow to perfection, and we believe has never been before exhibited in this country. It was shown by Mr. Mayne, gardener to Mrs. Mary Jane Morgan, Twenty-sixth street, who also took first honors for a fine collection of Orchids in bloom, many of them new and rare. The show of cut flowers was also good, Messrs. A. W. Burgess and A. Dejonge leading the way in roses, and Messrs. Woolson & Co., Passaic, N. J., with a very choice collection of cut blooms of herbaceous plants. From one of the students at the Normal Agricultural School at Hampton, Va., was received by mail a collection of over thirty-five correctly named grasses, which were much admired and received a well-merited diploma. The florists did not turn out quite so strong as usual, though their table was comfortably well filled. The most tasteful, neatest, and at the same time least expensive design, was a picture frame composed of rose buds, etc., with a row of the common yellow Linaria (butter and eggs) round the margin to represent the gilding, the picture itself being a group of water or pond lilies, most artistically arranged on a background of ivy leaves. This was exhibited by Mr. Shepherd, 1,286 Broadway. Mrs. W. J. Davidson, Brooklyn, contributed a dinner table laid for ten persons, in the centre of which was a mound of flowers composed of the rarest exotics, interspersed with growing plants of Adiantum Farleyense. From the centre of this mound sprung a tall March glass (trumpet shaped) also filled with choice flowers mixed with ferns and grasses, giving the whole design a most light and graceful appearance; the two side pieces were palms (the graceful Cocos Weddleiana), the pots being let through the table and only the palms showing on top. Four small bouquets flanked the centre piece, and at each plate was a neat Boutonniere. This novel exhibit was much admired, and received a special premium from the judges. Mr. James Riddle, Inwood, also exhibited a novelty in designs. It was composed of rooted plants, some 2,500 or more being used in its construction. We believe Mr. Gilmore secured it as a permanent attraction to the garden. Taken altogether the society may well be proud of their third semi-annual exhibition, the attendance being larger than ever before, averaging over 5,000 each evening, showing indisputably the growing interest taken by the public in all things horticultural.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

CANINE MADNESS.

JAMAICA PLAINS, June 12, 1878.

MR. EDITOR: The increasing interest taken by the public in field sports has of late induced the magazines to enliven their pages with an occasional sporting article. The series in *Scribner*, if not always correct in detail, is admirably illustrated, and similar papers in *Harper's Magazine* are quite readable. Even the epicenal writers in the *Atlantic Monthly* are turning their attention to the woods and waters, though in a feeble way. Mr. Warner "verifies the Adirondacks," as if hitherto those regions had been a myth to the dwellers in and about Boston, and he, a milder Stanley, had been sent into that howling wilderness to see if it were safe. This pleasant writer, however, appears to more advantage in his suburban garden than under the grim shadow of Bald-face Mountain, and the whole tone of the narrative shows that, to him, the pleasantest day of the excursion was that on which they broke camp.

In the June number of the *Atlantic*, a party of contributors are supposed to be boating in Florida, but their talk, as at home, is of novels, poetry, taste, and the musical glasses, with an alligator and a "blue bittern" thrown in to give a local color. All evidently evolved from the inner consciousness of the writer, sitting within sight of the gilded dome which dominates the modern Athens.

Another of the contributors, frantic with the fear of hydrophobia, declares that one hundred and fifty persons have died from the bites of dogs during the past eighteen months, and believing, as he says, that a single human life is more precious than that of the entire canine race, calls for the destruction of every dog running at large without a muzzle. Some may dissent from this opinion as to their comparative value. For myself, I hold that the life of many a dog is worth more than that of many a city official, lobby member, or congressman. The dog does his duty according to his knowledge; the man often devotes himself to mischief. I think that something like this has been written before by that noble sportsman and lover of the dog, Professor Wilson, but it will bear repetition in these days of cant. As to the danger from canine madness in the first place, out of ten dogs killed by ignorant persons on supposition of rabies, probably nine are suffering from other diseases. Of ten persons bitten by dogs which are really mad, it has been shown by repeated observation eight or nine escape the disease. So it follows that this nervous contributor, as he walks to his publisher's office, is in more danger of death from a falling tile or brick from a housetop, than from the bite of a dog. Should not tiles and bricks be abolished?

S. C. C.

A CASE OF HEART DISEASE.—We submit the following careful diagnosis of heart disease in a bitch, with an effort to produce artificial respiration, as among the interesting additions to canine physiology. The whole history of the case is due to a distinguished physician in Minnesota:

Sleepy Eye at six months was affected with dysentery and loss of appetite, with general febrile disturbance and rapid wasting of flesh. Symptoms rapidly becoming alarming, but mitigated by active treatment. On examination of the mouth the gums were found inflamed, tense and swollen; brisk friction and pressure over the presenting teeth bringing them to view. A soothing application of opiated glycerine soon brought relief of some of the more distressing symptoms, and under the internal administration of the following powders: Hyd'g. cum creta; pulv. ipecac; Co. *aa* gr. *v* acid Gallic; pulv. capsicum *aa* gr. *ss*. One powder every two to four hours, as required. The heretofore frequent evacuations of blood and mucus were replaced by stools of healthy appearance and consistence; subsidence of all inflammatory symptoms and restoration of appetite. For a few days, continued improvement followed, when it was observed on visiting the kennel that the bitch had eaten about a pint of sawdust, followed by a repetition of the symptoms above enumerated. A dose of castor oil, containing Tr. opii 5 drops, was administered, and acted promptly. Made comfortable for the night. On visiting the kennel in the morning, she was found apparently lifeless—perfectly cold; pupils strongly contracted and undilatable; the mouth and floor about were covered with froth; no perceptible pulse. The treatment during the day consisted of injections of beef tea and port wine, eggs, etc., with external warmth and friction. At 8 P. M. ceased breathing, and was pronounced dead. After the continuance of artificial respiration for ten or fifteen minutes with electricity, the breathing returned, though irregular. By way of experiment, this was followed by a hypodermic injection of sulphate of strophia. The only change following this was more uniform respiration, increased action of the heart and movement of the jaw. In this condition she remained till after midnight, when suddenly the heart ceased to act. Further efforts were discontinued.

Autopsy.—Internal organs all healthy, save a portion of the intestinal canal, which was considerably conjested (death from this could not have resulted), and an *Embolism* (clot) in one of the *Auricles* of the heart about double the size of a walnut, one side being organized fat, the other free and irregular, with fat interspersed—death, no doubt, being caused by *Embolic Apoplexy*.

This unanticipated condition would suggest as a probable cause, over-feeding, with insufficient exercise, this noble young animal being almost entirely confined to a small kennel. The importance of artificial respiration should not be overlooked in any case of suspended animation, and those who witnessed its effects in the present case will, I am sure, fully appreciate its application.

ST. PAUL BENCH SHOW.—Mr. Charles Lincoln writes: "The whole State of Minnesota is interested in the bench show to be held at St. Paul Sept. 2d to 7th. The prize list will embrace nearly all breeds of dogs, with two additional classes that have not been given at other shows—viz., champion native English setters and English retrievers. The cash prizes will amount to nearly $2,000. Besides, a large number of special prizes will be given, as a committee has been appointed for that purpose. The committee hope to receive a good representation of Eastern dogs, as exhibitors can after the bench show enjoy some of the best shooting the country affords. Chicken shooting will be at its best, and from the accounts given by the sportsmen here, the prospects are that there will be a vast number of them; more than for many seasons past, as the mild winter has been favorable to them. It has been suggested to hold a meeting during the bench show to arrange for a field trial the following week. In any event the members of the club propose forming parties for a week's shoot in this wonderful country. It will be a splendid opportunity for the sale of dogs, as they are very anxious to improve the breed of dogs which they now have. The hotel accommodation is good, and at very reasonable rates. The show will be held on the grounds of the State Fair Association, in a large building specially erected for it. There is also over fifty acres for the dogs to exercise on. The committee, by a unanimous vote, have asked Mr. John Davidson to act as Judge. Mr. W. S. Timberlake, the secretary, will be glad to give any further information. I am quite sure that sportsmen visiting here will be pleased with the welcome they receive from the hands of the committee. Prize lists will be sent out next month.

DOGS BROKEN.—We call particular attention to the claims of Mr. E. S. Wanmaker as a dog breaker. Having resigned his position from the Westminster Kennel Club, Mr. Wanmaker is now prepared to devote his time to breaking dogs. Dogs given to Mr. Wanmaker's care are thoroughly educated, and taught practical lessons in the field with game. As a person thoroughly conversant with dogs, Mr. E. S. Wanmaker is well known to the public. [See advertisement.]

MASSACHUSETTS KENNEL CLUB.—*Boston, June 22.*—Mr. W. H. Cowing having resigned his position as President, Dr. J. Nelson Borland has been elected to fill his place.

VISITS—*Springfield, Mass., June 21.*—E. H. Lathrop's field dog Dick to his Luna, same strain as Dick.

ROOK-JESSIE.—Mr. L. Bowser's (Franklin, Pa.,) field setter Rock—Belton-Dimple—full litter, brother of Sanborn's Nellie, to his bitch Jessie—Pride of the Border-Kate—June 20 1878.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
June 28	9	48	6	15	8	38
June 29	10	36	7	02	6	30
June 30	11	24	7	48	7	22
Aug. 1	M		8	37	8	14
Aug. 2	0	26	9	29	8	59
Aug. 3	1	12	10	22	9	45
Aug. 4	2	00	11	14	10	31

YACHTING NEWS.

COLUMBIA YACHT CLUB REGATTA.—For once a match was sailed this season in as fine a breeze as any one could wish, and the Columbia Club must consider itself fortunate in hitting upon such splendid sailing weather as a kind Providence vouchsafed them on Friday, June 21. The steamer *Fort Lee* went over the course with a large party of friends and spectators. All classes went over the regular club course from the stakeboat off Seventy-ninth street, around one at Glenwood, a mile or so above Yonkers, on the Hudson. The starters were as follows: Cabin yachts, first class—*Libby R.*, 36ft. 11in., H Schwarz; *Emma*, 37ft., William H. Rowe. Open yachts, second class—*Eureka*, 29ft. 9in., John Klaus *Journeyman*, 28ft. 8in., R. McWhinney. Third class—*Nettle*, 24ft. 9in., Joseph Nobles; *Lydia, T.*, 22ft. 5in., W. J. Greacen. Cat-rigged, fourth class—*Laurel*, 24ft. 9in., Jos Nobles; *Gem*, 21ft. 9in., L. P. Wiegman; *Belle*, 21ft., J. C Perine; *Columbia*, 20ft. 7in., Abner Inglee. The wind was moderate from the S.S.E., and the tide making flood. *Eureka* was first away, crossing the line with her boom to port, and making a close shave of the stake boat. *Emma* second on *Eureka's* weather-quarter, and a short distance astern of her the Vice-Commodore's famous *Journeyman* with a red-capped crew. The latter was handled by Mr. McWhinney himself, and her well-known record made her a favorite from the start, but somehow, owing either to a new crew unaccustomed to work together or to too great care on the part of her owner, she did not fill expectations. On his weather was *Libby B.*, a handsome sloop, but not a particularly speedy one alongside of Mr. Rowe's big working boat. The latter,

though not strictly a yacht and not built for racing, proved a tough customer for the fancy ones. *Columbia* and *Belle* crossed half a minute later, and lost some of the breeze which carried the first boats across in fine style. A quarter of a mile astern of the rest, *Lydia T.* and *Laurel* brought up the rear. The Commodore's handsome sloop lay at anchor, and many were the regrets that he did not make sail and try his luck with *Libby B.* The skipper of *Eureka* laid a straight course for the upper mark, while the rest kept closer in to the weather shore to take the gusts as they came down through the hills, and make the most of the tide which sets in on the west shore. *Lydia T.* was well handled, and soon dropped *Columbia* and *Belle* and ran up alongside of *Libby B.* While abreast of 125th street she was gaining on her, leading half of the fleet, but then run out of the wind for awhile. The four leaders at this point were pretty well bunched, with *Nettle* leading *Emma* and *Journeyman* to windward and a little astern, and *Eureka* out in the river. When 150th street was reached *Emma* ran through *Nettle's* lee, and *Libby B.* fetching into a nice streak of wind again dropped *Lydia T.* It was not long, however, before *Nettle* gave her big sister the go-by once more, for the tremendous rig she sported was doing good service with the quartering wind—her sails set like boards. Below Spuyten Duyvel the wind fell light and prospects looked gloomy, *Eureka's* crew standing up to catch all there was going. During this let up *Nettle* went ahead and took the lead in earnest. Above the creek the yachts had shaped themselves into two lots, with a half mile between them, *Libby B.* still leading the second half of the fleet. The creek had no sooner been past than the wind went around to the east a little, and came out strong and in puffs. This sent big *Emma* ahead, whereupon she took in her jib topsail, all hands going forward to stow it, putting her down by the bows and letting the smart *Nettle* once more to the front. This order was maintained up to the mark, which *Emma* was the first to jibe around. *Nettle* would not risk it, and tacked, while the Vice-Commodore let his boom go over to starboard, thereby gaining considerably upon Snedecker's craft, even it it did put combings under and a bucketful into the cockpit. *Eureka* tacked around the stake boat, and all the above then stood across to the Jersey side, gunwales under and crews laying out to windward. It was now a beat home with a long leg and a short one, the mark being rounded as under:

Name.	H.	M.	S.	Name.	H.	M.	S.
Emma	1	26	00	Lydia T.	1	34	30
Journeyman	1	26	24	Columbia	1	37	05
Nettle	1	26	52	Belle	1	39	50
Eureka	1	27	50	Gem	1	39	50
Libby B	1	30	30	Laurel	1	41	53

Lydia T. tacked around some four minutes after *Libby B.* The latter stowed her jib topsail and jibed, while *Columbia* and *Belle* followed suit. *Gem* being the only one among the cats to tack around. *Laurel*, hitherto bringing up the rear, jibed around short in good style, and was soon up on the weather-quarter of *Gem*, who had manned her pumps, and gave the latter a bad blanketing and dropped her. All hands were now making short boards off the Palisades, and working to windward as best they could, with the flood still strong against them. *Eureka* got a little bit of a knock down, but was luffed out in good shape. *Nettle* held a wonderful wind, and headed a full point higher than any of the rest Of course she very soon worked way out to windward of everything, and, standing up like a steeple with canvas, that was simply perfect, her performance was really wonderful to behold. Never before do we recollect seeing so smart a craft, such a fine suit of muslin and such perfect tooling as Dave Snedecker was giving the craft in his charge. With the same man at the tiller we would back her against anything on either river. *Libby* doused topsail and did not seem to hold as good a wind as the rest, while *Journeyman*, for some unaccountable reason, sagged way off to leeward. She did not seem to be herself at all. Her jib was kept lifting, often even spilt, when her rad was not as much as wet. Who was tending jib sheet in her? *Nettle* was first to tack to the E., but not relishing the tide in the middle, stood in again after a short board. Breeze freshened and *Emma* sent topsail on deck. Among the cats, ex-Commodore Joseph Noble's *Laurel* was doing well and pointed high; likewise *Gem*. *Lydia T.* carried away her jib-halliards, and was from that time unfortunately out of the hunt. Abreast of the convent, *Nettle* had screwed out to windward of the lot something like ¾ mile, in a manner that was simply astonishing. With the exception of occasional stretches out into mid-channel, the fleet hugged the Jersey shore all the way down till the bend in the river was reached. From there a long leg brought them down abreast of the club-house. *Laurel* had weathered everything in her class and was close up with *Libby B.*, her competitors ¼ mile to leeward. *Eureka* was well handled and weathered on *Emma* just above Manhattanville. By the time the creek was fetched on the beat home wonderful *Nettle* was almost hull down ahead. *Journeyman* in the meantime had been making a better thing, keeping mid-river, and what with the ebb having set in and luffing her out often in the way of half-boards, she was rapidly picking up on *Eureka* and *Emma*, besides having a more weatherly position, when suddenly a gust struck her and down she went in spite of flowing head sail. For a moment it seemed as though she were lost, but finally righted, chock full of salt water and down to her deck. No time was lost in baling her out. Peak was dropped, a reef taken down, and once more the Vice sent her off for home. *Eureka* and *Emma* were crossing tacks down the Jersey side, when the former carried away her jib-halliards, delaying her for some time. Not long after they parted a second time, but a hand was sent aloft and repaired damages. *Nettle* reached the line first, and making a short tack to the E. shore, stood across a winner of a most remarkable race, the best the metropolis has witnessed this season. *Emma* crossed a good second, and *Columbia*, of the fourth class, third. This cat boat was well tooled all day by Com. Kreimeyer, the boat being a stiff and fast craft. She held a good wind all the way down. *Gem* followed with a couple of short boards, and *Libby B.* next. *Journeyman* crossed 5m. later. A summary of the match is added:

CABIN YACHTS—FIRST CLASS.

Name.	Start. H. M. S.	Finish. H. M. S.	Actual Time. H. M. S.	Corrected Time. H. M. S.
Emma	12 04 10	4 21 31	4 19 21	4 19 21
Libby B.	12 05 02	5 18 30	5 13 28	5 13 18
OPEN YACHTS—SECOND CLASS.				
Eureka	12 04 10	4 54 15	4 50 05	4 50 05
Journeyman	12 04 50	5 18 55	5 14 05	5 11 55
OPEN YACHTS—THIRD CLASS.				
Nettle	12 04 52	4 16 40	4 11 48	4 11 48
Lydia F.	12 07 22	Not taken.		
CAT RIGGED—FOURTH CLASS.				
Laurel	12 10 00	4 47 50	4 37 50	4 37 50
Gem	12 07 12	5 13 35	5 06 23	5 00 23
Belle	12 05 35	Not taken.		
Columbia	12 05 23	Not taken.		

Emma beats *Libby B.* 53m. 57s., winning in her class; *Eureka* the *Journeyman*, 21m. 50s.; *Nettle* wins her class prize and the pennant awarded the yacht making the quickest time over the course; *Laurel* the cat-rigged prize, beating *Gem* 22m. 33s.

LYNN YACHT CLUB REGATTA.—The eight annual regatta of the Lynn Yacht Club was sailed over the usual courses, June 17, in a light southwest wind. Seventeen boats entered. *Magic* won in the first class, *Expert* and *Mule* in the second, and *Mabel* and *Nymph* in the third class.

MARBLEHEAD YACHT CLUB.—For the fifth annual regatta, June 17, there were entered two first class boats, eleven second class boats, twenty-four in the third class, five in the fourth and five in the special class. *Thistle* took the prize in the first class; *Gall*, *Lottie*, *Napoleon* and *Mystic* won in the second class; *Veronica*, *Unknown*, *Eugene* and *Posey* in the third; *Rose*, *Avis* in the fourth, and *Ivy* and *Sarona* in the special class.

NEWBURYPORT YACHT CLUB REGATTA.—There were thirteen entries for the first annual regatta of this club, June 17. The wind was light and from the S. W. *Bohemian* won in the first class, *Torrent* in the second and *Keturah* in the third.

EASTERN YACHT CLUB.—The rendezvous of this club at Swampscott, June 17, the anniversary of the battle of Bunker Hill, was interfered with materially by unpleasant weather, not many of the fleet putting in an appearance.

THE UNION REGATTA OFF NAHANT.—Owing to the bad weather June 17, the entries for the Union Regatta of the Boston and Dorchester Yacht Clubs were meagre. The schooner *Breeze*, of the first class, had a walk-over, but was disqualified on account of taking wrong course. In the second class the keel sloop *Shadow* had also a walk-over. In the third class four yachts started. The *Wanderer* withdrew and the *Sea Bird* took the prize, beating *Volante*, keel sloop, and the cat *Fancy*. In the fourth class four starters were sent across the line, *Psyche* coming in first, *Druid* second.

JERSEY CITY YACHT CLUB REGATTA.—Owing to light winds and want of balloon canvas *Pirate* was beaten by *Genia*, the owner of the former not intending to sail her, until at the solicitation of friends she put in an appearance at the starting line without light canvas and with her bottom foul. On the run home *Genia* boomed out her head canvas while *Pirate* suffered severely for the want of her pole. As it was, however, *Pirate* gained nearly twenty-two minutes on the way down to the southwest spit and crossed the finish eight minutes or more ahead. After re-measuring the boats, the race was given to *Genia* on time allowance, though with light canvas aboard the *Pirate* the result would probably have been different.

NEW YORK BAY REGATTA.—The judges for this regatta will be Mr. A. Cary Smith, P. W. Ostrander and M. Roosevelt Schuyler. The names of these gentlemen stand so high in yachting circles that they will inspire confidence in the coming race and induce many entries.

THE SEAWANHAKA OCEAN RACE.—This race has been postponed until fall. So much the better. Big schooners need a breeze and a lop, which is more than one can expect in June.

LONG ISLAND YACHT CLUB REGATTA.—Though over thirty yachts were entered, only nineteen sail came to the line, the calm having prevented many craft from the suburbs reaching the start in time. The steam yacht *Burgess* was placed at the disposal of the judges and went over the course. The yachts starting were as follows: First-class cabin—*Dudley Hope*, *Sophia* and *Twinkle*; second-class cabin, *Reveille*, *West Wind*, *Admiral Rowan*, *Minnie T.* and *Marie*; first-class open, *Fannie K.*, *Nettle*, *Chauncey M. Felt* and *Martha M.*; second-class open, *Excelsior*, *Faith* and *Sadie*; third-class (cat-rigged), *Hi Pi*, *Johnnie B.* and *Gypsy*. Course for first-class from Frank Bates' Short Branch House, around Buoy No. 8½; for all others, around Buoy No. 17 near Robbins' Reef, thence around Fort Lafayette and back to starting point. Messrs. Jas. Lennox, Wm. Pegg and Chauncey M. Felt acted as judges. The *Hope* led across the line, with the *Twinkle* second, *Dudley* third, *Sophia*, *C. M. Felt*, *Fannie K.*, *Reveille*, *Admiral Rowan*, *Minnie T.*, *Nettle*, *Johnny B.*, *Marie*, *Excelsior*, *Gypsy*, *Hi Pi*, *Faith*, *Martha M.*, *Sadie*, and *West Wind* in the order named. Wind light from the S. *Hope* led down to the buoy in her class, *Reveille* carrying away her topmast owing to too much beef on her jib topsail halliards. *Nettle*, whose wonderful performance we noticed at some length in our account of the Columbia regatta, had been up to her old tricks again. It will be remembered that Dick Wallen has had her in hand this spring, and that Sawyer has had the order for her new canvas. With this, and Snedecker at the helm, she led from the start. The same may be said of *Excelsior* in her class. She was built by young McGillhan, who seems to inherit the talent of his father for first-class turnouts. The first round among the smaller ones was made with *Nettle* in the van, *Martha M.* second, and *Excelsior* third. The finish and summary was as follows:

FIRST CLASS CABIN YACHTS.

Name.	Start. H. M. S.	Finish. H. M. S.	Elapsed time. H. M. S.	Corrected Time. H. M. S.
Dudley	12 58 78	Not timed.		
Hope	12 56 09	6 24 52	5 27 43	5 21 53
Sophia	12 59 45	Not timed.		
Twinkle	12 58 06	Not timed.		
SECOND-CLASS CABIN YACHTS.				
Reveille	1 10 25	Disabled.		
West Wind	1 14 30	Withdrawn.		
Admiral Rowan	1 10 51	5 55 24	4 44 33	4 36 33
Minnie T.	1 14 30	6 15 59	5 01 29	4 51 19
Marie	1 14 30			
FIRST-CLASS OPEN YACHTS.				
Fannie K.	1 08 10	6 05 08	4 56 58	4 56 58
Nettle	1 14 30	5 23 56	4 09 26	4 07 06
Chauncey Felt	1 07 15	5 58 56	4 51 41	4 48 51
Martha M.	1 14 30	5 29 22	4 14 52	4 13 22
SECOND-CLASS OPEN YACHTS.				
Excelsior	1 14 30	5 32 53	4 18 23	4 13 23
Faith	1 14 30	5 52 16	4 37 46	4 37 06
Sadie	1 14 30	Withdrawn.		
THIRD CLASS (CAT-RIGGED).				
Hi Pi	1 14 30	6 10 02	4 55 32	4 55 32
Johnnie B	1 14 13	Withdrawn.		
Gypsy	1 14 30	6 31 25	5 16 55	5 16 55

The *Hope* wins the first cabin class; the *Admiral Rowan* wins in the second cabin class; the *Nettle* wins in the first open class; the *Excelsior* wins in the second open class, and the *Hi Pi* wins in the third open class.

FIDGET-VICTORIA AGAIN.—As noted in these columns, Commodore Grinnell, after handing to Mr. Roosevelt the champion pennant of the Central Hudson Yacht Club, won by the latter in his sloop *Victoria*, again challenged him for a second race in accord with the rules governing the holding of the pennant. The race came off June 19, one day after the regular annual regatta of the club. There was a light breeze from the N. and a strong ebb tide, when the two yachts got away at 11:30 A. M., *Victoria* leading across the line 1m. 19s. ahead. *Fidget* weathered on her opponent, and turned the Van Rensselaer buoy about a minute ahead. On the run down *Victoria* set topsail, and both boomed out their jibs. Off Jew's Creek *Victoria* caught a strong streak of wind and closed the gap; but *Fidget* soon felt the same breeze and again went to the fore. The starting line was passed with *Fidget* leading by a minute and a half, and when the Law Point buoy was reached the lead had been reduced to eight or nine seconds. On the beat back *Fidget* got slightly the better of Mr. Roosevelt's crack, and led her by nearly two minutes when passing the starting line on their way north. The wind had increased and come out from the N. W. When the buoy at Van Rensselaer Point had been turned the second time, sheets were again eased and jibs boomed out, the home buoy being passed for the last time with *Fidget* leading by 1m. 20s. Below New Hamburgh *Victoria* blanketed the Commodore's boat in a bad way, and, passing, gained all the way down to Low Point buoy, rounding full 2m. ahead. *Victoria* trimmed aft flat, but her rival showed the stuff in her by handsomely weathering on her and outrunning her as well, finally crossing the line a winner by only 43s., as under:

Name.	Start. H. M. S.	Finish. H. M. S.	Actual time. H. M. S.	Corrected time. H. M. S.
Fidget	11 40 00	4 57 31	5 17 31	5 18 20
Victoria	11 39 44	4 58 47	5 19 03	5 19 03

There is a possibility of Mr. Van B. Livingston's *Flyaway*, of West Park, being matched with the Commodore's sloop before long. We believe this was the first race *Fidget* sailed under her new sloop rig, and the result will probably encourage Mr. Grinnell to keep the jib on her. In the above match she carried five hands against seven of the *Victoria*.

ONEAGH CRUISING EASTWARD.—The British yacht, *Oneagh*, has arrived at Boston June 18. Her owner takes no interest in American yachts. Possibly he thinks discretion the better part of valor.

QUINCY REGATTA.—The Quincy Yacht Club sailed its first championship regatta of the season June 21. There were a large number of entries and a fair breeze. *Imp* parted her main-stay and lost a portion of her false keel. *Rocket* and *Annie V.* fouled, the former parting her halliards. Prizes were awarded as follows:

First Prizes—*Folly* (first class), *Nattie* (second), and *Psyche* (third).

Second Prizes—*Vision* (first class), *Wildfire* (second), and *Imp* (third).

GRAY-SURPRISE MATCH.—A match was sailed at Belleville, June 20, between the yachts *Katie Gray* and *Surprise*, for $200 a side, over Big Bay course, distance about twenty-five miles. The *Katie Gray* came in the winner by 6m. 38s. Time, 2h. 47m. A good breeze, a glorious day, no accidents, and a large attendance, all tended to make it a successful affair. The Belleville Yacht Club propose taking weekly cruises during the season. The fleet will sail out of the harbor every Friday afternoon and remain under the directions of the Commodore during the sail. Kingston, not to be behind in water sports, will hold a regatta on Dominion Day, the prizes being as follows: Second-class—First prize, $65; second, $30; third, $10. Third-class—First prize, $25; second, $10; third, $5. Barrie, a smart town north of Toronto, and which boasts of the possession of the fine Kempenfeldt Bay, has also got an attack of the water fever, and healthy development of aquatic interests is looked for. Races have already taken place, and a number more are talked of. AH-MIK.

NEWBURGH REGATTA.—The fifth annual regatta at Newburgh will be sailed July 10. There will be five classes, corresponding to the following lengths: From 26ft. upward; from 23 to 26ft.; from 20 to 23ft.; and for less than 20ft. The fifth class is for catamarans. Entrance free. Course for first, second, third and fifth classes, 20 miles; for fourth class, 15 miles. Prizes—1st class, $125; 2d class, $75; 3d class, $50; 4th class, $25, and same for 5th class. Time allowance for three leading classes, 2m. to the foot; for 4th and and 5th class, 1m. 30s. to the foot; measurement taken on water line. Designating numbers will be furnished by the regatta committee, to whom all captains must report before 10 A. M. on the day of the race, and from whom information can be obtained, with charts of the courses. Regatta Committee—A. S. Ring, T. P. Ramsdell, J. C. Griggs, T. Donoghue, J. H. Weddle, J. T. Sloan, J. C. Adams, M. H. Hirshberg, H. C. Higginson and W. M. Trask.

WELL DESERVED COMPLIMENT.—Mr. F. C. Sumichrast, of the Nova Scotia Yacht Squadron, has been elected honorary member of the Yacht Racing Association of Great Britain.

—We are in receipt of many club books and pamphlets of yacht clubs, notice of which has been deferred. The senders will please accept our thanks.

YACHTING DRIFT.

Mr. Phœnix's steam yacht *Vidette* is very handsome on deck, outside she partakes a little too much of the *Ideal* style, though a much more graceful model.....Cutter *Enterprise*, of Boston, is said to be a very handsome boat and a fast sailer .....*Nellie G.*, formerly a sloop of New York, has been altered to a schooner in Boston..... *Mattie* and *Posey*, of Boston, will sail again owing to dispute concerning second prize in regatta of June 1.....A number of yachts have left for that paradise "down East," among them *Volante*, *Intrepid*, *Columbia*, *Mystic*, *Fleetwing*, s.s. *Ibis*, *Seawitch*, *Wenonah*, *Nettie*, *Restless*. Mr. A. De Cordova has purchased the s.s. *Mystic*.....*Lila* is the name of a new yacht sent to Savannah from New York..... *Dreadnaught* went ashore off Mamaroneck, June 22. Her regular captain was not on board at the time....*Comet* has challenged *Peerless* for the Bennett Challenge Cup, recently won by the latter at the N. Y. Y. C. regatta on the 14th inst. Catamaran *Nereid* has done the same. Surely this latter must be a joke.....*Mohawk*, alias *Eagre*, has had her masts cut down eight feet in accord with suggestions made in these columns. Trouble about the judges of the Fourth of July regatta in Boston.....*Violet*, of Boston, has been sold to N. Y. parties..... 'Frisco will soon have its new club-house open.....*Frolic* beat *Ariel* on the wind at the Golden Gate.....Lead and iron on keels is becoming the order of the day down East.....*Magic*, of Queen's Cup fame, hails from Boston.....*Casco*, a Pacific venture in the building line, is said to be a success.....In the Trenton regatta, June 20, *Ellis* came in first, *Belle* second, and *Champion* third.

OAR AND PADDLE.

MISSISSIPPI AMATEUR ROWING ASSOCIATION—*Peoria*, *June* 21.—The first annual regatta of the Mississippi Amateur Rowing Association is now a thing of the past. A few pools were sold on the evenings of the 18th and 19th, and a few on the mornings of the 19th and 20th, but the betting was light. On the evening of the 18th the annual meeting of the association was held, at which the following officers were elected for the ensuing year: President, J C Osgood; Vice-President, J A St John; Secretary and Treasurer, A S Porter; Commodore,

C L Williams; Vice-Commodore, P C Wheeler; Ensign, F W Gould. The morning of the 19th dawned bright and clear. Just before the races commenced a slight breeze sprang up, causing a ripple on the water, but not enough to interfere with the rowing. At 3.28 P. M. the first race was called, which was the Junior four-oared shells, with the following entries, who took their places as follows:

1. Burlington Boating Association, Burlington, Iowa (orange).—C M Schenck, bow, weight 140; E E Osgood, 2, weight 135; J S Denslow, 3, weight 145; C W Bodemann, stroke, weight 140.

2. Peoria Boat Club, Peoria, Ill. (color white).—Herbert Walker, bow, weight 159; C S Cockle, 3, weight 180; G W Weddle, 3, weight 150; G J Brown, stroke, weight 165.

3. Modoc Rowing Club, St. Louis, Mo. (color tan).—W Welch, bow, weight 128; H Assman, 2, weight 134; J Stumpht, 3, weight 125; C Fischer, stroke, weight 144.

4. Mitchell Rowing Association, Milwaukee (color of bow oar, cap dark blue).—J K Berkhauser, bow, weight 130; O Warner, 2, weight 148; H C Ludwig, 3, weight 146; A J Richter, stroke, weight 130.

5. Sylvan Boat Club, Moline, Ill. (color cardinal).—W V Cooper, bow, weight 128; J M Waters, 2, weight 132; B Parregry, 3, weight 142; W H Lewis, stroke, weight 143.

6. Farragut Boat Club, Chicago (color light blue).—C S Downs, bow, weight 135; G T Muchmore, 2, weight 135; Frank Booth, 3, weight 155; F M Staples, stroke, weight 140.

When the signal was given to start the Burlington crew withdrew from the race, leaving the other five to go over the course. At the end of the first half mile the Farraguts gave up, having broken an oar, which left but four competitors in the field. The Sylvans' crew rounded the mile buoy first in 7m. 13s. At the end of the first half mile the Peoria caught up within two lengths of them, and maintained that position to the finish. The following is the time: Sylvans, 13m. 12¼s.; Peoria, 13m. 32½s.; Mitchell, 14m. 53s.: Modoc, no time.

The second race was for double sculls, same distance as four-oared shells, one mile and repeat. In this race there were but two entries.

1. Minnesota Boat Club, St. Paul.—H M Butler, bow, weight 130; W H Hyndmanu, stroke, weight 140.

2. Riverdale Rowing Club, Riverdale, Ill.—C S Downs, bow, weight 130; C A Billings, stroke, weight 150.

At the start the St. Paul Club took the lead and turned the stake boat in 6m. 23s. From that time to the finish they maintained the lead, doing some very fine and rapid rowing as they neared the home-boat, crossing the line in the following time: St. Paul, 14m. 42½s.; Riverdale, 15m. 22½s.

The next race was the six-oared barge, one and one-half miles straight away, with but two entries.

1. Peoria Boat Club (color white).—W R Cockle, bow, weight 185; H B Skule, 2, weight 151; W P Townsend, 3, weight 140; W W Hook, 4, weight 160; B Allison, 5, weight 146; W C Beasley, 6, weight 164; J Taylor, Coxswain, weight 145.

Burlington Rowing Association, Burlington, Iowa (color orange).—E S Phelps, bow, weight 140; C E Osgood, 2, weight 135; J S Denslow, 3, weight 145; C W Bodeman, 4, weight 140; Theo Bishop, 5, 135; C M Schenck, 6, 140; T M Garrett, coxswain, 120. At the start the Peoria crew took the lead and held it to the finish in the time as follows: Peoria, 9m 26s; Burlington Rowing Association, 11m 20s.

The next race was the Junior single scull, one mile and repeat, with the following entries: Farragut Boat Club, Chicago—T R Eddy (color brown), weight 155; Riverdale Rowing Club, Riverdale, Ill.—C A Billings (scarlet), weight 150; Sylvan Boat Club, Moline, Ill.—J R Fleming (orange), weight 140; Farragut Boat Club, Chicago.—H P Darlington (light blue), weight 127. At the end of the first half mile Eddy dropped out, leaving but three in the race. Fleming, of the Sylvan Club, was an easy winner, doing some very lively spurting as he approached the home lime. Time as follows: Fleming, 16m 37⅛s.; C A Billings, 17m 20¾s; H P Darlington, 18m 13¼s.

The last race of the day was the tub race. Sixteen entries were made, but only ten started. This was won by Charles Barnard, of the Sylvan Club. This ended the programme for the first day.

The morning of the second day, June 20, broke clear and cool. The first race of the day was that of the small sail boats owned here, but called for the occasion "yachts." The following named yachts, with captains' names given, were entered. The course was three miles and return. W F Tower entered yacht *W F Tower;* C Hefell, *Treat;* R Dahlke, *Warner;* H Walters, *Kitty Cat;* Dahlke, *Culter;* G T Gray, *Fannie.* The race was won by *Kitty Cat* in 1h 30m.

The first race of the regatta was called at 3:20 P. M. The wind had gradually been increasing, and it was feared the water would be too rough to row, but the judges decided to let the boats start. This race was the senior four-oared shells, one mile and return, with the following entries: Sylvan Boat Club, Moline.—C A Barnard, bow, weight 138; Jas Roseborough, 2, 132; W V Cooper, 3, 128; Ben Perregoy, stroke, 142. Farragut Boat Club, Chicago, Ill.—C S Downs, bow, weight 135; G T Muchmore, 2, 135; Frank Booth, 3, 160; L H Jones, stroke, 150. Madison Boat Club, Madison, Wis.—C F Slightman, bow, weight 135; W Fielmann, 2, 150; A J Reuter, 3, 160; E L Hills, stroke, 150. When the word was given the crews started as follows: 1st, Sylvans, with a stroke of 39; 2d, Madison, with a stroke of 38; 3d, Farragut, with a stroke of 37. The Sylvans turned the stake boat two lengths ahead, closely followed by the Madisons, who made the turn in as quick and pretty shape as has been seen on any course. The Sylvans proved too much for them, however, and crossed the home line, winners by three lengths. The following is the time: Sylvans, 14m 1⅛s; Madison, 14m 33⅛s; Farragut, no time.

This next race was for double sculls, one mile and repeat. There was but one entry for this, by the Madison Boat Club, of Madison, Wis. The names of the rowers are as follows: C F Slighman, bow, weight 135; Wm Fielmann, stroke, weight 150; time, 16m. 39s. The time was very good, considering that they had the wind and waves to battle with, in addition to having just rowed over the course in the four-oared shell.

The next race was the four-oared gig, with two entries; distance, one mile and return:

Peoria Boat Club, Peoria, Ill.—H Walker, bow, weight 159; C S Cockle, 2, weight 180; G W Weddle, 3, weight 150; G J Brown, stroke, weight 164; E S Pulsifer, coxswain, weight 121.

Burlington Boating Association, Burlington, Iowa.—J C Osgood, bow, weight 140; C W Bodeman, 2, weight 140; J S Denslow, 3, weight 145; C M Schenck, stroke, weight 140; C E Osgood, coxswain, weight 135.

The Peoria crew took the lead at a stroke of 36, closely followed by the Burlington crew with a stroke of 37; but their stroke did not seem to be heavy enough, for the Peoria crew turned the one mile buoy from four to five lengths ahead, making the turn completely just as the Burlington crew reached the turning-point. At the three-quarter point on the return both crews did some spurting, and crossed the home line as follows: Peoria three lengths ahead, with a stroke of 38, and the Burlingtons bringing up the rear with a stroke of 40. Peoria, 15m. 45s; Burlington, 16m. 2⅜s. This race was closely followed by the Senior single scull race, with three entries:

Minnesota Boat Club, St. Paul, W H Hyndman, weight 140; Minnesota Boat Club, St. Paul, H M Butler, 130; Sylvan Boat Club, Moline, J R Fleming, weight 140. At the start Hyndman and Fleming got away abreast of each other, Hyndman with a stroke of 37 and Fleming with a stroke of 33. Although Butler started with the same stroke as Hyndman, he immediately dropped to the rear, and at the one-half mile flag dropped out of the race entirely. It might be doing him justice to say that he had no boat of his own here, and was forced to use an old boat belonging to the Peoria Club. His time is said to be fully equal to that of Byndman. Hyndman gradually gained on Fleming and turned the flag three lengths ahead. Fleming made a poor turn, and by the time he was completely turned Hyndman had widened the gap to some nine or ten lengths ahead. Fleming did his best, however, but was unable to overtake Hyndman, and they crossed the home line in the following time: Hyndman, 15m. 18s.; Fleming, 16m. 12s.

This race concluded the boat-racing, and then came the Commodore's review. This was one of the prettiest sights of the day. Last of all came the swimming race, which was won by Chas. Barnard, of the Moline Club.

On the evening of the 25th the prizes were distributed at Rouse's Hall, where a grand reception was given to the visiting clubs by the Peoria Boat Club. In conclusion, I might say the regatta was an entire success, every one seemed well pleased, and it is estimated there were 10,000 visitors. The Moline Club were the most fortunate of all, taking away with them five prizes. The members of the press were all well taken care of, and they are all indebted to H. Knowles and S. J. Kilduff, who were the committee on the arrangements for the press. F. C.

EMPIRE NAVY.—The second annual regatta of this organization was rowed at Peekskill, June 18. The water was lumpy, but gradually smoothed down. The Palisade four-oared shell beat Highland and Harlem fours; time, 12m. 48¾s. In the pair-oared gig race the Highlands beat Resolutes, of Carmansville, and Palisades; time, 16m. 25s. In the double scull race the Highlands had a walk-over. In the junior sculls H. Morse, of the Resolutes, beat H. W. J. Telfair, Harlem; R. G. Jackson, Palisade, and J. C. Seymour, Highland; time, 16m. 41s. The remaining races were rowed on the upper course. Sculls—H. P. Dain, Highland, beat A. Moffat, senior, Palisade, in 15m. 4s. Eight-oared Barges—Resolutes beat Palisades in 14m. 13s. The regatta was a great success.

NEPTUNE ROWING CLUB.—July 15, their spring regatta was rowed with fine weather and smooth water. In the pair-oared shell race A. T. Shand and F. L. Rodewald beat O. T. Johnson and T. R. Keator; time, 6m. 6¼s. In the single sculls F. L. Rodewald beat L. Morris; time, 7m. 17⅜s. In the four-oared barge race A. C. Sharp (bow), S. E. Whitman, W. C. Rowland, R. T. P. Fiske (stroke), and J. W. Edwards (cox.) beat W. J. Roberts (bow), J. W. Fuller, D. S. Babcock, Jr., R. P. G. Bucklin (stroke), and B. Beckwith (cox.); time, 16m. 46s. In the four-oared shell race F. L. Rodewald (bow), L. W. Morris, S. Pratt, and A. T. Shand (stroke) beat O. T. Johnson, J. W. Edwards, T. R. Keator, and C. King (stroke) in 6m. 21¼s.

HARLEM REGATTA.—The annual June regatta of the Harlem River Association took place June 22. The Nassaus and New York Athletic Clubs refused to enter against Messrs. Walsh and Levien, disqualified by the N. A. of A. O. but allowed to row by the Harlem authorities. This reduced the entries materially, and left the two gentlemen a walk-over in the pair-oared race, as well as the Nautilus Club in the four-oared race. Captain R. J. Cook acted as referee; courses as usual. In the junior scull race, called at 2 P. M., Childs got the best start, while Gaisel soon passed him and Lyon drew up even with Newton in the rear. Gaisel crossed the line in 6m. 14½s, Lyon second, Newton third, and Childs last, having ceased pulling too soon. In the pair-oared race, Walsh and Levein had a walk over, time 6m. 38½s. In the senior scull Rathbone was the favorite. Gaisel was the first to get away, but Rathbone quickly passed him, pulling a quick stroke. Mills dropped to the rear. Rathbone led across the line in 6m. 29¼s. by a length and a half, Gnisel second. The winner of this race already holds the diamond sculls won from P. C. Ackerman on a foul. Only one entry in the junior gigs by the Columbia College Club. Time 6m. 14½s. The Nautilus four had a walk over, while the six-oared gigs were started only a few seconds later. The Dauntless gig (with coxswain) won easily in 5m. 34⅜s., beating the Gramercy crew and overhauling the Nassau four on the way. In the last event, four-oared gigs, the Nassaus beat the N. Y. Athletic Club, time 5m. 17½s.

ALOYONE BOAT CLUB.—The Brunette crew defeated the Blondes through an accident to the latter in the six-oared race, time 12m. 20s. In the four-oared race *Flirt* beat *Coquette* in 12m. 24s. The day's racing was finished by a most enjoyable social evening party, at Mr. W. C. Langley's, at Bay Ridge.

SILVER LAKE, MASS., REGATTA.—Despite bad weather the Silver Lake Regatta was as successful as all such events generally are in the East. Perfect order and discipline prevailed, and so far as the rowing was concerned there was nothing left to be desired. Under the auspices of the Eastern Rowing Association the regatta was fixed for the day of the anniversary of the Battle of Bunker Hill, June 17. The first race on the list was that for the junior scullers. The prizes were a silver cup to the first and a pair of Donoghue sculls to the second. The starters were: Jeffrey Eager, of the Shawmut Club; Frank Turner, of Boston; John Marrow, of Boston; D. Breen, of the West End Boat Club, and Charles E. Curtis, of Lowell. Curtis won in the excellent time of 15m. 15s.; Breen second, Marrow third, Turner fourth and Eager fifth. The principal event of the day was the six oared race among amateurs, for which the *Boston Herald* offered a handsome piece of silver ware. The *Boston Herald*, through its very complete and thorough reports of Eastern rowing affairs, deserves the thanks of the boating fraternity for the great benefit acruing through the *Herald's* enterprise and liberality. Five six-oared crews came to the start out of the six entered; the Narragansett, Shawmut, City Point, Lakeman and Dauntless. The Dauntless crew made the worst start, and the Shawmut's lead at the first half-mile, pulling a stroke of 43, City Points 37 and Dauntless 38. Narragansetts snapped their steering wires soon after the start, the Lakemans fell astern. Near the mile, City Point was ahead and Dauntless three quarters of a length astern of them. At the upper stake Dauntless had come out in front with a lead of a quarter of a length only after a close struggle, the New York crew making a splendid turn, owing to their having a coxswain, and soon after the turn had gained three lengths. City Point spurted gallantly and somewhat closed the gap. In the meantime the Shawmut six turned the upper stake some three lengths behind the City Point crew, with Narragansett and Lakeman in the rear. Finally the Dauntless crew crossed the finish, a winner by two lengths, time 19m. 11s. The crew from New York was composed of: Dyer Pearl (bow), Wm. S. Ridabock, C. E. Knapp, W. G. Demarest, H. W. Walker, David Rouch (stroke), John Kyle, Jr., (coxswain). In the professional four-oared race the Union crew, of Portland, Faulkner crew, Mahoney crew and Lowell crew made a fine contest. The Mahoney and the Boston fours led at the mile, Lowell a good third, and the Unions fourth. Faulkner make a bad turn and then stopped his crew to avoid collision with the Unions coming up. The Mahoney crew thus got the lead, but the Boston crew, putting on a terrible spurt, closed again, and at the two and a quarter mile were in the van once more, pulling a stroke of 32 against the Mahoney's 36. The Faulkner-Reagan crew kept their lead and came in winners in 18m. 49½s. by a good length, Mahoney second, Lowell third and Union fourth. The race for the four-oared working boats for a purse of $200 resulted in favor of the Lakeman crew No. 1, time 19m. 55s., distance 3 miles. In the professional single scullers' race the starters were: Johnson, Williams, Kennedy of Lowell, Rourke of Lowell, Mahoney, Plaisted and Kelley. Johnson was the favorite, and took the lead at once. At the mile Plaisted came out to the front with a good lead and kept the race well in hand. He turned four lengths ahead, Kennedy and Johnson turning next, almost together, around the same stake, and a collision became the inevitable result through "Frenchy's" fault in having picked up the wrong stake and being in the other man's water. This let Lynch go around second and O'Rourke third. Plaisted had in the meantime been lying coolly on his oars and the other two had passed him, but it was not long before he had overtaken them and sent his boat across the finish in fine style, after stopping a second time, in 21m. 43½s; John A. Kennedy second in 21m. 50½s., Johnson having given up; Lynch third in 21m. 52½s.; Lawrence fourth; Johnson, D. Kennedy and E. Williams in the rear. The *Herald* Cup was presented to the Dauntless crew at the Globe Theatre with appropriate formalities and speech making.

COURTNEY-DEMPSEY RACE.—Though Courtney played with his rival all the way up, he suddenly was thrown from his boat by fouling a submerged wire, as he claims. To say the least, this is a tough yarn to swallow, and as no evidence whatever has been found to substantiate Courtney's claim, the whole affair looks like a disreputable trick in concert with the gamblers. It is strange that Courtney finds it so difficult to get accommodated and is always getting into snarls in his races. Though the blame in his latest fiasco has not been fixed upon any one as yet, the whole thing is calculated to throw a bad reputation upon all concerned, and Courtney will suffer with the rest. The judges decided to row the race over again, but Dempsey declines, and there the matter rests. They will meet again at Skaneateles.

HANLON-MORRIS RACE.—Pittsburghers generally are out of pocket, as they ought to be. Hanlon, the Canadian champion, has now finished up about everything excepting Courtney, and his pull on the Alleghany shows him to be a pretty tough customer over a distance of any kind. Both Hanlon and Eph Morris were in fine condition on the day of the race, June 20. The course was the same upon which Morris won the championship originally from Coulter. The start was effected at 6:10 P. M. Hanlon took the lead immediately, pulling 34 to the minute. At the mile Morris made a vigorous spurt, and as he reached the bend was gradually closing the gap. Near the buoys, however, Hanlon had again spun out his lead considerably, but the Pittsburgher bettered his position somewhat. From the turn Hanlon kept the lead all the way home, pulling a very long and graceful stroke of 28, and shot across the line with four lengths to spare in 37m.

NEW LONDON NOTES—*New London, June* 17.—The Thames Rowing Association are building a boat-house 70 feet long by 20 feet wide, and 15 feet to rafters; will be ready for occupancy by last of week Time of rowing Yale-Harvard race not yet decided, but the hour of eleven proposed. From an experience of three years' rowing a shell boat at all hours of the day, and a season's daily practice, I find that the hours to 8 A. M. and from 4 P. M. are the only hours when they may reasonably expect good water. At eleven it is generally rough or windy, a breeze coming in from eight and dying off about four. MISAL.

THE HENLEY REGATTA.—The Shoe-wae-cae-mettes and Mr. Lee are in daily practice on the Thames. The Columbias are improving, and are better liked. The Western men, of course, are not much thought of by the highly-trained British crews, nor does Mr. Lee seem to give them any anxiety. We see it mooted in English papers that the above crews represent the championship of America. They do nothing of the sort, and we must protest against any such flimsy assumption. The Watkins Regatta has been fully exposed in these columns, and however creditable an English victory may be, they will not have met the real American champions at all.

ROWING RIPPLES.

In the Mystic regatta on the Passaic the Idler crew won the pair oared gig race in 7m. 5s. J. W. Adams won in the single sculls in 5m. 28s., and the Kate K. crew took the prize in the pair-oared shell race. The Freeborn crew won in the four-oared scrub race.....Ariels have built a new boat house, and Mysties expect to lay out $2,500 in a fine structure on the Passaic.....Buffalo Bill is a new six-foot candidate at the oar. Courtney has him in hand at Owasco Lake....Harvard freshmen have put up their boat house on the same lake for their race with the Cornell crew.....Geo. W. Lee will pull a paper boat in England....The Northwestern regatta will be held at Detroit in July....Beaver Boat Club has been organized at Windsor, Mich....J. Reagen now pulls stroke in the Boston Leverett four.....Union Boat Club, Boston, has sold all its old boats owing to the present great demand for boats of any kind.....Frenchy Johnson prefers paper boats.....Wallace Ross thinks he can beat Hanlon. The race between them takes place July 25, on the Kenebecassis.....Why does not Reagan row Plaisted?.....Best time made from Putney to Mortlake is 23m. 15s., made by Chambers against White in 1860, and by Renforth against Kelley in 1868.....Higgins will keep the Newcastle, Eng., champion cup, having won it three times.....Boston appropriates $2,000 for the Fourth of July regattas.....Frenchy Johnson will not go to Toronto, but at-

tend races at home.....Raritans beat Rugters College, June 13, for the championship of the river.....Warren Smith and Wallace will pull a three-mile race between July 10 and 20, on Bedford Basin, Halifax.

Sea and River Fishing.

FISH IN SEASON IN JULY.

FRESH WATER.	SALT WATER.
Trout, *Salmo fontinalis.*	Sea Bass, *Centropristris atrarius.*
Salmon, *Salmo salar.*	Sheepshead, *Archosargus probatocephalus.*
Salmon Trout, *Salmo confinis.*	Striped Bass, *Roccus lineatus.*
Land-locked Salmon, *Salmo gloveri.*	White Perch, *Morone americana.*
Black Bass, *Micropterus salmoides; M. nigricans.*	Weakfish, *Cynoscion regalis.*
Muskalonge, *Esox nobilior.*	Bluefish, *Pomatomus saltatrix.*
Pike or Pickerel, *Esox lucius.*	Spanish Mackerel, *Cybium maculatum*
Yellow Perch, *Perca flavescens.*	Cero, *Cybium regale.*
	Bonito, *Sarda pelamys.*
	Kingfish, *Menticirrus nebulosus.*

TROUT FLIES IN SEASON FOR JULY.

Little Egg, No. 12.—Body and feet of orange and yellow, mohair and hare's ear mixed; wings, bright hyaline, slightly mottled; setæ, same as wings.

Lightning Bug, No. 10.—Body of equal parts, of dark brown, and black mixed, tipped with yellow; feet, of feathers from the English grouse; wings, double, the inner wing black, the outer wing a yellow brown.

General Hooker, No. 9.—Body made of bright yellow and green, ringed alternately; feet; red hackle; wings, of the tail feathers of the ruffed grouse.

Little Claret, No. 11.—Body and feet, dark claret mohair, slightly tinged with blue; wings, of the bittern, or brown hen; setæ, dark brown.

Claret Fly, No. 9.—Body, dark claret; feet, black; wings, of the brown hen.

Fetid Green, No. 10.—Body, feet and wings, a pale green.

FISH IN MARKET—RETAIL PRICES.—Bass, 18 cents; blue fish, 6; salmon, 18; mackerel, 18; shad, 40; weakfish, 10; Spanish mackerel, 20; green turtle, 10; halibut, 15; haddock, 6; king fish, 20; codfish, 6; black fish, 12; flounders, 8; porgies, 8; sea bass, 15; eels, 18; lobsters, 8; sheepshead, 15; Canada brook trout, 50; Long Island brook trout, $1; pompano, 75; whitebait, per pound, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.50.

CANADA—*Grand River, June* 14.—The net fishing throughout the whole Gaspe District has been unusually good. The angling is just commencing. The salmon are not only numerous, but unusually large. We expect great sport. There has been an almost continuous rain during the ten days preceding the 12th inst. IMBRIE.

NOVA SCOTIA—*Halifax, June* 18.—Two anglers back from a Restigouche fishing trip, report salmon plentiful and fine, and they back up their report by showing 33 splendid specimens. They were only absent eight days. One of the fish weighed 36 lbs., and the average weight of the lot was about 20 lbs.

SALMON ON THE RESTIGOUCHE.—The following letter from a correspondent is quite interesting. The presence of a fish bone in the stomach of the salmon would indicate, as the writer observes, that the fish had but quite lately left the sea:

Halifax, June 19.—While fishing on the Restigouche last week my companion killed a male salmon weighing 36 lbs., and upon opening it we found a part of the back bone of a small fish about two and a half inches long in its stomach. It was killed in Cross Point pool about forty miles from the salt water. The Indians thought it was the bone of a caplin. Now that fish must have come up very quickly from the sea to have not digested the fish. It is, I believe, very unusual to find anything in the stomach of a salmon in fresh water. In eight days, with two rods, we killed 33 fish averaging 22 lbs each. G. W.

NEW BRUNSWICK.—Just in from a week at Kilburn Lake where trouting is excellent. I took 28 speckled trout in two hours last Monday afternoon. Largest weighed 2 lbs. 6 oz., and gave me some good fifteen minutes work. N. S. Dickey and W. W. Curtis, of Boston, were with me for the week. Jno. Stewart, Supt. of N. B. & C. R., of St. Stephen, was our guest two days. At Skiff Lake the other day two of us caught forty land-locked salmon in one day. C. L. W.

MAINE—*Machias, June* 20.—Eighty eight trout, four ounces to two pounds weight, is the catch this season up to June 15. Some nice dinners, I remember, as well as the catching. S. B. H.

MASSACHUSETTS—*Ashburnham, June* 18.—Some good strings of trout have been caught here lately. One basket of seventeen weighed fifteen pounds, and one of fourteen weighed thirteen. Largest single trout, two pounds, which is large for brooks fished as they are here. H. C. D.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals at this port the past week has been 77; 44 from Georges, 14 from the Banks and 19 from mackereling trips. The receipts from the Banks have been 257,500 lbs. codfish and 252,500 lbs. of halibut. The Georges fleet have met with continued good success for the season, the receipts amounting to 1,056,000 lbs. of codfish and 43,000 lbs. of halibut. The reports from the mackerel fleet are indicative of poor success thus far on this shore. The season, however, has not far advanced, and a good spirt would quickly change the mackerel fishery, and cause rejoicing among the owners and the fishermen. The first Bay fleet of forty sail are now getting ready and will soon be away.—*Cape Ann Advertiser, June* 21.

—Two Gloucester fishing schooners have fitted for a summer trip to the Greenland coast halibut fisheries. This is the first trip to those grounds since 1873.

FISHING AT HELL GATE.—Bass fishing at Hell Gate has afforded sport for a week past. On the 18th seventeen were caught. Mr. Wade caught twelve, average two pounds; Mr. Irwin two, one five and one two pounds, and Mr. John Rodgers, the champion of 33 and 25 pounds last year, caught one weighing 7¾ lbs.

SUPERB SALMON.—At the invitation of Messrs. Abbey & Imbrie, the well-known manufacturers of fishing tackle, we alled on Mr. Sutherland, of Liberty st., to look at some of the finest salmon we have seen for a long time. These fish were caught by General Arthur, Collector of the Port of New York, and by R. G. Dunn, Esq. Seven fish in all had been caught in one day by these able fishermen in the Cascapedia. The largest fish weighed 50 pounds, and was 4 feet ½ inch in length, with a girth of 2 feet 3. The other fish weighed 38, 35 and 28 pounds. The fish were all clear run fish, in superb order, and had been only three days *en route* from the river. What a whizzing of tackle, what a clicking of reels, what a bending of upper and middle joints there must have been, and how the butt must have been called into play! and then the gaffing, and the excitement, and the doubts and fears, and the triumph about it! All these things were recalled to mind, as we saw these slabs of silver, with fins and tails, lying all quiet and peaceful on Sutherland's marble floor.

GREENWOOD LAKE.—Bass and pickerel still afford fair sport, but are more successfully taken with trolling spoon than with a fly. The hotels are in perfect order and already well patronized considering the weather of the past month, and only require a few bright, warm days to fill up. The Montclair and Greenwood Lake Railway deserve great credit for the promptness and regularity with which they have run their trains despite the discouraging influences of a late rainy season and consequent light pleasure travel. Every provision is made for the comfort and convenience of the traveling public, the elegant Pullman parlor car "Phaetou," Mr. Gilbert conductor, being regularly run on the 4:30 P. M. train to, and the 7 A. M. train from, the lake, at the remarkably low rate of twenty-five cents extra fare. It is currently reported that the company contemplate making at an early date a reduction in the rate of fare to Greenwood Lake, of which, when done, due notice will be given. GREENWOOD.

—Fishing reports from the Thousand Islands record fair sport with rock and striped bass and pickerel.

NEW JERSEY—*Forked River, June* 24.—Bluefish, sheepshead and weakfish keep all hands busy. ARTHUR.

Barnegat Inlet, Kinsey's Ashley House, June 23.—Sheepshead, bluefish, blackfish and sea bass are the catches now B.

TENNESSEE—*Memphis, June* 20.—Fish have been biting freely in the neighboring lakes for some weeks past, and many fine strings have been shown. Hopefield and Marion Lakes have become depleted from the constant and out-of-season attacks of pot-fishermen, and afford sport no longer. Ten Mile Bayou and Burnt Lane hardly uphold their reputation of former seasons; but Blackfish is the Mecca of the initiated. One man caught 150 black bass trolling in one day. Trout (bass), white or speckled perch, bream, goggle-eyes, (crappie or dominicker), striped bass, etc., are found there in incredible numbers, and are caught with but little trouble; P. C. H.

THE FLINT RIVER SQUADRON—*Nashville, Tenn., June* 13.—This is the rather peculiar name of a club of four gentlemen who pass a great deal of their time angling during the season. They often go out for two and three weeks together. Their last expedition was to Flint River, striking it at a point near Winchester, fishing down to near Fayetteville. They have a large boat, capable of carrying all their camping outfit, and a smaller boat of Bond's make for excursions up the smaller streams. The Flint is a tributary of the Tennessee River, and is one of the best stocked streams in the State. The water is free-stone, very clear and cold, and has been less seined and trapped than any other one I know of. They took a great many trout (bass) and perch. Mr. Goodrich tried artificial flies, and trolling with a silver-spoon bait. As fly fishing was a novelty in that part of the country, considerable curiosity was manifested as to the result. The spot first fished in was a mill-pond, from the dam of which Mr. G made his casts. Although the water was exceedingly clear, and be in that exposed position, at the second cast he took a fine perch (here called goggle-eye), and at the third a striped bass. Several striped bass were afterward landed, one weighing nearly three pounds. The fly used was black body with white wings. Quite a number of fine trout (bass) were taken while trolling. In a few days the club start off to Elk River, another tributary of the Tennessee. This they will descend to the mouth, a distance of nearly 200 miles, where they intend launching their boat. They are to have as guests two gentlemen from New York, one of whom has already fished with this club before, and who says he knows of no place North where he can have such sport as he enjoyed on his first visit here. I have made diligent inquiries from a number of sources, which, added to my own knowledge of the country, and I can safely say that there are few localities better adapted to the sportsman than our State. Could we induce the Legislature to pass protective laws and have them enforced, it would not be many years before our streams would all be full of magnificent fish. J. D. H.

MICHIGAN—*Grand Rapids, June* 15.—Trout fishing in our northern streams is good. Parties from this place and abroad are flocking thither, and it is estimated that at least two hundred fishermen are now on the Jordan, Rapid and Boardman rivers and their tributaries. A small party from here returned last week from a few days' trip to the Jordan, and brought with them 150 pounds of brook trout averaging half a pound. Another party of two from here has just returned from the Boardman, near Mayfield; absent four days, and caught 400 fine trout. Musquetoes have not been troublesome. Fine pickerel and bass fishing in Grand River, and in nearly all the small lakes surrounding this vicinity and in the northern part of the State. H. B. W.

WISCONSIN—*Neenah, June* 13.—The fishing here in Lake Winnebago is excellent; never saw it better. Black and silver bass, pike and pickerel caught in large numbers and of extra good size. A few shad taken. A gentleman and two ladies at Roberts' summer resort the first of the week, in two days with hook and line caught 301 bass and pike, and your correspondent went out fishing Thursday the 13th, noon, and caught sixty bass and pike. This I call good sport. C.

"KILL YOUR FISH WHEN CAUGHT."—Another correspondent, signing "Grim," of Pottsville, Pa., recommends the method of inserting the finger in the mouth of the fish, and bending the head backward, almost parallel with the back, when the spinal column is severed at the neck, and life becomes extinct almost instantly.

For Forest and Stream and Rod and Gun.

BLACK BASS FISHING.

"To sit upon the river's brink
And see my quill or cork down sink,
With eager bite of perch or dace."

WALTON.

THE most remarkable circumstance about all the writing on the subject of fishing, is the extreme reticence of all the writers as to definite information upon the subject of the kind of lines to use, the bait to use, and the size of hooks. One honorable exception, leaving out garrulous old Izaak, is "Hallock's Gazetteer," than which no better compend can be found in the world. Of rare literary excellence, it is practical in all its details, and should be in in every angler's hands. As to black bass fishing: In the first place, there is very great confusion in the nomenclature of many game fish. In the "Elkhorn," a stream in the blue grass region of Kentucky, there is a fish called bass. He is no more like a bass than a salmon is like a red perch. Long, slender, and as game as a speckled trout, he is the prince of all the game fish for hard, stubborn fighting, and quick, subtle movements, which disconcert the ordinary angler, and leave him oftentimes fuming upon the bank, over the loss of "The finest bass, sir, in Kentucky." The same fish can be found in "Fork Lick," a tributary of the Licking. They are not yellow bass, nor are they black bass. You see I believe in "yellow" bass. I do, natural history to the contrary. To tell me that the slender, finely formed yellow bass is only a black bass, but of a different gender, is to stultify me and all other anglers. I have caught yellow bass and black bass out of the same stream, and have gone home and studied them. They are distinct fish. I believe it; and were this not a paper in which scientific discussion would be out of place—that is, I did not start on science—I would give the reasons for the faith that is in me. Should any French gentleman wish to break a lance with me on this subject, he is invited, with all due courtesy, to give his opinions in FOREST AND STREAM. I promise him some facts that will startle the one-bass theorists; and I promise him that, if confuted, I will yield, if not gracefully, at least cheerfully. I have caught bass, black and yellow, striped and spotted, and green, with fine reels and rods, and give me a long light cane in preference to anything in the shape of a rod. A cane eighteen feet long, one inch in diameter at the butt, with a perfect taper to the end, which should not be larger than a knitting-needle, is the rod of rods for bass fishing. Now take three strands of the very coarsest black silk that you can find, twist them thoroughly, lay them cable fashion, wax them, and you have your line. Make the three strands twenty feet when you commence twisting, and your line will be seventeen feet long when you have finished. Make five or six such lines and cary them with you. Put a buckshot at the bottom, six inches above the hook, which should never be larger than No. 5; salmon hook; use a cork if you fish in still water, and if not, not. Hook your minnow through the back fin, and here your small wired hook does the work, for it does not kill your minnow. Fish on the bottom if you fish in the spring of the year, and half way if you fish in autumn or summer.

With such tackle I will kill more bass day by day than the most enthusiastic lover of the reel and braided lines and ounce sinkers. Has any one who is a finished angler, even ever thought of the vast difference between pulling a fish whose weight you can feel all the time and pulling one whose weight you can never feel in full, for fear that your rod should break or your line snap? In fishing, as in all things else, as our years increase, we fall back upon a severe simplicity, characteristic of our infant days. I remember once, on a bright May morning, going to a mill in Kentucky, then famous for its bass fishing. Fifteen anglers, good and true, were standing on the dam, and these fifteen had caught nine fish. On a ledge of rocks, below the dam, stood two ragged boys, fishing with long, taper, sycamore poles! They had lines made of black flax, three strands to the line, and well waxed. They had a small rifle bullet on their line, and no cork. They had caught thirty fish, some of which would have weighed six pounds, and they sold them to the gentlemen anglers of the rod and reel, who threw their lines to within six feet of the place where the ragged disciples of the art piscatorial were "pulling 'em!" and they caught nary one! Colonel, that lesson sunk deep into my mind. The water was very clear and bright, and the bass were too sharp to be taken with lines that were large enough to hang a man, leaving out bass. And five rifle balls on the line! And a painted cork as large as my fist! *Ecce signum!* "But," says some timid brother of the rod, "will three strands of coarse black silk hold a bass?" Try it, brother, and you will thank me forever! The main reason for using such lines, apart from the question of scaring the fish, is the great increase of the sport. Of course, the smaller and the lighter the line you double your chances for bites, and your fish pulls—seemingly—double as hard. But the rod must be fast—the rod I have named above—or say good-by to your line; for a bass, when hooked, means business, and is quite as lively and game as a bream, with three times his weight.

In such fishing there is true pleasure. No reel to foul; no losing your fish at one hundred and fifty feet; no execrations upon the man that made the rod, the line, the reel, but a quiet peace with all things. I know how pleasant it is to hear the click of the reel. I know how you feel when the fish makes his first leap for freedom, way down the river, under the overhanging branches of the big sycamore. I know with what exultation, having subdued his first wild rushes, you watch the line cutting the water and speculate as to weight. I know all this; and yet, I prefer a light cane rod. But the most killing bait for bass of any kind—black, striped, rock or green—is the crawfish. The rock bass—called red-eye in Kentucky—feeds almost entirely on crawfish, when he can get them. He—the "red-eye"—will bite at the leg of a "peeler" crawfish, when no other bait on earth can tempt him. He is a bold biter, and, with the tackle I have named, gives fine sport.

Judge Bibb, of Frankfort, Ky., by acclamation elected by the angling guild *Premitus* Professor of the Gentle Art, was accustomed to say that "red-eyes" were only fit for women and children to catch. The Judge was an artistic angler. All of his appointments were of the most exquisite character. From the burnished reel to the slender tip of his long rod, all indicated the gentleman and true sportsman. But, finished angler as he was, the Judge was badly beaten once on the Kentucky River.

One bright morning in June, some thirty years ago, the Judge was seated at the mouth of a small creek that empties into the Kentucky River, now, as then, a famous fishing ground. The sun had mounted high in the heavens, and not a single bite had rewarded the patient watch of the expectant angler. Hearing heavy footsteps behind him the Judge turned his

head and saw a brother angler, whose type can be found only in "Old Kaintuck." With a rod longer and heavier than a Kaffir lance on his shoulder, and an old coffee-pot full of crawfish in his right hand, he stalked up to the Judge's fishing ground. He attached a "peeler" crawfish to the hook at the end of a line, about the size of a wheel-band, then sticking his poplar pole into the ground he looked round at the Judge with a patronizing smile. Soon a five-pounder jerked his infantile tree into the water, when, with a mighty effort with both hands, he threw him out over his head. Five times did that heathen throw a fine large bass over his head, and five times did the Judge, by a mighty effort, restrain the righteous anger that boiled in his bosom. For the sixth time did that inhuman violator of all the rules of angling go to his old coffee-pot for a new "peeler." But as he unkinked himself for the sixth bass the Judge met him, fire in his eye and a club in his right hand. In a solemn, judicial tone, he spoke as follows:

"My friend, you have murdered five fine bass this morning, and as an officer of the State of Kentucky I am compelled by the unwritten law of the land to kill *you!* I could stand fishing all the morning and catching nothing with a minnow, but when you come into my presence with a poplar pole twenty-five feet long, with a line taken off your plow horse, and crawfish! and catch bass and throw them over your head, why, you must die!"

How the matter ended I know not; but some say that the fellow "comp'd" by giving the Judge all his crawfish.

Ah, me! and I started to write of bass fishing, and I have said nothing of that at all, but have let my pen wander at its own sweet will among the bright memories and the dearly-loved associations of my boyhood. I could write an article on bass fishing which should be so severely scientific that no one would read it. But I promise one on this superb game fish, in which I shall attack everybody, and no doubt get a sound drubbing for my pains. Fraternally, J. W. ST. CLAIR.

Lawtonville, Ga.

For Forest and Stream and Rod and Gun.

CATCHING GUDGEONS (Dotted Silversides), Chirostoma Notata.

"Despise not the day of small things;" therefore, while your readers, Mr. Editor, are reveling in the recitals of your correspondents of their catches of "big fish;" how they have to "play" them; how to "start" them from their "sulkiness"—to "give them the butt," to "net," to "gaff," and all the rest of fish lore, let one who has tried these devices, and luxuriates in the recollections thereof, tell some of the sport of catching little fish.

There are numerous fresh water streams near the city of Baltimore, similar to scores of others more remote—all flowing into the Chesapeake Bay or its estuaries, which are the resorts of the gudgeon during its spawning season—say from early in April until beginning of June. During this period the fish come in countless numbers, actually crowding the rivulets as they force against the current to their spawning beds, which are as high up the streams as they can reach. The first mill dam or cascade of, say three feet in height, stops their career. Between this barrier and tidewater is the space which the angler seeks, and with the smallest hooks attainable, baited with gentles or earth worms, generally succeeds in taking all he desires. The fish being a delicacy of the table second to no other, is too highly esteemed to be recklessly thrown away, and their beauty and innocent appearance (this is literally a fact) appeal strongly and successfully even to the typical small boy, who, with his pin hook, having caught ten dozen, winds up his tackle and declares he has "got enough," and that it is "a shame to catch any more." At some of the favorite resorts for the gudgeon, which are also those most accessible, may be found "the man and his net," with meshes small enough to serve as a fly trap, dragging the water, thereby spoiling the angling and securing for himself a monopoly, the proceeds of which he disposes of to the disappointed rodfishers, whose ambition is to take home their baskets full and boast of their special good luck.

Imagine a clear, sparkling brook, just before it reaches tidewater. Its banks carpeted with close grass, interspersed with the early spring flowers; the young leaves beginning to cast shadows from the trees that line its banks. A good little company of "nice folk," some ladies, and children a few, are tolerated; then to see the least skillful draw up the "doublets" with a gentle little scream, and the query, "What am I to do with them?"—the ready assistance of cousin John or uncle Tom, and the rapid recurrence of the scene, while John and Tom wish they could get a chance themselves to cry out for help from Mollie or Jennie to secure their prizes. The luncheon is eaten; the sun is low in the Western horizon (where it generally is at sun-down), and the whistle of the locomotive summons "all a-board" for home. Oh! the anticipation of to-morrow's breakfast!

The process of preparing the fish for table is very simple. The scales are so delicate as to require for their removal only the necessary handling to remove the gills and viscera. The usual mode is to cook in hot lard, butter or olive oil (the first is the best), taking care to use cracker dust or corn meal sufficient to keep the fish separate. Served as hot as practicable. Break off the head, a touch of salt (no other condiment is permissible), and two fair bites—on your part this time—and you have a taste of the finest fish in our waters.

To take these little beauties artistically, requires the smallest tackle to be procured. A "spreader," to be procured readily at the shop, or easily made by turning loops into the ends of a lady's hair-pin, admits two hooks or fine gut. A small float—quill preferred—good bait, and with a light reed rod, the outfit is complete.

The gudgeon lingers in the tide water, near the mouth of the fresh brooks long after the spawning season is passed, and may often be taken as late as December, if the ice does not freeze them to deeper water. At this present time the small fry are just hatched, and may, by careful observation, be seen on the surface of the stream floating downward to seek such quarters as instinct may dictate. Whether they remain with the adults at the head of tide, or near it, during the winter months, is not yet ascertained.

A recent issue of your hebdomadal answers my question at close of article "Gudgeons," viz., wherein is the difference between English "whitebait" and "American gudgeons?" The gudgeon cannot be the immature progeny of any other fish (as the whitebait is said to be herring, alewives, etc.), as it (the gudgeon) is full of spawn, and runs up stream on shoals (or schools) of both sexes. The young fry (about a quarter of an inch in length) are coming down stream abundantly, and the season to take the mature fish is practically over by the first of June. N.

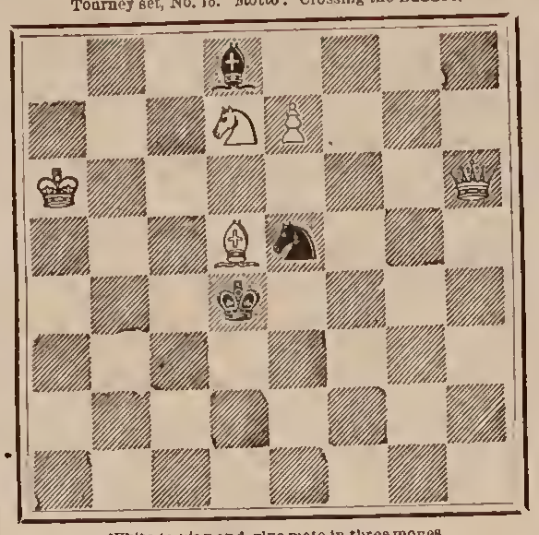
The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

☞ *Remember that our Problem Tourney closes July 1, 1873. We expect that all our friends will enter at least one set.*

Problem No. 19.

Tourney set, No. 15. Motto: Crossing the Danube.



White to play and give mate in three moves.

SOLUTIONS TO PROBLEMS—NO. 17.

1—Kt-K3 2—R-B6 3—Mates	1—Q-K8 2—Any	1— 2—P tks Q 3—Kt mates	1—Q-Q4 2—Any
1— 2—Q-Kt6 3—Mates	1—R-R2 or Kt2 2—Any	1— 2—B-B7 3—Mates	1—R-R3 2—Any
1— 2—Q tks Q 3—Mates	1—Kt tks P or [Kt-Q 2—Any	1— 2—R-B6 ch 3—Mates	1—K tks R 2—Any
1— 2—R (B) B6 3—Mates		1—Any other 2—Any	

Game No. 67.—SICILIAN OPENING.

White. Herr A.	Black. Herr P.	White. Herr A.	Black. Herr P.
1—P-K4	1—P-Q B4	21—R-Q sq	21—Q-K2
2—Kt-K B3	2—P-K3	22—P-K Kt3	22—Kt-K3
3—Kt-Q B3	3—Kt-Q B3	23—B-Kt2	23—P-K Kt3
4—P-Q4	4—P tks P	24—Castles	24—K-Kt2
5—Kt tks P	5—Kt B3	25—K R-K sq	25—Q-B2
6—Kt-Kt5 (a)	6—B-Q Kt5	26—R Q5	26—P-K B3 (h)
7—Kt-Q6 ch	7—K-K2	27—Kt-Q6	27—Kt-Kt4
8—Q B-K B4	8—P-K4	28—Kt tks B	28—K R tks Kt
9—Kt-B5 ch	9—K-B sq	29—R Q Kt5	29—P-Q Kt3
10—Q B-K Kt5	10—P-Q4 (c)	30—P-K B4 (i)	30—Kt-B2 (j)
11—P tks P	11—Q tks P	31—P tks P	31—P tks P
12—Kt-K3	12—Q-R4 (d)	32—R-K Bsq	32—Kt-Q3 (k)
13—Kt-B4 (e)	13—B tks Kt ch	33—B tks Kt	33—Q tks B
14—P tks B	14—Q tks P ch	34—R tks P	34—Kt-K B4
15—B-Q2	15—Q-Q5	35—P-K Kt4	35—Q-B6
16—P-Q B3 (f)	16—Q-K5 ch	36—R-Kt7 ch (l)	36—K-R sq
17—B-K3	17—Kt-Q4 (g)	37—P tks Kt	37—Q-Kt4 ch
18—P-K B3	18—Q-R5 ch	38—B Kt3	38—R-B5
19—B-B2	19—Q Q sq	39—P tks P	39—R-Q sq
20—Q-Kt3	20—Kt-B5	40—Q tks R	Resigns (m)

NOTES.

(a) The attack derived from this sally does not turn out as strong as might appear, if the defense answer on the seventh move, as in the present game; and we should, therefore, think that P-K Kt3, often adopted in similar situations, would also answer in the present case, *e. g.*: 6—P-K Kt3, 6—B-Q Kt5; 7—B-Kt2, 7—P-Q4; 8—P tks P, 8—Kt tks P; 9—Castles, and if Black takes the Kt with the B, White will ultimately obtain a strong attack by B-Q R3.

(b) This move is, we believe, an American invention, and its illustrations in the present game cannot, we believe, be quoted in evidence against its soundness, though the attack finally succeeds.

(c) We should have preferred Q-R4 first. White could not then answer Q-Q3, for in that case Black would still capture the K P with the Kt; and, if White defended by B-Q2 or B-Q3, then the continuation of P-Q4 became still stronger.

(d) Black seems to be trifling with the danger. Surely he could, with greater advantage, first take the Kt with the B checking, and then exchange Queens, *e. g.*: 12—B tks Kt ch; 13—P tks B, 13—Q tks Q ch; 14—Kt tks Q, 14—Kt-K5; 15—B-K2, 15—P-K B4; 16—P-K B3, 16—Kt-K B3; 17—B-B5 ch, 17—K-B2; 18—B-B4 ch, 18—B-K3, etc.

(e) Evidently the most promising resource under the circumstances, and apparently also sound.

(f) Time was a great object, and the attack had to be taken in hand vigorously, otherwise Black would have forced an uncomfortable retreat of the Kt by B-K3.

(g) B-K B4, with the view of offering the exchange of Queens at B7 was apparently more to the purpose.

(h) The precursor of future trouble, for it weakens Black's tenderest flank where the K has to be defended. Wearisome as it looks, we should have elected to retreat the Kt from K3 to Q sq, threatening B-K3.

(i) The way in which the Professor has accumulated minute advantages, and kept up a puzzling attack, is thoroughly admirable. The brilliant stroke he dealt at this point would have felled many a stout adversary.

(j) But Paulsen is not dazzled, and coolly gives the correct answer. Simple as it looks, it covers combinations which were certainly extremely difficult to see through. Had he, for instance, yielded to the inviting temptation of taking the P, the game might have proceeded thus: 30—P tks P; 31—B tks Kt, 31—Q tks B; 32—R tks Kt, 32—P tks R; 33—R-K7 ch, 33—K-R3; 34—Q-K B7, 34—R-K R sq; 35—Q-K Kt7 ch, 35—K-R4; 36—P-K R3, threatening to sacrifice the Q by taking the K R P, and winning easily.

(k) Mr. Paulsen has confronted the brunt of the hottest attack with remarkable steadiness up to this juncture, but now he fails to grasp security, which we believe was within reach, though it would not appear clear at the first blush. He ought to have moved the R to Q-Kt sq with the object of making his position impregnable by Q-Kt Q sq, unless White took that Kt at once. In the latter case, after the Q retaking it, the unmasking of White's Q B would do no harm. The most menacing way of removing the B, was B-Q4, and then Black would simply take it off with the P, and stand the answer of Q or B tks Kt ch with impunity.

(l) Anderssen every inch. If the R be taken, Black's Q is lost by B-Q4 ch and he cannot give the ch at once, for the Kt would take the B, attacking the Q.

(m) The R is simply swept off without recompense. If Black take the Q, mate follows in two moves, commencing with B-K6 ch.

New Publications.

PRACTICAL BOAT BUILDING FOR AMATEURS. Illustrated. By Adrian Neison, C. E., "The Bazaar" office, 170 Strand, W. C., London, England. Price 75c.

This is a neat little volume published by a gentleman, himself an amateur, for the benefit of others desirous of following in his footsteps. We can especially commend chapters I. and II., in which full instructions are given for drawing plans, calculating the necessary centres, the buoyancy, and other points required in a skillful design. A complete list and description of the tools and materials used in construction will also be found of value in the way of a general guide to the beginner. We say as a general guide, because in America we have a larger range of suitable woods than are at the disposal of amateurs abroad; and also because some of our woods are not rated quite as high for certain purposes as our experience in America justifies. Some of the dimensions for scantling or for siding and moulding size given in subsequent chapters, are rather heavier than we are accustomed to in America, where our superior materials and joiner work has rendered boat construction an art much more elastic and graceful than in England. Still, the principles involved in design and manipulation of course being alike, this work on boat building will be as favorably received in America as it has been in Europe. Among the many designs the book contains, those of the Rob Roy and canvas canoe strike us most favorably. The same may be said of the Canadian batteau, a type of boat with which the author has had experience during his sojourn on this continent.

THE YACHTMAN AND COASTERS BOOK OF REFERENCE, by Capt. Wm. A. Pratt. Case, Lockwood & Brainard Co., Hartford. $1.75.

We are always glad to welcome anything in the way of professional nautical literature. This branch has so far been very much neglected in America and the nautical public, and particularly our yachtsmen, have been obliged to look altogether to England for standard works of information of a modern character. It is all the more pleasing therefore to lay before our readers the work of Captain Wm. A. Pratt and to be able to give his book our hearty approval and indorsement. Navigation has been sadly neglected among the average yachtsmen, deterred no doubt by the voluminous character and excessive cost of "Blunt's Coast Pilot" and the full Government Sailing Directions. They have trusted largely to good luck and individual knowledge in making a landfall, or picking their way into port. Captain Pratt's work, which is both handy and low priced, will do away with all haphazard sailing, for it should certainly find a place in the library of every cruising yacht as well as in the cabin of our numerous fleet of coasters. The courses and distance, with bearings of lights are given from Cape Hatteras to St Johns, N. B., together with clear and succinct "sailing directions" for seventy-five harbors, besides storm signals, and other matter valuable to seafaring men. With a book like this in your locker there is no excuse for running ashore, or mistaking lights. The bearings are magnetic, according to the latest government observations, and will thus afford an excellent means of correcting campasses for local deviation caused by the attraction of a yacht's engines, or ironwork. By making a series of comparisons of your compass and the bearings given in the book on different courses the errors of the compass will be detected and may be calculated in the customary manner. Yacht clubs sailing over the N. Y. Y. C. course will find the directions on page 81 of especial value. All know the difficulty of making out the buoys on the course, especially of a murky day, and how troublesome it is to steer a straight course for the S. W. spit. By following the bearings given by Captain Pratt any buoy can be made and the lightship picked up without difficulty. This book appears very seasonable, and yachtsmen contemplating cruises South, or East should not put to sea without this handy little volume of directions. It is bound in waterproof covering, printed in large clear type and will in many cases serve instead of charts.

LLOYD'S YACHT REGISTER. Lloyd's Register of British and Foreign Shipping, No. 2 White Lion Court, Cornhill, London. James D. Leary, 73 William st., New York.

Through the courtesy of Lloyd's London office and Mr. J. D. Leary, their agent at this port, we are in receipt of the new yacht register just published in England. The appearance of this work signalizes the commencement of a new period in yacht building. Hitherto every builder, especially in America, has consulted his own notions and conveniences in proportioning the scantling of his yachts, the owner generally knowing nothing concerning the requirements of strength and durability, and often paying the highest rates for work of the most flimsy and untrustworthy kind. The lack of some authoritative standard to hold the builder to, which could serve as a guide to owners and purchasers, we have always severely felt. Many of our yacht builders having started in life making small sail-boats, have not sufficiently readily increased their scantlings when branching out on a large scale. Their lack of experience at sea, and want of examples to follow, have left upon almost our entire fleet the stamp of flimsiness and unseaworthiness. Happily the excellent standard now set up by the tables in Lloyd's Register will remedy this, the most crying evil in our fleet. Owners, before contracting, will have something upon which they can draw up definite specifications, or be enabled to institute comparison between the class of work being delivered them and what such work ought to be if brought up to the highest grade. We do not wish it to be inferred from this that no deviation from Lloyd's tables are to be countenanced. Far from it; for our workmanship, joinerwork and fastenings especially, are generally of a character so much superior to that made in England that we can well afford to slightly diminish the scantlings given in consideration of longer and wider material and the better workmanship common to American artisans. But the tables are of great value as a definite starting point upon which to base such differences as we may deem permissable within discretion. Even after making all due allowances, it cannot be denied that our yachts are built altogether too light, and a return to sound and long-lived construction will be one of the many benefits we look for through the publication of the Register. It contains, besides the classifications to be assigned to yachts built under the survey of agents, a vast amount of useful and practical information. We do not see that any one intending to build can do better than provide himself with the Register beforehand, and, thus armed, infuse into his builder an amount of information which he will, at the present day, be found to stand very much in need of. The tables include dimensions of all the materials and fastenings for yachts from 15 to 500 tons, whether built of wood, iron or composite, an alphabetical list of yachts, signal letters, and yacht owners. In the table of yachts, tonnage (Thames measurement), dimensions, builder, sailmaker, date of construction, port, fastening, sheathing, engines, etc., are given in detail. There are also full directions as to the manner of having a survey effected, a list of surveyors and their addresses, list of subscribers to the book, and other matter of interest. As a means of obtaining a correct idea concerning the wonderful development the sport of yachting has attained in England, as well as an invaluable book of reference, the Register should be found in every yachtsman's library.

National Pastimes.

QUOITING IN CANADA.—A simple, homely game that of quoits. There is none of the dash of lacrosse or cricket about it, but for quiet recreation the pastime has great merits. Firstly, you may pitch your quoits in the shade with that indolent deliberateness which most befits a warm summer afternoon. Then there are opportunities for nice hair's-breadth measurements on disputed positions, as well as good-natured wranglings, which give a zest to the games. In Canada quoiting as a pastime receives much more attention than is accorded the game in the United States. Of the recent quoit matches there a Toronto correspondent writes under date of June 20:

The Caledonia Quoiting Club of Toronto was organized in the year 1874, and has had a varied membership now numbering twenty-five. The officers are John Carruthers, President; John Dickson, Vice President; James Rennie, Secretary. Annual tournaments are held and the championships of the club played for, and also a pitching contest for the championship of the Dominion and numerous other prizes, players from all parts of the Dominion, taking part. Friday, June 14, closed a two-day's match at which twenty-six players entered and some very fine pitching was done. Sixty-one points is the champion standard. On opening the game the players are pitted against one another in pairs, by ballot; those not scoring the required 61 retire, and the others draw again and play each other down. In event of an odd number the one drawing the "bye" counts without playing. The following are the different "draws."

First Draw—Geo Sheppard, 61; John Carruthers, 61; Jos Dobson, 61; W Patton, 61; David Purdy, 61; Jas Rennie, 61; John Brown, 61; S Rennie, 61; Wm Bright, 61; R Sylvester, 61; Jas McTague, 61; W J Reid, 61; W Glendinning, 61; J G Malcolm, 28; R McGowan, 33; F J R Mitchell, 13; Jas Brown, 38; Jas Patton, 26; John Dickson, 35; R A Fraser, 42; John Brown, 51; J Allon, 13; H Cameron, 60; Geo Gibb, 42; A J Reid, 56; W Purdy, 46.

Second Draw—S Rennie, 61; Jas Rennie, 61; Wm Bright, 61; W J Reid, 61; Geo Sheppard, 61; Jas McTague, 61; R Sylvester, 57; David Purdy, 58; Walter Patton, 40; John Brown, 37; John Carruthers, 28; Jas Cobson, 59. Walter Glendinning drew the bye.

Third Regular Draw—Wm Bright, 61; Jas Rennie, 61; W Glendinning, 61; Jas McTague, 55; S Rennie, 60; W J Reid, 58. Geo Sheppard drew the bye.

Fourth Draw—Geo Sheppard, 61; W Glendinning, 61; Wm Bright, 40; Jas Rennie, 42;

Final Play—W Glendinning, 61; Geo Sheppard, 59.

After the championship has been decided the number of points can be as agreed upon. The games were then continued to determine third, fourth, fifth, sixth, and seventh prizes. Intermediate first, second and third prizes. Then not to discourage any, a number of consolation prizes were given.

MANHATTAN ATHLETIC CLUB.—Open handicap games, Club grounds, Eighth Ave., and Fifty-sixth St., N. Y.; June 22. Prizes:—For the one-mile walk and one-mile run, a gold medal to each winner; for the tug of war for light weights, a set of colors to the winning team; for the half-mile walk for schoolboys under sixteen years, a medal. The contests were as follows:

100 Yards Run—First heat, five entries, won in 10½s by T C Thomas, handicap 8yds; second heat, four entries, won in 10⅕s by G W Carr, handicap 11yds; final heat, won by Carr in 10⅕s, Thomas second.

One-mile Walk—Thirteen entries, won by J D Freeman, Manhattan A C, in 8m 3s; E W Brown, second; P J Mott, third.

Tug of War—Teams of five men; Scottish-American A C team defeated by Eagle Base Ball Club team in 2m 17⅕s. Hudson Boat Club team defeated by Harlem A C team in 1m 35s. In a second heat the Eagles defeated the Hudsons in 3m. 45s. Eagles ruled out on charge of foul, and Harlems defeated Hudsons in 2m 23¼s.

Half-Mile Walk for schoolboys under 16 years of age—Seventeen entries, won by G Emig, 3m 51⅕s.

One Mile Run—Ten entries, won by T H Smith M A C, in 5m 2⅕s; T B Bates, H A C, second; A W Anderson, third.

NEW YORK ATHLETIC CLUB.—The long postponed games of this excellent club are appointed for next Thursday. The list of entries is such as to warrant the expectation of a fine display of athletic skill. There are fifty-one prizes and a proportionate number of entries.

UNION ATHLETIC CLUB.—The entries for the Union Athletic Club, Boston, games next Saturday number eighty-one. Among them are the names of many amateurs whose records rank with the best, and the event promises to be an interesting one.

LACROSSE.—A match at Toronto, Can., last Saturday between the Shamrocks of Montreal and the Torontos, resulted in a victory for the latter.

RUNNING IN CANADA.—In a match at London, Ont., June 15, between J. S. Barnes and G. A. Carruthers, 75yds., even start, Barnes soon gained the lead, when at 6yds. snapped a cord in his leg but limped on, running in 7¾s. The physicians say he can never run again.

—Where is the Rod and Gun column of the *Bucks County Gazette?*

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

WOODCOCK, New York.—See head of Game Bag and Gun column.

F. O.—1.—A worst is 1,167 yards. 2. The sack or half of wool is 308 pounds.

NOVICE, Elizabeth, N. J.—July is too early for wild fowl shooting at Barnegat.

W. H. S., Wilkesburre.—The mange mixture will be sent you by express, C. O. D.

R. C. C., Sing Sing.—To register your dog write to Arnold Burges, Hillsdale, Mich.

H. W. H., Lowville.—Write to the secretary of the Narragansett Gun Club, Newport, R. I.

S., Philadelphia.—For bay birds in New Jersey August and September are excellent months.

J. H. S., New Bedford, Mass.—The open season for black bass in Massachusetts begins July 1.

A. K. F., Sing Sing.—For the Bulletin of the Essex Institute address Essex Institute, Salem, Mass.

J. H., Phila.—Write to Peck & Snider, Nassau st., New York, for book on Indian club exercises.

WADING, Baltimore.—You can procure the old-fashioned sewed army brogans at 43 Dey st., New York.

OUR HARRY, Kingston, N. Y.—Is there any fishing in the Bronx River? Ans. Nothing to speak of.

A. M. S., Bridgeton, N. J.—Buy Brown's Taxidermist's Manual, price $1. Orange Judd & Co., New York.

C. L. W., Cantonbury, N. B.—Write to Edw. Norton, Second Connecticut Lake, via North Strafford, N. H.

R. R. C., Sing Sing.—We can recommend to you Geo. Mercer, Williamsbridge, N. Y., as a dog breaker.

DEER'S HAIR.—The address of the firm you inquire about is Deer's Hair Mattress Co., West st. above Canal, New York City.

J. R. N., Newark.—The man is a rascal. We found him out two years ago and have never allowed him to advertise in our columns.

BOSTON.—From the size of your harrier, as you give it us, we should say he was all right. At the shoulder he might vary from 15½ to 20 inches.

WEBB, Nashua, N. H.—"Woodquests" are unfamiliar to our market men here in the city. It is probably a local name, perhaps for wild pigeons.

FIRST WESTMINSTER BENCH SHOW.—Gentlemen who left money with us for above pamphlet can have same returned by sending address to this office.

J. D. S., Quebec.—We do not think your English water spaniel is true if he has as much curl on the cheek and face as you write about. Liver and white is the right color.

INQUIRER, Clearfield, Pa.—The fyke is a long net, the large openings distended by hoops and offering easy entrance for the fish. Once in the fish cannot get out again.

E. A. A., Watertown.—In shooting at the trap under the Hurlingham rules how is the gun to be held? Ans. The butt of the gun must be held below the armpit until the word "Pull" is given.

W. T. J., Fort Gratiot, Mich. Address *Science Gossip*, London, Eng., and *The Country*, London, Eng. You may order them through Wilmer & Rogers News Co., 31 Beekman st., N. Y., who import foreign papers.

TARGET, Aberdeen, Miss.—You should have made a provision for such a case. Were our number 73 we should claim the pellet in dispute; and we now think that 73 should be awarded a prize in preference to 49.

J. C. N., Jr., Philadelphia.—You can go in a skiff from Philadelphia to the Delaware Water Gap, but above Port Jervis you will find much hard poling, as the water is low. There are plenty of good camping grounds.

A. L., Newton.—We are pretty certain that our correspondent meant dry Epsom salts. The person sending us the method of treatment can be relied upon. Would be glad to hear from you and your case. Give it to us in detail.

J. F. H., Aquetong.—Is it possible for a crow to be taught to talk, and if so please tell me as near as you can how to operate? Ans. Slit the tongue and the crow will devote his whole newly-acquired faculty to cursing you for your cruelty.

W. F., Troy.—You advise the use of kerosene for mange and lice. Will it take off the hair? How must it be applied? Ans. Rub the kerosene in thoroughly for a few minutes and then wash off with castile soap and tepid water 15 minutes later.

BRIDGEPORT.—These are two scores in dispute: H. 4 5 4 5 5, 4 5 4 5 5, 5 5 4 4 5—69. T. 5 5 5 5 5, 4 4 5 4 5, 4 5 4 4 5—69. Which of these wins? Ans If shot under the rules of the N. R. A., H. wins, the first 69 having one more 5 in the last round than has T.

C. E. L., St. Paul, Minn.—You will find instructions for building canoes in many of our back numbers. See also book reviews this issue. There are so many different kinds of canoes that we cannot send you particulars until you specify what you want your canoe for.

VAL.—1. Is the —— a safe and reliable gun? 2. Will a 12, 30 shoot buck, or duck shot, and make a good pattern? 3. What is the best length and weight for general upland shooting? Ans. 1. Perfectly so. 2. Yes. 3. Just the size you mention, 12 gauge, 30in barrel.

F. P. & Co., Oshkosh.—A spaniel of mine is losing all his hair from one side of his neck. The place has turned greenish and is offensive. He seems dull and is continually twisting his head. Ans. Your description is that of gangrene. The cause should be ascertained and removed.

J. D. H., Nashville, Tenn.—What is a goggle-eyed perch? Ans. A goggle-eyed perch is a strawberry perch, called chub in South Carolina; crappie in Missouri; grass bass in Ohio; chinkapin perch in Louisiana and sac-a-lai by the Creoles. Its scientific name is *pomoxys hexacanthus*. See "Sportsman's Gazetteer."

W. H., Providence.—Much obliged for information about motor. As to the hammerless gun we are very much predisposed in its favor, though we have not as yet used one. It seems to be quite perfect and we really see no room for improvement. As to construction it is simplicity itself. Like all new things, however, it is objected to.

F. S., Oakland, Colfax, Cal.—1. Are the firms of —— and ——, of ——, reliable? 2. Is Hallock's "Gazetteer" bound in cloth, or paper, at $3? and is it a standard work? Do you know from whom I could get back numbers of the *Oologist*? Ans. 1. Both parties most reliable. 4. In cloth, and standard. 5. Address *The Oologist*, Oneida st., Utica, N. Y.

RUPEE, Philadelphia.—Much obliged for information. We found out some time ago that Wehley & Son made the guns. It is not surprising, however, that Greener nor Eley knew the make, as the guns are built for the American trade. What we are certain of is this, that the Messrs. Grubb in Philadelphia would not sell them unless they were good guns.

F. B. Y., Trenton.—1. At what time is it against the law to catch black bass in the Delaware? 2. Is there any law against fishing for pike in mill ponds with a hook and line? 3. Is there not a law against fishing with a net in mill ponds and creeks? 4. What is meant by point blank range? Ans. 1. April 1 to July 1. 2. No. 3. Yes. 4. See F. and S. May 30, 1878, page 328.

BAR NONE.—Would not advise glazed tiles for your kennel, but there is a roughened tile which would be better. Sometimes the back of the tile has ridges which we think would be better suited to your purpose than the slippery side of the tile. You must have a gutter. For white-washing your wooden kennel add some half pint of carbolic acid to your wash.

A. D. B., Carlisle, Pa.—My —— 12 gauge gives an average pattern of 291 pellets in 30 inch circle 40 yards, 3¼ drs. powder, 1¼ oz. No. 7 (317 to the oz.), centre of target 6 inches square, 25 pellets; same charge, 45 yards, target 4 FOREST AND STREAM, 147 pellets. Would a 12 gauge full choke —— do any better? Ans. An excellent pattern and many guns made by crack makers will do no better.

J. B. H., Buffalo.—Deer claws would be objectionable on the show bench. Some 18 months ago a friend of ours was outraged on the receipt of a cocker spaniel (not from your party). It was all deformed, he said. That dog has turned out splendidly and he has refused $100 for him. Still, we don't know your party and must again hold ourselves perfectly irresponsible of advertisements.

D. L. G., Berghen.—The period of gestation in the bitch does not vary as much as you suppose. The period is something between the sixty-first and sixty-fifth day; before or after that it is abnormal. Consult your calendar as to the date, for you must be wrong. Let her lap all the milk she wants. If raw milk should purge, boil it; then oatmeal is good. Cod liver oil you can give her puppies in about the fifth week.

H. G. P., Providence, R. I.—1. Has the proposed Government trial of "Magazine Rifles" been attempted, and if so with what result? 2. What is style of mechanism of the new Winchester rifle (Hotchkiss patent)? Ans. 1. The ordnance board for trial of magazine guns is now in session at Springfield, having opened on the 18th inst. Have heard no reports as yet. 2. The new "Hotchkiss" is on the "bolt system," having magazine in stock and can be used either as single loader or repeater.

SHRIMPS, New Bedford.—I find salt water shrimp the best bait for black bass. How can I preserve them alive for a day or so? Ans. See our Fish Culture columns in present issue. The following method taken from the "Gazetteer" has stood the test: Put them clean and solid into a basket and place on ice in a refrigerator. If to be carried a distance before used, the basket or box in which they are should be packed in ice. If you are near the water a better method is to keep them in a perforated box in the water.

H., New York.—1. Are the shooting qualities of a —— double-barre gun equal to those of others of American manufacture? 2. What will be the cost, and where can I have a hunting coat made? I have the goods. 3. What game is in season in the Catskill Mountains in the months of August and September? 4. What is the price of the game laws of New York and Connecticut of 1878? Ans. 1. Quite so. 2. Consult your tailor. 3. Bears, partridges and foxes. 4. Write the Secretaries of the States and they will send them to you.

W. J. M., Horsham.—1. Is the Dudley pocket cartridge loader as good as represented? The price and where to get it? 2. Have a foxhound that is afraid of a gun. How can I break him of gun-shyness? 3. Does the ground about Sea Breeze belong to any club, and what kind of game is hunted (road and rail I suppose), and time for shooting? Ans. 1 Very good; costs $1.50. Send to Mr. Squires, No. 1 Courtland st. 2 Hard thing to cure in a foxhound. Cap a gun first, and explode it, so as to accustom him. 3. What Sea Breeze? There are over so many

G. A. S., Toledo.—I have a number of brass cartridges which have a rent or open seam close to the head or breech part of the cartridge, about one fourth of an inch long. The rent or open seam is large enough to permit the smoke of the powder to issue out. Whenever I fire one of these cartridges in my gun I find they are always hard to extract. Would you advise me not to use them? Are they in any way dangerous to use? Ans. Not so much dangerous to you as to the gun You might wedge in the head of a shell and have trouble in getting it out. Discard the shells.

A. B. P., Norristown.—1. I am to buy a 40-60 Maynard rifle, and would like to have you tell me how far it can be depended upon to place the bullet in the regulation sized bull's-eye every shot? 2. Which bullet would you advise me to use, the No. 2 or the No. 3 cylindrical? 3. What is the weight of the bullet you recommend me to use? 4. Every one questioned as to how many times the Maynard shells can be shot without danger of expansion, answers, "An indefinite number of times." What number of times can one 60 grain shell be fired—50 times, 500 times, or 5,000 times? 5. Which wind-gauge is the most accurate and durable, the Hart, Remington, or Marlin? Ans. 1. 500 yds., if held properly. 2. The No. 2, the medium. 3. 280 grains. 4. Makers say they will last as long as the rifle. Made out of solid metal. 5. No appreciable difference. (The reason why your first was not answered was because it was anonymous.)

S. B. H., Machias, Me.—I own a small pond about 50 acres, depth of water 15 to 60 feet, now stocked with trout; those caught this season about 13 inches average, well fed. It is good water, no grass except at outlet and inlet—a small spring brook. The outlet is about one mile in length; good bottom for trout. Would it be proper, or would it improve the sporting upon it to introduce land-locked salmon. I am keeping it as a reserve for my family and friends. I do not understand the spawning habits of land-locked salmon. Ans. Your lake seems well adapted to land-locked salmon. The spawning period begins about the close of October and ends in about a month. (See our Commissioners Report for '78. Mr. Atkins' notes. Page 911). We should not like, however, to trust too small trout in the presence of land-locked salmon, or of the little locked land-salmon with big trout.

J. T. B., London, Ky.—I want to stock a mountain stream with fish. Please tell me kind to get and where to get them. Runs fresh and cold all the year. Forty to fifty miles to the mouth, some slight falls and two mill dams on the stream near mouth. Would trout, salmon, or bass be likely to stay above the dam? Cool, deep pools all along and well stocked with minnows of different kinds. Some pike below the upper dam, none above. Got one last week weighing ten pounds between the dams. Ans. Your mountain waters being similar to those of the Tennessee ranges we would advise you to transport mountain trout from Tennessee. Geo. F. Akers, of Nashville, State Fish Commissioner, can aid you. Put mountain trout into the head waters of your streams, black bass (called trout and club at the south) in the middle waters and let the pike breed down below the dams. The bass will probably not run up high enough to encroach upon the trout. To learn how to transport fish refer to our fish culture department in this issue.

C. W. K., New York.—Though we have, with one or two exceptions, no really fast steam yachts in America to compare with the English, our river steamers are universally faster than those abroad. English passenger steamers rarely reach sixteen knots an hour in actual practice, the Dublin Royal Mail packets being the fastest, we believe, in Europe, and they made only eighteen knots on trial at the measured mile under the most favorable circumstances. The Reindeer, on the Hudson, made 116 miles in 4h. 57m., including five landings. Allowing 3 miles an hour for current or tide, gives the speed of 20⅗ miles per hour as the maintained speed. On a spurt she could reach 22 miles. The Alida averaged 22 miles, the Daniel Drew made 21 miles, not tide, including landings; the Chauncey Vibbard ran from Rhinebeck to Catskill, 23 miles, in 1h. 6m.; the Mary Powell has averaged 21 miles, and the Sylvan Dell over 20. Of large ocean steamers, the City of San Francisco, built by Roach & Son, and the Hudson, built by Pusey, Jones & Co., average greater speed on less coal consumption than any English steamers.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INOCULATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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All transient advertisements must be accompanied with the money or they will not be inserted.

No advertisement or business notice of an immoral character will be received on any terms.

*** Any publisher inserting our prospectus as above one time, with brief editorial notice calling attention thereto, and sending marked copy to us, will receive the FOREST AND STREAM for one year.

NEW YORK, THURSDAY, JUNE 27, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. No PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

☞ Trade supplied by American News Company.

CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, June 28.—Creedmoor: Fifteenth battalion. Regatta: Yale vs Harvard, at New London. Cricket: Philadelphia vs Dorian, at Nicetown.

Saturday, June 29.—Creedmoor: Remington Long-range; Amateurs' 200 yds.; Seventh Regiment trophy. Nova Scotia Yacht Squadron Harbor Cruise. Union Club (Boston) Annual Spring Games. Cricket: Germantown (2d) vs Belmont (2d), at Nicetown; Chestnut Hill vs Young America, at Chestnut Hill; Merion (2d) vs St Timothy, at Ardmore.

Monday, July 1.—Nahasset Yacht Club Regatta, at Cohasset, Mass.

Wednesday, July 3.—St. George vs Young America cricket match at Hoboken.

Thursday, July 4.—Regattas: Seawanhaka Annual, at Oyster Bay; Savannah Yacht Club; Detroit, Mich., Open; Duxbury, Mass., Yacht Club; Lowell, Mass., Open; Boston City; Buffalo City; Albany Open Amateurs; Royal Henley, Eng. Athletics: New York A. C., at Mott Haven; Staten Island A. C. Summer Meeting; Norwich, Conn., Caledonians; Scottish-American A. C., New York.

GOING WEST.—Charles Hallock, Esq., managing editor of FOREST AND STREAM AND ROD AND GUN, left us on Saturday by the Old Dominion steamer *en route* for the West via Virginia, Kentucky, and Minnesota. His wife accompanies him. He will revisit the territory covered by his trip of last summer. The letters which he then wrote, setting forth its natural attractions, have been so favorably regarded that the Grand Rapids and Indiana Railroad Company traversing Michigan have had them republished in a pamphlet to advertise the road. As Mr. Hallock always utilizes his vacations by bringing new regions into notice, we are pleased to state that nearly all steam lines have been most prodigal in furnishing him every facility for investigation. Mr. Hallock will probably extend his journey to New Mexico, which is now made easily accessible by the recent completion of the Denver and Rio Grande Railroad.

TO CORRESPONDENTS AND CONTRIBUTORS.—An unusual press of material this week has obliged us to defer several articles and communications. We ask the indulgence of our correspondents and contributors.

A CARD.

HALLOCK'S AMERICAN CLUB LIST.

In order to render this work complete and serviceable, clubs or individuals will confer an obligation upon the publishers by sending us the names and addresses of their President and Secretary, in order that they may be printed in a revised edition of the Club List also designate errors and send names of any clubs not mentioned.

Purchasers of the first edition will receive a copy of the revised Club List free.

FOREST AND STREAM PUBLISHING CO.,
111 Fulton st., New York.

EXPLORATIONS IN FLORIDA.

A PRACTICABLE WATER ROUTE ACROSS FLORIDA FROM JACKSONVILLE TO THE GULF OF MEXICO.

IT is with no little satisfaction that we print the following letters. They furnish the solution of the intricate problem which we and others have for so many years been trying to solve. During the years 1873-6 the FOREST AND STREAM went to considerable expense in fitting out the "Fred Beverly" and "Al Fresco" expeditions to Lake Okeechobee, the results of whose respective explorations are fully set forth in the book entitled "Camp Life in Florida." This volume not only contains most valuable general information regarding the climate, geography, fauna and resources of Florida, but describes localities in the interior and along the coast which had previously been wholly unknown. Fred Beverly gave us an insight into the domestic life of the remnant of the Seminole Indians which still inhabit and cultivate with their negro slaves the regions bordering the Everglades, and described as far as he could the fluvial system of the interior, a map of which was printed in FOREST AND STREAM in Vol. II., No. 10 (April 16, 1874). His labors were afterward supplemented by a party of gentlemen, of whom several were from Indiana, and their discoveries and routes were fully described in the FOREST AND STREAM of Dec. 30, 1875 (Vol. V., No. 21), and illustrated by a full-page map and other diagrams. Meanwhile the indefatigable Dr. Chas. J. Kenworthy, better known as "Al Fresco," was equipped with a boat selected for the special service, and examined the watercourses, including the Caloosahatchie, which were supposed to communicate between the Gulf of Mexico and the lacustrine bodies of water in the interior of the State. What we give our readers this week is the sequel of their efforts and the proof of the correctness of their theories and endeavors. A low stage of water alone prevented them from accomplishing what fortuitous circumstances have enabled others to do. Much credit belongs to all concerned, and we do not know which most to admire, the pluck of Fred Ober ("Beverly") who waded waist-deep through mud and water into the home of the alligators and moccasins, or of Mr. Driggs who pursued his lonely way through the sawgrass and submerged marshes around the headwaters of the Caloosahatchie. Messrs. Ingram Fletcher and A. M. Conklin, of Indianapolis, have been most persistent in their researches, and the latter has done much toward explaining the system of canals and earthworks which are found along the fluvial route discovered and now located by the several explorers referred to. There can be no doubt that these gentlemen have merely traced out an old and long abandoned line of intercommunication across the State, which was once defended by earthworks by the jealous inhabitants who populated that section. This water route is now choked at all times by sawgrass, water lettuce, and other rank vegetable growth, and at some seasons is dry in places; but that it can be made practicable by reopening channels and digging canals, at no great expense, can be easily demonstrated. Whether it will ever be utilized remains for the future to disclose. The fact, as made known, is sufficiently valuable for the present. We subjoin the correspondence:—

FROM OKEECHOBEE TO THE CALOOSAHATCHIE BY WATER.

Editor Forest and Stream: As you are well aware, several of us have made three different rounds of Lake Okeechobee with the belief that a passage could be found across the sawgrass to Lake Flirt, and from thence down to the Caloosahatchie. This theory seemed the true one this spring when we found the lake (Okeechobee) but two feet higher, while the Kissimmee River indicated ten and twelve feet more water. The three previous seasons the river averaged one hundred and fifty feet in width—this season it was fully three miles wide! All this was sufficient to convince us that the water "spilled" off in the direction of the Caloosahatchie.

Barber, Dr. Hunt, Packard, Rooney, West and myself left Fort Bassinger with the river "booming," so that we skimmed across the "bonnets" and marsh-grass with ease. But our stay at the Heronries was too long, and our time required us at Mellonville by the first of April.

On our return to Fort Bassinger we met Mr. James W. Driggs, of Orange Hammock, who had started in pursuit of our party, determined to go across the Caloosahatchie with us. To him belongs the honor of taking the first boat across to the Gulf by way of water communication. A few days since I received the enclosed letter from him, which you are at liberty to publish if you so desire. In conclusion I will say of Mr. Driggs that he is a thorough explorer. He has spent several years on the Kissimmee, gathering eggs and preparing bird skins. Any one wishing to communicate with him will find him at Fort Mead until October.

I. F.

ESTERO, Monroe Co., Florida, April 4, 1878.

MR. INGRAM FLETCHER:

Being weather-bound here on the coast twenty miles south of Punta Rassa by a strong northwest gale, it seems a proper time to begin to write you an account of my exploring trip. * * On Monday morning, after I saw you at Mr. Dougherty's, I started from Platt's place, four miles below Fort Bassinger, taking as working passengers to Fort Myers, Messrs. Pierce, Platt and Jones. We sailed down the flooded prairie on the east side of the river (Kissimmee) until within a few miles of the lake, and then turned short across the marsh, entered the channel, and down its winding course to the greatest lake of the South, the mysterious Okeechobee; head wind, some waves, and green hands get scared. Take down sail and row along near shore. Night comes on and we have no camping ground, but we pushed our boat into the marsh, beat down brush, and piled it beside the boat for a fire-place, having wood aboard, cooked supper, and passed the night on the boat, resting very well considering circumstances.

Tuesday Morning.—Took breakfast very early, and by daylight were well under way, rowing again, for there was little or no wind all day. Found no obstruction in Fish-Eating Creek, and stopped for dinner at the banana plantation nearly a mile from the lake. Dinner over, we proceeded until within sight of the mound at old Fort Centre, and then turned south across the marsh back of the sawgrass and down the prairie; but here it was not the free open sailing as on the Kissimmee prairie, and although the water was two or three feet deep we encountered a great deal of switch grass, coarse prairie, but poled along without wind three miles an hour and camped on an old Indian field in one of the small hammocks which dot the prairie all the way; but most of them are flooded now. Here we had a good camp with plenty of wood. Next morning we started again, having the wind south, while our course was a few degrees west of south. No change for some time, and then we saw fine timber beyond the clumps of hammock on the prairie, and soon it loomed up in front, and also off our port bow. We were running S. S. W. now and thought this timber must be on the south side of the Caloosahatchie prairie, which proved to be the case.

We now begin to notice a slight current in that direction, and before noon were sailing W. by S. down the marsh, not sawgrass, through which winds an open slough—*the head of the Caloosahatchie River*, distant from old Fort Centre perhaps eighteen miles. Two miles farther down, the channel enters the Indian cane and is obstructed by water lettuce; so we get outside on the prairie (south side) finding four feet of water, like a lake. After going perhaps seven miles from where we first entered the river, we struck Lake Flirt which, at low water, is a beautiful prairie, the bank of the river fringed with willow; and at Fort Thompson, now from four to six feet under water, is a splendid park-like place with river flowing rapidly between its walls of rock. Below these falls the tide flows, they say; but now the giant live oaks and clumps of cabbage palmettos seem standing in a lake of water, with current barely flowing. Soon the river gets crooked, as we pass down, winding through the heavy hommock of oak and cabbage, the current increasing. We camp for the night on the first dry land we find—a pine bluff three miles below Fort Thompson.

For the next five or six miles the banks are getting higher, and we pass now and then a settler's cabin, some of them abandoned because of the flood. Current increases to three miles an hour or more until we get below Fort Simmons, which is an old field where the old road crosses the river. Fort Deyland (pronounced Deno) was an important post during the Indian War, but the building and stockade have been burned, and it is a wilderness again. Below here the country improves some, and we passed several pretty places, but none of them well improved, as the people are not rich, and but few of them are have lived here more than three or four years. Nearly all of the semi-tropical fruits do well on these hammocks. The country seems to have a limestone and shell foundation, and even the many scrubs of palmetto will produce good potatoes, peas, or orange trees, melons, and other things which are raised here to some extent for the Key West market. The people are from every section nearly, and are generally kind and polite.

Our camp the fourth night was seven or eight miles above Fort Myers, on low ground again, and in the night the tide rose so that we were obliged to take up our bed and walk to the boat to keep it dry. Next day we passed the mangrove islands, entered the broad shallow river, with deep narrow channel and low-lying flat woods on either side. For twenty-five miles from the coast the river is one or two miles wide. Fort Myers has perhaps 150 inhabitants living near enough to be neighbors, three stores which sell inferior goods at war prices, a post office, school, Masonic lodge, poor land, and saw palmetto. There are a few bearing orange trees, and Major Evans has a few cocoanut trees bearing. The Major gave us an account of an exploring expedition which was fitted out for the Okeechobee country, and which returned a few days before we arrived. Capt. Henry, he, and several other residents of the river started with two small boats and succeeded in reaching Lake Hick-po-chee, which they say is two by three miles oblong and, unlike many of the Florida lakes, quite deep. They worked some distance into the sawgrass toward Okeechobee, but returned without getting a sight of the great lake. I saw several of the party. Some of them still wear cloths on their hands, and all exhibit blisters from the oars, and cuts from the sawgrass.

Leaving my companions at Fort Myers I sailed on down the river to Punta Rassa, where I caught the first mess of salt water fish, chiefly sheepshead. The town, which consists of two buildings, stands on a ridge of sand backed by a mangrove swamp. One old frame building covers a good deal of ground, and is occupied by the telegraph and post office, signal service station, etc. The other is for the stock men, and both are stilted high on timbers to be above the high tides. A wharf and set of cow-pens complete the town. For five miles south, after leaving the river, we must sail outside; and then I entered the Estero River. Through this salt lagoon and oyster bay nothing is visible but mangrove swamps, shoals, oyster bars, etc., except the pines in the background on the mainland and a fringe of pines on the gulf beach. I found one bird rookery on an island, but few plume birds. I also found one galaxy of pink curlew and captured two of them, but birds are not plentiful in these parts just now. I am told that April is too early, but if I should come in summer the insects would devour me, I know, for they nearly drove me crazy the other night while I was putting up my mosquito bar.

FORT MEADE, *May* 12, 1878.—Persistent head winds, insects, and bad weather admonished me to hasten back, and I returned with fair wind. At Fort Myers I learned that Pierce and Platt had bought a small skiff and returned, but were obliged to hire two men to help them against the current. I came without trouble, but had head winds and a rough time on Lake Okeechobee. Was all day beating up from this side of Fish-Eating Creek to the mouth of the Kissimmee river. There is very little game and few birds or alligators on the Caloosahatchie. The coast would be a pleasant place to cruise in, with a large flat-bottomed boat to live on and small boats to hunt with, only for the insects.

JAS. W. DRIGGS.

THE RECENT YACHT MATCHES.

AMONG the many unprofessional critics who have dilated upon the paucity of entries in some of the recent regattas in the waters of the metropolis, we notice a tendency to judge of the extent and prospect of the sport of yachting by a numerical comparison of the entries of one year with those of another. This inclination is entirely wrong, and leads to very deceptive and valueless deductions. Yacht sailing and yacht racing are two quite distinct branches of the same sport, and the status of one has no connection with, nor does it indicate in any way, the prosperity or adversity of the other. The number of yachts coming to the line with racing colors aloft depends so much upon secondary considerations that inferences based upon their number are misleading. The weather, expenses, temporary attractions abroad, lack of particular ob-

jects or rivalry, absence on cruises, and many minor points govern the amount of spirit displayed in yacht matches. Perhaps one of the chief causes of few entries, however, is the growing conviction that time-allowance in practice is a failure, and the diversity of size and classification is annoying and aimless in too many cases. In light winds and smooth sea, when all is in favor of the smaller boat, the large one is nevertheless compelled to give time to her favored adversary; and again, in heavy winds and a sea the amount granted the smaller craft is based simply upon the theoretical difference due to size, when sailing in smooth water, whereas the greater momentum and power of the larger yacht is altogether left out of consideration and comes to the line unchallenged. Time allowance, unless among yachts very nearly matched as to size, is a dead failure. There is but one way out of the difficulty. Follow the English plan, select certain standard sizes, let owners and builders conform as far as possible to such sizes and race the yachts in classes without time allowance. Gradually our fleets would crystallize to the standards set up, and racing could then be followed to some purpose. To match *Tidal Wave* and *Clytie*, or *Volante* and *Petrel*, is aimless and profitless. "I will never race again unless with something about my size," is an expression too often heard, and goes far to account for the slackening interest and diminishing entries at our regattas. But racing *per se*, is not to be confounded with yachting as a sport. There has never been a season in its annals where so many small craft have been built, or where the Corinthian and cruising spirit has attained its present development. Yachting is not on the decrease, as hasty critics would infer. On the contrary, its prospects were never brighter, its popularity never greater. As a people, we are simply passing from yacht owning to yacht sailing. So much the better.

COFFEE—HOW TO MAKE IT.

If there is anything which people think they can make, and don't make, that thing is coffee. When that peculiar old man in Arabia first found out how to make Mocha, he oracularly said (you will find it paraphrased in the Koran): "Source of joy and bitterness; consoler of man and bane of women." All that this Arab meant, was, that since ninety-nine women in a hundred did not know how to make coffee, the brewing of it would bring trouble to them in reproaches from the men. Now, Miss Juliet Corson very kindly comes forward in defence of her sex, and is willing to tell how coffee is made. We recommend most particularly the receipt which is called "Coffee With a Stick." It is perfectly possible to make the best coffee in this way, providing there is coffee, a pot, a stick and hot water. Having tasted of coffee made with a stick, we declare it to be admirable. We are sure that this summer, many of our readers, when in the woods, will make their coffee "with a stick," and will thank Miss Corson for having added to their comforts. May we, as simple commentators on coffee, say, that Turkish coffee is excellent. There is a very stupid prejudice against the grains in coffee. Just you take, reader, some day, any little copper vessel which will stand fire and will hold about a half a glass of water, and pounding your coffee as fine as you can get it, adding a lump or so of sugar, put it in your water, and bring up quickly to the boil, then let it stand a minute and drink it. Now tell me if it is not barbarous, but good! A few coffee grounds do no harm. The Turks deem the sediment an admirable tonic and thus drink it in Stamboul. As funny a chapter as we know of in "Canoeing in Kanuckea" is where the marine party blow up their coffee pot. Now, we stand up for that particular coffee pot, as that identical pot was the one we had presented to an ungrateful member of that crew. When we gave it to Mr. Alden, we remember distinctly that his face assumed a woe-begone and dazed appearance. We felt sure, because we could not impress on him which was the top or which the bottom of the machine, that some disaster would be certain to occur. The world is to be congratulated, than when the innocent coffee pot was placed on a funeral pyre, big enough to cremate a Suttee, that Messrs. Alden, Holherton and Norton were not sent to Kingdom Come, and this world deprived of the services of three most clever journalists. With Miss Corson's method of making coffee fully understood, we trust that the canoeist of the future will run no such terrible risks:

The best coffee is a hot, clear, fragrant infusion, aromatic and exhilarating. It can be made in any rather deep vessel; either a coffee pot, a tin pail, an earthen pitcher or an iron pot will answer the purpose, always providing the utensil is clean. Intense heat is required to develope all the valuable properties of the berry, but actual boiling dissipates its delicate volatile oil, and extracts its tannic acid; the action of this acid upon the cream or milk generally used with coffee is to harden their albumen into an indigestible compound, which irritates the sensitive membranes of the digestive organs. The strength of coffee must be decided by the taste. One ounce, or two heaping tablespoonfuls of ground coffee will make a quart of pleasant, well-flavored beverage, suitable for breakfast. *Cafe noir*, or black coffee, used after dinner, requires a cupful of coffee to every quart of water. *Gloria*, or burnt coffee, needs a like proportion of coffee and water. French coffee, as served on the Continent, requires six ounces of coffee to each quart of water, and the addition of three-quarters of an ounce of chiccory. Below we give receipts for all these beverages.

Coffee With a Stick.—Have ready the quantity of water actually boiling; if you use a pitcher heat the coffee in a frying pan, stiring it over the fire one minute. If you use a pot or pail, heat the coffee the same length of time in that. For one quart of water use two heaping tablespoonfuls of ground coffee. When the coffee is hot pour the boiling water upon it and stir it with a stick or spoon for one minute; let it stand by the side of the fire, where it will keep hot, but not boil, for one minute; then stir it again for one minute; keep it by the fire for two minutes to let it settle, and then pour it into the cups carefully enough to leave the grounds at the bottom of the vessel. The object of stirring is to thoroughly saturate the coffee with the boiling waters, so that the grounds will sink to the bottom with their own weight.

Cafe Noir.—Proceed as above, allowing one cupful of coffee to each quart of boiling water; if you use a coffee pot with a percolator, or strainer, put the coffee into that and pour the boiling water through it gradually; let it stand near the fire while you are pouring in the water; do not stir or shake the coffee pot, and serve the coffee as soon as you have added all the water.

Gloria.—Make the same as *cafe noir*; sweeten it almost to a syrup, pour a little brandy into each cup over the bowl of a spoon, set it on fire; and when it is half consumed, blow out the flame and drink the coffee.

Soyer's French Coffee.—Stir togeher over the fire six ounces of coffee and three-quarters of an ounce of chiccory, until hot; pour over it one quart of boiling water, set it by the side of the fire for ten minutes, and then serve it with milk and sugar; it can be made in a percolator, or in a pail or pitcher, stirring as in the first receipt.

Camp Life Menus.—We are in receipt of numerous letters from correspondents who, not being bachelors, confess their masculine ignorance of the culinary art, and crave enlightenment as to the mysteries of the kitchen. Appreciating their plaint we shall, from time to time, endeavor to give to our friends, suddenly cast upon their own resources in the woods, such hints and receipts as shall absolve them from all dependence upon a feminine monopoly of these accomplishments. We shall studiously confine ourselves, however, only to such *menus* as are adapted to the woods alone. The bare intimation of the average man ever becoming independent of a helpmeet in his domestic life suggests a radical revolution in society which would be as deplorable in its character as fatal in its effects. We append a part of one of several letters which we have received:

"The sluggish stream furnished no better fish than the ordinary sun, the sprightly shiner, the ever snapping perch and the slimy, despicable bull pout. The kettle was half filled with water, and the parsnips, onions and potatoes cut into slices and set boiling merrily for twenty minutes with a large piece of pork. Next the fish were cut into pieces and all kinds cast in without exception. Last, when the fish was done, a quart of milk and a lump of butter were added, and as soon as the mess showed signs of boiling it was served with hot toast. Nobody knew what dish was originally intended, or would result, but on tasting, we all, with one voice, called it oyster chowder, and a very good one it seemed to be. Nobody ate anything else. The success of the experiment was doubtless due to the parsnips and made a very pleasant variety in the course of our camping out cookery. We record it as a hint to other wanderers, and with the hope that you will publish all Miss Corson's new dishes, venturing only to suggest to her that what we crave is ingenious variety of the fewest and simplest materials, such as are alone procurable in the woods. H. D. J.

Fish Chowder.—The following receipt for making chowder is from C. F. Hotchkiss' new book entitled "On the Ebb," printed by Tuttle, Morehouse & Taylor, New Haven, Conn. The best fishes for chowder are cod, blackfish and sea bass:

Put the kettle on a slow fire, of a capacity sufficient for your needs; put in a layer of clear sliced salt pork;
Put in a layer of clear cuts of fish, free from bone as possible;
Put in a layer of clear sliced potatoes;
Water to cover only;
Repeat the three layers twice, after which one pound of butter, with pepper and salt to suit;
Pour in one pint of brandy, one pint catsup, one pint port wine, the juice of six fresh lemons;
Then, for the purpose of knowing when done, put three good sized potatoes on top;
No pilot bread or crackers in the kettle, but they should be toasted, stewed in butter and served separate.
No meat or flour; don't burn, or forget the lemons.
Serve the chowder from the kettle, unless you have extra large platters.
Fish cuts should be tied in muslin.

Send Hotchkiss a dollar for his little book, and you will be interested. It contains much information regarding salt water fishing in Long Island Sound, which fishermen will find useful.

For the Cold Country.—On Wednesday last the Eothen, Capt. Thomas F. Barry, left New York for her long cruise amid the ice. The departure of this vessel has a certain scientific importance, since she carries out Lieut. Schwatka, U. S. A., Lieut. Gilder, Henry Klutschak, Frank Melems and "Esquimaux Joe" Ebberling. The mission of these volunteers is to find the remains of Sir John Franklin. The Eothen is a stanneb whaling schooner of some 120 tons. Her intention is to land her party of explorers at Whale's Point in Hudson's Bay. Here, if possible, dogs and sleds will be bought of the natives, and then some more distant point on an island in the Gulf of Bothnia will be sought for, where it is reported the remains of the brave English Arctic explorer are to be found. The schooner expects to be absent some thirty months, and a meeting place has been agreed upon in Repulse Bay in the spring of 1880. The exploring party hope to find musk ox in abundance. The party is well supplied with Winchester, Sharps, Whitney, Remington and Springfield rifles. During the long absence the Eothen will cruise for whales. The outfit of the party is due to the liberality of Chief Justice Daly and to Carson Brevoort, Esq. Of course ample stores of food have been carried out. At the suggestion of a correspondent of this journal we called on Captain Barry with the request that attention should be paid to the ornithology of the countries he visits. It is quite a question as to the brant, which are said to breed in the neighborhood of King William's Land. The Captain has assured us that he will do his best in procuring information on this and kindred topics in natural history, all of which we trust to present to our readers at some future day.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2 Sect'y., Clark Pritchett, Nashville, Tenn.
Wisconsin State Sportsmen's Association.
Massachusetts State Sportsmen's Association, at call of President
Missouri State Sportsmen's Association.

Messina Quail.—The Messina quail received by the Salisbury, Conn., Club, and liberated by them as detailed in our columns last week, were part of a shipment of which other distributions were: 200 to the Rod and Gun Club, of Springfield, Mass.; 400 to Northampton, Mass.; 200 to Rutland, Vt. We have already announced the return this spring of some of the original birds liberated at Rutland last year. The number of birds now in the country is so large that the question of successful importation cannot long remain unsettled.

—A correspondent in warren, Pa., writes under date of June 21:

The "Warren Club for the Protection of Game and Fish" have just received from Mr. D. Bonano, of Messina, a consignment of 192 quail (200 ordered), all being in excellent condition and strong flyers. D.

—A New Jersey correspondent also writes:

Dear Sir: On Saturday I received from Messina, Sicily, two hundred African quail, or, as they are generally called, "migratory quail." I put them out in Morris County, New Jersey. They were all strong birds; none of them alighted on their escape from the box within five hundred feet, except one whose wing feathers were broken. They were sent out by Mr. Bonano, of Messina, through the kindness of Mr. Evans, our Consul in Sicily, to whom the American Acclimatization Society desire to return their thanks for his great politeness and attention to their order. If we can succeed in acclimating these birds, we shall have done a good thing for the sportsman, the farmer and the table, as they are a first class game bird, feed largely on insects that are injurious to vegetation, and are very delicious as food. They are said to be better than woodcock. Their flesh is unlike our quail, in being dark instead of white. They are about half the size of our birds. The "Duke," with whom I conversed while shipping the birds at Hoboken, informed me that he had frequently hunted them near Naples, that they arrived in that vicinity about May, and left in September; were found in high stubble; were delicious eating. John W. Greene, M. D.

Cecil County Sportsmen's Association.—The officers of this club, whose headquarters are at Elkton, Md., are: Wm. R. Gilpin, Pres.; W. K. Reckafus, Sec.; R. G. Reese, Treas; Dr. R. F. Tull, Cor. Sec. The club has been very efficient in securing the enactment and enforcement of game protection measures. Occasional.

The Rifle.

FOREST AND STREAM AND ROD AND GUN TEAM MATCH.

On Monday evening, June 24, the Third Association Match of the Sharpshooters' Union of the United States of America was brought to a close. From early morning of June 16 to midnight on June 24 the festivities had never ceased. Each day many thousands of persons visited Union Hill; all day, save on Sundays, the crack of the rifle was heard.

The Americans would not know how to carry out such a vast enterprise with the same success. It is our German friends who have taught us the lesson. We take our pleasure sadly and demurely; we make a labor of it. Now your Teuton, without ever once outstepping the bounds of propriety, goes in for good, honest fun. He enjoys a hearty laugh, and he takes it whenever the opportunity presents itself. Think of it! There must have been as many as 200,000 people who visited Union Hill during the week, and throughout all that time there was never a fight—not even a quarrel. The Schuetzenfest was a festival in every sense of the word, modeled after the fairs held in the Fatherland. There were all kinds of amusements all day long; there were acrobats, rope-walkers, prestidigitateurs, who carried on performances in the open air, and these were paid by the association. Fine bands of music were stationed at intervals through the grounds, who made the air joyous with their harmonies. There were no end of side-shows, which could be visited for a trifle, and there were greased poles to be climbed. On certain days the Turners went through their feats, and the leading singing societies gave vocal entertainments. Long, covered sheds, handsomely decorated, were given over to dancing, where string bands presided. Of course there was beer, good honest lager, in profusion, and mountains of empty casks at the close of each day showed the quantity consumed. One great feature of the Schuetzen Park was the Prize House. This was a real treasury. Through the windows could be seen some $50,000 worth of prizes. There were silver goblets, silver tea-sets, wine-coolers, sewing machines, billiard tables, gold watches, gold and silver medals, and no end of gold eagles. Standing watch and guard over this wealth were the cadets, a corps of young gentlemen who, with gun and bayonet, patrolled the neighborhood of the Prize House. In the long, covered house, which was the rifle-gallery, method and system was the rule. How to accommodate the thousands who shot, how to keep all the scores correctly, and how to make them immediately public, is a secret which our German friends possess, which is beyond the power of our clerical force at Creedmoor. The shooting house having been enlarged for this special occasion, every match was shot on time, and there was no delay. At the Castle a spacious room was given up to the press, and every attention possible was shown to representatives of the newspa-

pers. Contiguous to the press room was the office of the Secretary, and particular thanks are due to Mr. B. H. Tienken, the Recording Secretary, and to Mr. J. H. Behrens, the Corresponding Secretary, for facilities in obtaining scores.

In considering the immensity of this meeting, the great administrative power necessary, and the good judgment and sound common sense which was displayed in carrying out this Association Match, it would be invidious on our part to mention any single name as having alone been conducive to the great results obtained. Captain George Aery, the President of the Association, never for a moment was off duty during the whole week. With a fund of good temper, combined with untold capabilities for hard work, very much is due to him. Mr. Jose, Captain Aery's first lieutenant, with Mr. Anton Meyer, the adjutant, were indefatigable in their labors. On the shooting committee Messrs. H. Raschen, Ph. Klein, J. H. Mueller, J. N. Crusius, and G. A. Kundahl, managed the innumerable details of the matches with the best of judgment. Of course, when so many riflemen are in the field, differences of opinion must exist; but in almost every case, when any disputes arose, the good judgment of the riflemen themselves settled the point, and appeals to higher authority were very rare.

We have given in our last week's issue, and in our paper of to-day, the winners in the various matches. We now come to what was to us one of the leading events of the Schuetzenfest—the team match for the Forest and Stream and Rod and Gun Medal. Our first medal was given early this year, for a team match at the Schuetzen match, our second medal for a team match at Conlin's gallery, and on Monday we had the honor of presenting through Judge Gildersleeve a third medal, to be shot for by teams.

We can safely say that this event caused as much speculation and excitement as any match yet shot in the vicinity of New York, the International matches only excepted. It was known that the crack shots, who had distinguished themselves during the last week at the various targets, were affiliated with various societies. The King, Mr. W. H. Farrow, was a member of one club, and his distinguished rival, Mr. W. Hayes, was the mainstay of another. Then, too, there was the Helvetia Club, celebrated for its skill, with other clubs from New York and Philadelphia, who had entered into the lists with fine records.

It is with a great deal of pride that we record the fact that the winning team, the Zettler, carried off the prize with a superb score, one in fact which it is believed has never been equaled. An average of 199.50, almost 200, for eight men, means that at 200 yards the eighty balls all struck on an average *not over eight inches* from the dead centre of the target. In examining Mr. P. Fenning's score of 223, which has rarely been beaten—that means, too, that in shooting ten shots this rifleman struck the bulls-eye every time at a distance of only three inches from the dead centre of the bulls-eye; M. Farrow's score, 211, is also a very fine one. In the Zettler's score one-half of the team made 200 and over. Mr. Hayes, of the Newark Club, as fine and reliable a shot as can be found in the country, made 218. As had been surmised, the contest for the first prize was between the Zettlers and the Helvetias. Between the Zettlers and their rivals there was the large difference of 150 points.

At 3 o'clock the fifteen clubs who had participated in the match, having fired their last shot, formed in a body and proceeded to the Prize House, where his honor Judge Gildersleeve, on behalf of T. C. Banks, Esq., of the FOREST AND STREAM AND ROD AND GUN, in presenting the medal, made an eloquent speech, of which we present the following abstract. Judge Gildersleeve said: He had not anticipated being present on this important and agreeable occasion; not for lack of interest, but on account of his judicial duties. He addressed the riflemen present with a certain amount of painful emotion. If it had not been for the sad and unexpected death of a gentleman, an officer and a rifleman, the prince of good fellows and the prince of riflemen, Major General Dakin, it would have been General Dakin who would have stood there and addressed them. Judge Gildersleeve delivered an eloquent eulogium on General Dakin, who had been appointed one of the prize committee, and warmly endorsed a plan, now being proposed, of having a trophy to be called the Dakin Trophy, to be shot for at Creedmoor, the trophy to be obtained by contributions among the riflemen of all nationalities in New York. The benefits of rifle-shooting were mentioned by the Judge. "It was a pastime which was healthful and invigorating, intended to strengthen the brain, the hand and the intellect. It tended to develop a proper military spirit within the length and breadth of the land, and gave the necessary preparation when at any time the nation was required to defend itself." In presenting the badge to the Captain of the Zettlers, Judge Gildersleeve congratulated Captain Zettler on the fact of its having been the third medal won by them, all the gift of the FOREST AND STREAM AND ROD AND GUN. The conclusion of the speech was particularly happy, when the Judge declared that the losing teams now perfectly understood "what little things they had omitted doing, which, had they done, would have made them come in first." Appropriate replies were made by the captains of the various teams, and the performances concluded with cheers for the Zettlers, for Judge Gildersleeve, and the FOREST AND STREAM AND ROD AND GUN.

The conditions were: Match to take place at the Schuetzen Park, Union Hill, on Monday, June 24, 1878, each team to consist of eight men. Entrance fee, $15 per team. The team making the highest score to win the Forest and Stream and Rod and Gun Medal. The entrance fee money, after deducting cost of markers, will be divided among the teams, pro rata. All the members of such teams must belong to the same society, and must have been members of it for ninety days previous. Any rifle club or shooting society of the United States will have the privilege of sending their teams without being members of the Union.

Zettler Rifle Club—B. Zettler, captain.

W M Farrow	20	19	23	20	20	21	19	24	25	22—211
C G Zettler	22	25	22	19	19	21	23	18	17	21—207
B Zettler	22	18	21	23	21	18	21	15	14	22—198
Theo Kleisrath	20	16	17	20	20	22	21	19	20	14—189
P Fenning	25	25	24	21	23	25	24	15	18	22—223
Henry Oehl	16	15	24	22	22	20	18	21	16	15—188
M Dorrler	22	11	24	22	20	17	22	23	21	18—200
D Miller	18	13	13	18	23	12	17	21	24	22—181—1596

Helvetia Rifle Club—P. Meyer, captain.

L Vogel	11	19	17	21	24	22	21	22	18	17—192
T Mauz	21	18	21	23	17	20	23	20	16	15—194
A Paul	14	21	15	18	4	21	16	22	19	14—164
N Lewis	13	20	19	20	24	22	21	21	16	24—200
F Landolt	20	15	20	16	25	20	20	20	19	13—188
R Faber	20	17	15	17	17	21	18	16	21	17—179
F W Fliedner	3	11	21	13	24	15	12	23	19	23—164
P Meyer	21	15	14	18	14	20	21	19	11	12—165—1446

Newark Rifle Club—W. B. Briggs, captain.

Belcher	12	22	21	16	18	22	18	21	0	22—172
W Hayes	22	21	23	24	24	19	19	23	21	22—218
H Koegil	23	17	11	15	17	13	4	20	19	17—156
McLeod	11	24	20	18	21	19	23	22	15	21—194
C Koegil	24	26	19	18	5	16	24	19	20	24—185
Gardner	24	22	15	21	20	16	24	24	19	16—200
Seitz	16	20	10	17	23	16	4	21	12	21—160
Cleaviand	14	15	19	15	13	14	18	9	22	17—156—1441

Jersey Schuetzen corps—Capt Henry Lembeck, captain.

A Ermisch	20	23	22	19	24	23	21	22	17	13—203
H Raschen	24	20	21	21	23	19	15	15	16	24—192
J Raschen	23	5	20	19	16	20	23	4	15	21—166
J Dittmar	23	14	14	21	17	23	9	10	13	15—158
A Zeugner	6	1	23	19	22	13	15	17	21	7—144
S Hansen	10	15	23	18	17	14	19	17	23	14—162
J Binmenberg	17	24	20	22	16	25	16	25	24	23—212
M Bergman	9	24	17	14	19	20	17	15	24	23—182—1426

New York City Schuetzen Corps—Henry W. Cordts, captain.

Henry W Cordts	16	19	18	18	22	24	15	24	12	15—184
Jno W Schneider	13	24	15	14	11	21	23	1	24	21—167
Jno R Grohman	19	22	11	20	21	21	21	22	23	14—194
Henry Newman	12	21	11	17	16	18	19	10	22	24—165
B Kuhlman	24	21	20	20	15	20	21	20	16	14—191
Emil Berger	22	17	14	17	17	24	16	19	18	24—188
A Koller	16	15	16	22	20	15	15	7	23	19—168
Chas Keller, Jr	12	20	0	22	16	8	16	20	23	11—147—1404

Zettler Rifle Club, Team No. 2—M. L. Riggs, captain.

M L Riggs	16	17	25	18	14	18	19	21	18	21—187
M B Engel	19	22	14	18	14	16	14	20	15	19—170
R Zimmerman	20	14	15	11	20	24	19	12	14	21—170
C Judson	13	10	18	19	19	23	20	22	24	17—181
F Patterson	11	20	7	23	0	14	3	19	21	17—136
N D Ward	21	12	22	14	22	19	13	9	17	20—169
J Dutil	14	17	15	14	17	21	9	23	23	13—166
G A Schurmann	20	16	20	23	24	20	22	12	21	16—194—1375

Columbia Rifle Association—G. A. Kundahl, captain.

G A Kundahl	6	16	16	22	19	23	14	14	19	17—166
Chas Overbaugh	16	21	19	23	10	19	17	20	9	12—166
Jacob Heintz	13	20	22	18	17	18	21	19	14	20—177
George Baier	14	18	20	21	19	19	18	16	13	8—166
B Lippmann	4	15	5	15	19	20	20	21	18	16—148
John Mink	18	4	19	20	24	23	24	16	17	15—180
Phil Kato	9	18	21	10	21	17	20	18	15	12—161
Chas Horney	20	22	20	19	16	23	20	17	22	14—193—1357

New York Schuetzen Corps—Geo. Aery, captain.

Phil Klein	22	19	17	17	16	18	22	24	17	8—179
Wm Klein	22	15	18	17	20	21	23	20	22	23—201
J F Rathjen	16	10	16	17	16	23	18	23	22	23—184
Wm Hahn	21	21	21	21	18	11	22	0	23	24—182
John Rein	23	19	16	21	15	17	11	17	15	14—168
J H Muller	9	20	0	19	11	16	20	16	14	15—140
President G Aery	25	18	10	13	17	8	10	20	0	19—140
Louis Lane	16	9	21	11	8	21	19	17	11	16—149—1343

Helvetia Rifle Club—L. Dreyer, captain.

L Dreyer	19	24	13	22	17	13	15	20	19	7—169
T Aeschbach	20	19	0	1	0	24	19	21	17	11—132
R Weidmann	19	19	2	12	19	19	2	23	20	19—154
A G Hellwig	25	14	8	11	14	22	19	7	21	25—176
F Kessler	22	15	12	20	12	12	23	21	8	17—162
A Knoepfle	21	11	20	10	6	23	19	9	16	20—155
T Tadler	18	19	23	18	18	11	20	20	22	19—188
T W Naef	18	13	13	19	22	24	22	24	23	23—201—1337

Brooklyn Schnetzen Corps—Herm Posbergh, Captain.

Herm Posbergh	17	15	23	12	6	23	16	14	15	12—153
Henry Muller	18	16	17	10	15	22	21	11	19	22—171
Henry Dohrman	19	11	22	18	18	16	23	18	16	16—177
Geo Pape	5	13	18	22	13	20	18	18	23	15—165
Geo Buddelmann	15	0	5	23	17	9	13	20	22	10—134
Claus Paulsen	23	19	22	21	14	7	22	16	19	19—182
Wm Tomford	15	8	17	15	20	11	20	12	19	20—157
Chas Ziegler	19	21	18	24	15	16	20	21	10	17—181—1320

Seppenfeldt Rifle—F A Grueneberg, Captain.

F A Grueneberg	15	15	8	4	23	10	9	11	25	17—137
Isack Garrison	17	18	22	20	14	18	23	16	20	19—187
Wm Seppenfeldt	19	11	10	20	24	24	24	13	20	18—178
A H Anderson	16	22	20	5	18	18	18	2	19	18—155
E Holtzmann	18	20	21	21	11	23	18	15	24	17—188
M Morrissey	17	0	16	18	15	12	15	19	14	24—143
John W Adams	0	0	17	20	9	21	12	17	14	11—121
Louis Bachman	0	8	2	18	18	7	15	13	16	16—113—1227

Helvetia Rifle Club—C Maltmann, Captain.

A Meyer	20	18	19	8	18	19	5	20	17	9—153
C Maltmann	19	3	0	21	22	19	9	13	13	13—132
J Kaegi	15	12	17	11	14	0	2	15	16	16—118
R Naegeli	19	19	23	22	9	8	0	20	11	19—150
P Tobin	18	20	17	18	10	20	18	19	18	16—175
L A Ameuronx	16	19	4	16	11	14	10	11	8	23—122
M M Helwig	22	4	17	1	11	20	14	14	22	19—144
D Hug	15	21	16	20	18	16	16	17	14	8—161—1165

Brooklyn Independent—Bayha, Captain.

Bayha	18	5	6	20	0	17	0	15	22	12—115
Mattern	18	15	14	13	23	15	13	0	24	0—135
Abt	10	0	9	17	9	15	16	19	0	8—103
Loeber	16	12	18	0	10	0	13	0	19	5— 93
Fuchs	24	12	24	24	15	20	0	23	24	19—185
Weigel	2	21	14	19	7	23	7	17	19	22—151
Roth	10	20	1	7	23	11	12	16	10	13—123
Zitzmann	18	13	19	8	20	9	14	20	0	0—121—1026

Brooklyn, E D—W W Hohlmeyer, Captain.

J H Diercks	12	0	17	13	16	13	16	25	19	13—151
C Ruppel	3	20	0	15	12	18	2	7	17	17—111
H Knebel	17	21	23	19	22	21	23	22	17	19—204
A Rauch	0	5	12	24	5	9	12	18	18	21—124
D Gnote	17	15	16	0	19	19	20	14	15	0—135
G Kliegehofer	16	22	5	15	10	18	0	15	9	9—119
J Beckman	13	0	3	3	0	0	0	0	14	13— 46
H Kohlmeyer	0	7	2	21	12	6	9	20	0	14— 91— 931

Philadelphia—Molter, captain.

Chas Molter	17	20	17	16	22	19	17	19	23	22—192
Wm. Gelzer	9	11	13	21	18	16	18	12	13	20—155
Otto Rnoff	19	22	12	17	18	11	12	5	22	16—151
G Schalk	17	10	23	22	24	22	24	15	23	23—209
H Vulglus	19	17	20	21	21	21	19	8	21	24—191
Wiegert	15	10	19	20	19	16	12	21	15	19—173
W Koenig	17	21	19	8	24	20	19	18	21	23—191
W Ehrenpfort	0	19	11	6	13	16	22	15	20	24—146—1408

RECAPITULATION.

1. Zettler Rifle Club	1,596	Medal
2. Helvetia Rifle Club	1,446	$35
3. Newark Rifle Club	1,441	25
4. Jersey Schnetzen Corps	1,426	22
5. New York City Schentzen Corps	1,404	17
6. Zettler Rifle Club, second team	1,376	16
7. Columbia Rifle Association	1,357	15
8. New York Schnetzen Corps	1,343	15
9. Helvetia Rifle Corps, second team	1,337	15
10. Brooklyn Schentzen Corps	1,320	
11. Seppenfeldt Rifle Club	1,227	
12. Helvetia Rifle Club, third team	1,165	
13. Brooklyn Independent	1 026	
14. Brooklyn (E. D.) Rifle Club	981	
Philadelphia Schnetzen Corps	1,408	

The Philadelphia Club having in their team two riflemen not members of their club, shot under the agreement not to compete for the prize.

SCHUETZEN FEST AWARDS.

We continue our list of prizes from Tuesday:

Wednesday, June 19.—The following were the winning men:

Man Target—L Wilmo, 51 points; R Faber, 73 points; R Weidmann, 61 points; Charles Gruber, 67 points; J J Tobler, 66 points; August Knopfli, 59 points.

Silver Medals—Dr A Schwarz, Baltimore; H Relling, E Brehm, B Lippman, F Kramer, John Baier, J Debmke, L Kirloher, Bridgeport; Charles Zettler, Charles Gruber, Joseph Belcher.

Gold Medals—Koenig, San Francisco; Schotte, N W R C; John J Tobler, A Geilfues, Charleston; R Weidmann.

Volkprels (Public Target)—Charles Genoblin, Chicago, 60 rings; Aug Kuopfli, N Y, 57; P Delahimty, Pitteton; E Ruegger, N W R C; Charles Zettler, H Lewis, Troy; A Zollfne, R Weidmann, P Feming, B Kuhlman, 71 points; A F Norris, Baltimore, 81; G A Kuhndahl, 81; B Engel, 71; L Graf, 72; F Hansen, 90; L F Beatee, 81; W N Bonesteel, 69.

Most Bull's-eyes—Farrow, 1, Molter, 2; D Wiggers, 3; Onsitmeyer, 4; Ehrenpfort, 5; Charles Zettler, 6; William Hahn, 7; Grau, 8; Fenning, 9.

Goblets—N Lewis, Troy; T Broadway.

Thursday, June 20—The following persons received silver medals as prizes:

N Orueus, Emil Gross, W Geiselberg, C Stein, F Kassel, A G Hellwig, H F Rico, J F Ficken, T D Bischoff, C Blydenburgh, R Naegeli, W Stein, Phila; G Menken, John Wellje, J Aeschbach, L Dreyer, J F Rathjen, G Brueck, W Tomford, Brooklyn; Emil F Kolb, Phila; J Carlton, New Britain; L Miller, A Fuchs, Brooklyn; C H Tohr, D L Grane, T Laager, J Manz, Phila; J Tobin, Newark; M Bubeer, L Vogel and H Omittmoyer, Bridgeport; W F Fielding, New Britain; F Rentschler, Hartford; Gust A Frecke, M Doseler, T Burbach, M Grau, Chicago; J U Nef, W Knecht, L Baker, John Rein, Louis Billion, B Zettler, M Henken, A Eudry, J H Muller, H Rubien, Jac Kagi, H Ahrens and T H Dutcher, Troy; W C Gardner, A von der Linden, G A Schusmann, A Meyer, B H Gerken, M V Valkenburg, A Wangeroth, Troy; J Levy, H Ruppel, H H Dreyer, Phil Klein, Jr, F C Esseick, J C Kingman, Bridgeport; H Alt, John Wilkens, G Pollock, H Durfee, Troy; E Hunziker, James S Conlin, A W Lemcke, F Elder, G Doehle, W W Tucker, G F Keller, Tul Seitz, J Dutel, Ch C Koegel, A T Houlett, A S Paul, A Amouroux, R Weigel, W Hahn, P Omeblin, Jul Kirchner, J Almonsleohner, J F Colline, Jac Dux, Aug Bergoron, Geo Klingelhofer, D Schuckhardt, A Braun, J D Volkmann, B Brown John Wechter.

Gold medals were awarded to the following:

Geilfuse, Charleston; R Weidmann, G Omittmeyer, Bridgeport; T F Norris, Baltimore; John F Rathjen, Molter, Phila; W Ehrenpfort, San Francisco; Kleine, Archy Paul, C Horney, F Kleisrath, J Blumenburg, George Schilling, Baltimore; L Vogel, George Schalk, Pottsville; M Gran, Chicago; George Leitz, Baltimore; H Poeebergh, Joe Heintz, W Keller, Chicago; Victor Schobinger, A Seitz, W Hahn, Emil Berger, F Harrison.

The following received goblets:

W Gelzer, George Spangler, Phila; O Gruber, Ph Klein, A Paul, A Geilfuse.

Target of Honor Score—J Blumenberg, 62; A J Ditlmar, 57; J H Grohmann, 61; B Zettler, 53; J W Schneider, 54; Robert Faber, 64; A Meyer, 57; C Paulsen, 59; W Cowden, Chicago, 63; Mart Henken, 60; Chs Kruse, 58; Ph Klein, 61; T Tobin, 56; L Dreyer, 62; Archy Paul, 58; H Dohrmann, 56; August Bergerow, 57; J B Claussen, 62; N H L Koenig, San Francisco, 58.

Kich Target—Score: The following made bull's-eyes—Charles Kundalk, B Zettler, H Rasohen, C Stein, J W Schneider, L Vogel, C Paulsen, M Henken, H Von Deylen, G Schilling, Baltimore; Chr Koegel, Albert Meyer, Ed Hueziker.

Premiums—Most bull's-eyes, D Wigel, Highland; second, Farrow; third, Gehl; fourth, Pfenning; fifth, Ritchie; sixth, W Hayes; seventh, W Ehrenpfort; eighth, Klein, Jr; ninth, A Zeligner; tenth, E Dreyer.

Man Target Scores—L Vogel, 79 out of a possible 100; M Dorler, 76; C Graf, 70; Archy Paul, 71; H Raschen, 67; B Zettler, 74; John Mainz, 81; L Dreyer, 80; C Becker, 65; L Becker, 69; John Laager, 88; Ed Ruegger, 66; A G Hellwig, 68; D F Davids, 78; G Gmittmeyer, 83; C Reibsame, 73; Albert Meyer, 79; John Wechter, 69; C Blydenburgh, 69.

Friday, June 21.—The following were the winning riflemen.

Silver medals:

C Hertgen, Gtto Ruoff, Capt Bayha, Richard Brittam, G Dexton, J C Wenner, Jul Kainer, W Lemken, D Mecroee, H Delbonge, Capt F Gennerith, E P Whitney, Hartford; Geo Gammel, G Brier, H Mersee, Louis Berndt, David J Jordan, Frederick Fitz, J F Hill, F Gathmann, Frederick Horetman, A H Anderson, G W Scholermann, F Heide, F A Gruneberg, G Holtway, G P Amon, A Henziger, O Meyer, T S Kruger, J H Lippe, F Roth, Ph Kato, F Carpenter, A G Genez, E Stieber, F H Holton, W H Dunlap, John Ritter, Chas Overbaugh, J H Sundermann, M Ahlers, M Moripu, D F Davids, G L Morse, F Schmidt, Henry Lembeck, John Schmidt, G F Zeller, M Hamerschlag, A C Froman, J H Horetmann and Geo Werhan.

Gold medals were given to E Graf, L Wageman, G Spangel, S Gassert, J Laager, Chas Grube, W Cowden, G Hartman, H Nulpine, Capt A Ermisch, W N Bonesteel, A G Hellwig, F H Jacobi, R Spitz, F Fabarius, Ph Klein, A M Meyer, Henry Knebel, Chas Babcock, Frederick Kessler, W Stein, Phila; F Ritchie, Troy; R Faber, D Miller, J Cook, J D Rentschler, G F Kolb, Phila; John Raschen, J R Grohman, N Y; A Zengner, John Schneider, H W Cordts, F Kramer, Baltimore; Chas Ziegler, C Paulson, F Abel, St Louis; Louis Dreyer, J A Bauer, San Francisco; P Stockert, Chicago.

Goblets were given to G F Kolb, J Cook, John Rasohen, C Mattmann, A Schwarz, Alb Seik and P Stockert.

Target of Honor Score—Jas Heintz, 66; G Quittmeyer, 63; G F Kolb, 57; W W Tuckor, 56; H Durfee, 70; F H Dutcher, 62; Chas Babcock, 58.

Public Prize Target Score—W Stein; 60; G F Kolb, 60; G Spaegler, 59; M Gran, 61.

Creedmoor Prize Target Score—G Hnittmeyer, 21; A Benziger, 21; Arch Paul, 22.

Man Target Score—W Tuckor, 77; W Steinzner, 88; G F Kolb, 83; G Spangler, 81; Jul Kammer, 75; Ed Ruegger, 91; S C Kingmann, 66; Frederick Abel, 66; E H Williams, 66; F H Holton, 70; G W Scholermann, 83; R Nagell, 73; H Lembeck, 70; G Bapor, 84; A Benziger, 67; S F Rathjen, 87.

Stitch Target Score—J Heintz, 2 bull's-eyes; G Omitmeyer, 2; W W Tucker, 1; G F Kolb, 1; Capt A Ermisch, 1; R Rothlisberger, 1; H von der Linden, 1; H Lembeck, 1; W Stein, 1; J Delmke, 1; H Muller, 1; John Manz, 1.

Prize Target Score—H J Quinn, 58; F S Harrison, 62; Ed H Williams, 66; A Benziger, 63.

Premiums—W Hahn, 10 bull's-eyes; Farrow, 16; W Milton, 16; Pillard, 13; O Zettler, 12; J Konig, 10; P Fenning, 10; Quittmeyer, 10; J Laager, 9; J Manz, 8; J R Grohman, 8.

The following is the result of the shooting at the man target, the public prize target and the Creedmoor target, with the list of the premiums won:

Man Target—J A Baner, 70; George Schalk, 81; John Blumenberg, 70; J T B Collin, 71; W. Ehrenpfort, 69.

Public Prize Target—Benjamin Brown, 56; J A Bauer, 62; H Kuchel, 57; G Sobalk, 68; D Wiget, 69; W Flamer, 56.

Creedmoor Target—J U Nef, 22; J R Grohman, 21; P Fenning, 21; O Gruber, 22.

Premiums—G Quittmeyer, $6; W Hahn, $5; W A L Koenig, $5; W Farrow, $4; F Landott, $4; N Lewis, $3; Emil Graf, $3; Stieber, $2; W Ehrenpfort, 2; O Horney, $1.

Stitch Target—Complete List—First prize, Robert Faber, N Y, 227 degrees; 2d, Cowden, Rock Island, Ill., 432; 3d, D Miller, N. Y, 542; 4th, M Farrow, N Y, 579; 5th, M B Engel, N Y, 397; 6th L Rasch, Brooklyn, 636; 7th, Jul Seitz, Newark, 650; 8th, Fred Horstman, Hoboken, 682; 9th, J H Horstman, Hoboken, 689; 10th, Anton Meyer, N Y, 698; 11th, L A Lienau, Hoboken, 707; 12th, John Baier, Newark, 858; 13th, F Wilma, N Y, 874; 14th, C Gehl, N Y, 916; 15th, E G Prillard, New Britain, Conn, 939; 16th, W H L Koenig, San Francisco, 962; 17th, John Becker, N Y, 989, 18th, Aug Ernisch, Hoboken, 1,001; 19th, W Durfee, Troy, 1,019; 20th, E Stieber, Pa, 1,032; 21st, John Manz, Pa, 1,128; 22d, Jos Lurch, N Y, 1,144; 23d, Theo Enprat, N Y, 1,159; 24th, A Rathbone, N Y, 1,224; 25th, F Landolt, Hoboken, 1,264; 26th, Pres Geo Aery, 1,284; 27th, A Gassert, St Louis, 1,297; 28th, Phil Kato, N Y, 1,339; 29th, George Schilling, Baltimore, 1,414; 30th, Charles Kundahl, N Y, 1,427; 31st, G G Zettler, N Y, 1,429; 32d, Henry K Koegel, Nowark, 1,428; 33d, F Fliedner, N Y, 1,468; 34th, P. Tobin

Troy, 1,494; 35th, E Henzicker, N Y, 1,539; 36th, F Fabarius, N Y, 1,551; 37th, Emil Berger, N Y, 1,562; 38th, Charles Gwenke, Hartfort, Conn, 1,568; 39th, John Wechter, Brooklyn, 1,574; 40th, P Stockert, Stillwater, Minn, 1,607; 41st, W Flammer, Newark, N J, 1,628; 42d, W. Klee, N Y, 1,690; 43d, L Wagemann, St Louis, 1,701; 44th, Theodore Feldstein, N Y, 1,713; 45th, William Stein, Phila, 1,733; 46th, Richard Spitz, N Y, 1,739; 47th, Conrad Stein, N Y, 1,754; 48th, George Quittmeyer, Bridgeport, 1,764; 49th, A Geiffuss, Newark, N J, 1,796; 50th, G F Kobb, Phila, 1,819; 51st, F Ritchie, Troy, N Y, 1,852, 52d, Charles Provano, N Y, 1,899; 53d, J W Schneider, Hoboken, 1,906; 54th, Herman Rascher, Hoboken, 55th, M P McLowd, Newark, 1,916; 56th, Henry Lembck, Hoboken, 1,937; 57th, J B Claussen, Hoboken, 1,943; 58th, Charles H Graner, N Y, 2,089; 59th, John Blumberg, Hoboken, 2,108; 60th, E Holtzmann, N Y, 2,110; 61st, Charles Judson, N Y, 2,168; 62d, W W Tucker, Hartford, 2,196; 63d, W Blossfield, Brooklyn, 2,228; 64th, Jacob Heintz, N Y, 2,299; 65th, Henry Quittmeyer, Bridgeport, Conn, 2,301; 66th, Peter Rademann, Hoboken, 2,304; 67th, William Hahn, Jr, Williamsburgh, 2,306; 68th, Captain Bayha, Brooklyn, 2,307; 69th, G W Schoelermann, Union Hill, 2,328; 70th, E Dompke, Hoboken, 2,330; 71st, L Vogel, N Y, 2,345; 72d, B Zettler, N Y, 2,347; 73d, D Meerase, N Y, 2,351; 74th, Claus Paulsen, Brooklyn, 2,384; 75th, Fred Kramer, Baltimore, 2,416.

Target of Honor—1st, William Durfee, Troy, 70 rings; 2d, Charles Keller, N Y, 68; 3d, William Hayes, Newark, 66; 4th, William Hahn, Brooklyn, 66; 5th, Jacob Hintz, N Y, 66; 6th, J Manz, Philadelphia, 65; 7th, A Holzmann, N Y, 64; 8th, Thomas Broadway, N Y, 64; 9th, Robert Faber, N Y, 64; 10th, R Britain, Hartford, 64; 11th, F Schmidt, Brooklyn, 64; 12th, Phil Klein, N Y, 63; 13th, A Weidmann, N Y, 63; 14th, W. Klein, N Y, 63; 15th, J H Horsmann, Hoboken, 63; 16th, G Quittmeyer, Bridgeport, Conn, 63; 17th, W Cowden, Rock Island, Ill, 63; William Durfee, Troy, 70; E Williams, Hartford, 63; Philip Klein, N Y 63; J Blumberg, Hoboken, 62; O E Pittard, New Brittain, 62; P D Volkmann, N Y, 62; William Farrow, N Y, 62; L Dreyer, N Y, 62; J B Clausen, N Y, 62; J H Dutscher, Troy, 62; J R Spitz, N Y, 62; D Schnchardt, Brooklyn, 62; J R Grohmann, N Y, 61; Ph Klein, Jr, N Y, 61; F Landolt, Hoboken, 61; G Baier, N Y, 61; Captain George Aery, 61; E Stieber, Philadelphia, 61; C G Zettler, N Y, 60; Vat Loewer, N Y, 60; Martin Henken, N Y, 60; P Ruppel, Brooklyn, 60; L A Lienau, Jersey City, 60; Peter Stockert, Stillwater, 60; Albert Keller, N Y, 60; Ch Horney, Williamsburg, 59; Ch Knudahl, N Y, 59; P Kuhlmann, N Y, 59; C Paulsen, N Y, 59; David Jordan, N Y, 59; J A Bauer, San Francisco, 59; George Schalck, Pottsville, Pa, 59; W H L Koenig, San Francisco, 58; Charles Kruse, Hoboken, 58; Archy Paul, Cohoes, N Y, 58; Charles Babcock, Troy, 58; J H Quittmeyer, Bridgeport, 58; Mr Pollock, Troy, 58; A Zengner, Greenville, N J, 57; A J Dittmar, Jersey City, 57; M Dorrler, N Y, 57; Anthony Meier, N Y, 57; William Stein, Jr, Philadelphia, 57; August Begerow, Newark, 27; J F Kolle, Philadelphia, 57; E Gohrs, Hoboken, 57; H Vulpina, Pottsville, 57; James Burback, Chicago, 57; Ben Brown, Staten Island, 57; R G Moore, N Y, 57; F Egge, Bridgeport, 57; William Lead, Newark, 56; J F Rathgen, Staten Island, 56; H Possberg, Brooklyn, 66; Julius Kummer, Staten Island, 56; J Toblen, Troy, 56; H Dohrmann, Brooklyn, 56; William Tucker, Hartford, 56; W Ehrenpoirt, San Francisco, 56; N Norris, Baltimore, 55; H Muller, Brooklyn, 55; Joseph Lurch, N Y, 55; J Ritter, Greenville, 55; Ed Buckholtz, N Y, 55; B Meier, Hoboken, 55; John Mohnk, N Y, 55; J W Schneider, N Y, 54; W Shovering, N Y, 54; J P Wight, Troy, 54; A G Hellwig, N Y, 54; R. Nagell, Hoboken, 54; C Becker, Bridgeport, 54; C Judson, N Y, 53; John Baier, Newark, 53; Alh Seitz, Newark, 53; Fred Hansen, Hoboken, 53; B Zettler, N Y, 53; N D Ward, N Y, 53; M B Engle, N Y, 53; S Doehle, N Y, 53; F Ritschie, Chicago, 53; F Roth, Brooklyn, 53; Captain W Kohlmeier, Brooklyn, 53; George Menken, N Y, 53; Fred Abel, St Louis, 53; Jac Aeschbach, Jersey City, 53; M L Riggs, N Y, 52; Fred Rentschler, Hartford, 52; John Lauger, Phila, 52; Jac Levy, N Y, 52; H Rasehen, Hoboken, 52; Fred Zeller, N Y, 52; L Vogel, N Y, 52; W Cleveland, Newark, 52; Ch Zettler, N Y, 52; B Lippman, Jersey City; Capt A Ermisch, Hoboken, 52; F W Fleidner, N Y, 52; H Rankon, N Y, 52; Ed Ruegger, Monroe, 52; Fred Fitz, Hoboken, 52; H Fischer, N Y, 52; E Berger, N Y, 52; J Meier, N Y, 51; I Bartell, Bridgeport, 51; F Harrison, Newark, 51; I Belcher, Newark, 51; C Gmehlen, Chicago, 51; J H Rashon, Hoboken, 51; Vio Schobinger, N Y, 51; Chr Kuhndahl, N Y, 51; G Schilling, Baltimore, 51; W C Gardoer, Newark, 51; William Lemken, N Y, 51; E M Wet, N Y, 51; J Weibold, N Y, 51, L Fink, N Y, 21; A Steflen, Schnetzen Park, 51; D Wiggel, Highland, 51; H Koegel, Newark, 50; H W Cordis, N Y, 50; C Mahnken, N Y, 50; And Horn, N, 50; E Whitney, Hartford, 50; Capt Ellerich, N Y, 50; D Mearse, N Y, 50; Karl Klein, N Y, 50; Ch Groenke, Hartford, 50; E F Gassert, St Louis, 50; L D Beatee, N Y, 49; Hm Heineke, N Y, 49; John Rein, Williamsburg, 49; Ch Koegel, Newark, 49; J P Collins, N Y, 49; Wm Flammer, Newark, 49; C W Stremel, Harlem, 48; G Schnrman, N Y, 48; R Appel, Hoboken, 48; G F Keller, N Y, 48; H Delonghne, N Y, 48; Chas Eisemann, N Y, 48; Wm Rose, N Y, 48; John Gften, N Y, 47; C L Freche, Newark, 47; And Fowl, Newark, 47; C H Johr, N Y, 47; J Kramer, N Y, 47; F Kramer, Baltimore, 47; Fred Wilms, N Y, 47; John Dierks, Brooklyn, 47; C Weismeier, J C, 47; E Brehm, J C, 47; N Lewis, Troy, 47; H Stappenbeck, 47; Louis Lane, N Y, 46; George Bechtel, Staten Island, 46; F Kassel, 46; William Fielding, New Britain, 46; Geo Saitz, Baltimore, 46; Geo Werhahn, Hoboken, 46; R Landolt, N Y, 46; M Grau, Chicago, 46.

The Point Target—The following is the score of those gentlemen who competed to make the most points in 600 shots:

Wm Farrow, N Y, 1,049 points; Wm Hayes, Newark, 1,046; Wm Hahn, Williamsburg, 956; W H L Konig, San Francisco, 831; H Gehl, N Y, 829; D Wiggert, St Louis, 820; C Q Zettler, N Y, 813; G Quittmeyer, Bridgeport, 787; P Feuning, N Y, 764; F Landolt, Hobokeo, 714; W Chrenyfort, San Francisco, 687; T F Norris, Baltimore, 671; J P Delihenty, Pittston, 652; Ed Ruegger, Wisconsin, 599; W Keller, Chicago, 422; Aug Geilfens, Newark, 385; E Graf, Minnesota, 356; Peter Bertschy, Chicago, 289.

Sunday, June 23.—Sunday was grand gala day, devoted to the coronation of the King. This honor fell to Mr. William Farrow, who made 1,049 out of a possible 1,800. Mr. Wm. Hayes, of Newark, had made the same score in 600 shots, but, having been crowned last year, gracefully gave up the place to Mr. Farrow. Mr. Farrow is a Maine man, and is well known for his skill with the Ballard rifle, and is a member of the Zettler Club. The ceremony of making the King was charmingly managed, little Miss Anna Ermisch making an appropriate speech. Around the neck of the King was placed the scarf of honor. It is quite probable that Mr. Farrow will go abroad and contest for the palm of victory in the great German rifle contests. For descriptions of the team for the FOREST AND STREAM AND ROD AND GUN Medal see other column.

THE KING OF THE SCHUETZENFEST.—Mr. William Farrow, the King of the Schuetzenfest, leaves on Saturday next for England and the continent. Sir Henry Halford has entered Mr. Farrow for various matches at Wimbledon, and, being a member of the Bund here, he will have the privilege of shooting at all the matches at the great Schuetzen Bund, to be held at Dusseldorf on the 20th of July. We should not be surprised if Mr. Farrow would be king both in Germany and America. Our American king takes with him in lieu of sceptres some half dozen republican Ballards. Mr. Farrow says that 1,049, made by him for his king score, has never yet been beaten. No better representative American rifleman could be sent abroad than Mr. Farrow, for to his great skill he unites a singularly modest and unassuming manner. The king goes abroad with the best wishes of all his American and German subjects.

BOSTON, *June* 20.—There was a large concourse of people to witness the "Shot-Gun Match," at 800, 900 and 1,000 yards. Mr. Jackson was the winner. His score has been a very strong one, and he has secured the much coveted gun. The record of 213, 212, 218 in three consecutive trials, makes an average of 214.66. The following is the score:

W H Jackson.

800	5	5	4	5	4	5	5	4	5	5	5	5	5	4—72
900	5	5	3	4	5	5	5	5	4	5	5	4	5	5 4—69
1,000	4	5	4	3	5	5	5	5	3	5	5	5	3	5 4—66—207

J S Sumner.

800	5	5	5	5	5	5	5	4	3	5	5	4	5	5 5—71
900	3	4	5	5	4	5	5	5	4	5	3	5	5	5 5—68
1,000	4	5	4	4	4	4	4	5	3	3	5	4	5	3 5—62—201

J F Brown.

800	5	5	4	5	5	5	5	5	5	4	5	5	4	5 5—72
900	5	5	5	5	4	5	5	5	4	4	4	4	5	5 5 8—68
1,000	0	2	4	4	4	4	4	5	4	4	4	5	5	3 4—56—196

J Smith.

800	4	5	5	5	5	5	4	4	5	3	3	4	4	5 5—66
900	4	3	3	4	5	5	4	5	5	5	A	5	5	5 5—63
1,000	3	5	5	5	5	5	3	0	4	4	5	5	5	5 4—63—192

William Gerrish.

800	4	3	4	5	3	5	4	5	4	5	4	5	5	3 4—63
900	3	5	4	5	4	5	4	4	4	0	4	5	5	5 5—52
1,000	5	4	5	5	2	5	5	5	4	4	2	4	5	3 3—61—186

S Wilder.

800	5	3	4	5	0	4	5	5	3	4	5	5	5	5 3—61
900	5	5	4	5	5	4	4	5	4	5	4	4	4	3 5—66
1,000	1	5	5	3	5	5	3	5	3	2	4	A	5	5 4—56—183

E W Law.

800	1	5	3	5	5	5	5	1	5	5	4	4	5	5 4—68
900	5	5	4	3	5	5	3	5	5	3	4	4	2	5 4—60

Retired, broke sight of rifle.

Walnut Hill, June 22.—Amateur series, 200 yards; east wind, steady, varying from 3 to 5 o'clock:

Poland	5 5 5 4 4 4 5 3 5 5—45	Bennett	5 4 3 4 4 4 5 3 5 4—41
Chadwell	4 5 4 5 5 3 4 5 4—44	Lord	5 4 4 4 4 3 5 5 4 3—41
Mortimer	4 4 4 4 4 5 4 5 5 4—43	Nelson	4 3 3 5 4 4 4 4 5 4—40
Dansor	4 4 4 5 5 4 4 5 4 4—43	Johnson	4 4 5 4 5 4 4 4 4 3 3—40
Fryt	5 5 4 5 3 5 5 3 4 4—43	Newman	2 4 3 3 4 4 5 4 4 5—38
Souther	4 4 4 4 4 5 4 4 5—42	Eddy	5 5 3 4 3 4 3 4 3 4—38
Law	4 4 3 5 5 4 4 4 5 4—42		

In match No. 3 four gentlemen completed their scores; seven shots at 200 yards:

O M Jewell	4 5 4 4 5 5 4—31	H Rogers	4 5 5 4 4 5 3—30
J C Messer	4 4 4 5 4 4 5—30	E W Law	5 5 4 5 4 4 3—30

CREEDMOOR.—On two days of last week the Twenty-third and Sixty-ninth Regiments shot in order to qualify for marksmen's badges. Of the 100 of the Sixty-ninth, only 27 qualified. Of the Twenty-third, in 302 officers and men, for the third-class shooting, 100 and 150 yards, 220 men qualified, and for the second class, 300 and 400 yards, 48 men.

Saturday, June 22.—Second competition for the Soldier's Match, open to teams of eight (privates or corporals) from each company in the National Guard, each having the right to send as many teams as it sees fit. Distance, 200 yards; position, standing; weapon, rifle or carbine, State model; third-class target. Competitors to be in uniform. The match to consist of two stages. First, firing by file, five rounds per man; time not to exceed two minutes from the command, "Commence firing." Second, firing by volleys, five volleys for each team. The firing in both stages to be conducted according to the tactics. Eight entries were made by four teams. The highest score of each was as follows:

	Fits.	Volley.	Total.
Co H, Seventh Regiment	88	89	177
Co I, Seventh Regiment	107	53	160
Co G, Seventy-first regiment	84	76	160
Co G, Seventh Regiment	73	46	119

Champion marksman's badges; distances 200 and 500 yards:

J L Price	44	J B Holland	35
E W Price	43	E W Candee	34
C F Robbins	43	W G Dominic	31
J E Ware	42	A Mills, Jr	33
A B Van Heusen	42	Lewis Cass	33
J F Merchant	41	T S Timpson	33
W A Bryant	41	G N Wright	33
H R May	40	F P Marshall	32
T W Linton	40	W T Miller	31
J C Abrams	40	W H Ropes	31
J H B Bagley	39	G T Addison	31
J W Gardner	39	James Ross	31
T C McLewes	38	H B Thompson	30
C M Englis	38	M M Mabby	30
A T Decker	37	B M Whitlock	28
W J Underwood, Jr	37	G W Hasbronck	29
W H Heisser	37	S H Hersey	27
C J Rice	37	W E Starr	26
C W Fisher	36	H E Jenkins	25
H W Clements	35	E Dutcher	25
L C Mott	35		

MEDAL OF THE STOCK EXCHANGE CLUB.—It is natural that Broad street should do things in the most superb way. Accordingly, Mr. C. J. Osborne has offered a magnificent medal to be shot for by N. Y. S. E. R. C. It is a Creedmoor square target of gold, surrounded with a wreath of laurel. There is a rising sun in gold, and the inscription above is Osborne Medal, and below, Creedmoor. The Messrs. Tiffany designed and executed the medal. The intention of the donor is that it be awarded to the best shot at 300 and 500 yards distance, in three competitions, at Creedmoor.

MORRISANIA SCHUTZEN VEREIN.—This club, of which John Eichler, Esq., is President, and Mr. Charles Geib, Secretary, is of quite recent formation, having only been organized during the last three months. Not having joined the regular organization, they had, however, presented a handsome prize to be shot for at Union Hill. Captain Aery gave them permission to shoot at the target of honor, which courtesy they declined. In a very pleasant speech the President of the shooters' association congratulated them on their fine appearance, and expressed the belief that the Morrisania Schutzen Corps would soon take rank among the leading rifle clubs in the United States. Mr. A. G. Genez, the well-known manufacturer of arms in Chambers street, is the shooting master, and showed his skill by winning a handsome prize, as did Mr. Julius Brenner.

THE ZETTLER CLUB.—This club was organized in 1874. It has gained the pre-eminent position of being the strongest German rifle club as to team shooting in the United States. Such skill as they have attained is due to hard and persistent work. At Zettler's gallery shooting is going on almost all the time. The club is quite prepared to turn out a team of 25 men. At 200 yards we are pretty certain, with slight practice they could hold their own with any team at Creedmoor. Gallery practice with the Zettler club is a *sine qua non*. It is there that they have acquired their skill. There can be nothing like chance in a team which within six months won the first prizes when opposed to the best American and German teams in the gallery (we refer to the Conlin match) and at the Schuetzen Park.

MOHAWK VALLEY RANGE.—In a report made by us of the military team match some errors were made. The Utica Veteran Zouaves used the N. Y. State Remington rifle, open sights. We append the corrected scores:

Adjt Bacon Cadets.

Meyers	0	2	0	2	2	4	4	1	2	12
Fort	0	0	0	3	3	0	0	0	0	6
Devendorf	4	0	0	0	2	0	0	0	2	8
Heltz	1	3	3	3	2	0	2	0	2	10
Cleveland	0	0	0	0	2	2	0	0	4	4
Total										34

Second Squad.

Dimblebly	0	3	0	2	0	2	4	0	8	
Ryan	0	0	0	2	3	3	3	0	11	
Brayton	2	4	4	4	5	0	3	0	16	
Gomph	2	2	4	4	0	3	2	0	13	
Scranton	0	0	2	2	3	4	4	0	15	
Total										63

Utica Citizens' Corps—First Squad.

Miller	2	3	4	2	4	2	2	0	14	
Pomeroy	4	4	1	3	1	3	4	0	16	
Hill	0	0	2	2	3	3	4	0	14	
Kimball	3	4	1	4	0	3	4	0	15	
Martin	2	4	3	2	4	3	3	0	15	
Total										74

Utica Veteran Zouaves.

Potts	4	2	3	4	3	2	4	0	16	
Eurcsman	2	4	3	3	4	2	2	0	14	
Pope	3	2	2	3	5	3	4	0	17	
Ferriss	4	4	4	4	3	3	5	0	20	
Smith	3	0	3	4	4	4	5	0	20	
Total										87

NORRISTOWN RIFLE CLUB.—The club spent June 19th at Valley Forge, and was present at the exercises and military reviews. Before going to Valley Forge two of the members shot a match "to fill in" the day's work. They have a hard range to shoot over, being across the Schuylkill River, 200 yards range; 3 scores of 5 shots each at 200 yds., standing; N. R. A. rules to govern:

A H Parker	5	2	4	4	4	4	4	5	4	4
M M Thomas	3	3	4	4	4	4	4	3	3	4

3	3	5	4	3—58						
0	4	3	3	2—48						

Out of a possible 75 in a bad 4 o'clock wind.

Game Bag and Gun.

GAME IN SEASON FOR JULY.

July is a close month for game, except as to woodcock, in certain States.

☞ NEW YORK LAW.—The open season for woodcock in New York State begins August 1; for quail, Nov. 1; and for ruffed grouse or partridge, Sept. 1.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson Snipe, $3 to $4 per dozen; wild pigeons, flights, $1,25; stall fed do, $1.75; Philadelphia squabs, $2.50; wild do $1.25.

Poultry.—Philadelphia and Bucks County dry picked chickens, 20 cents per pound; do fowls, 16 cents; do turkeys, 16 cents; do ducks, spring, 20 to 25; do geese, Boston green, 15; State and Western chickens, 15; do turkeys, 15 cents; do fowls, 15; spring chickens 20 to 30 cents.

MAINE—*Machias, June* 20.—Prospect of deer being more plenty this season. Grouse are having a good chance this spring to hatch. If black duck shooting was not allowed after the 1st of January, we should have plenty of good duck shooting in the fall. I saw in one small pond eight the other day, all males. S. B. H.

ADIRONDACKS.—A Brooklyn correspondent writes: "Paul Smith, of hotel fame, writes me from the Adirondacks that he has made his house double the size of two years ago. Terms for board, three dollars per day. (A No. 1 fare, as we can attest.) Stabling for horses, five dollars per week. Says "he sees deer every day feeding on the marsh opposite house. Largest trout taken in the St. Regis, so far, fifteen pounds; largest one taken in the Upper Saranac, twenty-six pounds Guides are now $2.50 per day. C. C. M.

MARYLAND—*Elkton, June* 19.—Woodcock are abundant. OCCASIONAL.

TENNESSEE—*Nashville, June* 23.—In addition to the fishing there are many parts of this State where there is still an abundant supply of large game. In the winter time water fowl are found in abundance in all of the many streams in the State; and for the canoeist there is not more picturesque scenery anywhere to be found than along the Upper Cumberland and Tennessee Rivers. While on the Flint, the Elk and Duck Rivers, which are not navigated by steamers, game and fish in such quantities are to be found as to offer a never ending series of sport. The people are everywhere glad to meet strangers, and as the country, though thickly settled, is dotted with vast areas of forests in almost their virgin state, the tourists have the advantage of both the comforts of civilization and the excitement of frontier life (less the Red Skin) agreeable blended. J. D. H.

MICHIGAN—*Grand Rapids, June* 15.—Deer are very numerous, more so than I have seen in years. Two fawns were caught near our lumber camp last week, and also two young bear cubs. H. B. W.

STORM LAKE.—*Waterloo, Ia., June* 18.—In your issue of June 13 you say to H. H. T., Leland, Ill., "You will find quail and pinnated grouse about Storm Lake, Iowa." Quail are extremely scarce in that vicinity. Pinnated grouse are quite plenty. I had good shooting there last season. Ducks and geese are very plenty in the lake during the migratory seasons. It is getting to be well settled about Storm Lake, and of course game is not so plenty as it has been. I think that the best place for hunting and fishing in this State, if not in the United States, is around Spirit and Okoboje Lakes. The M. and St. P. R. R. now reaches within fifteen or twenty miles of these lakes. O. E. D.

We strive to keep up with the times, and if there be an occasional lapse indulgent readers must remember that this is a great country, and our field is a wide one. The supply of game in different localities is necessarily inconstant. For this reason we invite communications of a character like the above.

NEVADA—*Columbus, June* 9.—As for this place, it is part of the great desert lying between the Rockies and the Sierra Nevadas. There is not a drop of water (except what is dug for), a blade of grass or a tree within 20 miles. Walker's River, 100 miles north, and Owens River nearly as far South, are the nearest rivers. Both are swallowed up by the thirsty desert, like all the rivers flowing east from the Sierras and west from the Rockies. Columbus is a mining camp on the edge of a valley 10 miles in circumference, said by scientists to be the crater of an extinct volcano. It is covered with immense deposits of borate of lime and soda, so that it looks precisely like a frozen lake with snow on the ice. The object of the works I spoke of is to extract the boracic acid from these compounds and use it to manufacture borax. I doubt its feasibility. Twenty miles west are the White Mountains,

towering 14,000 feet above the level of the sea, their summits buried in snow. In the canyons below is the nearest timbers. Near the upper line of the timber big horns are plenty, with deer, mountain quail and grouse below. Part of the miners say that the grouse are "sage hens," and part say no, and as those who say no are the most intelligent, I believe they are sharp-tailed grouse, although it seems any one ought to know the difference; but one must be prepared to find any amount of ignorance in matters pertaining to natural history. As for antelope they are in all the foot hills, but none nearer than 20 miles. From all that I can learn water is always found where they are, so the assertion that they are independent of water is probably a fallacy, and when they have been found at apparently great distances from it there was probably a concealed spring within reach. I expect to add an antelope and big horn hunt to my experience before leaving the State.

D. S. L.

CHALLENGED BIRDS.—On leaving our Chicago friends, Monday evening, via Pittsburg, Fort Wayne and Pennsylvania Railroad, I anticipated a dreary, lonesome ride to New York, even in the elegant hotel car "Windsor." But shortly after taking my seat a gentleman entered with a bundle of trout rods and a fish basket. At a glance I saw that he was a sportsman, handed him my card and found a genial companion as well as an old friend of our Editor in Chief, Mr. Hallock, in the person of Mr. McLain, of Alleghany City. He was now returning from Marquette, his headquarters, where he had taken four days' fishing in Chocolate River, making a fine catch of trout. He soon assured me that I would not be lonesome, as the hotel car conductor, Mr. Geo. A. Lougee, was also a genuine sportsman. The associations proved of a most pleasant character, and I once more learned that the friendship of the fraternity of sportsmen was more enjoyable and binding than many of the fraternities that make greater pretensions. After leaving Pittsburgh, and when climbing the Alleghany Mountains, I was served with a nice broiled pigeon in the car, which the conductor said was a wild bird from the tournament. I immediately challenged the bird for shot marks, and on picking I scored it a lost bird. If at our regular shoots all birds challenged were brought to the referee in the same manner the search for shot would be very close.

T. C. B.

PIGEON MATCHES.

HOW TO PREPARE SCORES.—To insure insertion in current issues of this paper, scores should be sent so as to reach us on Tuesday, and earlier if possible. These particulars should be given and these only: Place, date, name of club, name of competition, kind of trap and balls used, distance of rise, boundary, rules governing, and weather. Scores are valueless without these.

* An asterisk signifies dead on tot bounds.

FOURTH OF JULY.—Just how many thousand glass balls will be shattered next Thursday will depend entirely upon the skill of the shooters. How one of the Forefathers would open his questioning eyes at this incomprehensible way of "celebrating."

CANADA—*Strathroy, June 6.*—Match for badge by Jno. Paine; glass balls; Bogardus trap; 21 yards.

A Johnston	1 1 0 0 1 0 1 0 1 0—5
Jno Paine	1 0 1 0 1 0 0 1 1 1—6
Mr Beuar	1 1 0 0 1 1 1 0 1 1—7

ANOEL.

MAINE—*Kennebunk, June 15*—R. F. and G. P. A. Glass balls.

Cushmso	1 0 1 1 1 1 1 0 0 0—6	Bonguty	1 1 1 0 1 1 1 1 1 1—9
Buton	1 0 1 1 1 0 0 1 1—7	Drown	0 0 0 1 1 0 0 1 0 1—4
Staoley	1 1 0 1 1 1 0 0 1 1—7	Downs	1 0 0 1 0 1 1 1 1 1—7
Lord	1 0 1 0 0 1 0 0 1 1—5	Grey	1 0 0 1 0 0 0 1 0 1—4
Clondman	0 1 0 0 1 0 1 1 1 1—6	Cole	0 1 1 0 0 0 1 0 0 0—3
Stevens	0 1 0 0 0 0 0 0 1—2	Littlefield	1 0 1 1 0 1 0 0 0 0—4
Larrabee	0 0 1 1 1 1 1 1 1 1—8	Pitts	0 0 0 0 0 0 0 0 1 0—1

CUSHNOC HEIGHTS GUN CLUB.—*Augusta, June 20.*—Regular weekly practice at glass balls, 18 yards rise, Paine's rules.

Farnham	1 1 0 1 1 1 1 1 1 1 0—10
Clement	1 1 1 1 1 1 1 1 0 1 1—11
Fish	1 0 1 0 0 0 1 1 0 1 0—5
Mackie	1 1 1 1 1 0 0 0 1 0 1—8
Longfellow	1 1 0 1 0 1 1 0 1 1 1—9
Pierce	1 1 1 0 1 1 0 1 1 0 1—9
Biggins	0 1 1 1 1 1 1 0 1 1—9
Glazier	1 0 0 1 1 0 1 1 0 1 1—8
Byer	0 0 1 0 0 0 1 0 1 1 0—4
Moore	1 1 1 0 1 1 1 1 0 1 1—10
Hunt	0 0 0 1 0 1 1 0 1 0 0—4
Thorndike	1 0 1 0 1 0 1 1 1 1 1—9

H. F. FARNHAM.

LONG ISLAND—*Columbusville, June 13.*—Match at 21 yards.

Conoors	1 1 1 1 1—5	Schanck	1 1 1 1 1—5
Eagleston	1 1 1 0 1—4	Lancake	1 1 0 1 1—4
Jolger	1 1 1 1 1—5	Newman	1 0 1 1 1—4
Plossrd	0 1 1 1 1—4	Murphy	1 0 1 1 1—4
Colier	1 0 0 1 1—3	Gildersleeve	1 1 1 1 1—5
Hatty	1 1 1 1 1—5	Murphy	1 1 1 1 0—4
Matthews	1 1 1 1 1—5	Gildersleeve	1 1 1 1 1—5
Ben Newman	1 0 0 1 1—3	Watts	1 1 1 1 0—4

In the shoot off Gildersleeve, Connors and Butty tied on ten each. Match not decided.

LONG ISLANDS VS. NASSAUS—*Dexter Park, Cypress Hill, L. I.*—Match at pigeon shooting for a cup valued at $100, shot for by teams of ten members of the Long Island and Nassau shooting clubs, the latter the challengers; H and T traps; 25 yds. rise, 80 yds. boundary; Long Island Club rules:

Long Island.		Nassau.	
Eddy	1 1 1 1 1 1 1 1 1 1—10	Selover	1 1 1 1 * 0 0 1 1 1—7
Redding	1 1 1 1 1 1 0 1 1 1—9	Garrett	1 1 0 0 1 0 1 1 1 0—6
Gildersleeve	1 0 1 1 1 1 0 1 1—8	B V Wyckl'n	1 1 0 1 1 0 1 0 0 1—6
Wynn	1 1 1 1 0 1 0 1 1 1—8	Br Powell	0 0 0 1 0 1 1 1 1 0—5
C Williams	1 0 1 * 0 1 1 1 1 1—7	Rider	0 0 0 1 1 1 1 0 0 1—5
Br Willard	1 1 1 * 1 0 1 0 1 1—7	J V Wyckl'n	0 0 1 1 0 * 0 1 1 1—5
Madison	0 1 1 0 1 1 0 1 1 1—7	Smith	1 0 0 0 0 1 1 1 1 1—5
F Hance	1 1 1 1 1 0 1 * 0 1—7	Watson	1 1 0 1 1 0 0 0 0 0—4
Blackley	0 1 1 0 * 1 0 1 0 1—6	Buryea	0 0 0 1 1 0 1 0 0 1—4
Appleyard	0 * 0 1 0 1 1 0 0 0—3	Wyckhoff	0 1 0 0 0 0 0 0 1 1—3
Total	71		50

MONROE COUNTY VS. SENECA.—Pigeon match. Teams of Monroe County Club, of Rochester, and Seneca Club of Seneca Falls, N. Y., twenty single birds, 21 yards New York State rules. First time the Monroe Club was ever defeated in a team contest:

Monroe County Club—First Squad.

M M Hollister	1 1 1 0 1 0 0 1 1 0 1 1 1 1 1 1 1 1—15
J K Beckwith	1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1—18
H Walzer	1 1 1 1 1 1 1 1 0 1 1 0 1 0 1 1 1 1 1—18
I H Andrews	0 1 1 0 0 1 1 1 0 1 1 0 0 1 1 1 1 1 1—13
F Chaffey	1 1 0 1 1 1 1 0 1 1 0 1 1 1 0 0 1 1 1 0—14

Second Squad.

W H Crittenden	1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1—17
W H Bowman	1 1 1 1 1 0 0 1 1 1 1 1 1 1 0 1 1 1 1 1—17
E Redmond	1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1—17
G W Crouch, Jr	1 1 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1—16
H B Hooker	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
Total	165

Seneca Gun Club—First Squad.

H Silsby	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
Geo Marsh	1 1 1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1—17
E W Ross	1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1—17
Geo Stacey	1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 0—17
H Twist	1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1—17

Second Squad.

J F Lawrence	1 1 1 0 1 0 1 1 1 1 1 1 1 0 0 0 1 1 1 1—15
M Hooge	1 1 1 0 1 1 0 0 0 1 1 1 0 1 0 1 1 1 1 1—14
M Ten Eyck	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0—17
E C Rozencranz	0 1 1 0 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1—16
J Niver	0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1—17
Total	167

Trap shoot, under the auspices of the Seneca Gun Club. Class shoot, ten birds, single, at 21 yards rise.

Babcock	8	Bishop	9
Parish	4	Cory	9
Walzer	9	Hudson	9
Smith	9	Burroughs	5
Miller	6	Beals	8
Hotchkiss	8	Stumpton	8
Briggs	8	Andrews	8
The. Elders	2	Whitbeck	9
Hooker	10	Cronch	9
Chaffey	9	Sheridan	9
Kipp	10	Twist	9
Bowman	9	Hollister	7
Crittenden	8	Sellick	8
Stacy	9	Nevers	7
Lawrence	10	Ross	10
Silsby	8	Sees	6
Redmond	10	Worls	5
Helmer	7	Ten Eyck	8
Robinson	8	Lewis	7
J J Burroughs	5	Wilcox	8

Ties on Ten at 26 Yards—Hooker, 5; Lawrence, 5; Richmond, 4; Kipp, 5; Ross, 5.

Second Tie on Ten at 31 Yards—Hooker, 3; Lawrence, 5; Kipp (w), 0; Ross, 5. First prize won by Mr. Ross, Seneca Gun Club.

Ties on Nine, 26 yards—Bishop, 5; Walzer (w), 0; Smith, 3; Whitbeck, 5; Chaffey, 7; Twist, 0; Stacy, 4; Cory (w), 2; Hudson, 4; Burroughs, 3; Cronch, 4; Sheridan, 5; Bowman (w), 2.

Second tie on nine, 31 yds—Bishop, 5; Sheridan, 3; Whitbeck, 1. Second prize won by Bishop, of the Monroe County Club.

Ties on eight, 26 yds—Babcock (w), 0; Stimpton, 5; Briggs (w), 1; Silsby, 4; Robinson, 5; Sellick (w), 2; Hotchkiss (w), 1; Crittenden, 3; Andrews, 5; Ten Eyck (w), 1; Wilcox, 5.

Second ties on eight, 31 yds.—Stimpton, 3; Robinson, 4; Andrews, 2; Wilcox, 0. Third prize won by Robinson, Phœnix Club.

Ties on seven, 26 yds.—Hollister, 1; Sees, 0; Niver, 5; Helmer and Lewis divided.

Second Match, class shooting; 10 single birds at 21 yds.—A H Sheridan, Phœnix Club, wins first; G W Crouch Monroe Club, wins second; Hiram Twist, Seneca Gun Club, wins third.

FOREST AND STREAM SPORTSMEN'S CLUB.—*Akron, June 15.*—H and T plunge traps; 21 yards rise, 80 yards boundary, New York State rules governing; weather fair; first attempt for several at birds on the wing:

Wells	0 0 0 1 0 0 0 0 0 1—2	Zimmer	0 1 1 0 0 0 1 1 1 1—6
Stapleton	0 0 0 0 0 1 0 1 1—3	Van Cliel	0 1 0 1 1 0 0 1 0 0—4
Doulhee	0 0 0 0 0 0 0 1 0 0—1	Altenburg	0 0 0 0 1 0 1 1 1—5
Tyler	0 1 1 1 1 1 1 0 1 0—7	Magonin	0 0 1 0 0 0 0 0 0 0—1
Dunnett	0 0 1 1 1 1 0 0 1 1—5	Patrick	1 0 0 1 0 0 1 0 1 1—5
Wickwire	0 0 0 1 1 0 1 0 1 1—5	Tabor	1 0 1 1 1 1 1 1 1 0—8
Morgan	1 1 1 1 1 0 1 1 1 1—9	Stevens	0 0 1 0 0 0 0 0 0 0—1
Flinn	1 0 0 1 0 1 0 0 0—4	Parker	0 1 0 0 0 1 1 0 1—4

NAW JERSEY—*Whiteport, June 15.*—Rosendale Team: L. Schoonmaker, 18; L. Schoonmaker, 71; N. Keator, 72; J. Blansban, 68—Total, 284. Ellenville Team: N. Rockwell, 73; E. H. Munson, 69; G. H. Benedict, 69; B. F. Faler, 34—Total, 269.

NEWARK GUN CLUB—*Newark, June 22.*—Weekly shoot for gold badge:

Brienthall, 20 yds	1 01 11 10 00 10 10 11 01 11 01 11 11—17
Coster, 20 "	1 11 01 01 00 11 11 11 00 11 01 10 01—16
Duston, 20 "	1 10 11 11 10 11 00 10 11 01 01 10 11—17
Hobart, 20 "	1 01 01 11 11 10 10 11 01 01 01 11 01—17
Kay, 20 "	1 11 11 00 00 01 10 11 00 11 11 11 01—16
Miller, 16 "	0 00 11 11 11 00 01 01 10 11 01 01 11—15
Leroy, 20 "	1 10 10 00 10 11 01 11 01 11 11 11 10—17
Decker, 12 "	1 11 10 01 11 11 11 11 11 11 11 00 11—21
Van Valkenberg, 16 "	0 11 11 10 11 10 11 11 11 01 10 10 01—18

Same day—Shoot for a Scott Breech Loader; 16 yds rise; Bogardus trap and rules:

Sanger	00 11 00 11 00 11 11 10 01 10 0w
Coster	00 10 11 00 10 00 10 10 11 10 01 11 10 10 11—16
Hughes	11 11 11 01 11 00 11 11 11 10 11 11 11 11—26
Becker	01 11 11 00 11 11 10 01 10 01 00 00 00 01 11—16
Leroy	10 10 10 01 11 11 10 01 11 11 11 10 10 10 11—21
A B Kay	10 11 11 11 11 11 11 10 11 11 10 11 11 11—27
Sigler	11 11 11 11 11 11 11 11 11 11 01 11 11 11—29
R Kay	10 11 11 01 01 11 00 11 10 01 10 11 01 00 11—19
Bukes	10 11 11 11 11 00 11 11 10 01 11 11 11 10 11—25
Glaze	11 11 11 11 11 01 10 11 11 10 00 10 11 11—24

JERSEY CITY HEIGHTS GUN CLUB—*Jersey City, June 24.*—Regular competition for twenty-ball badge, club grounds, June 15, from 3 Bogardus traps; Bogardus rules:

W Hughes, 18 yds	1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0—17
W F Quimby, 16 yds	1 1 0 1 1 0 1 1 0 1 1 1 0 1 0 0 1 1 1 0—13
A Heritage, 18 yds	0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1—18
J B Burdett, 18 yds	1 1 0 0 1 1 1 0 1 0 1 1 1 1 0 0 0 1 1 1—13
G B Eaton, 18 yds	1 0 1 0 1 1 1 1 1 1 1 1 1 0 0 0 0 0 1 1—13
J A Van Gelder, 15 yds	0 1 1 1 1 1 1 1 1 1 0 1 1 1 0 0 1 1 1 0—15
C Andrews, 18 yds	0 1 1 1 0 1 1 0 0 1 0 1 1 0 1 0 0 0 0 1—10

Regular match for 15-ball badge, June 19, 1878, from 3 Bogardus traps; Bogardus rules to govern:

G B Eaton, 16 yds	1 1 0 0 1 1 1 0 1 1 1 1 1 1 1 1—12
C Andrews, 19 yds	1 0 1 1 0 1 1 0 1 0 0 1 0 0 0—7
A Heritage, 18 yds	0 0 1 1 0 1 1 0 1 0 1 0 1 1 0—8
J B Burdette, 18 yds	1 1 1 1 0 0 1 0 1 0 1 1 0 1 1—10
J A Van Gelder, 15 yds	1 0 1 1 1 0 1 0 0 1 1 0 0 1 1—9
W F Quimby, 16 yds	1 0 1 1 1 1 1 1 1 0 0 0 0 1—10
O Remmey, 15 yds	1 1 1 0 1 0 1 1 0 1 0 1 0 0 1—9
A Lewis, 14 yds	0 0 0 0 0 0 0 0 0 1 0 0 0 1 0—2
F Cummins, 10 yds	1 1 1 1 1 1 0 1 1 1 1 0 0 1 0—11
W Hughes, 18 yds	0 0 1 1 1 1 0 1 0 0 1 1 1 1 0—9

JACOBSTAFF.

PENNSYLVANIA—*Mechanicsburg, June 18.*—Match at birds thrown in the air by man in a pit in the ground; 24 yds. rise; 80 yds. boundary:

J C Rapp	0 1 1 1 1 1 1 1 1—8	J C Styder	1 1 0 1 1 0 1 0 0—5
W Hammond	1 0 1 1 1 1 1 0—7	S F Harkle	0 0 1 0 1 0 1 0 1—4
J D Rea	1 0 1 1 1 1 0 1 0—6	G D Keller	1 0 1 1 0 0 0 0 0—3
J J Ringwalt	0 0 1 1 0 0 1 1 1—5	H Noble	0 0 1 1 0 0 0 0 1—3
A D Boas	0 0 1 1 0 0 1 1 1—5	J Croman	0 0 1 0 0 0 0 1 1—3
S Kohler	1 0 1 0 1 1 0 0 1—5	G S Ennis	0 0 0 0 0 0 1 1 0—2

PENNSYLVANIA.—*Mahoningtown, June 15.*—Match at birds; plunge traps, 21 yards rise, 80 yards boundary; O. S. Rules; wind quartering away to left.

Kirk	1 0 1 1 1 1 1 1 1—9	Frisbee	1 1 1 1 1 1 0 0 1—8
Newell	0 1 1 1 1 1 1 1 0—8	Robinson	0 0 0 1 1 1 1 1 1—7
Blanchard	0 0 1 1 1 0 1 1 1 0—6	Andrews	1 1 1 1 1 1 1 1 1—10

AHRINAN.

Matawan, June 20.—Monthly shoot of the Midway Shooting Club, Margaos Station, for gold badge, H and T traps, 1¼ OZ. shot, 80 yds. boundary, 10 birds each, handicap:

James Vanbrackel, 26 yds	1 1 1 1 1 1 1 1 1 0—9
H A Warne, 23 yds	1 1 1 1 0 1 1 1 1 1—9
Hart Height, 25 yds	1 1 1 1 1 1 1 0 0 1—8
Elias Vandeveer, 22 yds	1 1 1 1 1 1 1 0 1 0—8
James Terhune, 22 yds	0 1 1 1 1 1 1 1 1 0—8
James Ivins, 22 yds	1 1 1 1 1 0 1 1 0 1—8
George White, 22 yds	1 0 1 1 1 1 1 0 1 1—8
Wm A Dunlop, 22 yds	1 1 1 1 0 1 1 0 1 0—7
Richard Warrell, 22 yds	1 0 1 1 1 0 1 1 1 0—7
Stephen Lambertson, 24 yds	1 0 1 1 1 1 1 1 0 1 0—7

James Lamberson, Craig Fleming, Abraham Teneyck, Charles Brown, C H Warne and G Farrington withdrew.

The tie was won by Warne with 8 out of 10.

NORTHWESTERN SHOOTING CLUB.—*Erie, Pa., June 14.*—Seventh match for the field medal; Purdy trap; 18 yards; Bogardus' rules.

Chas Linch	1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0—17
T W Jarecki	1 1 0 0 1 0 1 0 1 1 0 1 1 1 1 1 1 1 1—15
Jake Graham	1 1 0 0 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1—16
Wilf Tracy	1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 0 1 0 0 1—15
Jasper Harding	0 1 0 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1—15
T Lynch	1 1 1 1 1 0 0 1 1 0 0 1 1 0 0 1 1 1 1 1—14
Capt Haywood	0 0 1 0 1 1 1 0 1 1 1 1 0 0 0 1 1 1 1—13
W W Derby	1 1 1 0 0 1 0 1 1 1 1 0 1 1 1 0 1 0 0 0—12
P Dielenbach	0 0 0 0 0 1 1 1 1 0 1 0 0 0 1 1 1 1 0 1—10

Sweepstakes—Same day:

Berby	1 1 1 1 1—5	Lynch	1 1 1 1 0—4
Graham	1 1 1 1 1—5	Tibbals	1 1 1 1 0—4
Jarecki	1 1 1 1 1—5	Carpenter	0 1 1 1 1—4
Harding	1 1 1 1 1—5	Jones	1 1 0 1 1—4
Johnson	1 1 1 1 1—5	Dielenbach	1 1 1 0 0—3

Ties, miss and out, won by Jarecki, with nine balls, and Tibbals four balls.

—Louisville, Ky., sportsmen are enthusiastic over glass ball shooting.

TENNESSEE—*Nashville, June 21.*—Matches at glass balls; two spring traps, 18 yards rise; Bogardus rules.

First match—A sweepstakes; five balls each, 18 yards.

Maskey	1 1 1 1 1—5	Brachman	1 1 1 0 1—4
Nicholson	1 1 1 1 1—5	Mitchell	0 1 1 1 1—4
Bitterbek	1 1 1 1 1—5	Stone	0 1 1 0 0—2
Burkholz	0 1 1 1 1—4	Meadows	1 1 0 1 0—3
Ridge	0 1 1 1 1—4		

Maskay won shoot off with five straight.

Second Match—Sweepstakes; 5 balls, 21 yds.

Bitterleck	1 1 1 1 1—5	Meadows	1 1 1 0 1—4
Mitchell	1 1 1 1 1—5	Nicholson	1 1 1 1 0—4
Maskey	1 1 1 1 1—5	Gilbert	1 0 1 1 0—3
Brachman	0 1 1 1 1—4	Waterman	1 1 0 1 1—4
Burkholz	1 1 1 0 1—4	Wallman	0 1 0 1 0—2
Phillips	0 1 1 1 1—4	Noble	1 0 0 0 1—2
Ridge	1 1 1 1 0—4	Stone	0 0 0 0 0—0

Bitterleck and Maskey tied again on 5 each, Maskey winning second shoot-off with 5 straight.

ONE HUNDRED BIRDS—*Quincy, Ill., June 15.*—Match at Singleton Park between W. B. Hauworth, of Quincy, and Fred Erb, of St. Joseph; S. H. Turrill, referee:

Hauworth—1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 * 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 * 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 * * 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 * 1 1 1 * * 1 * 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—90.

Erb—1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 0—93.

PEORIA TOURNAMENT.—Of this most successful shooting convention we shall give the full scores in our next issue.

DETROIT TOURNAMENT—*Detroit, Mich., June 19.* First match:

Robert Alton	1 1 1 1 0 1 0 1 1 0 1 0 1 1 1—11
Gibson	1 0 1 1 1 1 0 0 1 0 1 0 0 1 1—9
Pike	1 1 1 1 1 1 0 1 1 1 1 1 0 1 0—12
Davidson	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Crawford	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Wherry	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Christy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Moore	0 1 1 1 1 0 1 1 1 1 0 0 0 1 1—10
Linman	0 1 1 1 0 1 1 1 1 1 1 1 1 1 1—13
Cook	0 0 1 0 1 0 1 0 1 0 1 1 1 0 0—7
T Hamilton	0 0 1 1 1 1 1 1 0 1 1 1 1 1 0—11
Wheeler	1 1 1 1 0 1 1 1 1 0 0 1 1 1 1—12
E Hamilton	0 0 1 1 0 1 1 1 1 1 1 1 1 0 1—11
Cole	1 0 1 1 1 1 1 1 0 1 1 0 1 1 1—12
Jardine	1 1 1 1 0 0 1 1 1 0 1 1 1 1 0—11
Gillman	1 1 1 1 1 1 0 1 1 1 1 1 1 0 1—13
Thomas	1 1 0 0 1 1 0 1 1 0 1 1 1 0 1—10
Norris	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Lee	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Long	1 1 1 0 1 1 1 1 1 1 1 1 1 0 0—12
Glenn, Jr	1 1 1 1 1 0 1 1 1 1 1 0 1 1 1—13
Hadley	1 1 1 1 1 0 1 1 1 1 0 1 0 1 1—12
Farrer	1 1 1 1 1 1 1 0 1 1 1 1 1 1 0—12
Baker	1 1 1 1 1 1 0 0 1 1 1 1 1 1 1—13
Goff Stenton	1 1 1 0 0 1 1 1 1 1 1 1 1 1 1—13
Slocum	1 0 1 1 1 1 0 1 1 1 1 1 1 0 1—12
Summerfield	1 1 1 1 1 1 0 0 1 1 1 1 1 1 0—12
J V D Eldridge	1 0 0 1 1 1 0 1 1 1 1 1 1 1 1—12
Winters	1 0 1 0 0 0 0 0 0 1 0 0 0 0 0—3

Nelson, Mason, Rush, Horn, Brown, Canatta, Gray, Long, Sheldon, Baker, France, Jardin, Eldridge, White and Dowling withdrew. Norris and Crawford divided second, Linman took third, and Cole fourth.

Second Day—Five bird sweep.

Moore	1 1 1 1—5	Eldridge	1 1 1 0 1—4
Crawford	0 1 1 1—4	Stenton	1 1 1 1—5
Hadley	1 1 1 1—5	Sheldon	1 1 1 1—5
Beebe	1 0 1 1—4	Long	1 1 1 1 0—4
Lee	1 1 1 1—5	Wherry	1 1 1 0 1—4
Gillman	1 1 1 1—5		

Stenton won first, Wherry second.

Five bird sweep.

Moore	1 1 1 0 0—3	Stenton	1 1 1 1 1—5
Crawford	0 1 1 0—3	Long	1 1 1 1 1—5
Hadley	1 1 1 1—5	Wherry	0 0 1 1w
Beebe	0 1 1 0 1—3	Snow	0 0 0 1 1—2
Lee	1 0 1 1 1—4	White	0 0 0 1 1—2
Gillman	1 0 1 1 1—3	Hamilton	1 1 1 1 0—4
Eldridge	0 1 1 1 1—4	Glenn	1 1 0 1 1—4

Stenton and Long divided first, Hamilton took second.

Ten bird sweep:

Moore	1 1 1 1 1 1 1 1 1 0—9	Gillman	1 1 1 1 1 0 1 1 1—9
Glenn	1 1 1 1 0 1 0 0 0 1—6	Christy	1 1 1 1 1 1 1 1 1—10
Long	1 1 1 1 1 1 1 1 1 1—10	Beebe	1 1 1 1 0 1 0 1 1—8
Crawford	1 1 1 1 1 0 0 1 0 1—7	Stenton	1 1 1 0 1 1 1 1 1—9
Wherry	1 1 1 1 1 1 1 1 1 1—10	Lee	1 1 0 1 1 1 1 0 1—8
Eldridge	1 1 1 1 1 1 1 1 1 1—10	Hamilton	1 1 1 0 1 1 1 1 1—9

In shoot-off Wherry won first, Moore second, Lee third.

Ten bird sweep:

Moore	1 1 1 0 1 1 1 1 1 1—9	Christy	1 1 0 1 1 1 1 1 1 1—9
Glenn	1 0 1 0 1 1 1 0 1 0—7	Hamilton	0 1 1 1 1 0 1 0 1 1—7
Long	1 0 1 0 1 1 0 1 1 1—7	Stenton	1 1 1 1 1 1 1 1 1 1—10
Gillman	1 1 0 1 1 1 0 1 1—8	Crawford	1 1 1 1 1 1 1 1 1 1—10
Eldridge	0 1 1 0 1 1 0 1 0 1—6	Beebe	1 1 1 1 1 1 1 1 1 1—10
Wherry	1 1 1 0 1 1 1 1 1 1—9		

Ten bird sweep:

Moore	1 1 1 0 1 1 1 1 1 0—8	Christy	1 0 1 1 1 1 0 1 0 1—7
Gillman	1 1 1 1 1 0 1 1 1 0—8	Glenn	1 1 1 1 1 1 1 1 0 1—9
Long	1 0 1 1 1 1 1 1 1 1—9	Crawford	0 1 1 0 1 1 1 1 1 1—8
Eldridge	1 1 1 0 1 0 1 1 1 1—8	Wherry	1 1 1 1 1 1 1 0 1 1—9
Stenton	1 1 1 1 1 1 1 1 1 1—10	Beebe	1 1 1 1 1 1 1 1 0 1—9

Stenton won first, Wherry second, Moore third.

Five bird sweep.

Stenton	1 0 1 0 1—3	Wherry	1 1 1 1 1—5
Long	1 1 1 0 0—3	Moore	0 1 0 1 0—2
Gillman	1 1 1 1—5	Beebe	1 1 1 1—5
Eldridge	1 1 1 1—5	Crawford	1 0 1 0 1—3

Gillman took first, Stenton and Long divided second.

Third Day.

Crawford	0 1 1 0 1 1 1 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 0—19
Eldridge	1 1 0 1 1 1 1 1 1 0 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1—20

Five bird sweeps.

Moore	1 1 0 0—2	1 1 0 1 0—3	1 1 1 0 1—4
Gillman	1 1 1 0 1—4	1 1 0 1 1—4	1 1 1 1 1—5
Eldridge	1 1 0 1 1—4	0 1 1 1 1—4	1 1 1 1 0—4
Stenton	0 1 0 —1	1 1 1 0 0—3	0 1 1 1 1—4
Long	1 1 1 1 1—5	0 1 1 0 1—3	1 1 1 1 1—5
Hamilton	0 0 —0	1 1 0 0 1—3	1 1 1 1 1—5
Rush	0 1 0 —1	0 0 0 —0	0 1 0 —1

Long won first sweep, Gillman and Eldridge divided second, and Gillman and Long divided third.

WISCONSIN—*Oshkosh, June 23.*—We have just organized the Oshkosh Shooting Club, and as a start off one of the members, Mr. M. B. Parkinson, undertook to break 95 balls out of 100, from a single trap, Bogardus pattern, 18 yards rise. Result:

Parkinson 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—93

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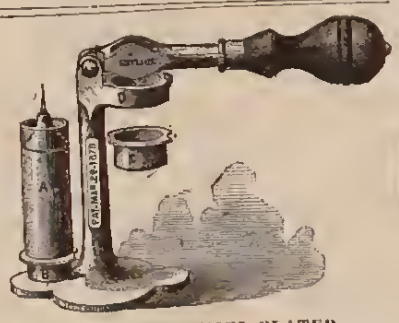

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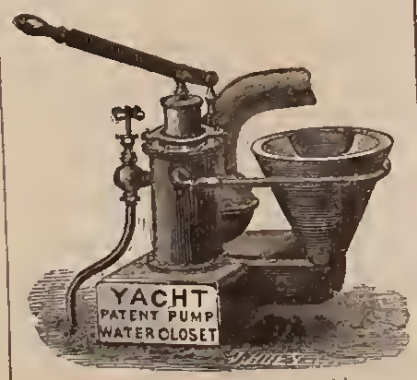

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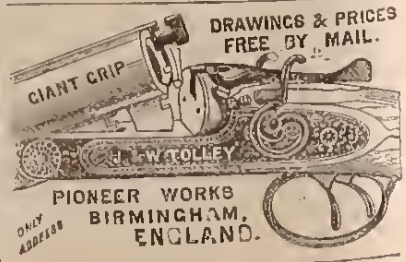

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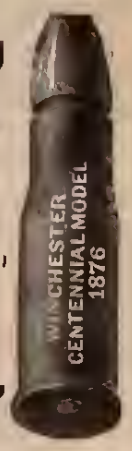

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MARYLAND POINTERS IN THE STUD.

"PONTO."

Liver color, weighs about 57 lbs.; is a first-class field dog both on coveys and single birds; has great speed and endurance, and is not afraid of briars. Was shown at Baltimore in the same class as Sensation, and was highly commended.

"BRAGG."

Lemon and white, weighs about 60 lbs.; litter brother to Till, who took first premium for Native Pointers at New York, May, 1877.

Fee for Either Dog, $20.

As regards performances of dogs in the field, would refer to Messrs. Clark & Sneider, Baltimore; Hon. J. E. Reyburn, 1,822 Spring Garden street, Philadelphia.

FOR SALE, one liver-colored pup, by Ponto, out of Ginger, whelped in August, 1877. Price for pup, $25. Also, five dog and four bitch pups, whelped April 1, 1878, by Ponto, out of Ginger. Price, $15, at eight weeks old, or $20 per pair. Address MUIRKIRK KENNEL, Muirkirk, Prince George's County, Md. apr25 3m

FOR SALE—A number of setter dogs; broken and unbroken dogs boarded and broken; all for low prices. H. T. DAVIS, South Wethersfield, Conn. je6 4t

The Kennel.

SPRATT'S PATENT
MEAT FIBRINE DOG CAKES.

Twenty-one Gold, Silver and Bronze Medals awarded, including Medal of English Kennel Club, and of Westminster Kennel Club, New York.

None are genuine unless so stamped.

F. O. De LUZE,
18 South William Street, N. Y., Sole Agent.

BROWN & HILDER, St. Louis, Western Agents.

For sale in cases of 112 pounds.

Rory O'More.

Pure bred red Irish Setter. The handsomest as well as one of the best bred and finest field dogs in the United States; winner of first prize at New York, 1877. Fee, $25.

W. N. CALLENDER,
je6 tf Albany, N. Y.

COCKERS! COCKERS!

Sportsmen in want of first-class cocker spaniels write at once to ROBERT WALKER, Franklin, Del. Co., N. Y. Stock and delivery guaranteed. Price, $15 each for dog or bitch or spayed bitch pups.
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ENGLISH PRIZE, STUD, SPORTING AND NON Sporting Dogs for sale. Greyhounds, pointers, setters, retrievers, spaniels, broke for the field, £20 each; for the field and show bench, of good pedigrees, £40 each; fox terriers, bull terriers, black and tan terriers, from £10 each, all dead game, of good pedigrees, and very valuable for breeding; better quality for the show bench, £20 each. Also a few Yorkshire terriers, at £10 each. The prize Yorkshire terrier, "Willie," will be sold. Winners of silver cup, Queensbury, first and silver cup Ulverston, and ten other prizes. All dogs will be sent to Messrs. Bampton & Steglish, Express Agents, 60 William street, New York. Drafts to accompany order, payable on Alliance Bank, London. Satisfaction is guaranteed by the advertiser, who is a judge and reporter of English dog shows. F. STEEL, Well Royd Farm, Stump Cross, Halifax, England.
mar7 6m

SPIKE COLLARS.—Spike Collars, by means of which dogs of ANY AGE OR breed, no matter how long honted, or what the disposition, can be taught to fetch and carry, and to retrieve game in a most perfect manner, with no play about it. Dogs broken of gun-shyness and whip-shyness, made steady before and behind, and "to heel" steadily; prevents jugging on the chain, besides a much more extended sphere of usefulness. Price, with directions for using, $3. Kennel collars, which no dog can get over his head, price $1. Address M. VON CULIN, Delaware City, Del. feb7 tf

FOR SALE—Six puppies, whelped May 12, out of Woodbridge's Plunket-Nell's setter bitch Maggie, by Col. P. W. Hudson's imported Gordon dog Max; undoubted pedigree. Three red dogs, one black and tan gyp, and a pair seal brown, dog and gyp, with tan marks. Price $10. Address J. L. WOODBRIDGE, Box 208, North Manchester, Conn. je27 1t

The Kennel.

COCKER SPANIEL
Breeding Kennel
OF

M. P. McKOON, Franklin, Del. Co., N. Y.

I keep only cockers of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruffed grouse and woodcock shooting and retrieving. jl0 1f

FOR SALE, when eight weeks old, twelve fine setter whelps, seven dogs and five bitches, out of my blue belton Mell by Burges' Druid; whelped May 17. Five are black, tan and white, balance black and white. Address L. F. WHITMAN, No. 6 City Hall, Detroit, Mich. je13 10t

FOR SALE—Pointer pups, five months old, out of my Queen, by Jesse Sherwood's imported champion Sancho; also, a red Irish setter dog, out of Moll II., by St. Patrick II. If sold at once will be sold cheap. Address N. R. BAKER, Topeka, Kan. je20 3t

FOR SALE CHEAP—A few splendid, well-bred, seven-months-old Gordon setter puppies; full pedigree. S. J. H., P. O. Box 1,223, N. Y. je27 1t

FOR SALE—A well-broken native setter. He is an excellent partridge dog and good retriever. Price moderate, or would exchange for a good breech-loader. R. A. GRIFFING, Hartford, Conn. je27 2t

CLUMBER SPANIEL FOR SALE—Romp, litter brother to Duchess, winner of second prize at New York Bench Show, 1878. Price $25. CHAS. W. BANKS, Patapsco Kennels, Elkridge Landing, Md. je27 1t

FOR SALE—A BARGAIN—Cocker spaniels; well-bred dog and bitch, nine months old; price, $15 for the pair, or $10 each. Will exchange one of them for a pure-bred Skye terrier pup, two or six months old. E. B. HARTWELL, 305 Third avenue, Louisville, Ky. je27 2t

FOR SALE—DINKS and SCOT, the handsomest brace of black and tan setters in the country; full brothers; four years old. Sire by Munn's Duke of Gordon, dam Kate. Thoroughly broken on snipe, quail and woodcock. Retrieve from land and water. Address M. HUGHES, Box 773, New York. je27 1t

DOGS BROKEN—Gentlemen desiring to have their dogs broken this year by me will please communicate at once. Want them fitted for the field ere season opens. Shall go South for the winter with the dogs. Some choice young stock for sale low. Address E. S. WANAMAKER, Clifton, Passaic County, N. J. je27 tf

FOR SALE—A thoroughbred setter dog, three years old, by a pure Gildersleeve dog, out of a bitch by Morford's celebrated Joe. This dog is thoroughly broken. Refer to Horace Smith, 33 Park Row, New York, as to qualities, etc. Price $75. T. DENMEAD, P. O. Box 458, Baltimore, Md. je27 2t

For Sale.

WILD PIGEONS—Live wild pigeons for sale for shooting purposes at W. S. COX & CO., Wholesale Fruit and Produce Commission Merchants, No. 174 West Sixth street, Cincinnati, Ohio. je27 1t

FOR SALE—5,000 live wild pigeons, stall fed, for for trapshooting. Address O. B. FITCH, Wilcox, Pa., or N. SCHULTZ, 55 Cliff street, N. Y. je27 4t

FOR SALE, CHEAP—A long-range Sharps Rifle, all complete and in fine order. Address box 150, Taunton, Mass. je20 4t

For Sale.

FOR SALE—Crystal Spring Fish Farm and Picnic Grounds, Oakland, Bergen County, N. J. Buildings cost over $1,200; five years old; gothic frame villa; all modern improvements; tenant's house, stables, etc.—in one, four horses; twenty-three acres, four acres grove, with from twenty to thirty ponds; fine garden; 100 young fruit trees; apple orchards. Address B. D. P., care this office. Je13 tf

FOR SALE CHEAP—A first-class Remington sporting rifle, .44 cal., 30in. bbl., 9¾ lbs., pistol grip; stock nicely finished; shot only a few times. For full particulars address E. T. BARNEST, 1116 G. St., Washington, D. C. Je27-tf.

Wanted.

WANTED—Additional capital of $7,000 to extend a business paying large profits, and to reduce the present cost of manufacture of an article in universal demand, secured by two strong patents. One-half interest to the right party with the above amount and the fullest investigation solicited to show a net profit of $10,000 the first year, with orders now on hand which cannot be filled for want of necessary capital. The best references given when required. None but principals address J. H., office of FOREST AND STREAM, 111 Fulton Street, N. Y. Je27-tf.

WANTED—A Scott Premier Gun, second-hand, 10-bore; not less than 10 lbs., with latest improvements. Price must be reasonable. Address, with full particulars, T. S. B., Box 4,810, N. Y. P. O. Je27 1t

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address True & Co., Augusta, Maine.

25 Fashionable Cards, no 2 alike, with name 10c. post paid. GEO. I. REED & CO., Nassau, N. Y. Oct4 1y

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EVERY ONE THEIR OWN PAINTER.

50 Per Cent. Saved.

We are manufacturing a very fine Pure Ready-Mixed Paint, mixed in such a manner that any ordinary stable or farm hand can make as good a job painting as a painter can with paint mixed in the old way. This is because our paint does not set quick, and thus show marks of the brush. We sell it lower than materials can be bought in the ordinary way, and pay freight on certain sized orders.

Any one wishing to Paint, will have mailed free, upon application, our book—"How Every One can Paint and Select Harmonious Colors." Address INGERSOLL PAINT WORKS, South and Dover streets, New York.

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GUNPOWDER.

American Powder Co.

233 STATE STREET,
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GENERAL WESTERN AGENTS.

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Laflin & Rand Powder Co.

No. 26 MURRAY ST., N. Y.,

Sole Proprietors and Manufacturers of

Orange Lightning Powder.

No. 1 to 7, strongest and Cleanest made, in sealed 1 lb. canisters. Higher numbers specially are recommended for breech-loading guns.

Orange Ducking Powder,

For water-fowl, strong and clean. No. 1 to 5 in metal kegs, 6¼ lbs. each, and canisters of 1 and 5 lbs. each.

Orange Rifle Powder.

The best for rifles and all ordinary purposes. Sizes, FG, FFG and FFFG, the last being the finest. Packed in wood and metal kegs of 25 lbs., 12½ lbs. and 6¼ lbs., and in canisters of 1 lb. and ½ lb.

All of the above give high velocities and less residuum than any other brands made, and are recommended and used by Capt. A. H. BOGARDUS, the "Champion Wing Shot of the World."

BLASTING POWDER and ELECTRICAL BLASTING APPARATUS. MILITARY POWDER of all kinds on hand and made to order. Safety Fuse, Frictional and Platinum Fuses.

Pamphlets, showing sizes of the grain by wood cut, sent free on application to the above address.

Auxiliary Rifle.

SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot-Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44 as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

AUXILIARY RIFLE BARREL COMPANY,
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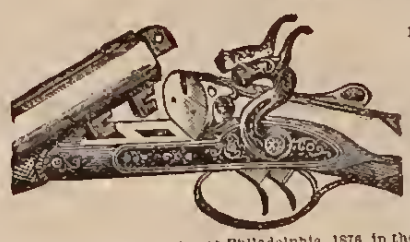
W. W. Greener's Champion Treble Wedge Fast, Breech-Loader.

THE WINNING GUN.



At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £705, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Choimondeley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1875, beating 102 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,323. BEWARE OF INFRINGEMENTS OR IMITATIONS.

W. W. GREENER, St. Mary's Works, Birmingham, England.

H. C. SQUIRES, Agent, No. 1 Cortlandt Street, New York City.

IMPORTANT TO FARMERS, COW-KEEPERS AND DAIRYMEN.

The Wonderful Self-Acting Cow-Milker,

PATENTED MAY 28, 1878.

THE MOST USEFUL INVENTION OF THE AGE.

Tested and approved by many of the leading Agriculturists, Dairymen and Farmers throughout the United States, and highly recommended by all who have used it.

WILL MILK A COW IN FROM THREE TO FOUR MINUTES and can be adjusted and used by A CHILD. Usefulness, simplicity, cleanliness, durability and cheapness combined. PRICE, TWO DOLLARS.

Apparatus, with full instructions and pamphlet containing description of the milker and sectional views and treatise of the cow's teats and bag, sent prepaid to any address on receipt of price, $2.

READ THE FOLLOWING TESTIMONIAL:

21 LEXINGTON AVENUE, N. Y., June 5, 1878.

I hereby certify that, in company with the Superintendent of the American Society for the Prevention of Cruelty to Animals, and other officers of that society, I have witnessed the operation of the Self-Acting Cow-Milker, and that it fulfills all that is claimed for it. (Signed) JOSEPH B. COLEMAN, Veterinary Surgeon.

Member Royal College of Veterinary Surgeons of England and Veterinary Surgeon to the American Society for the Prevention of Cruelty to Animals.

STENT & CO., Manufacturers' Agents, P. O. Box 2,997. 182 Nassau Street, New York.

Hart's Sportsman's Favorite Metallic Shells.

FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside. Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country.

HART & SLOAN, Newark, N. J.

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

TATHAM & BROTHERS,

NEW YORK.

MANUFACTURERS OF

BLUE LABEL.

AND

RED LABEL.

Compressed Buck Shot.

FIRST PREMIUM, CENTENNIAL EXHIBITION—REPORT.—"Exact uniformity of size, truly spherical form, high degree of finish and general excellence."

Gunpowder.

THE HAZARD POWDER CO

MANUFACTURERS OF

GUNPOWDER.

Hazard's "Electric Powder."

Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of 1 lb. *only*.

Hazard's "American Sporting."

Nos. 1 (fine) to 6 (coarse). In 1 lb. canisters and 6¼ lb. kegs. A fine grain, quick and clean, for upland prairie shooting. Well adapted to shot-guns.

Hazard's "Duck Shooting."

Nos. 1 (fine) to 5 (coarse). In 1 and 5 lb. canisters and 6¼ and 12½ lb. kegs. Burns *slowly* and very clean, shooting remarkably close and with *great penetration*. For field, forest or water shooting, it ranks any other brand, and it is equally serviceable for muzzle or breech-loaders.

Hazard's "Kentucky Rifle."

FFFG, FFG, and "Sea Shooting" FG, in kegs of 25, 12½ and 6¼ lbs, and cans of 5 lbs. FFFG is also packed in 1 and ½ lb. canisters. Burns strong and *moist*. The FFFG and FFG are favorite brands for ordinary sporting, and the "Sea Shooting" FG is the standard *Rifle* powder of the country.

Superior Mining and Blasting Powder.

GOVERNMENT CANNON & MUSKET POWDER; ALSO, SPECIAL GRADES FOR *EXPORT*, OF ANY REQUIRED GRAIN OR PROOF, MANUFACTURED TO ORDER.

The above can be had of dealers, or of the Company's Agents in every prominent city, or wholesale at our office.

88 WALL STREET, NEW YORK.

Sportsmen's Goods.

THOMAS ALDRED'S

Superior Archery.

W. HOLBERTON & CO.,
SOLE AGENTS,
117 FULTON STREET, N. Y.

A very fine stock of the above first-class makers goods just arriving. Liberal discount to the trade.

Fine Trout, Bass and Salmon Flies, tied after McDride, Thad. Norris, or other patterns, in a superior manner, constantly in stock.

Trout Flies, per dozen, $1.

Maine and Black Bass Flies, with double guards, per dozen, $4.

Large Black Bass Flies, with double guards, per dozen, $3.

Salmon Flies, per dozen, $5.

See other advertisement.

Magic Lanterns and Stereopticons.

E. & H. T. ANTHONY & CO., 591 Broadway, N. Y., opposite Metropolitan. Stereoscopes and Views; Graphoscopes, Chromos and Frames; Albums, Photographs of Celebrities, Photographic Transparencies, Convex Glass, Photographic Materials. Awarded First Premium at Vienna and Philadelphia. dec28

Sportsmen's Routes.

Chesapeake & Ohio RR

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
Richmond, Va.

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LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 2:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4:30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M. Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M. and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 393 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Supt.

J. CHITTENDEN, Gen'l Pass. Agent. je6 tf

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE.
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 3, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 11:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:50, 8:13, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 4:00, P. M. trains from New York and to the 7:45 A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 6:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 6:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept18 1y H. P. BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday and Thursday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

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TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing. Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
FRANK THOMSON, Gen'l Manager. feb11-tf

STONINGTON LINE,
FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE.

Elegant Steamers STONINGTON and NARRAGANSETT leave Pier 33 North River, foot Jay St, at 5:00 P.M. NOT A TRIP MISSED IN SEVEN YEARS.

Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

PROVIDENCE LINE.

Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

L. W. FILKINS, G. P. Agent. D. S. BABCOCK, Pres.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 22 South Delaware Avenue, Phila.

Dec14-1y

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.

Send for Guide Book.

HENRY PRATT, G. T. A.
my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and Black Bass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at Owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

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A. ROPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.
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FROM PIER 41, N. R., foot of Canal st., daily, including Sundays, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only night line of steamers selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.
EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the Office on the pier, at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. E. MAYO, Gen'l Passenger Agent.

St. Louis, Minneapolis
AND
ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

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Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids. C. J. IVES,
E. F. WINSLOW, Gen. Passenger Agent.
General Manager. tf

Hotels and Resorts for Sportsmen.

Grand Fishing.

ROBERTS' SUMMER RESORT,

DOTY ISLAND,

NEENAH, WIS.

FISHING AND ANGLING.—To the sportsman and angler no place in Wisconsin offers greater inducements, the catch of fish during the season being at all times good, and the varieties such as to make it first-class sport. Black and silver bass, muscalonge, pike, pickerel, catfish, sturgeon, rock bass and perch, are the common varieties caught, and as the best fishing grounds are within a few rods of the house, no time is lost in going or coming. je20 3m

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Sportsmen's Headquarters.

Bromfield House,
AND
LADIES' AND GENTS' DINING ROOMS,
55 Bromfield street, 15 Montgomery place,
BOSTON.
E. M. MESSENGER, Proprietor.
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FOR DEER, BEAR, PARTRIDGES, DUCKS,

Take the Grand Rapids and Indiana Railroad.

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FOR PIKE, PICKEREL, BASS, Etc.,

Follow the G. R. and I.—The "Fishing" Line

Time, New York to Grand Rapids, 37 hours

EXPENSES LOW.

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CORTES, Capt. Bennett, and
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form a regular line between above ports, leaving Pier 10, North River, New York, three times a month. Persons visiting Nova Scotia, Newfoundland or the Lower St. Lawrence will find this the cheapest and most direct route, avoiding changes and detention. Time between New York and Halifax about sixty hours, one half of trip through Long Island and Vineyard Sounds, in smooth water.

Cabin passage, including stateroom and meals, New York and Halifax, $15 gold; New York and St. Johns, $20, gold. Excursion tickets at reduced rates. For schedule of sailings and further particulars apply to

CLARK & SEAMAN,
56 West street, N. Y.

AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. je206m

Hotels and Resorts for Sportsmen.

Invalids' and Tourists' Hotel,
BUFFALO, N. Y.

A new and elegant summer resort; overlooks Lake Erie and Niagara River, and is in the midst of beautiful parks. The Canada shore and the spray from Niagara Falls may be distinctly seen from its Tower. Trains run to the Falls every hour. Climate delightfully cool, equable, and invigorating. The cool lake breezes so temper the atmosphere that no summer day is too warm for comfort, while the temperature at night is appreciated by all who have sojourned here during the warm months.

What man with a family, having once been crowded into some small "sky parlor" in that hottest of all known places—Saratoga—or has been continually jostled and elbowed by the metropolitan throng that rolls alternately in dust and surf at Long Branch, but that has vowed never again to repair to summer resorts! And yet with each returning season, comes the query, where shall we go? No place on this continent possesses more advantages for the tourist, pleasure seeker, or those in search of rest and relaxation from the cares of business, than this hotel. 1st, its accessibility. 2d, Its cool, bracing and salubrious climate; the thermometer ranging in summer from 65 to 75 degrees Fahrenheit. 3d, The attractions of the hotel and its environs. All these combine to render it the most desirable resort for those in search of relaxation and rest. The architectural features and interior finish of the house are said, by good judges, to be the finest of any hotel in the world. Its furnishing is unique, and superbly rich. Table unsurpassed. Elevator, hot, cold, Turkish, Russian, electric, needle, and other baths; billiard room, bowling alley, speaking pipes communicating from every room with the office; telegraph and R. R. ticket office, and all modern conveniences are provided. Advantages for fishing and boating are unsurpassed. Terms, $3.00, $3 50 and $4.00 per day, according to location of room. Address,

MANAGER INVALIDS' AND TOURISTS' HOTEL,
Buffalo, N. Y.

Sherman House,

(CLARK AND RANDOLPH),

CHICAGO.

Rates reduced to $3 per day for all rooms above the parlor floor, without baths.

Rooms with baths, $3.50, $4, and $4 50 per day.

ALVIN HULBERT, Prop'r.

We challenge any Hotel in the World to show as large and as elegantly furnished rooms as those of the SHERMAN. je20 tf

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NEW SUMMER BOARDING HOUSE

Situated three miles from Bethel Station, in the vicinity of good brook trout fishing. Healthy location and pleasant drives. Address H. R. GODWIN, North Bethel, Maine. je13tf

Hotels and Resorts for Sportsmen.

"AVON HOUSE," LAKEPORT, N. Y.

Lakeport is handsomely situated on the banks of Oneida Lake, four miles north of Chittenango Station, on the New York Central Railroad. Bathing, boating, fishing and hunting to season. Experienced guides. Steam, sail and row-boats to let; good stabling. Special inducements for families by the week. For further particulars apply to or address, J. J. DEMPSEY, Lakeport, N. Y.; formerly of Union Club, also Windsor and Union Square Hotels, N. Y. je13 1t

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Mt. Kineo House,

MOOSEHEAD LAKE, ME.

A delightful resort for the sportsman, summer tourist or invalid. Good trout fishing. For circulars address O. A. DENNEN, Superintendent, as above, or W. L. CHENERY, 196 State street, Boston, Mass. je10 6t

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Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. je6 tf

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HOPKINS HOUSE, Warctown, N. J. The proprietor, formerly of Harry Cedars, would hereby inform his friends and the public generally that he has removed to the Hopkins House, Waretown, where he is prepared to accommodate all who wish to give him a call. Every facility for boating and fishing will be found in readiness.

N. B.—Stages connect with trains at Waretown Junction. CHAS. MARTIN, Sr., Prop'r. je6 4t

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CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters, with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

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THE BARNEGAT HOUSE,

Forked River, Ocean County, N. J.

The nearest house to the finest fishing and gunning at Barnegat Bay. Superior accommodations for families or transient guests at reasonable rates. Access via N. J. S. R. R. Address S. L. ATKINSON, Manager. Refer to C. SMITH, 41 West Broadway. Je20 4t

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MONTCLAIR & GREENWOOD LAKE RAILWAY.

THE ONLY THROUGH ROUTE TO GREENWOOD LAKE.

Splendid Bass and Pickerel Fishing—Beautiful Lake and Mountain Scenery.

Trains leave New York, foot of Courtlandt and Desbrosses streets, daily (Sundays excepted) at 8:20 A. M. and 4:30 P. M.

Leave Brooklyn, via Annex boats foot of Fulton street, at 8 A. M. and 4 P. M.

Pullman Parlor Car on 4:30 P. M. train.

Through coach daily between Hackensack, Paterson and Greenwood Lake.

Excursion fare from Brooklyn, New York or Jersey City, $2.75. Parties of fifteen or more persons, $2 20 each.

J. F. MACKIE, Gen. Pass. Agent.

Notice to Anglers.

THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle.

Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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St. George Hotel,

Cooper, Greenwood Lake, N. J.
S. W. GEORGE, Proprietor.

P. O. address, Greenwood Lake, Orange Co., N. Y. may2 3m

THE SUBSCRIBER desires a capitalist or association of gentlemen to join him in the erection of a select family hotel or club house on the most beautiful and eligible situation at Greenwood Lake, N. Y., with from twenty to fifty acres of land, as may be desired, and will take one-third of the purchase price of the property to stock or shares in the enterprise. Choice building sites, with water fronts, also for sale, in plots to suit, on favorable terms. Circulars can be had at office of FOREST AND STREAM. Apply to or address S. CALDWELL, Greenwood Lake, Orange County, N. Y. may16 tf

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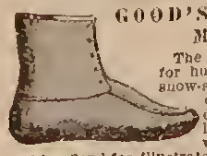
BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y. Splendid bass fishing good boating and bathing. Telegraph office in house. Take Montclair and Greenwood Lake Railway.

TRAPHAGEN HOUSE, GREENWOOD LAKE, Orange County, N. Y., L. Y JENNESS. An excellent family hotel. Also good accommodations for the sportsman. Good boats and every facility for fishing. je13 3m

Sportsmen's Goods.



GOOD'S OIL TANNED MOCCASINS.

The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

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LOST

BECAUSE HE HAD NO

COMPASS.

THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

BOUDREN'S PATENT COMBINATION

Jack, Dash and Fishing LAMP,

For NIGHT HUNTING Deer and other animals, SPEARING FISH. Indispensable on any Boating, Yachting or Camping Trip.

Not affected by Wind, Rain or Jolting. Burns kerosene safely without a chimney. Throws a powerful light 200 feet ahead. As a DASH LAMP for CARRIAGES it has no equal. Fits on any shaped dash or on any vehicle.

PRICE.

Jack and Dash.....$5 00
Fishing Lamp..... 8 00

C. O. D., with privilege of examination.

WHITE MF'G COMPANY,
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FERGUSON'S

Sportsman's Lantern.

WITH HEAD AND STAFF ATTACHMENTS.
(Patent Applied For.)

Light, Strong, Compact and very Effective. It is the BEST lantern for sportsmen and Camping Parties yet offered. UNEQUALLED either as a CAMP lantern, HAND lantern, "HEAD JACK" or "STAFF JACK." Can be worn over any size or style of hat, and can easily be carried in the knap-sack or pack-basket. No chimney, no smoke; cannot be extinguished by wind, rain or jolting. Send for descriptive circular to A. FERGUSON, 137 Wilson street, Brooklyn, E. D., N. Y., or W. HOLBERTON & CO., Sole Agents, 117 Fulton street, N. Y. may16 2m

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Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.

No 1 weighs 1½ lbs. Sustains six adults. Sent by mail on receipt of $3.75. Obtain our circulars describing other sizes.

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DECOY DUCKS.

M. C. WEDD,

Manufacturer of Decoy Ducks, Mallards, Blacks, Canvas-Backs, Blue-Bills and Red-Heads. Extra size and very nice, by my customers sending their best models to copy. 50 cents each. 87 Manhattan street, Rochester, N. Y. je.7 2t

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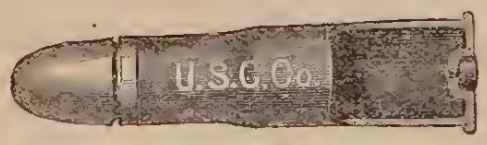
United States Cartridge Company,



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MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and in use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

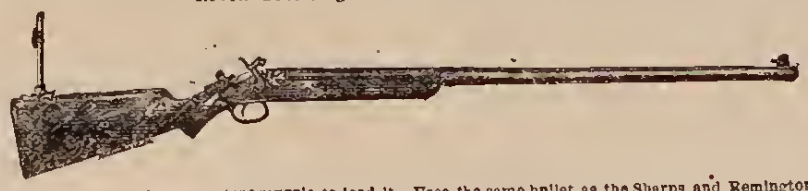
Cartridges for Target Practice.

Send for Illustrated Catalogue.

FOWLER & FULTON, General Agents, 300 Broadway, N. Y.

Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder end balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.

BARTON & CO.,
337 Broadway, New York.

IMPORTERS AND MANUFACTURERS OF

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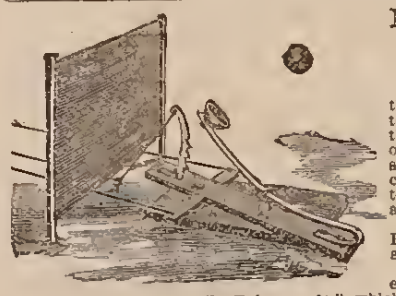
REDUCED PRICE LIST OF SPLIT BAMBOO RODS, WARRANTED THE BEST IN THE MARKET FOR THE PRICE.

Six-strip hexagonal fly rod, German silver mountings, three-joint, extra tip and tip case..... $18 00
Six-strip hexagonal fly rod, German silver mountings, three-joint, extra tip and tip case, solid reel plate..... 25 00
Six-strip hexagonal, black bass rod, German silver mountings, three-joint, extra tip and tip case, solid reel plate..... 27 00
H. L. LEONARD'S six-strip hexagonal light fly rod, two-joint, German silver mounting, extra tip and tip case..... 17 00
H. L. LEONARD'S Six-strip hexagonal fly rod, German silver mounting, three-joint, extra tip and tip case, waterproof ferrules..... 30 00
Black bass rod, ash and lancewood, brass full mounted, two middle joints and three tips, 10½ft..... 7 50
Black bass rod, ash and lancewood, German silver, full mounted, whipped butt, two middle joints and three tips..... 15 00
Russia-leather fly-book, with the "Hyde" clip, large size..... 5 00
Russia-leather fly-book, with the "Hyde" clip, small size..... 3 50
Best enameled waterproof taper fly lines, from.....6c. to 10c. per yard
Helgramites or Dobson bait for black bass, each..... 60
A large assortment of trout and black bass flies from.....$1 to $2.50 per dozen
All kinds of Snelled Hooks tied to order. Also Flies dressed to any desired pattern.
United States Arms Revolver, 7 shot, .32 cal., nickel, each..... $2 50
United States Arms Revolver, 5 shot, .32 cal., nickel, each..... 4 50

THESE PISTOLS WARRANTED.

EVERY REQUISITE FOR SPORTSMAN'S OUTFITS.

Agents for Huber's Champion Glass Ball Trap..... each $9 00
" Amateur " " " ..... " 5.50



Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the putter, is now ready for the market. **Price $8. Old style, $6.**

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

HEADQUARTERS FOR BALLS, HAGGERTY BROS. & CO., 10 Platt Street, N. Y. City.
FOR TRAPS, HART & SLOAN, Newark, N. J.

Second and enlarged edition of "Field, Cover and Trap Shooting," by A. B. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill. Dec6 tf

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IRA A. PAINE'S
FEATHER FILLED GLASS BALL.
PATENTED OCTOBER 23, 1877.

The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade

HEADQUARTERS BOHEMIAN GLASS WORKS, 214 Pearl Street, N. Y.

Sportsmen's Goods.

INDIA RUBBER
Fishing Pants, Coats, Leggins and Boots,
RUBBER CAMP BLANKETS,

COMPLETE

SPORTING AND CAMPING OUTFITS, AND

India Rubber Goods of Every Description.

HODGMAN & CO.,

SEND FOR PRICE LIST. 27 MAIDEN LANE, N. Y

'76 Shooting Coat. Yachting Shirt. Gaiter Pantaloons.

The largest assortment of SHOOTING GARMENTS in the World.

Illustrated price list will be sent to any address on letter of request.

GEO. C. HENNING,
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STEPHEN SUMMERVILLE,

ENGRAVER OF

FINE GUN MOUNTINGS,

111 SOUTH TENTH STREET,

je20 2t Philadelphia, Pa.

PHOTOS of Actresses, comic, etc., 10 for 25 cts. List of books, 2c. S. R. LUDDEN, E. Lincoln, Me. je13 1yr

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Fishing Tackle.

Craige's Full-Length Fly Book

with the "Hyde Clip," bound in fine Russia Leather and sewed.

No. 1 book, stiff cover, holding 1 gross flies, $7 00
No. 2 " flexible " " 8 dozen " 5 00
No. 4 " " " " 6 " " 3 75

Sent C. O. D. or upon receipt of price. Steadman's Flea Powder and Areca Nut, each 50 cents per package, postpaid TEMPLE F. CRAIGE (formerly at W. Holberton's Sportsmen's Emporium), Sportsmen's Purchasing Agent. Office, 95 Maiden Lane, N. Y.

THE STRONG BLACK BASS ROD--IN TWO PIECES.

The undersigned is making a rod for Black Bad fishing, to which the attention of anglers is called. It is made from drawings and suggestions furnished by the well-known expert, Dr. J. A. Henshall, of Ky., who says of it: "It is the finest rod made, and just 'the thing' for the best black bass anglers." The two-joint principle, applied to rods of this style and class, Dr. Henshall considers by far the best. The butt of the STRONG ROD is of the choicest second-growth ash, and the top-joint of Cuba selected lancewood. The rod is finished with solid German silver mountings; reel bands above the hand, and standing guides throughout. Length, 8ft., to 8ft. 6in.; weight, 8 ozs. to 9 ozs. The finish of the STRONG ROD is equal to any rod made. It is warranted in every respect. Price complete, as above, $10; price with extra top joint, $13 Address

F. A. STRONG, Honesdale, Pa.

Rods of all kinds made to order. Send for price list. je27 tf

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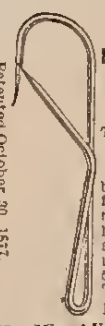
EDGAR'S



Patented October 30, 1877.

PATENT BARBLESS FISH BOOK.

The Only Reliable Hook Made.

We challenge the world on black bass, salmon and trout. Impossible for the fish to cast this hook. Guaranteed not to break. Try them. Trout hooks Nos. 2, 3 and 4, Bass Nos. 5, 6 and 7, Salmon Nos. 8 and 9, sent by mail for 10c. each; 3 for 25c., 15 for $1. 50 for $2.75; assorted sizes, 100, $5. Trout flies, 25c.; salmon and bass, 50c.

LIBERAL DISCOUNT TO THE TRADE.

H. W. ALL & CO., Bloomsburg, Penn., Manufacturers and Sole Proprietors.

Western trade supplied by W. H. HOLABIRD, Valparaiso, Ind. je13 4t

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SALMON FISHING IN CANADA

FOREST & SONS, of Ketso, Celebrated Salmon Flies and Casting Lines for sale at

T. W. BOYD,
241 Notre Dame street,
Montreal, Canada.
je6 4t

"The Mitchell Rods."

W. MITCHELL,

FISHING-ROD MAKER,

(Still in the Field).

je6 3mos 26 VANDAM STREET, N. Y.

FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, JULY 4, 1878.

Volume 10.—No. 22. No. 111 Fulton St., N. Y.

Selected.

THE TALE OF THE TERRIBLE FIRE

I WILL tell you the tale of the terrible fire:
It springs from the earth—it is dreadful and dire.

In the dark
Wintry sky,
See the spark
Upward fly;
See it grow
In its frame—
See it glow
Into flame!

See it burning and blazing;
See it spring into life
With a vigor amazing—
How it longs for the strife!
Hear the noise and the rattle—
How it swells, how it grows,
Like the crash of a battle,
Like the clash of the foes!

See it rushing and rising and roaring,
See it trying to touch a tall star:
It seems in the sky to be soaring
Like a flag of fierce flame from afar.
See it turning and burning and braving—
See it streaming and gleaming and red!
Ah! the smoke in the air is now waving
Like a winding-sheet of dull lead.

Hear it laugh with wild glee at each futile endeavor
To quench or to quell its exuberant force:
It is flaming and free and fantastic forever;
It delights and exults with no pang of remorse,
With no pain, with but passion—mad passion—it quivers
With its pennon of scarlet, the bloodiest hue,
With its gleaming streams and its rearing rivers,
It dares to do all things that flame dares to do.

How it darts, how it dances and dashes,
As though it had taken for aim,
To reduce all the world into ashes
And to fling all the stars into flame!
It is glittering and glowing and glaring—
And raising it rings its own knell;
It is showing its wonderful daring—
It is turning the sky into hell!

How it lazily lingers
With its swell and its fall;
With its fiery fingers
Wiredly weaving a pall;
With its horrible hisses,
Like the wind in a storm;
With its blistering kisses,
On face and on form!

Of its flashes
Bereft,
Only ashes
Are left;
Till its cries
Tell its doom—
And it dies
In the gloom.

I have told you the tale of the terrible fire:
It has sung its last song to its luminous lyre—
It has sung its last song, it has breathed its last breath,
It has lived without life, it has died without death.

—*Appleton's Journal for July.*

For Forest and Stream and Rod and Gun.

In the Chippewa Country.

UNCLE SAM has large interests at stake in the northern and western portion of his dominions, and often has occasion to send special commissioners or agents to those regions to look after the proper enforcement of his Indian and public land policies. The instructions given me in the spring of 1875 required that I should visit certain bands of the Sioux and Chippewa Indians in Dakota, Minnesota and Wisconsin, and assign to them, in severalty, allotments of land in accordance with previous treaty stipulations. About the first of June I turned my face from St. Paul toward the northwest, via the St. Paul and Pacific Railway, in company with the agent for the Sissdon Sioux and his brother, whom I had found in St. Paul. Our first objective point was "Morris," a small station about 175 miles distant, where we were to leave the railroad and cross the prairie some seventy miles to the Indian agency. Arriving at Morris, we quartered for the night at the Falsom House, a small two-story frame with perhaps six or eight apartments, each as many feet square and divided by pasteboard and wall-paper partitions, a fact that rendered all Caudle lectures the topic of mirthful conversation among the assembled guests the following morning. After breakfast a ride across the prairie to Foss' Lake, some four miles distant, was in order. A clumsy, flat-bottomed scow was the vessel Mr. Foss rented to amateur fishermen at fifty cents an hour. Our circuit of this small lake resulted in the capture of a dozen or more large pickerel, upon which we amply dined and breakfasted. A team and driver from the Indian agency arrived the next morning, and we pursued our journey, having added to our company a companion in the person of Carlow, a fine setter dog. Carlow had been the property and companion of an English sportsman in that neighborhood the previous year, but having had the misfortune to lose an eye through the awkward shooting of his master, was left in charge of the freight agent, Mr. Fisher. Carlow was a thoroughly educated gentleman of the most refined and tender instincts and feelings, and since his residence in Morris had been deeply humiliated at the manner of his treatment; no one seemed to assume the *role* of patron; no one encouraged him with kindly sympathy or friendly greeting; had boys cast loose stones and stray clods of dirt at him as he rapidly disappeared around friendly corners; proletarian curs snarled their displeasure or vented their deeper malice upon him at every opportune occasion. Borne down with the weight of these afflictions and the want of an occasional nutritious bone, Carlow had degenerated into a mere shadow of his pristine strength, beauty and activity. A casual glance at him was sufficient to tell the whole story, and I found no difficulty in procuring Mr. Fisher's permission to take charge of the unhappy dog and use him during the summer. A hearty meal of boiled beef and potatoes—doubtless the first in many months—with a few friendly pats upon the head, at once rendered me the focal point of Carlow's affections and inspired him with a new life that was fully manifest in his joyous bark and scampering antics as we started for the Indian agency on the morning of the 9th of June. Our course was due west, and as far as the eye could reach on either side stretched the boundless prairie, a novel sight to one whose life has been spent in the older States. The grass was fresh and green, and the numerous small lakes studding the bosom of the prairie like diamonds of rare brilliancy set in the brightest emerald, relieved all sense of monotony. As we wound along the black and snake-like trail, first skirting the bank of some beautiful little lake, whose bosom was literally alive with wild ducks and geese, and anon far out upon the prairie that swarmed with plover, curlew and an occasional prairie chicken, our spirits became buoyant and we drank in the inspiring sights on that beautiful day until our hearts became filled with wonderment at the marvelous extent, richness and variety of nature's creative genius. The material instincts of humanity, however, soon overcame all dreaming propensities and Carlow was kept busy retrieving ducks and birds throughout most of the day. In this connection I noticed a peculiarity of the curlew—it may be familiar enough to those who have had much experience in shooting them, but was novel to me—which is, that the sound of a gun seems to attract rather than frighten them; thus at times, after firing, there would be three to half a dozen of these birds rapidly circling around the wagon, within easy range and uttering their shrill screams, which they would continue for half a mile or more unless sooner victimized themselves.

Thirty miles west of Morris we reached Lake Toqua, a fine sheet of water several miles in length, a peninsula at the north end of which is covered with a dense cluster of oaks, the only timber sighted since leaving the former place. Two squatters had already fastened themselves upon this priceless grove and had erected comfortable log-houses within its shelter at a distance of thirty miles from the nearest neighbor. One was a man who had in early life been a newspaper editor in Connecticut, but, crossed in love, had left the comforts of civilization and was now the husband of as dirty and ugly a squaw as I remember to have met with. Fish were so abundant in the lake that a reasonable number could be caught almost any time by standing upon the bank, casting a trolling spoon as far out as one could readily throw, and rapidly hauling in.

After dinner we resumed our journey over a country similar in all respects to that we had been traversing all day, and at dark reached Brown's Valley, twelve miles distant from the agency, where, to avoid a drenching, we ate supper and spent the night. Brown's Valley took its name from a former Indian Agent and person of considerable local prominence and wealth in the earlier history of Minnesota. He married a Sioux squaw, and though he died some years since in New York City—where he was attempting to perfect an invention of a steam wagon for navigating the prairies—his widow, three sons and three daughters still reside in the valley. Two of the daughters were educated at Georgetown College, D. C., and are fine scholars, musicians, equestrians or sportswomen. This valley occupies a singular position; it is a depression of an hundred feet below the general level of the surrounding country; perhaps a mile in width and two in length, and as far as the eye is capable of judging is perfectly flat. At one end of this valley lies Lake Traverse whose waters find an outlet through the Traverse des Sioux, Red River of the North, etc., into Hudson's Bay; at the opposite end is Big Stone Lake which, through the medium of the Minnesota and Mississippi Rivers, eventually mingles with the Gulf of Mexico, and yet the nearest point of approach of these widely diverging currents is not much in excess of a quarter of a mile.

From this point to the Indian Agency, the country continues level or gently rolling prairie. The Agency itself occupies an elevated site upon the summit of the first terrace or "Little Coteau," as it is commonly called. These "Coteaus" or hills of the prairie are of singular formation. They traverse the country from N. W. to S. E. for a distance perhaps of a hundred miles or more; they rise abruptly from the level prairie to the height of two to five hundred feet, but, unlike other ranges of hills, terminate in no sharp summits or peaks, and, viewing them from the plain below, resemble a great terrace or military earthwork. A closer inspection indicates that they are intersected in all directions by deep ravines; these ravines are filled with a heavy growth of oak timber, sufficient to supply the needs of the Indians for many years to come. On the summit of the "Coteaus" as far west as the eye can reach, and in fact nearly to the crossing of the James River, the country is decidedly broken and scarred with alternate hillocks and ravines, with scarcely more than a mile or two in any direction without a lake. These lakes are all shallow with but two or three exceptions, scarcely exceeding ten to twenty feet in extreme depth, and many of them that present quite formidable sheets of water in June are nothing but meadows of succulent grass by the middle of August, that but a few years since were the delight of the thousands of buffalo frequenting this region. The water of the lakes and streams is quite strongly impregnated with alkali, which increases in proportion as you travel westward. At Fort Wadsworth, twenty-seven miles beyond the Indian Agency, it is absolutely unfit for drinking purposes, and the only resource of the troops stationed there is to put up large quantities of ice in winter and drink nothing but melted ice in summer (spiritous fluids of course excepted). The presence of this baneful substance is manifest in the milk, butter and eggs, and the hardness of the water must be broken with ashes or strong lye before it is available for washing purposes. The Indians occupying this reservation number some 1,700, and are the remnant of those formerly residing at Yellow Medicine and other points on the Minnesota River; they were largely engaged in the Sioux massacre at New Ulm and thereabouts in 1862, though numbers of them were then loyal to the Government and, at great personal risk, aided and rescued unprotected settlers from their bloodthirsty brethren. They are now provided by treaty with a reservation of nearly a million of acres, one-fourth of which is as fine agricultural land as any section of the country affords. The entire reserve furnishes fine grazing for stock, the only drawback being the length and severity of the winters.

After a few days spent in resting from the fatigues of travel, and in preparations for beginning the practical work contemplated by my instructions, I found myself armed and equipped after the following style—viz., one army ambulance and pair of good horses; one one-quarter blood Sioux interpreter, who also acted in the capacity of driver; one surveyor, with necessary instruments; one canvas wagon cover to be stretched across the wagon tongues and used in the capacity of a tent; one pair of blankets each; a rubber blanket, a gossamer waterproof coat for myself; one Fowler split bamboo rod; one breech-loading and one muzzle-loading shotgun; necessary cooking utensils and food, and Carlow, together with a native Sioux pony, which I purchased from a roaming band of Yanktonai Sioux, at that time visiting at the Agency.

It was our custom in this shape to leave the Agency each Monday morning, and after prosecuting assiduously throughout the week the work of surveying, marking and assigning to the various Indians their several allotments of land for future residence and cultivation, as well as, incidentally, the sport of shooting and fishing, to return to the Agency on Saturday night for a rest.

One Monday morning in the latter part of June found us *en route* for "Enemy" Lake, as the Indians designate it, near the western edge of the reservation, upon whose banks lived, or camped, a band of perhaps half a dozen lodges of the least civilized portion of the tribes, but who, hearing of my arrival at the Agency, had sent in word of their desire to receive allotments of land, and in future to follow the white man's mode of life. The road from the Agency leads directly to the foot of the "Coteaus" some half mile away, and winds along the sides thereof for a considerable distance, gradually ascending to the summit, from which a view of unparalleled magnificence and novelty is spread before the gaze. To the northwest and southeast, beyond the limits of human vision, stretches the huge back-bone or ridge, intersected in all directions with deep ravines, from which rises the thick, dark foliage of the great oak groves, while far out to the north and east and three hundred feet below you, is spread a vast expanse of perfectly level prairie, covered with the greenest and most succulent of grasses. From this point the road was simply an Indian trail, over a country more or less rugged and not particularly interesting until we reached "Enemy" Lake, some twenty-five miles west of the Agency. I at once assembled the Indians and had each one designate as near as he could the tract of land desired for his allotment, after which I caused the lines to be surveyed and marked, by which time the day was well nigh gone, and after moving a mile or so to the north, pitched camp on the shore of the lake, cooked our supper, and went to bed tired.

In the morning I rose bright and early, determined to have some fish for breakfast if possible, while "Billy," the interpreter, took a gun and went in quest of birds. A small "dug-

out" or canoe, belonging to one of the Indians, was drawn up on the bank, and as the lake was too shallow near the shore to admit of the advantageous use of rod and line, I at once appropriated the canoe and began to paddle out into the lake. To say that this vessel was decidedly "cranky" is drawing it quite mild. Although when a boy I had been quite an adept in managing "dug-outs," many years had elapsed since I had practiced the art, and my hand had certainly forgot its cunning with the paddle. By extreme care, interlarded with much wabbling and nervous holding of the breath, I reached a point perhaps a quarter of a mile from the shore. Here I cast my line, and before I had time to adjust myself in a comfortable position with a view to awaiting results, came a "strike," and in a moment he was well hooked. Away sped line and hook in the direction of a small island near at hand, where I saw with apprehension numerous snags protruding above the surface. An attempt to "snub" him too suddenly almost cost me a good rod, which bent to a curve that would have done credit to a "Damascus blade," but it had the effect of changing his movement in the direction of the open lake. The reel spun like a windmill, but I had two hundred feet of line, which I aided with a few well directed strokes of the paddle in the right direction. At last, after a full fifteen minutes spent in active hostilities, he lay exhausted and quiet in the bottom of the canoe, as fine a specimen of *Grystes nigricans* as it was ever my good luck to capture. In my judgment, he would have tipped the scales at seven pounds. I cast my line again, and with almost the same alacrity was the hook "gobbled." Success had made me careless, and after a less vigorous resistance, I reached forward to lift the victim into the canoe. My motion was characterized with rather too much suddenness. The canoe tipped to a dangerous degree. A quick backward motion more than balanced it, and the next moment I was frantically struggling in the lake. If there was anything in which I excelled when a boy it was as a swimmer. My feats in that line, however, had always been performed in a state of nature, and now my movements were embarrassed by heavy boots and clothes. However, a few strokes placed the canoe within my reach, which was bottom up. I drew myself on top of it, recovered control of my rod and line, which had become entangled with the canoe at the moment of the accident, and after ascertaining that the fish was still securely hooked, struck out with both hands to paddle the canoe ashore. In due time, though with patience and good humor almost exhausted, I reached shallow water and waded out, with one black bass of about five or six pounds weight to solace me for my unforeseen ducking. "Billy" having returned with two curlew and two plover, we ate a hearty breakfast, and after wringing and drying my clothes in the sun—which had by this time become quite warm—we were again ready to move on. At this place I saw for the first time what became afterward a very familiar sight. Along the shore of the lake, and completely encircling it, appeared a dark rim or strip, perhaps six inches to a foot in width, that looked as if it might be an accumulation of little black sticks washed up by the action of the water. But a close inspection showed that it was nothing more nor less than an accumulation of leeches of all sizes, some of them being fully three inches in length. Almost all the lakes in this region are infested with millions of these creatures, the reason for which I have heard no one explain.

From "Enemy Lake" we rode across an exceedingly rough country, without road or path of any description, until we reached "Pickerel" Lake, some six miles to the northeast. This is one of the very few deep lakes in this region. It is surrounded on all sides by precipitous banks, from thirty to one hundred feet high, and is probably a mile and one-half long by one-fourth mile in width. I made three allotments on the banks of this lake, and hired one of the Indians to paddle me around it in his canoe, whilst I trolled for pickerel. The fish were almost too plentiful to call it sport, for after a couple of hours spent in encircling the lake, we returned to our starting point with (as a rough guess) eighty to one hundred pounds of pickerel. I retained enough for our supper and breakfast, giving the balance to the Indians. R.

Washington, D. C.

For Forest and Stream and Rod and Gun

A DEER HUNT AMONG THE PINES.

WE have left the railroad at H——, in Central Wisconsin, for the village of N——, seventeen miles away, equipped with arms, ammunition and old clothes sufficient for a month in the woods. We travel by a good road, over an undulating country, which, a little while ago, was a dense forest of white pine and tamarack, with only here and there marks of the spoiler, in the shape of a logger's camp. Now all is changed. The ax and the muscle of the sturdy woodsman have turned it into a forest of stumps and fallen timber. The saw-mill, the snug log house, "entertainment for man and beast," "Lumberman's Home," and "Half-way House," ornament or disfigure the landscape. Now we pass the sight of a hunting camp, occupied by myself and a single comrade fourteen years ago, then in the unbroken pine woods, now the centre of a thickly settled district, disturbed by the whistle of steam, the stroke of the tearing saw, and the clang of the smith's hammer. We pass within a few feet of the spot where was passed, I verily believe, the most uncomfortable night of my life, a day of toil through hog-hole and windfall, road cutting and log rolling, a balky team, a "rickety" wagon, and a profane driver, all garnished with a merciless drizzle of rain, sleet and snow; and then at night our camp was a few pine-boughs for shelter and wet blankets for covering, and, with empty stomachs and gloomy thoughts for our companions, we dozed and shivered through the night—no human habitation then nearer than ten miles. Now a snug hotel and a neat little village occupy the spot. Within a stone's throw of the hotel in the bank of the stream lived then a colony of beavers, and standing in the door I mark the place in three different directions where I hung up two fine large bucks and a doe. If you have ever roughed it in the woods, thinking over the events of your expedition, you remember with the keenest enjoyment the pleasures, they seem to you like a pleasant dream. But you forget and cannot realize the discomforts you have had at the same time. The eager quest for game, the pursuit, the fruition of capture by your own sagacity and skill, you realize over and over again. You forget the wet feet, the benumbed fingers, the aching bones and the tired muscles; you have no doubt come home many times with little game and much weariness, inwardly swearing that you would never hunt again—for five lean bucks.

But the blandishments of the very next Indian summer are too much for your virtue, and you are off for the woods again. Well, whilst I was moralizing, our team has been going at a round rate of speed, and I see in the distance the end of our journey by public conveyance. Here we obtained our camp outfit and a good cook, and two teams to convey us into the woods proper. On the second day you might have found us forty miles away in the unbroken pine woods, comfortably encamped in a substantial log cabin, twenty miles from the nearest town. The first rifle-shot has been fired already. One of our party brought down a splendid four-prong buck before reaching camp; a beautiful running shot, such a one as makes an old man feel young again, and a young one feel like a veteran.

Our company consists of three, exclusive of our cook. Uncle John is sixty years old, vigorous in body, lean and tall, one of those rare characters whose sympathies and tastes are more in unison with the young than the old; a man whose heart will be young and kindly disposed to all, even to its last pulsation; a keen sportsman, a camp companion worth his weight in gold. (How his honest old face would blush if he should see this.) The next is T——, a bachelor of *uncertain age*, and lastly myself, aged forty-eight. We are encamped on the divide between the Eauclaire River on the west and Black River on the east, the two streams here being about five miles apart. The land is densely timbered, undulating, but not precipitous; a succession of ridges and hollows, each with its small stream tributary to the Eauclaire. The ridges are for the most part covered with a growth of hard wood, oak, maple, rock elm, etc.; the slopes and bottom-land with white pine. There is such a universal sameness in the woods, that to get lost is an easy matter, and even those who are perfectly familiar with the locality never venture out without a compass. The deer are plenty; bears have been here also in large numbers; we see old signs in abundance, but the animals themselves have gone for the most part to hibernate in the great oak forests to the far north. The old hunters say that September is the time for bears, and I believe it. Ruffed grouse and gray squirrels are here in countless numbers, and that repulsive but innocent animal, the porcupine, is met at almost every turn. We see the tracks and hear the howl of the large timber wolf frequently, but have seen none as yet. In my opinion he is the most cunning of all the prowlers of the forest, and the hardest to get a shot at.

October Ninetcenth.—The order is that each one shall go his own way and hunt as he sees fit. We do not propose to set a pack of yelling devils on the trail of the deer, and lie in wait for him with a shot-gun and handful of slugs, like a party of highwaymen. Our dog is trained to follow the slot of a wounded deer, and nothing else. The weather is mild and soft. The deer are shy, and Uncle John and I have returned empty-handed. T—— bagged a fine doe, and the carcass must be brought into camp in the morning, before the ravens find it.

Twentieth.—T—— is in luck again to-day, and I do believe he stands a full inch taller in his shoe-packs than he did yesterday. One of our teams is here yet, and on their way to fetch in the doe T—— killed a large three-tined buck and a beautiful spikehorn, fetching all three to camp together. I also bagged to-day a fine pronghorn buck, a two year-old, very fat and large. I may add here that I have killed, and seen killed in this region, a great many deer, but have never yet seen one, young or old, which was not loaded with fat.

Twenty-second.—It has snowed all night and bids fair to continue through the day. The foliage is so loaded with it that the pine woods look almost like great snow-banks extending to their topmost branches. And still it comes.

Twenty-fourth.—It is over at last, and the snow lies twenty inches deep. A light wind has dislodged it from the trees for the most part, and we started in for business this morning. The snow is soft, and the weather not at all cold. Decidedly unpleasant walking. Uncle John started an immense buck almost in sight of camp, and poured into the back of his neck a whole charge of buckshot from his No 9 shot-gun, to which he paid not the least attention. He ran about forty yards and almost over F—, who fired one barrel of his rifle at him, breaking one fore-leg just above the foot. This turned him across the hollow and up the next ridge, and as he ran by me, seventy-five yards away, I fired one barrel of my rifle at him, and he fell in his tracks, but in a moment was on his feet again and off like a race horse, bleeding profusely. After following him long enough to find that there was a good deal of run in him yet, I went to camp for the dog, put him on the trail, and in five minutes he was brought to bay and another shot finished him. He proved to be a very large five-tined buck. On examination we found that Uncle John's shot had penetrated very little more than skin deep, that I had not hit him at all, and the only wound he had of any consequence (except the last one while at bay) was the broken bone of the fore leg, just above the fetlock.

The more I see of deer hunting, the more firmly fixed is my opinion that the best weapon for the sport is a rifle of large calibre. The best of shot-guns are, to say the least, uncertain to hit at over fifty yards, and even at that distance they will not kill half the time. The concussion of the shot is so small that, even when fatally shot, a deer will run for miles before he succumbs, and so will be lost. Whereas with the large bore rifle, and even moderate skill in its use, every shot at fifty yards is certain; nearly all at one hundred; many at one hundred and fifty and two hundred. Then the concussion and the hemorrhage consequent upon the heavy stroke and the large wound are such that a deer will rarely run beyond eye or earshot before he is down. On this expedition T— used a double rifle, thirty-two conical balls to the pound, and I a double rifle, twenty-six round balls to the pound. The first ten deer we killed, except the old buck mentioned above, dropped to the shot without making more than a single bound, and I attribute it not so much to good shooting as to the heavy lead and the shock of a large wound. I am perfectly aware that many deer are killed with buckshot, but I cannot help thinking that many are hurt and escape, either to recover or to die a lingering and painful death, which would have been secured by the rifle. Many are missed at seventy-five or eighty yards, which any ordinary rifleman would have secured easily. It certainly must be vexatious to see a deer standing up broadside, say one hundred and fifty yards away, and know that the thing on his shoulder will not carry up more than half way, and if he should chance to hit him with a pellet or two, they would go no more than skin deep. So far as I have tried the Elya cartridge (and I have tried them pretty thoroughly with small shot, large shot, and buck) I have found them unreliable and uncertain in their action. I have driven the green buckshot cartridge entirely through the target at fifty yards repeatedly. Others would scatter fearfully, and others again would garnish beautifully. But, as I said before, they lack in steadiness of action. Buckshot loaded in any style do not suit me for large game.

One of the greatest nuisances to the deer hunter in this locality is the raven. Were it not for this argus-eyed pest, all large game might be left hanging in the woods until the end of the hunt, and thus the hard labor of dragging or carrying it to camp be avoided. But as it is, before you are done dressing your game, his discordant croak is heard right over your head. It is one of the scouts. He has gone to make his report to the main body, and as sure as fate an army of black guerrillas will attack your game the next day, and in twenty-four hours you will find nothing of it but bones and skin. Some hunters hang their deer by the head. It secures them from injury by the birds, as they cannot get footing on the sleek hair; but it is bad for the venison. The blood, instead of draining out by the divided blood vessels at the neck settles, back into the muscular tissue, makes it dark in color, and favors decomposition. There is nothing for it but to fetch in your venison the same day, or at most the day after it is killed.

Well, we remained in the woods seventeen days and killed sixteen deer and a large quantity of small game, mostly ruffed grouse and gray squirrels; not a great showing for the length of time, but enough. We had plenty to eat, and ten carcasses to distribute to our friends at home. We ate well, slept well, no one sick, no one hurt, and no family jars. I cannot help believing that such an expedition operates as a renewer of life to the care-ridden denizen of civilization. We will go again (*Deo volente*) the coming season.

Were you ever lost in the woods? Let me tell you (for I speak feelingly on the subject) it is not a pleasant experience. A lost man is resolved as nearly into his primitive elements as a man may be and live. He is reduced to a state of imbecility most curious to look upon. The muscles keep up mechanical motion without the governing power of the brain to direct them. He wanders in a circle, because the muscles on the right side of the body are the strongest. All his senses are concentrated upon one thought. Lost! Lost! The best that can be said of him is that he is a sentient being. Aside from this (as my old friend F. says) "he is nothing at all."

What then should a man do, lost in the woods at nightfall, tired, cold hungry, at an uncertain distance from camp. The first thing that he will do (if he has sense enough to do anything) will be to stop wandering around in the fast increasing darkness, select the largest log he can find, scrape away the snow on the lee-side of it for a space of six feet square, collect wood, and build a fire far enough from the log that he may sit between them. Now let him gather pine boughs enough for a soft, dry seat, sit down with his tired spine against the log, extend his tired legs toward the fire, and say to himself like old fat Jack Falstaff: "May I not take my ease in mine own inn?" Some cold venison and a piece of bread which he should have in his pocket come good just now. In default of which a squirrel or a grouse roasted on the coals restores the inner man. Soon he hears two shots in quick succession. It is a signal from his anxious comrades at camp. He does not answer, for he well knows the distance is too great for his tired legs to-night, and he does not wish them to lose their needed rest in hunting for him. The situation is not so bad as it might be. No danger of freezing. And the contemplative man may even find food for entertaining thought. You hear far off the long, dreary crescendo note of the wolf, the too-hoo, too-hoo of the 3 75 man's and you wonder what important business has called out the two prowlers of the earth and air on such a night. You hear a rustling in the leaves at your side, and there sits your little sleek friend, that smallest of all known quadrupeds, the wood mouse of the north. You hear the squeak of the flying squirrel, and the "swish, swish" of the night hawk over your head, and a thousand other sounds of things animate and inanimate. They start you speculating as to the causes of each, and you forget your discomforts in the investigation. Believe me, these "voices of the silent night" are a fruitful source of pleasure to the thoughtful man. But the fire is getting low, and our tired hunter must gather more wood. And so the time passes until the gray dawn comes creeping through the forest, bringing with it blessed hope and cheer. Now he answers the camp signals, carefully shapes his course, and in due time gladdens the hearts of his comrades by his presence in camp. And further on he finds out that there was perhaps much less sleep in camp that night than at his solitary fire in the woods. VENATOR.

ON THE SUNFLOWER RIVER.

THOSE who may have followed the Sunflower River bear-hunters on their rough-and-tumble, dare-devil chase through the canebrakes, as told by our correspondent "H. L. S." in these pages, Jan. 24, and March 21, 1877, will welcome this further account of Mississippi sport:

At the first break of day our deep sleep would be rudely interrupted by Uncle Joe's loud exclamations and shakings. In fact, he often routed us all out in the middle of the night, mistaking the rising moon or his own sleeplessness for indications of the approach of daylight. The early hours of the morning are usually the most pleasant as well as profitable to the sportsman, and a successful bear-hunter should be in saddle by sunrise, ready for the day's sport. We found bears very plentiful. Frequently but a few minutes would elapse after turning the hounds into the canebrake before they would strike a trail. Then came the most exciting sport imaginable. Nothing can try the nerve and endurance of a man and horse more than following the dogs in pursuit of a bear through this almost impenetrable wilderness. The excitement grows so intense that hunger, thirst and weariness are alike forgotten, and not until the chase is over does the hunter realize the intense strain of mind and body he has passed through. Bear hunting is undoubtedly the most royal sport our country affords, and it strikes me as something remarkable that with the abundance of this game so near at hand, so few of our enterprising sportsmen avail themselves of its attractions.

Hardly a day passed after our bear hunt was fully inaugurated that we failed to bring to camp one or more formidable trophies. All the surplus game killed was turned over to the gentlemanly Captains Dent and Bookout, of the fine little steamers "Sunflower Belle" and "Fair Play," which ply weekly between Vicksburg and the upper Sunflower. These gentlemen in turn distributed the spoils to their friends, and our fame as bear-hunters was soon noised abroad, and it was not long before our camp was enlivened by the arrival of several sportsmen from Vicksburg and vicinity. They were received with hearty cordiality, and we found them to be genuine representatives of the true Southern gentleman. Thus recruited, we spent several days of rare enjoyment.

One day we had started what Holt denominated an "old she one," the most savage and dangerous animal we had yet encountered. The time she made through the canebrakes, and her off-hand, or off paw, manner of scattering the dogs, was, as far as our knowledge extended, without precedent. It did not take her long to distance most of the party. This excited Ned to a pitch of enthusiasm and determination that the occasion demanded, and being mounted on a tough old mule, whose hide seemed almost invulnerable, and whose endurance was without apparent limit, he soon distanced the rest of us, excepting always the indomitable Holt and the persevering Waine. This bear had a trick of veering suddenly to the left or right very unexpectedly, and on several occasions during the day Ned found himself in very close proximity to her in consequence. At last she came to bay in the thickest and most impenetrable canebrake she could find, and Ned, with his mule, regardless of consequences, made a rush to break his way through to get a shot at her.

He succeeded in reaching a point within a few yards of the animal, when the obstacles of further progress proved too great, and Ned and his mule at last fell to the ground, tangled in vines, briars and cane, and neither could rise. The bear, in her savage fight with the dogs, was moving nearer and nearer to the prostrate Ned, and soon discovered him. With open mouth and glowing eye-balls she rushed upon him. The mighty Nimrod had no weapon at his command but his hunting-knife, and, drawing it, he struck her full in the mouth. The faithful dogs in the meantime seeing the peril of their master, made desperate efforts to attract her attention. But not by the dogs, nor by Ned's superhuman efforts was the battle finally won; so at least I am fain to believe. Ned is always silent when pressed on that point, but I suspect that the mule, simply following his well-known instinct, kicked, and that the blow thus delivered discouraged the bear from further effort in that direction. I found afterward an indentation in the bear's head that corresponded in shape to the hoof of a mule. This question has never been satisfactorily settled in my mind; but I shall always believe the mule gave the decisive shot. Waine came up and liberated the prostrate horseman, and Ned's pluck being nowise diminished, he made a rush on foot through the cane. Soon the report of his rifle was heard, and on arriving at the spot we found him standing over the body of his enemy. This animal was the largest killed by our party during our hunt, and would turn the scale, dressed, at about 400 pounds.

It is a rule in bear hunting not to shoot deer or other game, as it is apt to mislead and demoralize the dogs which are trained to follow bear only. It is very difficult to train dogs to follow only bear, and but few packs can be found in this region that are serviceable in this direction. The pure bred foxhounds make the best bear dogs, though some old hunters claim that a cross between the foxhound and Scotch terrier produce superior; but terriers are too rash, and are almost sure to get killed on their first encounter with bruin. Our hunt was suddenly brought to a sad termination by the sickness and subsequent death of our beloved companion, Geo. P. Waine, by whose invitation we visited the Sunflower country. A nobler, more generous type of the old Southern planter is seldom met with. How could we remain longer? And, bidding farewell to the best hunting grounds it has ever been my fortune to visit, with sad hearts we broke camp and turned our faces homeward. I will say, in conclusion, for the benefit of sportsmen, that I have had experience in deer hunting in the Adirondacks, Northern Michigan and Wisconsin, Colorado, Southern California and Florida, and hardly think the Sunflower region equaled for abundance of this noble game, or ease in obtaining it. Deer seem to be as plentiful here as in either of the above-mentioned localities, while wild turkey and water-fowl abound in great numbers. The steamers Fair Play and Sunflower Belle make semi-weekly communication between Upper Vicksburg and the Sunflower. Capt. Bookout, of the former, and Dent, of the latter, are first-class sportsmen, and interest themselves in forwarding the wishes of all who visit this region. They will leave you anywhere you desire, and always make a landing when passing your camp to bring or take your mail.

The climate during the early winter months is superb, having sufficient frost to kill all insects, yet warm enough to make camping out a pleasure. After January 1 rains are more frequent and the climate less agreeable. H. L. S.

LONG ISLAND RESORTS.

THE PECONIC BAY VILLAGES—NOYAC AND NORTH SEA AS SUMMER RESORTS—SHOOTING AND FISHING FACILITIES.

NOYAC, L. I., May 25, 1878.

I have located during summer months at various resorts of country visitors, but never have I been in any place which so exactly suited me as does the village of Noyac, Long Island, situated about four miles northwest of the old town of Sag Harbor, in Suffolk County. People go to the country during hot weather for divers reasons. Some go out of town because "it's the thing to do, you know." Others, simply for healthy relaxation; others again for sporting purposes; while still others leave town simply to while away time or get rid of *ennui*. Now, when I "get up and get," as the "sports" say, I do so for the purpose of breathing pure air, eating fresh food, enjoying mental rest, and especially to take things easy. I have no notion of going into the country to dress up and pay attention to the conventionalities of city life, as some people do who go out of town to the fashionable watering places; consequently I seek out retired localities unknown to Mrs. Grundy and her crowd—places where I can dress as I please, and, in the full sense of the term, take everything easy. Hence I have for the past four years selected this selfsame village of Noyac for such leisure days as I can steal away from my desk labors in the city.

As I said before, I selected that spot because it was out of the way of the run of summer tourists. I get up at daylight in the morning, put on my blue flannel pants and shirt and an old straw hat, and then am dressed for the day, ready to go rowing or fishing, shooting or driving, play croquet or loll on the turf beneath the shade—in fact, enjoy my "*otium cum*" like a sensible fellow. What with the pure air which prevails here, invigorating breezes wafted from the Atlantic or over the Sound waters, and the clear crystal water which rolls on the white, sandy beach; the homestead fare at my boarding house and the opportunities afforded for pure frolic and enjoyable relaxation—a week or so of all this makes quite a new man of me.

But I think I hear a reader say, "Tell us all about this place you extol so? How do you get there? What does it cost? Where do you board and what do you pay? What kind of fishing and shooting is there to be had?" and so forth. Here, therefore, is my answer to these several pertinent queries. You can get to Noyac either by rail or steamboat; that is, you can go to Sag Harbor by the Long Island Railroad, fare $2 50, or by the steamer W. W. Coit, from Pier 25, East River, fare $1 50. The trains leave at 8:30 A. M. and 4 P. M., and the ride to the Harbor occupies about four hours. The boat leaves Tuesday, Thursday and Saturday at 5 P. M., and reaches the Harbor at 6 A. M. the next day, passing Shelter Island, Greenport, etc., a very pleasant sail of a hot day. From the Harbor you reach the village either by a hack—$1 50—or the boarding house proprietor you stay with comes for you on due notice of day of arrival. You can get board at any of the farmhouses where they take boarders at $7 a week or $1 a day. Two of the residents of the village make a speciality of boarding, Nathan Pierson and Dr. Thomas. The former has an old homestead, and his good wife is very happy in making her boarders feel at home. Dr. Thomas has a large and new house, and he is prepared to do likewise with his guests. Now as to the fishing. In the bays—Noyac and Little Peconic Bays, on the shores of which Noyac is situated—there are blue fish, king fish and other fish peculiar to the eastern waters of the Island. But—these huts are sad things—the fact is the pound nets have played the deuce with the good fishing one used to have here, still you can get good sport occasionally. Certainly as regards blue fishing excellent sport is to be had in the rapid tide waters which run past Jessup's Neck—the headland of the promontory which divides Noyac Bay from Little Peconic Bay. In the way of shooting, the fact that you cannot pass along the road of a fine morning without flushing quail, or through the woods back of the road without starting up partridge or woodcock, speaks plainly in this respect. Snipe, too, in season, are found on the sandy beach at the shore of Jessup's Neck and in the little inlets, while duck shooting in the fall is one of the shooting attractions of the locality. But for rowing, sailing and bathing facilities this place cannot be beaten by any resort at the east end of Long Island, and as for beauty of scenery and extent of prospect it is unequaled. Just now the place is really lovely. The bright green foliage, with the combined fragrance of the woods and the pure sea air is worth a visit only to enjoy for a day or two. But I am trespassing on your space, and will avail myself of another column later on in the season to write about North Sea and adjoining places.

OLD SPORT.

A BUFFALO HUNT IN THE FOREST AND STREAM OFFICE.

OF course all of the readers of the FOREST AND STREAM have gazed upon its cover and noticed an animated and exciting representation of a buffalo hunt. The first thing in this picture that attracts a Western man's attention is the ridiculous position of the sportsman. Examine this picture carefully, and you will soon discover that the daring hunter is mounted on an English saddle; he is standing up in the stirrups, holding the bridle high above the horses neck, his right arm crossed over his left, and is shooting with a bull-dog pistol, barrel two inches long.

In the left-hand corner of the picture is what I suppose to be a buffalo skull, but which looks as though it had on spectacles. I was in the office when the editor received a letter from a Southern lady saying that she thought the picture a mistake. The look of disgust that overspread the face of Mr. Hallock would compare well with the picture under consideration.

Then he remarked: "The idea of writing us a letter saying that cut is a mistake, when our artist spent one whole summer hunting buffalo, and found one old bull; and he used to get up early in the morning, and run him until late in the afternoon every day for three weeks. The bull lasted well, and our artist returned satisfied that he was capable of making a cut for the FOREST AND STREAM."

The mystery was solved the moment he commenced his story about that old hull. I knew at once how it happened. The buffalo that this artist hunted is known to every Western man on the plains. He lived in our place for many years and was known as "the one-eyed buffalo of the Republican." This same old fellow had been hunted from time immemorial, and is the identical bull which made "Buffalo Bill's" reputation. The secret of this picture on the cover of the FOREST AND STREAM is, that when the artist saw this old hull standing in a canyon he made a rush for him. Of course he ran up on the left side of him, but you can't fool an old bull, and as soon as he heard the artist's wild cry he ran around on the other side of the intrepid hunter, so he could see what was causing the excitement!

The moment his one eye rested on the young hunter from the East, his bull-dog pistol and English saddle, he at once entered into the spirit of the chase with a vim, and did his best to give the FOREST AND STREAM artist an interesting course of instructions in buffalo hunting. Having finished his studies, the artist returned home and left this old veteran bull quietly running in the valley of the Republican. He was doomed to a sad fate however.

No buffalo could spoil the cover of the FOREST AND STREAM with impunity. When the Western men saw that cover they one and all swore vengence on the old bull. An opportunity soon offered to dispose of him. The Grand Duke Alexis came to this country for a buffalo hunt. General Sheridan took him in charge and went to the Republican. As they were preparing to break camp one morning the old bull hove in sight. The command surrounded and drove him into a deep canyon where he could not turn round. Bill Reed held him by the tail until the Grand Duke, with the assistance of Sheridan's command, destroyed him. DR. W. F. CARVER.

Forest and Stream Office, June 20.

[We are at a loss which to admire the more—the ingenuity of the above, or its audacity. To steal into a hostile camp and slay the enemy with his own sword, is, we believe, a perilous and notable exploit in war. What shall we say, then, of the man who has crossed a Continent, invaded an editor's sanctum, seated himself at the editor's desk, and with the editor's pen sought to cast ridicule upon the editor's own paper? The deed is audacious, preposterous, unparalleled, un—— We have nothing more to say. That noble specimen of his bovine race shall remain. He shall sink or swim, live or die, survive or perish with this paper, and let no buffalo-hunter of the whole North American Continent think to tame the fire that still illumines his one eye.—EDITOR AND ARTIST.]

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of two or more, $3 per annum.

Fish Culture.

HABITS OF EELS.

EDITOR FOREST AND STREAM:

Mr. Roosevelt, in your last number, speaking of the habits of eels, says the facts are "that the grown eels go down stream late in the fall; the fry—minute, semi-transparent, evidently just hatched—make their appearance in the spring before their parents come out of the mud where they have lain dormant during the cold weather, and the fry go down to the salt water almost as soon as hatched, and that the only fact yet unsettled is the time of the return to fresh water."

Now, the habits of eels in Mr. Roosevelt's ponds and the habits of the same in the Susquehanna River must differ very much if I am correct in what I consider facts, which are that the grown eels go down to the bay late in the fall, staying there in the warm water all winter. The young, from four to six inches long, make their appearance here in the spring coming up from the bay, keeping close in to the shore and making good time. When the water is clear they appear a dark, waving line, from one to several feet in width. These fry leave the shore as they increase in size and strength, penetrating to the headwaters of the river and its branches; when returning to the bay in the fall they are about one foot long, and are called here the black eel, and will average two feet long when grown.

In this river, in my opinion, no eggs would hatch in the spring if deposited in the fall, owing to the floods and ice-gorges, which even kill grown fish. Furthermore, if they did hatch after lying all winter, the fry would all appear at the same time, which is not the case, for they run up at intervals all through the spring as they hatch out.

That young eels when first hatched should drop down with the stream, I think natural, for shad and other fish fry do the same.

When seen here the eels must be three or four weeks old, and steadily fight their way up, overcoming every obstacle; sometimes the belt of eels narrows down to a mere line as they pass close to the shore to get above a rapid, and then, reaching quiet water, spread out and resume their march with an instinct which appears as strong in a little thread of life three or four inches long as it is in a fifty pound salmon on his run from the sea.

The fishermen say, and I believe, that the grown eels return up the bay and river (and spawn, no doubt) at the same time as shad, herring, etc., eating immense quantities of the eggs of these fishes, and also attach themselves to the shad and eat their way into the eggs. This mostly occurs when the shad are fast in the gill-nets, but some fish are taken with the seine in the river that have eels hanging to them. Eels, I think, are more destructive to the shad and herring than anything else except the inventions of man.

There has been a great deal said about the number of young shad eaten by black bass, but if they attack the eel fry that pass up the river every spring, they will do more good to the shad than harm in the end.

Professor Baird must be right in finding spawn in eels in March, this year especially (if it can be found at all), as the water in our bays and rivers was unusually warm for the season.

Just here I wish to say that, having been much interested in the articles in your paper on the connection between the movements of sea fishes and the temperature of the water, I have noticed its effect on the shad in this river, which, being broad and full of rapids and falls, chills very quickly, and a sudden cold snap in March or April, after the water is warm enough to bring the fish up, makes them immediately drop down stream again, as is proved by the fish dams beginning to catch them. This shows how delicate they are to changes of temperature. B. T. B.

June 17, 1878.

LOOKING AFTER THE FISHWAYS.

PORTLAND, ME., June 17, 1878.

EDITOR FOREST AND STREAM:

I have just returned from a professional visit, as engineer, to some fishways in the Eastern part of the State. Maine will soon lead the country in this matter, if, indeed, she does not already. Salmon retailing here from ten to fifteen cents per pound. Maine salmon are considered of better quality than those from the Dominion, and command higher prices in Boston market. Within a very few years Maine waters will afford more varied and finer fishing than can be found elsewhere in North America. Already there is fine black bass fishing, land locked salmon of two varieties, the largest known trout, pickerel, white and yellow perch, etc. In fact, all of these in such abundance as to afford fine sport angling, and there will soon be good salmon fishing with the rod. We expect to build five fishways on the Kennebec River the present year, and a number upon smaller streams. Salmon were supposed to have become extinct in the Saco River, but a fine fish has been taken there recently, and now the Saco people are clamoring for a fishway. Making a specialty of the construction of fishways, I shall hope to receive calls for service in other States as the work and interest increases. Instead of the long and expensive trip to Canada for salmon, American sportsmen will soon swarm to more accessible Maine. I expect soon to accompany Mr. Stillwell, our energetic Fish Commissioner, on a tour of examination of the various falls and dams of the Kennebec River. The most important of these is at Augusta. While I was examining the great fishway at Bangor, the water was shut off for a few minutes, and salmon and alewives were found in the act of going through. An efficient warden in charge is doing good work by vigilantly watching and prosecuting poachers who attempt to net fish too near the dam. S.

STRIPED BASS IN THE GENESSEE RIVER.—*Rochester, June 28.—Mr. Editor:* I have been thinking that some of our inland waters could be stocked with the striped bass, and have just made a successful attempt to stock the Genessee River tributary to Lake Ontario. I had one of my men, Mr. A. W. Marks, obtain as many fish as he could, take charge of and bring them to Rochester for the above river. He obtained 142 bass and succeeded in placing 140 in the river in fine condition. This is the first attempt, I believe, that has ever been made to transport the striped bass alive. The fact, then, is established beyond a doubt that bass can be transported successfully in warm weather. I intend placing more in some other of our inland water, and will then await the result of the experiment. SETH GREEN.

A French Leech Farm.—The subjoined account of a curious industry in France, we believe will be novel to many enthusiastic fish culturists:

One of the leech farms which were established by M. Laurens, is at Parempuyre, about nine miles from Bordeaux. Here an area of about four hundred acres, near the Garonne, is devoted to this industry. The marsh is subdivided into compartments of five or six acres in extent, each of which can be inundated separately. Each compartment is intersected with drains and can be flooded or laid dry at will by opening the hatches with which the ditches are provided. Besides these breeding grounds, there is a reservoir, which is replenished at every opportunity with the larger leeches, so that, when the other beds are laid dry, there is always a stock on hand ready for the market. This reservoir is always kept covered with water to the depth of three to five inches and holds from forty to fifty thousand leeches to the acre,—a rate rather larger than that observed in the breeding ponds, which are populated to the extent of thirty or forty thousand leeches per acre. During the cold season the leech remains quite underground: but the first rays of the spring sun bring him out, and then a troop of horses is made to enter the breeding grounds, in the proportion of ten to the acre. The leeches attach themselves to the lower part of the legs of the animals and then gorge themselves. The same troop of horses remain on service for five or six hours, when they are recalled and tended and sent back to their pastures, where they are allowed to rest and regain strength. After eight or ten days' rest, the horses are again dispatched on duty; the hitherto unfed leeches and those that have digested their last repast come out again, and from about the first of March to the middle of June they are thus fed about eight or ten times each.

In June the leeches all go underground, and the laying dry of the parks commences; the horses are kept out of them, the weeds and reeds are allowed to grow, and the soil becomes better knitted together, as it were. In July and August the leeches come out to deposit their eggs in the tufts of herbage, and then the drains before mentioned are filled with water enough to keep the ground moist. The leeches, having performed this duty, again burrow underground, and in a short time the young ones make their escape from the eggs.

The parks are inundated, and at the end of August the fishing commences. The fishers, protected by high boots, enter the ponds, arranged in lines, and beat the water with sticks to arouse the dormant leeches, which soon appear in great numbers, ready after their long fast for another feast. The large ones are carefully lifted out and placed in bags, with which each person is provided; and the line of fishers gradually advances till the whole bed is thoroughly beaten. It is then left to be subjected, three or four days afterwards, to another careful search, a sufficient stock being always reserved, in the shape of young and small leeches, and those that, not having digested their food, do not put in an appearance on the unceremonious summons of the collectors.

An establishment such as that described above will produce several million leeches annually in a healthy condition.

Paris alone consumes some twelve million leeches annually; and, prior to the establishment of the system of producing them in artifical reservoirs, the annual importation into France from abroad, exclusive of its own production, was nearly fifty millions. The enormous demand for these useful surgical attendants throughout the world may be estimated from the above figures.

Natural History.

MACKEREL ON THE NOVA SCOTIA COAST.

Halifax, June 19, 1878.

Mr. Editor: In some papers published some time since in the Forest and Stream upon the habits of the mackerel, it is asserted by Prof. Brown Goode that there is no reliable evidence of mackerel being seen upon the coast of Nova Scotia after the 25th of October, quoting me as his authority. Had be quoted me as giving the 1st of November, 1868, when the fish market at Halifax was full, I should have felt more complimented, as I should have known he had read my paper with more attention. In summing up my remarks I stated that mackerel remain usually all November on the surface in N. Scotia, and during mild winters linger to December. This, Prof. Goode says, is not reliable as scientific evidence, because no specific dates are given. To admit this would be to destroy almost the whole mass of information compiled in the report of both the Royal and American Commissioners of English and American Fisheries. But as I am certain that Prof. Goode's desire is to have the truth simply, will you allow me a place in your columns to add to my previous assertions such specific dates as I may be able now to obtain though not admitting his principle.

On May 23, 1875, going into the Halifax fish market, I asked generally how long are mackerel in market? I was answered, generally all through November. On asking how long in December they had known them in market, Mr. Greywire said: "I recollect them as late as the 10th of December. We keep our nets out to the 30th of November. Men hire to that time. Mackerel are seen after that date, but the seas are so boisterous that our nets are destroyed. Some few parties will keep them out in December in spite of cold and storms." Mr. White corroborated this. Mr. Thomas Brackett said he had taken them often in December, and often in weather so cold that the fish were frozen in removing them from the meshes of the nets, but could remember no dates. Mr. Wm. Duffy stated he saw one once on the 24th of December. He recollected it because it was Christmas Eve, and on account of its rarity; but he had frequently taken them during December, though having no dates. The nets used are about two fathoms deep, set near the shore in about five to ten fathoms of water. My own recollections, but without dates, are seeing stops made in very cold weather and frozen ground, which must have been late in November. I think I have now made good my assertion that they linger to December, and that in any future history of their habits it must be assumed as truth that they remain in numbers during November, but are found sparingly later on our coasts. Where they are during those dates in any intermediate point from Maine to Virginia, must be left to American observers. When these blanks are filled and a generalization made their history will be more complete, a task we may well leave in the hands of the American Commissioners of Fisheries.

In my paper (1865) I speak of their asserted torpidity and the story of their blindness as needing more proof before they are asserted as facts. I have had nothing to alter my opinion since. In examining the eyes of many mackerel on May 23 and 27 and October 27, in different years, I have found that, as in most fish, the bony orbit is much larger than the base of the eye, and that the space is filled by gelatinous substance, which may be called cellular membrane and adipose deposit, to this transparent membrane arising from the outer angle of this orbit spreads half way over the pupil of the eye. It may easily be raised and defined by passing a pen-knife between it and the eye. At the inner angle there is also a similar, but much smaller, membrane, not reaching to the eye. As the mackerel appear on our coasts about the 15th of May, and these observations were made the 23d, I do not think it can be asserted the eye is closed entirely in spring; and as the same appearance is found in September, we must admit it to be a permanent structure. An analogous membrane is found in the elupide, and doubtless other fish. On asking Thomas Loyd, our roughest and oldest fisherman: "I don't know anything about the scales of the eyes, but I do know that, curse them, they see too sharp for us, steering clear of our spring nets," and doubtless old Tom was right.

On dissecting a mackerel, May 23, I found the heart first presenting the tricornered ventrical with its white aorta and deep red auricle resting upon the fringe of cœca that covered the intestines, sweeping down to the vent. The liver and stomach were both covered by the cœca. The latter was about three inches long, its upper lobe thick and round, but ending in a narrow tail or point. The cardiac end of the stomach was prolonged two and a half inches, ending in a point. The cœcæ were attached to the gut about an inch below the pylorus. There was but little difference in appearance and size between stomach and gut. This we may roughly sum up: Stomach and gut very simple; cœca unusually large and complicated; liver small, all noteworthy facts in the study of comparative life. The fish being a male one, lobe on either side of ivory-white; melt reached from gills to vent, slightly adhering to the sides by thin membrane, and covered by a similar one. They were divided in lobes by shallow lines, the upper lobes slightly fimbriated. On removing both entrails and milt a dark-purple space about an inch wide extended from gills to vent beneath the back bone. This, when opened, seemed filled with coagulated blood. It had in some respects the appearance of the air bladder in the salmonidæ, though wanting in the direct communication they have with the œsophagus. But this communication is also wanting in the gadidæ, where especially in the hake, the air bladder assumes its highest form of organization. I have often found coagulation and reticulated plexi in air bladders of other fish.

It has been asserted the European mackerel have no air bladders, and a new genus proposed, but with more probability they have the same organization as our own, and the difference lies in the opinion whether or not it is an air bladder.

The mackerel appear on the Atlantic coast of Nova Scotia, and almost simultaneously on the Bay of Fundy, about the 15th of May. Nearly all spawners, male and female perform a somewhat easterly and northerly route, disappear from the surface in a few weeks and reappear again in September without spawn and fat, remain in numbers during November, and very sparingly during December, coming from the eastward and then disappear. It may be asserted generalizing from observation extending over a series of 8 or 10 years, that they are irregular in their movements as regards localities, though probably not as regards ocean surfaces.

The very great difficulty of accounting how these enormous masses of surface feeders find food after disappearing from the surface has caused many ingenious theories, as to the question in what state and where they pass that time. These are all pleasant reading, but valuable more or less as regards the ingenuity and scientific standing of the writers. In this paper and the one I enclose (1865) I have stated what I think are facts, and which must be accepted in the future history of American mackerel, which I hope soon to see written by that Commission which has already done so much in Atlantic waters.

Bernard Gilpin.

OBSERVATIONS ON CERTAIN FISH IN THE U. S. NATIONAL MUSEUM.

The following carefully prepared description of some new fish is a valuable contribution to ichthyology. The Burbot, or American fresh water ling, has caused a large amount of disputation. Dr. Bean seems to have considerably narrowed down the question, as he proves quite clearly to our mind that there is but one species in American waters:

1. *Lucania parva* (B. and G.) Bean.—In the Ninth Smithsonian Report, 1855, Baird and Girard described a small *Cyprinodont* under the name of *Cyprinodon parvus*. An examination of the type specimens proves the species to belong to the genus *Lucania* of Girard. They have a single series of conical, recurved teeth in each jaw, and the other characters ascribed to the genus. The affinities of *Lucania parva* are with *L. venusta* and *L. affinis*, Girard; not with his unnamed species which Gunther has taken as the type of the genus *Limnurgus*. The National Museum has *L. parvus* from Beesly's Point, New Jersey, and Greenport, Long Island (S. F. Baird), Sinepuxent Bay, Maryland (Otto Lugger), and Noank, Connecticut (U. S. F. C.).

2. *Trichidion octonemus* (Girard), Gill.—In a fine collection of fishes received last week from Mr. Silas Stearns, of Pensacola, Florida, is one individual of the above species. Inasmuch as it is not often observed, I give some additional particulars drawn from two of Girard's types and the Pensacola specimen: Size—Types from Brazos Santiago, Texas, 68 to 88 millimetres (2 11-16 to 3⅜ inches). Pensacola specimen, 62 millimetres (2 7-16 inches). Proportions—Eye, 3⅓ times in length of side of head; upper jaw, half the length of side of head. Head contained about 3 2-3 times in length to end of middle caudal rays. Some of these measurements differ from Girard's, as given in the Ichthyology of the U. S. and Mexican Boundary Survey. Scales: 6—60—12. Radial Formula: B. VIII.; 1st D. I., VII.; 2d D. I., 12. A. III. 13; P. 16; V. I. 5. Girard refers to the Brazos Santiago specimens as adults. If so, they represent a very small species of the genus.

Two other species of the same genus are known from the coast of North America—*T. plumieri* (Lac.) Gill, and *T. octofilis*, Gill. The former has but seven pectoral appendages, while *T. octonemus* has eight. *T. octofilis* may be distinguished from *T. octonemus* by observing that it has in the second dorsal eleven soft rays. Its first dorsal is punctuated with black, and its pectoral is almost wholly black, while *T. octonemus* has no such markings. The upper jaw in *T. octofilis* is contained nearly 2 2-3 times in head, and the longest pectoral filament reaches scarcely to the vertical from the middle of the interval between the dorsals. The longest pectoral filament in *T. octonemus* extends beyond the origin of the anal. Concerning this species Mr. Stearns writes: "No. 45 unknown. The first and only specimen that I have seen. Unknown to the fishermen. Captured by me at the surface of the water in this bay (Pensacola), with a slight wound in the belly and apparently dying." The only known specimen of *Trichidion octofilis* is the one taken at New York by Mr. J. Carson Brevoort, and presented by him to the U. S. National Museum.

3. *Lota maculosa* (Le Sueur), Rich.—The American fresh water ling, burbot, or eel-pout, has been the occasion of no little description and disputation. Forster and Pennant referred it to the *Gadus lota* of Linne. Their examples were from the Hudson's Bay region. In 1817, M. Le Sueur, in the Journal of the Academy of Natural Sciences of Philadelphia, published descriptions of two supposed new species of burbot—*Gadus maculosus*, from Lake Erie, and *Gadus compressus*, from Northampton, Connecticut. In February, 1818, Mitchell described his *Gadus lacustris* in the American Monthly Magazine. He spoke of it at the time as identical with the Lake Erie burbot, which is true, and the name must be regarded as a synonym of *Gadus maculosus*. In 1819, Le Sueur, in Memoires du Museum d'Histoire Naturelle, re-described *Gadus compressus* under the name of *Molva huotta*. In 1842, Zoology of New York, Fishes, DeKay described *Lota inornata*, from the State Cabinet at Albany. In 1843, Boston Journal of Natural History, D. H. Storer described the Winnipisiogee Lake burbot—*Lota brosmiana*. From this it will be seen that six species of burbot have been claimed for American waters, that from the Hudson's Bay region being identical with the European. Various and conflicting have been the opinions of writers concerning the validity of these species and their relation to one another. *L. inornata* was early challenged and relegated to the shades of synonomy, *L. brosmiana* with *Gadus lota* soon following, to keep it company. *Lota compressa* was believed in longer, but that, too, has lost supporters. Gunther, in the Catalogue of Fishes in the British Museum, vol. IV. 1862, places all the names applied to the American burbot in the synonomy of *Lota vulgaris*, believing that we have only one species, and that identical with the European. Even if his view were correct, he should use the name *Lota maculosa*, which really has priority over *L. vulgaris*. Cuvier did not use the name *Lota vulgaris* anywhere, so far as I can learn, although it is attributed to him. He does refer to *Gadus lota* and *La Lotte commune*, but he who seeks *Lota vulgaris* in the Regne Animal, or in Griffith's Cuvier will seek in vain. Jardine says nothing of *Lota vulgaris*, though it is credited to him. The first author to use and claim the combination was Jenyns, in "A Manual of British Vertebrate Animals," Cambridge, 1835. If, then, Europe and America have but one species of burbot in common, its name should be *Lota maculosa*, but of this more hereafter. Just here it may be supposed that I have overlooked Walbaum's *Gadus lacustris*, based on Pennant's description of the "mathemeg," or "land cod," of the Hudson's Bay region, and referred by late writers to the genus *Lota*, but not so: Pennant probably described the "mathemeg" from hearsay, and supposed it to be allied to the burbot, to which it has no close relationship. The "mathemeg" was really a catfish (See Richardson, "Fauna Boreali Americana," page 135, and Jordan, in Bulletin X., of the United States National Museum, 1877, page 84). Walbaum was misled by Pennant's curious blunder, and in his turn misled others. It is now pretty generally believed that only one species of *Lota* is found in the Old World and the New; but perhaps no better opportunity for reaching a conclusion could be afforded than that presented by the large collections of the National Museum. It has been my privilege to study specimens from the Hudson Bay region, the Yukon River, the Yellowstone, the Little Big Horn, the Great Lakes, Seneca Lake, Lake Winnipisiogee, the Connecticut River, and other parts of our own country, and from England, Sweden, France, Switzerland and other parts of Europe. Many individuals have been submitted to careful measurement and comparison. I have been unable to find anything upon which to separate the European and American species, save the number of vertebræ. Of course Forest and Stream could not burden its columns with the long tables of measurements which have been prepared, but they will be presented at another time and place. I can only say here that I am forced to believe that but one species of *Lota* is so far known to America, and this is to be determined in no other way than by comparison of specimens from all the localities whence species have been described. Differences more apparent than real become lost away under dividers and the proportional scale. Having adopted the name *Lota maculosa* for the American species, since the European, so far as my examination of the skeletons goes, has a smaller number of vertebræ I propose, for the present, to call it *Lota maculosa* (Le Sueur), Rich., variety, *vulgaris*, Jenyns. I have counted the vertebræ in two American specimens, and find twenty-four abdominal and forty caudal. In two European they were, abdominal twenty-two to twenty-three, caudal thirty-eight to thirty-nine. Gunther gives a still smaller number (21x28).

Notes on the habits, distribution, etc., of the *Lota maculosa* must be reserved for a future paper. To those who doubt the propriety of using Le Sueurs' name *Maculosa*, I must say that a series of surprises awaits the student of its synonomy.

In unravelling this synonomy, I have received valuable assistance from Professor Gill, and in determining the significance of certain anatomical characters.

4. *Amiurus lacustris* (Walbaum), Bean.—The *Pimelodus borealis* of Richardson (*Amiurus borealis*, Gill), is, in my estimation, the "mathemeg" of Pennant and the *Gadus lacustris* of Walbaum, hence I adopt for it the name *Amiurus lacustris*.

U. S. National Museum, June 22, 1878. Tarleton H. Bean.

RARE ANIMALS OF THE ROCKY MOUNTAINS.

BY J. H. BATTY.

THE fauna of the Rocky Mountains, and particularly that of their highest peaks, is exceedingly interesting. In the snow ranges, animals of curious forms and habits abound, and but few zoologists have had an opportunity of studying them. Even those who have made short excursions in the lower and most accessible ranges have visited them when hostile Indians were least liable to be met, and but partial investigations and hasty returns were made. The geology, botany, mineralogy, ornithology and conchology of the Rocky Mountains is much better known than the zoology. The latter branch of natural history is very difficult to study, and requires experience, perseverance, endurance, craftiness and keen observation in the explorer.

Having made a special study of the animals of the mountains during two years of steady hunting and trapping, I give the following original data on the rarer species, which is a part of the results of my researches: The Rocky Mountain bison is now nearly extinct, and, though accepted by some as a species, it is nothing more than a small dark variety of the common buffalo. I have found their skulls on many of the highest peaks of the mountains, also on the tops of the Bear's Paw, Sweet Grass and Sierra Madre mountains. They were commonly found in the Rocky Mountains above the forty-ninth parallel, and they are probably to be found much further north, to the extreme northern range of the buffalo.

In accordance to the statements of old Indian and white hunters, the bisons of the mountains were all bulls, roaming

singly or in twos or threes. They are known as "roamers" by the Indians, and are said to be driven from the herds of the plains. Their solitary life, lofty habitat and variety of feed may cause them to vary in size, color and habits. Climatic variations in size and coloration are common with birds and the smaller mammals, and why should the Rocky Mountain bison be an exception? The common buffalo are as different in anatomy and color as some breeds of domestic cattle. I have killed bulls from the same herd and of about the same age that differed in color, size, form, length of tail, and size and shape of horns.

The Big Horn or Rocky Mountain sheep is another curious inhabitant of the mountains. Marvelous stories of his terrific leaps have been told and exaggerated, until the most credulous hunters believe that he can leap extravagant distances from cliff to cliff and alight on his great horns uninjured. The agility of the mountain sheep is indeed remarkable, and he rivals the chamois of Europe in climbing. Both sexes and the young of the mountain sheep make long leaps recklessly over rocky mountain sides, but they alight squarely on their feet, with toes spread to their widest extent, instead of on their horns. The sheep and lambs will descend steep mountain sides with the same agility as the adult ram, and they will follow wherever he may lead. On three occasions I have seen bands of the big horns make head-long retreats down steep mountain sides. They will gallop over loose stones with ease, where one would think they could not possibly find a footing. I have seen an adult male make a clean leap of thirty-five feet (by measurement) in the mountains of Colorado, and pass over a declivity of about 600 feet, by successive leaps, without slackening his pace in the least. When triking the ground after the first leap he slid about fifteen feet through snow and mud and over loose stones, with the toes of all feet broadly extended.

The big horn sheep are more numerous than is generally supposed, and inhabit a wide tract of country. They range as far south as New Mexico, where they are abundant on some mountains. In Colorado I found them in small bands throughout the Sierra Madre Mountains, but owing to the inaccessible nature of their haunts they are seldom seen. In the Sweet Grass and Bear's Paw Mountains of Northern Montana, I have seen them in bands of nearly a hundred, and their whitish looking trails over those mountains on the loose rocks can be seen for miles from the plain. The Yellowstone Valley is a favorite resort for the big horns, and I have often observed them in the bad lands of Dakota, and in the valley of the Missouri, from Fort Benton down the river for eight hundred miles. The big horn has more the habits of the goat than the sheep, and has the stiff-legged lope of the former. He is very tenacious of life, and a .44 ball shot from a Sharps sporting rifle, through the base of the horn and part of the skull, failed to have any perceptible effect on an adult ram. An adult male in medium condition will weigh one hundred and forty pounds dressed, and a doe from ninety to one hundred and twenty pounds. The enormous horns of the old rams are greatly out of proportion to their bodies. I once killed one whose head weighed forty-two pounds. Near the base of the horns, over the brow, they are rough and have a weather-beaten appearance, which is natural. It is, however, unusual for them to be rough, as the horns of most individuals are worn and have a smooth surface on their fronts near their base. It is produced by the animals butting and rubbing their horns against the rocks, a peculiar habit they seem to take a pleasure in. In a pair which I have sketched the tip of one of the horns is wanting. This is the case with every pair of adult horns that has come under my notice. Many pairs have both their tips splintered, which is caused by fighting or butting them against the rocks. The horns, which I preserved, are 37 inches long; spread at tips, 17.50 inches; spread at middle of horns, 23 inches; circumference of single horn at base, 14 inches. The horns of another are 30.50 long, with a lesser spread of but 20 inches, and a circumference of 16 inches at the base. The latter dimensions are more in proportion to the average horns.

The mountain goat is one of the rarest large animals of the Rocky Mountains, and only inhabits the northern ranges. The Cascade ranges are said to be the southern limit of its range, though from its heavy coat and general appearance it probably migrates to the arctic regions in summer. Although having hunted one season where the goats are said to range, not one was seen nor any sign of them. What data I have of them was given me by three hunters that were camped on the upper Missouri. They killed nine in the Blackfoot Country in '74, where they were found in small bands on the highest mountains. It appears that they are even better climbers than the big horns, and are more wary and difficult to shoot. when alarmed they retreat to the highest mountain peaks, where it is next to impossible to follow them. The best time for hunting them is at morning and evening when they come down from the rocky peaks to feed on the grassy slopes. The mountain goat is nearly white, with a long hanging coat and beard. Its horns are like those of the female mountain sheep and domestic goat. Its legs are short and strong, and the flesh resembles mutton.

THE WHITE-HEADED EAGLES IN THE HUDSON HIGHLANDS.

(Read before the Linnean Society of New York, April 6, 1878.)

BY EDGAR A. MEARNS.

IT may interest some of your readers to learn that the bird that has been honored with the distinction of being adopted for the heraldic representative of the famous Confederacy of the United States is abundant here in the Highlands of the North River, where it constitutes a marked and romantic feature of the superb scenery of this part of the Hudson, lending another charm to a scene already grand and impressive, but rendered sublime and awe-inspiring by the presence of this noble bird, seen perched upon some blasted tree above the massive cliffs, or soaring—the merest speck—in the higher atmospheric region, far above reach of the coming tempest, while its shrill scream falls faintly upon the ear, answering the loud, quavering cry of its nearer mate. In winter, when the river is frozen, the eagles are seen soaring above the mountains, searching for the scanty prey upon which they are obliged to subsist when fish, their favorite food, is unattainable; but later, when the ice is in motion in the Hudson, carried swiftly by the current, numbers of them may be seen sitting in pairs upon trees low down by the river's edge, watching for their finny prey, or else floating upon the ice-cakes in the stream, in company with the crows and gulls. In summer their favorite perch is upon some withered tree on the mountain's side, from which, at intervals, they descend to the river, or some secluded lake, to seek their food. They are always seen in pairs, and their connubial attachment is said to continue through life.

Here I have observed the white-headed eagles during every month in the year; but, though in my constant rambles I have examined every mountain and valley in that section of the Hudson River valley known as the Highlands, in pursuit of their nests, guided by rumor or vague suppositions, I have always been disappointed and have failed to discover any. This eagle is said to nest almost exclusively upon trees, except in regions where those of a desirable size are not to be found, under which circumstances they have been known to nidificate upon cliffs. This, I think, is the case here, where, in the remote mountain regions, the soil is poor and rocky, and the trees never attain any very considerable size. On the other hand, there are vast, inaccessible ledges of rock, which could not but attract any wild, cliff-nesting species for purposes of nidification.

Unless we accept the above conclusion—that our eagles have in so much departed from their usual habit as to nest upon cliffs instead of on trees—I am convinced that no white-headed eagles breed anywhere in the valley of the Lower Hudson (*Pandion haliaetus*) seldom nests at present. Nevertheless, the fact of the presence of these birds during the season of reproduction strongly favors the supposition that they *do* nest here. But it is at the time when the ice first breaks up in the Hudson that these splendid birds appear most abundantly. At that season I have myself counted more than twenty-five eagles at once, and I am credibly informed, by a person who resides in the immediate vicinity of their favorite feeding place, that it is no uncommon spectacle to witness an assemblage of not less than fifty eagles, gathered there for the purpose of feeding, very early in the morning in March of certain years.

The place to which they are thus attracted is a large tract of flats and marshy lands, lying between the Cold Spring Foundry and Garrison's Station. This tract occupies what formerly constituted an east channel of the Hudson, as it then divided north of Constitution Island and flowed on either side of it; but the east channel, which was the shallower, has been filled up by an alluvial deposit, so that the river now uses only the deep, west channel, while Constitution Island is separated from the ancient bank of the east channel by a broad belt of meadow land, which has been dyked and ditched, but the efforts to reclaim and cultivate which, have been but partially successful. The alluvial deposit here reaches to a depth of more than sixty feet. There are persons, now living, who have sailed vessels over these meadows. A large flat of shoal water is situated at either end of this marsh, which, being cut off from the river channel by the Hudson River Railroad, which also cuts off two projecting points from the east side of Constitution Island, is called "cove." Each of these coves is supplied by fresh-water streams. The Upper, North or Foundry cove is fed by the foundry creek, while the Lower, or Gouverneur's cove is supplied by the large Indian Falls stream, the beautiful falls of which are well known to all residents and tourists who have visited this locality, which empties into it near its upper end; and at the lower end a triple stream empties into a beautiful deep basin at the foot of the falls of the main stream, each of the others being successively less in size, the smallest entirely vanishing in very dry times. Just at this place a large arm of the flat makes up into the land as if to meet the pure waters of the brook. Its banks are high and very rocky, in places precipitous; but, like all parts of this shore, they are clothed with trees which, in the rich, dark soil, grow to an unusual size. Towering hemlock and lofty deciduous trees grow upon the sides with pitch-pines and tall, symmetrical red cedars crowning the summit or maintain a precarious footing upon the sides of the perpendicular cliffs, while the graceful, drooping branches of the birches and willows shade the waters below.

Now, as is well known, a place where fresh water streams flow into brackish waters is a perfect paradise for certain kinds of fishes, and this place, reader, is certainly not an exception, as you might easily believe could you but see the fishermen hauling their heavy seines to the shore laden with different species of fishes which, however, have to be carefully sorted over, for many of them are unfit for food. Among them are carp, goldfish, suckers and roach, all of which are cast aside to furnish an abundant and agreeable feast to the crows, raccoons and foxes, or else are used for "compost," but the sun fish, white and yellow perches, pickerel, striped bass and a few chub-suckers, and an occasional trout, are all piled carefully into the stern of their skiffs, and are destined for the market.

This, then, is the secret of the great abundance of the white-headed eagles in these coves. Their food consists almost entirely of fishes, and where could they be so easily taken as here? For, when the tide is out, the water becomes very shallow, and the fishes can then be easily seized. These places, therefore, are the natural resorts of all kinds of fish-eating birds—ducks, mergansers, gulls, terns, herons, the osprey, and the noisy king fisher, as well as the eagles, all resort thither in quest of food.

But, reader, if you would see these noble birds in their full native vigor and beauty, you must visit them in their wild haunts. Perhaps you can do no better than to accompany me to-day, for I am all accoutred for the day's shooting, and the special object of pursuit is the white-headed eagle. It is early in March, and the heavy ice of the Hudson has broken loose as far above us as New Hamburgh, and now the great masses of ice are moving swiftly with the current, crushing and grinding each other with fearful force and deafening noise, piling up great ice walls upon the flats at the angles of the river's course, while the north winds are howling fiercely.

Are you all ready—warmly dressed, with heavy pea-jacket, and extra overcoat and gloves? All right! Then come along, for the sun will soon be up. * * * We have reached the river, and see! The sun is just rising over grand, homelike, old Sugar Loaf Mountain, and sends the warm sunlight over against the top of Bear Mountain opposite, on the bald summit of which rests a huge boulder, cleft in twain through the middle. Geologists believe that it was deposited there by the huge ice masses that swept this continent ages ago. We view before us, on a very limited scale an exhibition of the fearful power of those agencies, and are filled with awe to think of the powers which have been. Into the crevice of this boulder is fixed the base of a tall flag-staff, which stands out in sharp relief against the pale blue of the sky. This peak is called "Bald Rock," and is celebrated for the superb view which it affords to mountain climbers.

But how are we going to launch our boat, you ask, when the firm ice reaches quite far out into the stream? It will be a difficult task, but we'll manage it. Now, here goes—out upon the ice, bow first. Now take a close hold of the stern painter. Get her stern gently over the dock. Hold! Look out out for that sharp spike, or we'll have a hole in her bottom. Now we are all right! Her keel cuts through the spongy ice, which we must break in front of her bow, then, hauling her forward a little way with the gaff hooks, the ice has to be broken again in the same manner. This breaking the ice is a very tedious process and is accomplished by standing outside the boat upon the ice prepared to support upon one's arms the weight of the body when the ice gives way beneath it. Where the ice is too heavy for this the boat must be dragged along over the sodden mass by main strength, her keel only cutting through.

At last we reach the open water, but only to encounter new difficulties and greater exertions; for, struggling amongst the ice, against both wind and tide, is only easy to those possessing youth and strength and ardent zeal and determination. So we buffet away, always looking out for the open spaces between the great ice fields. There is a nice opening ahead, but when we have reached the spot the ice has again wedged in and filled it up, and we are once more drifting backward before it. See how the ice is grinding against that sharply-projecting, rocky point on shore, breaking off huge pieces and piling them up in a high wall just on the other side.

Herring gulls are flying overhead in small bands, with here and there a larger gathering on the ice, where some lucky one has discovered a bit of food. See them all rise at once on wing in pursuit of that one that has tried, but unsuccessfully, to bolt with the booty; but they do not get it all away from him so, for his stout bill has seized the fish across the middle and he never lets go, submitting, rather to their buffetings till enough has been torn from either end of it to allow him to swallow the remainder, which he does at a gulp and with evident satisfaction. Now they all fly away together. How beautiful they are, with their long, narrow wings; how exquisitely curved, with all below white of the purity of snow, and above, the mantle is of the delicate gull-blue. And how graceful their flight! How strange that such beautiful creatures should be so greedy and gluttonous. Crows are floating upon every ice cake, eagerly searching among the *debris* for carrion. Nothing eatable is distasteful to their omnivorous maws.

But what is that large creature sitting upon the ice? It is the eagle, and there comes its mate and alights beside it. We may save ourselves the fatigue of going in pursuit, for we should never get near them; besides, we have arrived at the termination of the river expedition near the little boat-house north of the Garrisons tunnel. Now we are fairly landed after a long row; for, though we have done our best, we have not made a mile an hour, and it is now eleven o'clock.

We have not too much time, so we must put on our overcoats and push on to the lower cove, which, I may say, is a better place than the upper one; for it can scarcely be called quiet near the foundry, where they are often trying the heavy Parrott guns; and then, too, they suffer less annoyance from the gunners and workmen than above. So the Gouverneur's cove will be the scene of to-day's exploits. And here it is before us. About one-half of the cove is already clear of ice, and upon the ice, at the edge of the open water, we see several of the eagles sitting, while perched upon the loftiest trees on shore are several others, and a number of them are seen soaring high in the air. Let us not stop to look, but hasten around to the other side, where the two large hemlocks stand; for, on the summit of each tree, I see one of the great birds sitting, perched erect, their snowy-white heads making them conspicuous objects, seen even at this distance. You do not think we can approach them near enough for a shot? I am glad you do not, for that is just what I think, and being agreed in this will save us the time that would otherwise be consumed by a fruitless attempt to stalk them; for, from their lofty perches, they would discover us long before we could creep within gunshot.

(*To be Continued.*)

THAT CUNNING OLD FOX.—He was afflicted with fleas. Went for the river; walked in slowly; took a mouthful of moss by the way; balanced that moss on the end of his nose. Then he sank in the water. The fleas hived in the moss. He cut loose from the moss, and the fleas floated down stream. A correspondent sends us this. A reliable Tennessee gentleman saw the fox. We read about this same fox when we were ten years old. There was nothing about the reliable Tennessee gentleman. We wouldn't have believed it even then. Another fox was troubled with fleas. He went to the apothecary, paid twenty-five cents for Persian insect powder, borrowed a bellows, dusted himself with the powder—and was happy. *Moral:* The wicked flea. *Pyrethrum Roseum* does the business.

CHESAPEAKE ZOOLOGICAL LABORATORY.—One of the departments of the John Hopkins University was opened for students at Old Point Comfort, Va., on the 25th of June. A laboratory is especially designed to facilitate the researches of advanced scientific workers, either ladies or gentlemen. Of course, the locality is a particularly good one for collecting marine animals, and students will receive proper help and guidance. The price of board will not exceed $5 per week, and a fee of $10 only is charged for the use of the laboratory outfit. For further information, address Mr. H. J. Rice, of the Johns Hopkins University, Baltimore, or to Dr. W. H. Brooks, Old Point Comfort, Va. The following is the list, as far as made out, of the members of the party: Dr. W. K. Brooks, Prof. of Zoology and Com. Anat., Johns Hopkins University; Mrs. W. K. Brooks; Mr. H. J. Rice, Mr. H. Sewell, Dr. Chris Sihler, Fellows in Biology, John Hopkins University; Dr. Emil Bessels, Smithsonian Institution, Washington; Prof. L. V. Tuttle, Friends Academy, Baltimore, Md.; Prof. N. B. Webster, Webster Military Academy, Norfolk, Va.; Dr. F. P. Webster, Norfolk, Va.

TRANSPORTATION OF SHELLS.—In the last number of *Nature* Charles Darwin states that in his "Origin of Species" he had suggested various means of transportation, "but as few facts on this head are positively known," he gives the case of a living Unio, which had caught one of the toes of a duck's foot between its valves, and duck and Unio were thus secured. It was Mr Arthur H. Gray, of Davenport Mass., who procured this exemplification to Mr. Darwin's surmises. A blue

winged teal (*Querquedula discors*) was shot in September last near Newbery, and to the bird's toe was attached by the valve of the shell a mussel the *Unio complanatus*. The Unio was alive and had abraided the skin of the bird's toe. Mr. Gray writes: "It (the *Unio*) would have been transported to some pond or river, perhaps miles from its original home, had the bird not been shot, and might have propagated its kind." That aquatic birds disseminate the spawn of fish in this way: the ova adhering to their feet is quite possible.

SNAKE EAT SNAKE.—Allow me to contribute my personal observation on this subject. If the rattlesnake use its rattles as a love-note I have never observed it, but that they use it as a slogan of war, and to gather the clans to the fray, I have seen; and heard the pibroch sounding, sounding from afar. In the summer of 1859, gun in hand, on a still hunt for squirrels and licks, I fell in with a negro digging gentian roots. While talking to Sam he disturbed a rattlesnake, which immediately tooted its tail. Sam got a little excited, jumping round a good deal, and striking at the reptile with a hoe, and always managed to keep between the snake and the gun, so that I could not get in a shot. Ere many seconds elapsed, two other rattlesnakes came from other different directions, sounding their battle-cry as they came. Sam cried enough, dropped his hoe, and left. In 1860 I had another experience, in which one answered the call for assistance. Up to 1869 I had met with many of them, and have never known them to spring their rattles unless excited by anger, or within hearing distance of one in trouble, when they would answer and come in haste. At times they are not easily excited. When gorged they will remain undisturbed, apparently unconscious of the presence of the enemy; but let a dog come on the ground, and peace is at an end—it is fight or run. I do not know of anything that will excite them so quickly as a dog, and they seem to smell a dog at a considerable distance. Their food is rats, mice, birds and eggs, young rabbits, squirrels and toads. A rattle for every year is no criterion to judge age by. I have known one instance of two rattles being matured in one year, and I believe if they could be carefully noticed there would be instances of still more. I have seen a snake with three rattles larger in length and girth than one with thirteen rattles, both killed on the same day. Have seen one with seven rattles larger than one with twelve rattles, both killed on the same day. Twenty-eight rattles is the greatest number of rattles I have ever seen on one snake, and it was not as large as some I had seen with a less number of rattles. Of the mortal enmity existing between the black snake and the rattlesnake, two instances have come under my notice, in each of which the rattlesnake proved an arrant coward, making a great noise, while the black snake did all the fighting—if I may call it fighting; it was rather a strangling and a squeezing. My attention was aroused to it by the rattlesnake passing close to me, paying no attention to my presence, but apparently endeavoring to get away from something in pursuit, his rattles springing to their loudest note. I was in the act of throwing gun up to stop him, when the black snake passed like a flash, going five yards to the rattlesnake's one, and the way he seized that rattlesnake by the back of the neck and went round him was something wonderful. This was in 1866; my next experience was in 1868. Neither victors eat the vanquished. I have heard of other instances, and since 1866 I have not killed a black-snake.

My experience with the king snake and the moccasin ran through a course of thirteen years, and in that time I have seen the king snake get outside of the moccasin many times. When the king first seizes his prey he coils around it until they are almost like a ball, turning occasionally and biting the coils of the moccasin. After being some time in the coil he will open out, and if the moccasin shows signs of life it receives another embrace. When life is extinct the king snake stretches out his victim and commences at the head. It takes some time to gorge, especially if the one going inside is about as large as the one crawling outside. THOS. CHALMERS.

Pittsfield, Mass., May 17, 1878.

THE OPOSSUM ONCE MORE.—*Editor Forest and Stream:* In reply to a query by "Tonic," in your issue of April 11, on the "Embryonic Development of the Opossum," let me say that I have hunted and taken many scalps of the opossum, and have heard some absurd theories on the breeding of the varmint—said theories all conjecture—taken from the formation of the sexual organ of the male.

As the hunting season is not the time to answer "Tonic's" query, we must go back into early spring—and just here comes the difficulty. I believe the female lies close concealed during the period of gestation. After some years of careful watching, I have never found the female when carrying embryos. I have found them in many stages of growth in the marsupium or pouch. Have found one with seven young—small, hairless and blind, and apparently not many hours old—fast to the fount of all infantile comfort—the uterus of the mother showing all the marks of having given recent birth, conclusive evidence to me at least that the young were placed in pouch after birth. The opossum, when not hybernating, have no permanent abiding place—here to-day, elsewhere to-morrow, wherever food is most abundant; nocturnal in their habits, and putting up at the first safe retreat on the approach of day. Of five, size of half grown rats, taken from pouch in July and marked in ear, one was captured by myself the following winter, two miles from place of first capture, two were captured by another party, six miles away, and two I never heard of. I have marked many other lots—the contents of different pouches—but never heard about them afterward. There are probably others who have had more time and been more successful in their search, and, as "Tonic" says, let us have it.

THOMAS CHALMERS.

P. S. On April 17, when out trouling, I observed a pair of partridge with a fine brood of chicks. On Wednesday, May 22, on my way home from trout brook, raised a pair of woodcock; female carried off three young hanging to her. The young were well grown, and so heavy the old one could carry them but a short distance.

Having nothing better to do, I am spending a few days tenting on the old shad ground. On Friday of last week, 24th, took twenty-two shad; Saturday P. M., eleven; Monday P. M., eleven. T. C.

Holyoke, Mass., May 28, 1878.

[April 17 is certainly unusually early for young ruffed grouse to be out, but then we all know that this is an "exceptional season." Woodcock have been seen to carry off their young before, but never three at a time, we think.—ED.]

BREEDING OF THE SNOW-BIRD IN PENNSYLVANIA.—Noticing in a recent issue of your valued paper, reference to the presence of the American goldfinch (*Chrisomitris tristes*) in Connecticut during winter, I thought it might interest you to know that said bird habitually winters in this part of Pennsylvania, although not infrequently the mercury falls to sixteen degrees below zero. They congregate in large flocks, and appear to be as comfortable and cheerful during cold weather as at any other time.

The following may also be interesting, showing how sharply the range or latitude of the habitat of certain birds is marked. I have been an observer of birds since my boyhood—some twenty odd years—but never noticed a snow-bird (*Junco hyemalis*) after warm weather fairly commenced, although they are usually plenty here in winter. Last June, while trout fishing only thirty miles north of this city, I found quite a number of snow-birds, and surmised that they bred in the neighborhood. In fishing near the same locality this season my surmises proved correct, as I found one of their nests, May 2, containing four eggs. Last week, my brother with others visited the same place, and he found no less than three nests. All of them were built on the ground, along old roads, and hidden under a tuft of moss or a moss-covered log, and, with the exception of one, each contained four eggs. The exception contained five eggs, but one of them was covered, or built over, showing that the parents did not propose to feed more than four young ones—perhaps on account of the "stringency" of the times! The rose-breasted grosbeak (*Goniaphea ludovociana*) which only tarries in our immediate vicinity for a short time early in spring, also nests in the locality referred to above; but thus far I have not been so fortunate as to find a nest. BOBOLINK.

Williamsport, Pa., June 3, 1878.

[With regard to the winter range of the *Chrysomitris tristis* we would refer our correspondent to a recent issue of FOREST AND STREAM, in which it is shown that this species habitually winters as far north as New Hampshire. The note on the breeding of *Junco hyemalis* near Williamsport is interesting, as this is one of the most southerly localities on record for this occurrence.—ED.]

ARRIVALS AT THE CINCINNATI ZOOLOGICAL GARDEN UP TO JULY 1.—One white pelican, *Pelecanus trachyrhyncus*; one copperhead snake, *Ancistrodon contortrix*, presented by Messrs. Thrall and Mumford; two American elk, *Cervus canadensis*, born in Garden; two fallow deer, *Dama vulgaris*, born in Garden; two wild cats, *Felis rufa*, presented; three rattlesnakes, *Crotalus durissus*, presented by Dr. Jno. Franke; four ponies, *Equus caballus*, deposited by Mr. Jno. Robinson; one ditto, born in Garden; one orangoutang, *Simia satyrus*; one chimpanzee, *Progtodytes niger*, deposited by Messrs. Chas. Reiche and Bro.; one red deer, *Cervus elaphus*, born in Garden; one black bear, *Ursus Americanus*, presented by Mr. C. Goshell; one pronghorn antelope, *Antilocapra Americana*, presented by Mr. W. H. May; two passenger pigeons, *Ectopistes migratorius*, hatched in Garden; two lineated buzzards, *Buteo lineatus*, presented; one black sea lion, *Zalophus gillespiei*, born in Garden; one Texan civet cat, *Bassaris astuta*, presented by Mr. B. H. Robb. H. P. INGALLS, Supt.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

THE CHINESE AZALEA.

THERE is no plant cultivated for winter or spring decoration in the greenhouse or conservatory, that will give better returns for a little extra care and attention than the Azalea, and when the varied and gorgeous colors of many of them are taken into consideration we cannot wonder at the admiration expressed and love shown them by the true florist, as he admires his pets and goes into ecstasies over a newly imported variety, or mayhap a seedling of his own, that, in his estimation at least, is better, or richer, or purer than any other variety of the same color. We are led to these remarks by, the other day, with Mr. William Bennett, Florist, Flatbush, L. I., looking over and comparing with each other the different varieties in his large and interesting collection, and thinking a few notes would be acceptable to our readers we here present them. Much complaint exists among botanists in regard to the hybridization of plants, as causing confusion—breaking up the natural division of plants by crossing the species; but we feel assured that instead of confusing the labors of the botanist it has been the means of more clearly defining these divisions, and has given to the world thousands upon thousands of plants far more beautiful and useful than the types from which they were produced.

The production of new varieties by the artificial crossing of flowers, by which we can blend the best characteristics of each, affords a source of pleasure and interest, to which there are no bounds. Although the art of producing new varieties in this way is of comparatively modern origin, it has now become the acknowledged source of improvement, and the best means for the acquisition of new and improved varieties. For many years florists were content with the old A. indica alba, pupurea, Phœnicea and other varieties of comparatively early introduction; but since the newer varieties discovered by Fortune in China have been obtained a large stride has been made in the production of superior sorts, for many of which we have to thank our Continental nurserymen, who in these, as with the hardy Azalea pontica, have taken the leading position in their cultivation. A most desirable cross or hybrid might be accomplished between the Azalea indica alba, which is hardy in Greenwood, and some of these hardy Japanese sorts, such as A. amœna, A. obtusa, and others. Hybrids between the two latter have been raised in England, and are spoken of as models of elegance and beauty, and exceedingly useful for decorative purposes as well as for cut blooms, the small flowers being much more useful for that purpose than the larger varieties.

In the treatment of established plants it is essential that the pots should be well drained with broken potsherds or some such material so that the plants may take a full supply of water without the earth becoming sodden and sour. The plants should at all times have a regular supply of water, especially when in flower and while making their growth. It is good policy to keep them in the greenhouse until the weather becomes warm outside that they may ripen their wood thoroughly. They should then be removed to a cool, shady place, or if allowed to receive the mid-day's sun the pots should be plunged in some substance, so as to prevent the roots from becoming injured by the heat of the sun on the pots. The best season for repotting is just as the plants start to grow in spring, or immediately after they have done blooming, and the best soil to use is half and half good peat and virgin loam with a liberal admixture of sharp sand.

With regard to the form of the plants we are not in favor of the modern method of training and tying down of the branches to make exact conical, spherical, or other geometrical forms, but rather after getting the young plant started in the way it should go, a pyramidal form being perhaps the best and most showy, by summer, pinching of the young shoots, removing or keeping in check such gross and rambling branches as are necessary to keep the plant in proper bounds. The Azalea may be forced early, and a succession of flowers had from December to June, if kept in a cool house until wanted for that purpose.

The following are a few of the most distinct of the many good sorts we saw in Mr. Bennett's collection: Bernhard Andreas, deep rose, double; Borsig, probably the best double white; Cedo nulli, dark purple; Charmer, bright Amaranth; Criterion, salmon pink, edged with white; Distinction, salmon edged with white, spotted; Due de Brabant, rosy salmon, large; Duc de Nassau, rosy purple; Flag of Truce, pure white, double; Gem, rich crimson scarlet; Hortense Vervæne, pale salmon, large; La Superbe, deep red; Mad. D. Vervæne, rose, upper petals purplish; Mad. Van der Cruyssen, rose, deep spot on upper petals; Magnet, rosy salmon, large; Neptune, orange, shaded violet; Princess Mary of Cambridge, deep rose color, fine form; Sigismund Rucker, lilac rose, bordered white; Souvenir du Prince Albert, double, bright rose, white margin; Stella, bright orange scarlet; Roi d'Holland, deep scarlet.

We may also mention that in Mr. Bennett's orchid house may be seen at present the finest lot of Cypripedium barbatum and its varieties round New York. Anthurium Schertzerianum also (seedling plants) shows larger and more finely colored spathes than we have seen elsewhere.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, ign of suff ering, etc.

"PODGERS" AND HIS DOGS AT HOME.

SAN FRANCISCO, June 15, 1878.

EDITOR FOREST AND STREAM:

For the article in a recent issue headed "The Dog Carefully Considered," also your editorial notice of the recognition of the labors of Captain John M. Taylor in the cause of the dog, I return hearty thanks in the name of all dogs, especially the half-dozen I own. As I read the article a terrier lay coiled up in my lap, and three others of various breeds lay stretched out at my feet; for know ye that I maintain a little den of my own, that is, my dogs and I are joint owners. It is a little room fourteen feet square, overlooking the backyard. Its wood-ceiled walls are covered with pictures of yachts, dogs, birds and beasts, with a glass-case for my guns, racks for my rods, shelves for baskets, a chest of drawers for my tools, and, in order to give it a nautical character, it is fitted up with lockers at the side and cushioned two lengths of berths long, so that when my friends drop in to spend an an evening they need not drop out until morning. All that is necessary is to turn up the cushions and draw forth from the lockers underneath plenty of blankets, and they are comfortably camped. If I could only give my habitation a little oscillating motion, in imitation of a yacht at anchor, it would be delightful.

Here with my dogs I spend most of my evenings. No feminine rights are recognized, no foothold permitted. You won't find any hairpins, those vestiges of woman creation, on my floor. The dogs understand this, and when an occasional female head is hesitatingly thrust in in quest of information on some domestic point, the dogs all turn their heads lazily toward the intruder, then rolling their eyes up at me and languidly wagging their tails in recognition of being acquainted; but there is an expression of countenance which plainly says, "She has nothing to say around here; she don't run our end of the schooner, does she?" Those dogs know just as well as I do that this is our domain, and they stretch themselves out at full length on the cushions and watch me as I write with a faint wag of their tails in recognition of my favorable mention of them. If I should read this to them they would understand it. A dog and a woman are never insensible to admiration and attention. They both prize it highly, and in one other particular they are alike. They are

the only two specimens of creation that ever turn around and look after those they have passed.

I forgot to mention the remainder of the happy family: four cats, that sleep with the dogs, and as I write Sir Thomas Tortoise Shell has coiled himself close under the throat of Bismarck, who refrains from moving for fear of disturbing him. While Madeline Maltese has settled down for a comfortable nap on Prince, a King Charles, two juvenile cats are having a little game of cuff-and-tumble on the floor. Such are my companions this evening—a fitting occasion to read of and write of dogs, eh?

I consider Captain John Taylor a missionary doing good service in the cause of dogs, cultivating a proper appreciation in the public mind for the noble animal, drawing attention to his qualities, and to know him is but to love him.

In the words of the stock sharps, dog stock is coming up. Bench shows have done much to bring the question before the public, and if with no other good results, they bring the dog and his admirers together and create an interest in him.

I have certain theories about dogs. I believe they have many of the charactertistics of human beings, they have qualities of head and heart, and are as varied in character and general make up as we are. They are emblems of honesty and integrity. You see them painted on Adams & Co.'s. wagons, alongside safes. Did you ever see a man so illustrated? Who ever saw two dogs alike in character and disposition. Each have their distinct qualities and qualifications and peculiarities, and it is interesting to observe the variety in a little family of dogs. You see, now, a litter of puppies a month old. They are so many children, and manifest at an early age peculiarities that they never outgrow. For instance, among a litter of King Charles, I observed that one, when only about one a month old, used one fore-paw in a peculiar manner. He would raise it, hold it poised a second, strike with it, when in a playful mood, then put it down with an emphasis I soon taught him to put his paw on his nose, and now whenever he is addressed he sits up, eyes the party, and puts his paws on his nose in a most comical manner; but the paw is raised and put down precisely with the same emotion as when a puppy.

I could write innumerable instances in my experience of the variety of character and disposition of dogs, for I have owned many, and in every variety, except, perhaps, Dinmonts and Dachshunds, neither of which do I pine for, as specimens of beauty, for uglier little wretches never were born.

I confess to a weakness for Gordon setters. I had the first ever imported here, and carried the stock along for sixteen years, and when it ran out I called our old friend, Horace Smith, to aid me in renewing it, and he sent me a noble pair—Jeff and Fly. Both have gone to the happy hunting grounds, but left behind some worthy sons and daughters.

I am acquainted with a great many dogs around town, and when I meet them we exchange civilities, and it is amusing to note the matter-of-fact way in which they receive your salutation, but always returning it with promptness. I was going down town in a horse car the other day when espying a favorite dog of my acquaintance in the street, I put my head out of the window, and remarked, "How are you, Dash?" The dog looked around, and catching sight of me, sprang on the platform, rushed into the car and greeted me, went out again by the front door, which was open, much to the consternation of two or three old anti-dog parties. When he reached the street he turned about, and, looking at me, laughed as plainly as human being could, and Dash and I had a little laugh together.

Now the uncultivated mind on the dog would have seen nothing in it but the erratic and senseless caper of a dog, but there was as much point and method in it as if he had been human. Dash enjoyed the consternation he created, and he did it for fun, and he and I enjoyed it together. He knew I would understand it. With such proper appreciation of dog character, what an infinite fund of observation interest and amusement they afford. When I walk out with my dogs of a Sunday when the poundman is at his devotions, I have lots of amusement at their capers, and the bits of fun they have rushing at some little dog, frightening him half out of his wits. They enjoy his fright and laugh as heartily as I do. After running a poor little wretch to his gate, or nearly upsetting some gouty old party by running against him, they come back to me, look up in my face to see if I noticed it and enjoyed it as they did.

There is an understanding and bond of sympathy between us, and we carry on conversations which are clear to us as if they spoke the English language. There are some theories and propositions in Dr. Hadden's suggestion of a method of keeping the dog at home that is open to objections. The dog, himself would object undoubtedly, and it would be a little rough on him. PODGERS.

PEDIGREE, LAVERACKS AND LLEWELLINS.—We publish with great pleasure the following from Mr. John R. Robinson. It is well known that Mr. Robinson was as familiar as any man in England with the Laverack dogs, and his letter will no doubt be read with interest:

EDITOR FOREST AND STREAM:

In your journal just to hand I notice Mr. C. N. Whitman's account of the pure Laverack setter Pedigree, and beg most respectfully to inform Mr. C. N. W. and your readers that I bred Pedigree and his sisters Magnet and Fairy II. They where born May 16, 1875, out of my Blue Daisy, by Bagly's Victor (lemon and white); Daisy by Prince, Blue Cora; the latter as well as Victor were by old Dash out of Moll. It is true that my old friend, E. Laverack, supplied Mr. Westcott with Pedigree and Magnet, and Mr. Tasker with Fairy II, but it is equally true that I both bred them and raised them. I am glad to learn that they are alive and have proved Mr. L.'s words true, namely, that they "would do me credit as the breeder." I was surprised and sorry to see such a bitter outcry against Mr. Lort's judgment at the late New York Bench Show. I do not always indorse Mr. Lort's awards, but I cannot believe that he could make such a mess as your correspondent would have us believe. In the first place there are few better judges than he, and I find that his awards where in favor of the Laverack, which always have held their own against all comers. In fact it is generally admitted that they are unequalled, and that no setter without Laverack blood is worth "a rush." I have seen Mr. Llewellin's "cross-breds," and I admit that some are very handsome, but all fall short of a good pure specimen of the Laverack, such as H. Raymond's Fairy and my late friend's Cora (notwithstanding that the latter was defeated once at the Chrystal Palace). I don't write from any bias. I know Mr. Llewellin personally, and respect him highly and like his dogs, but I like the "pure breed" better. The "Llewellins," as they are termed, are a cross between the "Laverack" and M. Statter's, and it is well known that the more Laverack blood you have the handsomer and better are the animal. In fact all the celebrated setters have more or less Laverack blood in them. You may cross other breeds as you like, but you cannot obtain the same results. As to their being small, Mr. Laverack always preferred small or medium sized dogs for "practical utility," being the quickest and most durable even when of the same blood. As an instance of this, when Mr. Laverack and I shot over Pride of the Border and Fairy, Pride had no chance with her, and I am convinced that if Mr. Wescott's Magnet (although she was badly reared and was for a time foundered) was matched against some big dogs, say for two or three weeks, that she would make them look very "small" long before the time was up. Of course there always will be differences of opinion about setters as about other matters, but being a Laverack fancier, and also having promised my much lamented friend, E. Laversek, on his death bed to maintain his breed of setters pure and propagate them, it is natural that I should say a word in their defence, although they are able to take care of themselves. JOHN R. ROBINSON.

Glenvilla, Ashbrook, Sunderland, Eng., June 18, 1878.

CANINE ABERRATION.—The case of a setter dog in Boston, under date of June 26, sent us by a correspondent, is so curious as pointing to lunacy in the animal, that we have thought it worth while to publish the letter with our answer. Our correspondent writes:

"I have an English setter dog fifteen months of age. He is a very gentle dog, obedient, well broken and very affectionate, but of rather a timid disposition. Within the last month a habit has greatly increased which he has always had in a slight degree, namely: gazing with a fixed stare at imaginary things in the air while in the house. As a pup he used to often gaze fixedly at my cigar smoke, evidently with fright. He has had the run of the house, and is used to all the rooms. Within the last two weeks this habit has increased greatly, and he now will not lie in any open part of the room, but gets under the table or piano, and, when made to "down charge" in the middle of any room, fixes his eyes on the ceiling or vacancy with a steady stare and retreats, if he is allowed, to the protection of the table or piano. If made to remain in the centre of the room he slightly shivers and seems to see frightful visions in the air. His limbs are in good order, his coat is fine and smooth, and he seems lively and playful outdoors. Has always had this habit in a small degree, but it is now intensified and he evidently is suffering. He is at the present writing in my office and wants to get under my desk, seeing all sorts of visions, apparently, in the air. Has good appetite, and, when he will forget for a moment to watch the ceiling, seems to be himself perfectly, but most of his time is taken up in star gazing. He acts as if he had been badly frightened by something dropping upon him from the air. Can you prescribe for him? Are the symptoms dangerous?" D. F.

The dog is doubtless suffering from some cerebral irritation, and, as it has existed since youth, more or less, it is not probable that a cure can be affected. He might be treated for worms to make sure that he had none, as they often create sympathetic irritation of the brain. Light diet and plenty of exercise will be in order. The dog should be carefully watched, and if the nervous symptoms increase very decidedly he should be tied up or killed. Nervous symptoms in the dog are often very serious.

THE OLD TUMP COON.—A coon hunt by moonlight is not so poor a sport as one might judge at first from a strictly Nimrod point of view; and I confess, for one, that whenever I start down the Potomac after canvas-back and red-head ducks, I almost hope that we will not get any at first, because ill-luck in that line always brings forth an enterprising expedition after coon. And then it makes the darkies so rapturously happy!

We start out about nine o'clock on a fine moonlight night, ten cur dogs, darkies of all sizes and ages, lightwood knots to make torches with, tobacco, pipes, cigars, blankets to bivouac with, etc., etc. And what can be finer than the sombre forest vaguely illumined by the pale orb of night, the long shadows below, the glimmering, jagged mass of trees above, and then the wild, weird, unearthly effect when the dark awakens with ten thousand echoes, and the motley chase goes tearing through the woodland. At last the dogs "tree" the quarry, and the blazing torches throw a lurid glare upon gnarled oaks and giant gum trees, the wild-looking figures of our dusky sportsmen, and their half savage cries of encouragement and delight resound in chorus to the mad yelping of the dogs. My friend Frank L., of Washington, is a rare sportsman, and it was with peculiar pleasure that I met him last Wednesday at the Imperial Hotel, and after one of the luxuriant dinners, such as are served in that establishment, proceeded by steamer down the river to the "Crow's Nest"—a noted ducking point. But the weather became so mild that not a duck could be seen, at which our sable gamekeeper grinned; and as he went out to make our improvised dinner he chanted a favorite refrain:

"Possum up de gum tree,
Coony in de holler."

In the immense timbered lowlands below the "Crow's Nest" there is a vast swampy forest called the Tump, why so called no fellow can tell, but it is; and in there are thousands of giant owls that make night hideous with their whoop. But the principal and oldest inhabitant is the old Tump coon, who was supposed to have caught more geese and rabbits, ducks and chickens, than any old housewife in the neighborhood could count.

He had been treed and shaken out about two hundred times, and had as often whipped all the dogs, until every coon dog in the country knew the trail of the old pirate and was supposed to leave it almost as soon as struck. Nevertheless, last Wednesday night, with about twenty well picked cur dogs and as many darkies, we brought this celebrated coon to bay, or rather to tree; then the giant old gum was felled, the darkies taking turns, two at a time, and as it went down with a crash everything rushed in, and sure enough, there he was with his tail set against the thickest of the branches, his two eyes gleaming like fire balls and his teeth grinning. In went six of the dogs with a desperate dash, but came out yelling and with their tails tucked. Then in we all went, helter skelter, and this time the coon ran for it; but before we could get up with him, he had gotten into a pool of water, and that is the very best military position a coon can assume, his flanks and rear being both protected. So everybody said, "Pshaw, it's no use trying; that there coon can whip all creation now, and it's only just wasting dog and fight to try him." But one of our party, Ryland Ruff, the society swell of Washington, and lightest in the dance, had become excited, and before anybody could catch him, he had taken the coon in the rear by water; there was a wild screeching and tearing and splashing, and then Ryland, bleeding but victorious, brought out the old Tump Coon dead. P. McC.

HOW A BIG DOG DUG A HOLE FOR A LITTLE DOG.—I have frequently read in your paper accounts of the wonderful doings of dogs. People call it "instinct." They can call it instinct if they like, but if it be not reason such as mankind is endowed with, it certainly is good dog reasoning; so I wish to add another instance to the many already placed on record. Here is my story—true, every word of it. I am the fortunate possessor of two fine setter pups, one eleven and the other three months old. I keep these youngsters in a yard adjoining my residence, which is surrounded by a fence high enough to keep them in bounds. A partition line of fence between me and a neighbor is of boards on end. This has been an unusually wet spring, and the rains have moistened and softened the ordinarily dry and hard ground. About a week ago, on going home, I discovered the older of my pups digging a hole under this line fence. I watched him for a time, when he ceased digging and stepped back to the younger chap, who was lying a few feet away, apparently much interested in the work of his older companion, when they put their heads together and appeared to have a little dog confab. Then the little fellow went up and tried to get through the hole into the next yard. The hole was too small, and he couldn't make it. He then backed off to his former position, and the older fellow set to work again to enlarge the hole, which he did in a few minutes, and the other passed through. Had the dog dug the hole in order to free himself I should have thought nothing more of it, further than a demonstration of puppyish deviltry; but as he did it evidently to liberate his mate, I cannot but think there must have been a mutual understanding between them. I will just add that our spring shooting was not very good. The early spring spoiled it. The promise for fall shooting is most encouraging. Large numbers of geese and duck nesting here, and the valleys and mountains are alive with the different varieties of grouse. K.

Virginia City, Montana, June, 1878.

BEAR DOGS.—In another column will be found additional information in regard to bear dogs, the testimony of an experienced bear hunter as to the best breed of bear dogs as used in the Sunflower (Miss.) River bear country.

NAMES CLAIMED.—Mr. W. Moore, of Bloomfield, N. J., claims the name of Macgregor for his black, white and tan puppy, 3 months old, out of Champion Rob Roy, Llewellin bitch Bess. Bess by Burganthal's Rake and L. H. Smith's Fanny. Fanny by Leicester-Dart, etc.—*June* 26, 1878.

Piper Hiedsick Kennel—Grand View, N. Y.—I name my three puppies Victor, Nellie and Mamie Mott. Whelped May 1st, 1878, out of Mrs. Victor M. Hackley's Imp. Nell and Russian Lin. JOHN Q. OSBORN.

POISONED.—Mr. I. Haggar informed us that last week his fine bitch Bonnet Carree was poisoned.

DEATH OF SHOT—*Erie, Pa., June* 22.—Graham's old Irish setter dog Shot died on Wednesday at the age of sixteen years. He was one of the very best dogs in this part of the State, and continued to do good work until he was fifteen years of age. SNIPE.

VISITS—*A. E. Godeffroy, Neversink Lodge Kennels—New York, June* 25.—Queen—liver and white pointer—formerly Sherwood's, bred to Sensation.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
July 5	9	48	6	15	8	38
July 6	10	36	7	02	6	30
July 7	11	24	7	48	7	22
July 8	M		8	37	8	14
July 9	0	26	9	29	8	59
July 10	1	12	10	22	9	45
July 11	2	00	11	14	10	31

YACHTING NEWS.

NEW YORK BAY REGATTA.—On the morning of the 27th inst. the greatest collection of small yachts ever witnessed in New York waters had assembled about Bay Ridge, L. I. The fleet numbered upward of 150 boats of all sizes, from *Tidal Wave* and *Comet* down to the sixteen-foot cat-boat. The entries for the First Annual N. Y. Bay Regatta had been very numerous, and the success and smoothness with which the event passed off will insure an immense assemblage of similar craft next year. Much praise is due the committee and the secretary thereof, Mr. Robbins, for the admirable manner in which the whole programme was carried out. Classes, course and prizes have been fully entered upon in our previous numbers. Forty-three out of forty-seven entered came to the line with racing numbers on their mainsails, and among them were the cracks of the small fry from far and near. The famous *W. R. Brown*, of Newburg, was again in charge of Capt. Ira Smith, and Snedicor had his love, the *Nettie*, with the usual picked crew and a mountain of sand-bags. In fact, during the earlier part of the race, she was too deep in water, but later on, when the wind freshened up, his pile of weight came in good stead. Joe Morris was at the tiller of *Thistle*, sister to *Nettie*. Both these flyers have handsome and able looking lines, rather a full round bilge and more sheer than others of their type, and the way they stand up to their canvas shows the value of their models. Ellsworth tooled the *Meteor*, that good old-timer, with none of the speed out of her yet, while *Josephine* and *Fowler* were two new boats, from whom great things were expected. *Dare Devil* was handled by Jake Schmidt, her builder, and between her, *Meteor* and the *Brown* a close match was looked for. In the third class *Addie Taylor* and *Excelsior* were the favorites, while among the cats *Emma D.* from the Harlem, was bought to have the best chance. The class for catamarans included three, *Tarantella* and *Minnie and Bella* being the

only two properly matched as to size, the *Deception* being too small to amount to much, and looking altogether like a home-made affair. This race afforded the first official match between catamarans and the ordinary sloop, and the ready style in which Mr. Hughes ran through the entire fleet as though they were at anchor, with only one hand on board besides himself, and not a single sand bag nor a racing sail, will settle forever the question as to their speed on or off the wind. When it is remembered that the first class jib and mainsails required about fifteen hands apiece and extra suits of racing sails, sand-bags, etc., the superiority in point of economy of the double-hull craft becomes so apparent that we should not wonder if in time the catamaran entirely displaced the open jib-and-mainsail for racing purposes. The starting gun went from the steamer *Fort Lee* at 11h. 47m. 40s. Wind, a wholesale breeze from S. S. E., and the tide three-quarters ebb. The yachts were sent across the line in the following order, with booms to starboard:

First Class—W. R. Brown, William Sware, Dare Devil, Josephine, Meteor, Journeyman, N. R. Fowler, Annie Geissel and Florence.

Second Class—No Name, Clara S., Inspector, Martha N., Mary, Fanuie D., Jenny Dilks, Nettie, Thistle and L., P. Springer.

Third Class—Marvel, George B., Deane, Sophia Emma, Willie, Addie Taylor, Excelsior, Joe Saunders, Lydia F. and Faith.

Fourth Class—Ida M., E. Warren, Emma D., Comanche, Brothers, Mary D., Clara W., May B., Gussie, Alice, Cora D. and Fidget.

Catamarans—Minnie and Bella, Deception and Tarantella.

The whole fleet stood for the Robbins Reef buoy, rounded and commenced a series of short and long legs down to the Narrows. Below Stapleton the catamaran *Minnie and Bella* had already left the fleet under her stern, and, with the freshening breeze, was rapidly spinning out her lead. A nuisance of the sand-bag affliction, under which our small racing craft suffer, was repeatedly illustrated to-day. Owing to the numerous entries blanketings were taken and given without stint on the run to Robbins Reef, and when one sloop would take the wind out of another's sail the latter, with all her sand-bags on the weather rail, would dip to windward with a sudden lurch and threaten to capsize. The whole fleet fetched into Stapleton Bay, tacked once again, and then went through the Narrows. *Tarantella* had in the meantime been overhauling all the sand-bag devices excepting the three leaders, and after a couple of hoards outside, laid up for stake-boat off Coney Island. *Minnie and Bella* rounded the upper mark first, eased sheets, and was off for home with a lead of nearly a mile. She was followed by the others as below:

	H.	M.	S.		H.	M.	S.
Minnie and Bella	12	47	30	Martha M.	1	03	30
W. R. Brown	12	55	05	N. R. Fowler	1	04	15
Tarantella	12	58	50	Nettie	1	04	45
Meteor	12	59	00	Jenny Dilks	1	05	55
Dare Devil	12	59	30	Journeyman	1	06	30
No Name	1	20	20	Clara S.	1	07	10
Josephine	1	02	55				

The cat-boats turned a stake-boat off Owls Head instead. Approaching the Coney Island mark *Brown* led the sloops, with *Meteor* and *Dare Devil* close together and *Tarantella* a little astern. She rapidly ran through their lee, and jibed round the mark without the least ado, though the wind was now quite fresh, and beyond Fort Lafayette went to the front of all excepting Roahr's double-huller. The *Brown* dropped a man overboard, but picked him up and kept off again, still leading the sloops, with *Meteor* close aboard and *Dare Devil* third. The fourth class had finished the first round as follows: Brothers, Comanche, Alice, Clara W., E. Warren, Emma D., Mary D., Fidget, Cora D., Gussie, Ida M., May B.

On the second round *Tarantella* picked up on her sister and went by her below the Narrows and led the fleet by a long distance, which she increased up to the last. *Brown*, *Meteor* and *Dare Devil* held well together until they got outside for the second time, the former being to windward. They all made a long leg through the Narrows, the Newburgh boat standing down along the Staten Island shore and apparently holding a better wind than the rest. When they all tacked for the outer mark the *Brown* was the only one who could fetch it, and rounded with a long lead. *Dare Devil* next, having outweathered *Meteor*, the latter rounding 6m. 50s. later. Booming out was again in order, and all hands made for home with booms over the port quarter. The finish was reached as under:

Name.	Start. D.	M.	S.	Finish. D.	M.	S.	Elapsed time. H.	M.	S.	Corrected Time. H.	M.	S.
FIRST-CLASS—TWENTY-SIX TO THIRTY FEET.												
Journeyman	11	49	46	4	7	45	4	17	59	4	17	59
Meteor	11	49	23	3	56	40	4	7	17	4	6	47
Annie Geissel	11	51	30	Withdrawn.								
N. R. Fowler	11	49	55	4	1	20	4	11	25	4	9	45
Wm. Sware	11	47	55	Not timed.								
Josephine	11	48	50	4	9	22	4	20	32	4	18	22
Dare Devil	11	48	35	3	48	40	4	0	5	3	57	55
Florence	11	57	33	Not timed.								
M. R. Brown	11	47	45	3	44	50	3	57	5	3	54	45
SECOND-CLASS—TWENTY-THREE TO TWENTY-SIX FEET.												
L. P. Springer	11	56	25	Not timed.								
No Name	11	47	55	4	06	45	4	18	48	4	18	40
Martha Munn	11	48	50	4	27	23	4	38	33	4	38	03
Nettie	11	49	40	4	06	30	4	10	50	4	16	10
Jennie Dilks	11	49	23	4	13	05	4	23	42	4	23	02
Clara S.	11	48	15	4	18	55	4	30	20	4	28	30
Mary	11	49	00	4	21	10	4	32	10	4	30	00
Inspector	11	48	30	4	29	10	4	40	40	4	38	30
Thistle	11	50	40	4	18	50	4	28	10	4	25	40
Fannie D.	11	49	10	4	35	00	4	45	50	4	42	29
THIRD-CLASS—TWENTY TO TWENTY-THREE FEET.												
Lydia F	11	52	50	Not timed.								
Excelsior	11	50	00	4	33	30	4	43	30	4	42	20
Joe Saunders	11	50	42	4	47	18	4	55	36	4	55	26
Geo. B. Deane	11	49	23	4	30	20	4	40	57	4	39	37
Sophia Emma	11	49	45	4	47	56	4	57	51	4	56	11
Marvel	11	48	50	Withdrawn.								
Faith	11	55	25	Broke down.								
Addie Taylor	11	49	55	4	30	05	4	40	10	4	38	10
Willie	11	49	48	Not timed.								
FOURTH-CLASS—UNDER TWENTY FEET.												
Emma D.	11	49	23	Broke down.								
Fidget	11	57	15	2	43	40	2	50	25	2	50	25
E. Warren	11	49	20	2	51	10	3	01	50	3	00	20
Comanche	11	50	30	2	44	10	2	53	40	2	52	02½
Brothers	11	50	35	2	37	06	2	46	31	2	44	38½
Mary D	11	50	54	2	32	48	3	01	54	2	59	39
Clara W.	11	50	58	2	45	50	2	55	52	2	53	37
Gussie	11	51	55	7	01	18	3	09	23	3	07	00½
Cora D.	11	52	15	3	03	24	3	11	09	3	08	16½
Alice	11	51	53	2	49	00	2	57	02	2	53	59½
Mary B.	11	51	25	3	10	21	3	18	56	3	10	26
Ida M.	11	49	15	Not timed.								
CATAMARANS.												
Minnie & Bella	11	48	25	3	24	05	3	35	40	3	34	55
Tarantella	11	50	45	3	18	06	3	27	21	3	27	21
Deception	11	50	40	Passed on wrong side stake-boat.								

The *Brown* takes first prize and *Dare Devil* second. *Nettle* was first home in the second class, but having fouled a stake-boat was protested against by *No Name*, second boat in. *Addie Taylor* takes first prize in third class, and *G. B. Deane*, the second. In the fourth class *Brothers* takes first and *Fidget* second prize, while among the catamarans *Tarantella* beats Roahr's boat *Minnie* and *Bella* 7m. 34s. The judges will give their decision concerning protest against *Nettle* in a few days.

EASTERN YACHT CLUB.—The Eastern Yacht club sailed their annual regatta over a 28-mile course, June 27. Yachts were divided into two classes for schooners and two for sloops. Start flying, as follows:

Name.	H. M. S.	Name.	H. M. S.
Whitecap	11 51 48	Enterprise	12 03 31
Shadow	11 54 34	Madcap	12 05 00
Foam	11 58 10	Breeze	12 05 00
Halcyon	11 59 10	Dream	12 05 00
Anna	12 01 12		

Wind light from E. S. E. and light sails came into requisition. *Halcyon* headed *Foam* when nearly abreast of Pig Rocks, and won readily in her class. *Madcap*, well known to our Metropolitan waters as a very fast craft, and built by Abertson, of Philadelphia, had a brush with the cutter-sloop *Enterprise*, and dropped her. Report says Mr. Peabody's yacht was kept too close, and that she would have done better if given more of a full. She out-pointed *Madcap* and held her own off the wind; it was only when on the wind that *Madcap* out-footed her. About half way over the course the wind backed round to S. W. and came out stronger. *Dream*, *Breeze*, and *Shadow* gave up, and *Anna* had it all to herself among the second class schooners, and *Whitecap*, formerly Mr. Livingston's famous boat, had a walk-over in the second class for sloops. Actual and corrected time as follows:

FIRST CLASS SCHOONERS—PRIZE $200.

Name.	Owner.	Length.	Cor. time. H.	M.	S.
Halcyon	George H Brooks	79.35	4	10	35
Foam	F D Boardman	79	4	24	50
SECOND CLASS SCHOONERS.					
Anna	David Pingree	48	5	57	41
Dream	G S Curtis	43	..	..	..
Breeze	J G Minot	42	..	..	..
FIRST CLASS SLOOPS.					
Madcap	W C Cabot	42	4	58	18
Enterprise	F E Peabody	43	5	01	14
SECOND CLASS SLOOPS.					
Whitecap	J M Forbes	35	5	11	32
Shadow	John Bryant	33.5	..	..	..

Magic, which a few years ago showed our British cousins that they did not know how to build a fast yacht, by smartly beating the English crack *Cambria* several miles out of twenty-five, went over the course with the racers and showed them some of her old time tricks in speed and weatherliness.

LANDMARK GOING.—Fifteen years ago the Brooklyn Yacht Club erected their present quarters at the foot of Court st., since which time their well-known house has become a regular landmark to all visitors to Gowanus Bay. But the world moves and so did the bulkhead in front of the piazza. What with filling in and the piers recently built, the club has decided to vacate for other scenes, where the view will not be impaired again. It is intended to build a new house at Bay Ridge next winter. In the mean time a house will be leased from Mr. J. T. Smith in the vicinity of the present one.

NOVA SCOTIA YACHT SQUADRON.—The yachting season in Halifax was formally opened on Saturday, 15th June, by the first cruise of the squadron, Bedford being the objective point. The following yachts rendezvoused at H. M. Lumber Yard at 2:30 P. M. Steamer, *Carrie*; schooners, *Albatross*, *Sea Foam*; sloops, *Mystery*, *Hebe*, *Psyche*, *Circe*, *Spray*, *Lily*, *Edith*, *Squirrel*, *Muta*; cat, *Bertha*. Rear-Commodore J. W. Stairs hoisted his flag on board the *Mystery*, and having allotted the yachts their stations, signalled D. R.—"Form into a line astern of me"—and led the way up the harbor. The breeze was light from S. W., and a prettier marine picture could not be seen than that formed by the yachts of the squadron as they swept on, covered with canvas and burgees, and ensigns flying. On passing H. M. S. *Bellerophon*, flagship of Vice-Admiral Sir E. A. Inglefield, K. C. B., the yachts saluted, the salute being returned by the flagship. The Rear-Commodore then signalled D. N.—"Form line abreast of me to starboard and heave to." Up went the answering pendants as the yachts dashed into their appointed places, waiting for the next signal, which proved to be H. L.—"Yachts are to race to mark next shown and heave to"—and was followed by B. H. J.—"Bedford Narrows." Gun fire sent the fleet off full speed, the flagship waiting till all had fairly started before drawing her jib sheet. The *Mystery* overtook the fleet, hove to at Bedford Narrows and led in to the anchorage, signalling B. H.—"Anchor as most convenient." Splash went the mud-hooks, and every man went ashore to Neuch's Hotel, where dinner had been prepared. Some fifty or sixty gentlemen sat down, and a very pleasant time was spent. The return trip was effected under sail by some yachts, in tow of the steamer by others, and a highly successful opening trip was over. A brilliant but an almost windless day proved a bar to fine racing on Friday, 21st June, when the squadron sailed their opening race. The wind died away before the race was completed, and throughout the last round was exceedingly paltry. Mr. Butler's sloop *Hebe* carried off the honors, and Mr. D. Cronan's handsome schooner distanced them all and landed the second prize easily. Mr. Cronan's victory gave universal satisfaction. Rear-Commodore Stairs had charge of the race. The following yachts passed the line:

Yachts.	Entered by.	Tons.	H.	M.	S.
Albatross (schr)	D Cronan	17	2	22	00
Hebe (sloop)	J E Butler	8	2	22	01
Lily (sloop)	Dr W H Weeks	5	2	22	50
Psyche (sloop)	Lieut G E Capel Cure, 20th	7	2	23	15
Circe (sloop)	James Fraser	5	2	23	35
Edith (sloop)	W Atkinson	5	2	21	05
Sea Foam (schr)	Lieut Ord, R E	27	2	25	15
Mystery (sloop)	Snnichrast and Troop	14	2	25	18
Spray (sloop)	H St G Twining	12	2	25	55

The sloops carried mainbooms to port and set spinnakers to starboard, all carried gaff topsails. The schooners winged out, and should have had square sails. *Spray* carried away her squaresail halyard block almost at the start, the sail came down by the run. Running to the Ferry buoy the *Hebe*, *Albatross* and *Circe* led, and rounded in that order; jibing being the order of the day, *Mystery*, *Spray* and *Seafoam* brought up the rear, but picked up on the reach across, when the *Circe*, by a clever manœuvre, cut out the *Hebe* and took the lead. It was now a beat down to Fort Clarence. *Hebe*, *Circe* and *Albatross* stood over to the Eastern shore, followed by the *Seafoam*, the *Mystery* and *Psyche*, the latter far ahead and close in with the leaders. The *Hebe* regained her lead, and the *Mystery* closed on the leaders. The flag-boat off Fort Clarence was rounded as follows: *Hebe*, 3h. 34m.; *Psyche*, 3h. 44m.; *Albatross*, 3h. 45m. 3s.; *Circe*, 3h. 46m. 20s.; *Mystery*, 3h. 51m. 30s.; jibtopsails and spinnakers were again called into requisition for the reach to Leopard buoy. *Mystery* jibed round the Leopard ahead of the *Lily* and began working up to the *Psyche* and *Circe*, crossing the bows of the former off the southern end of George's Island. She and the *Circe* then held on for Fort Clarence, dropping the *Psyche*, *Spray* and *Lily*, the *Seafoam* having given up, and the *Psyche* shortly after doing the same. Meanwhile the *Hebe* and *Albatross* were away ahead, and, bar accidents, had first and second prize safe. The racing was now between the four yachts astern, and on the reach to Commissioners' Point the *Mystery* went right past *Circe*, and rounded the buoy first, followed by the *Circe*, the *Spray* and the *Lily*. *Circe* then gave up. *Hebe* by this time had won, and the *Albatross* was crossing the line. *Hebe* was timed at the finishing line at 5h. 14m. 25s., and the *Albatross* at 5h. 26m. 20s. The *Mystery* did not get across till over an hour later. The next race will be sailed over the Bedford Basin Course on Saturday, July 13.

SOUTHWARK REGATTA.—First and third class boats of the Southwark and Philadelphia Yacht clubs sailed their regular regatta June 24, from Philadelphia to Chester and return. *Mitchell* and *Spurt* were the first home in the first class, followed by *Schuyler*, *Powell* and *Ledyard* in the third class.

SOUTHERN YACHT CLUB.—This newly organized club held their first annual regatta June 24 and 25. Crews were limited to amateurs the first day, with the following results: First-class, *Nathalie C.*; time, 2h. 58m. 36½s. Second-class, *Xiphias*; time, 3h. 27m. 58s. Third-class, *Juniata*; time, 3h. 31m. 14s. The *Maggie* capsized. Fourth-class, *Olivia*; time, 4h. 4m. 39s.

PROVIDENCE YACHT CLUB.—In the race, June 25, for the Harvey J. Flint cup, the *Peck* and *Dixon* again won in a strong breeze. *Wanderer*, *Sunshine* and *Lizzie* came to grief, and *Windward* failed to put in an appearance on account of lacking shifting ballast.

ADDIE TAYLOR AND H. H. HOLMES.—These two yachts, which failed to make a race some time ago, were started again June 25. *Holmes* had her board slightly altered and donned the racing rig of *Clara S.* Ira Smith had charge of the *Addie*. Double reefs were taken down, the wind blowing fresh from the N. W., and Mr. Taylor's boat carried whole jib, while ex-Com. Kreimeyer had a reef in his. After a number of knock-downs, the *Taylor* reached the outer mark and tacked around, but Schmidt in the *Holmes* lowered away jib and prepared to jibe. A gust struck the sloop and over she went. All hands were rescued by small boats from the hospital ship *Illinois*, and the yacht righted and towed home. The *Taylor* made good weather of it, and reached the finish, off Greenville, N. J., in 3h. 20m. 50s. from the start. The stakes of $500 went to her.

YACHTING LIBRARIES.—The attention of yachting, boating and canoeing men is called to our book reviews of recent numbers. They will find in that column notices of many seasonable books which should find a place in the literary locker of amateur skippers.

HAVERHILL YACHT CLUB.—The club squadron starts on a cruise to the southward July 4, and will be gone one week. Will not other clubs owning small yachts follow this excellent example.

COMET-PEERLESS MATCH.—*Peerless* will not hold the Bennett challenge cup unmolested for any length of time, if any thing is to come of Mr. Langley's proposition to match his *Comet* against the present holder. The proposed race will probably be sailed in the latter part of July, the rules allowing 30 days' rest to the winner. Capt. Joe. Ellsworth will tiller *Comet* probably, while *Peerless* will stick to Corinthian principles, and her owner will tool her himself.

CAROLINA YACHT CLUB.—The Wilmington, N. C., yachtsmen held their regular annual regatta June 25; course, Market Dock to Dram Tree Buoy and return, twice round, distance eight miles; start flying. Six yachts entered: *Frolic*, *Bonnie Lassie*, *Rosa*, *Retta*, *Ripple*, *Foam*. Wind fresh from S. W. *Frolic* went across the line first, followed by the *Lassie* and *Rosa*. On the run down *Frolic*, *Ripple*, *Foam* and *Bonnie Lassie* kept well together, the lower mark being rounded by *Rosa* first, *Frolic* second and *Ripple* third. The run back was with the wind aft. *Ripple* set square sail and *Frolic* drenched her canvas. *Rosa* retained her lead, and started over the course the second time, with *Ripple* second and *Frolic* third. At the lower buoy *Foam* had outrun *Frolic*, otherwise the order remained the same. The final was made as follows, *Retta* having given up: *Rosa*, 2h. 18m. 13s.; *Ripple*, 2h. 36m. 31s.; *Foam*, 2h. 37m. 10s.; *Frolic*, 2h. 46m. 57s.; *Bonnie Lassie*, 2h. 52m. 11s. *Rosa* takes the prize. This is the second race of the club this year.

CHICAGO YACHT CLUB.—The regular annual regatta of this club was held June 22. Course from Van Buren st., around stakeboat off Thirty-ninth st., thence around the Crib and to a stakeboat off Diversey st., and back to start. Entries as follows: *Ina*, *Cora*, *Cary*, *Enterprise*, *Mamie*, *Miller*, *Lucy*, *Unknown*. *Ina* and *Cora* were the two cracks of the day. *Ina* was built from lines by McGiehan, and *Cora* was built by the same party for the late Com. K. C. Barker, of Detroit. *Cora* won in her class in 3h. 1m. 32s; *Ina* in the second, 3h. 28m. 45s.; *Miller* in the third-class, 3h. 56m. 20s.; and *Cary* in the fourth class in 4h.

NAHASSET YACHT CLUB—*Boston, June* 28.—This club is starting on its third year with fifty members and forty small yachts. There will be three regular regattas. One, open to all comers, at Nahant, the other two at Cohasset. The members are nearly all Corinthian yachtsmen. P. G.

YACHTING ON THE LAKES—*Belleville, June* 22.—There is probably no other boat of her size in these waters which is superior in speed to the *Katie*, which recently defeated the *Surprise*, unless it be the *Kathleen*, of our local fleet, which remains to be seen, and probably the meeting of the boats in the Kingston Regatta on Dominion Day (July 1) will decide. At Toronto the yachting season promises to be lively, though there is nothing speedy now at the Provincial capital, except the schooner *Oriole*. The fastest of the Toronto second class fleet is the *Resolute*, a two tonner owned here, but which was too slow to be better than fourth in any race when competing with our local fleet, and the *Surprise* of Trenton. A match is talked of between the schooners *Oriole*, of Toronto, and *Countess of Dufferin*, the big representative of Canada, which raced with the *Madeleine* at New York. Mr. Wm. Pike, of this place, has built a handsome and finely modeled standing keel yacht of ten tons measurement, which he proposes launching a few days hence. Frank M. Roy has also built a ten ton centreboarder, which will be beautifully fitted up, and will probably be launched in September. She will be called the *Gracie*, and will be heard of in our races hereafter, as her model is much admired by good judges. PORT TACK.

By All Means.—We understand that Mr. Ross Wynans proposes taking his clipper sloop *Arrow* to Europe next summer and matching her against the English cutters. Nothing could be more interesting or instructive. Two things occur to us in this connection. In the first place Mr. Wynans will find difficulty in entering public races on account of English conservatism prohibiting the use of a centre-board, so that he may have to seek a series of private matches with such owners as are progressive enough to be willing to give the American sloop a fair trial on her merits. Second, Mr. Wynans will find it hard to arrange the time allowance question, the Thames Rule holding out such unjust advantage to the deep cutters that Englishmen will not be over-ready to adopt a fairer system for the accommodation of a visitor. Simple length measurement may afford a solution. Finally, we hope Mr. Wynans will not rest content with one or a few races, but will match his yacht under all conditions and as often as he can. Only upon the results of a large number of races can correct deductions be based concerning the question of beam vs ballast. *Arrow* measures 66½ tons O. M., is 65.7ft. over all, 61.5ft. on water-line, 26.2ft. extreme beam, 6 4ft. hold, and 5.5ft. water, without board. She was built by D. Kirby, and hails from Newport, R. I.

Lake Yachting—*Toronto, June* 28.—The yacht *Annie Cuthbert*, which has carried the champion flag for some time, has been sold to Capt. J. Prinderville, of Chicago, for $1,800 .....The Governor-General of the Dominion of Canada will give a silver medal for competition among Brockville yachts only, to be sailed for this season.....The Trenton Annual Regatta, on the 26th of June, proved very successful. In the second class race there were three entries. Won by the *Katie Gray*, of Belleville, the *Surprise*, of Trenton being second, and the *Martin*, of Kingston, third. In the third class there were seven entries, the *Idler*, of Brighton, being first and *Wideawake* second and the *Mystery* third. Ah Mik.

New Bedford Yacht Club.—*Enice* won in the first regular regatta of the club, Thursday, June 27. Time, 1h. 36m. 40s.; course, six miles in the harbor.

New Orleans Yachting.—The Southern Yacht Club held their first annual regatta June 24 and 25. On the second day the yachts were sailed by professionals and were divided into four classes, five starters in the first, two in the second, four in the third, and four in the fourth. Wind strong E. S. *Nathalie C.* and *Xiphias* proved themselves the best boats of the lot, beating the home-built craft. *Brender* carried away some of her gear and gave up. The finish was as follows: 1, *Nathalie C.*; 2, *Limnas*; 3, *Xiphias*; 4, *Restless*; 5, *Maggie*; 6, *Juniata*; 7, *Loulou*; 8, *Gov. Claiborne*; 9, *Minnie*; 10, *Mary A.*; and 11, *Olivia*. Time of winner, 2h. 13m. 4s.; of the *Limnas*, 2h. 24m. 67s. *Xiphias* takes prize in second class; time, 2h. 25m. 29s.; *Maggie* wins in third-class in 2h. 31m. 31s., and *Minnie* in the fourth-class in 2h. 39m. 57f.

Neenah, Wis., June 28.—The opening regatta of the Neenah (Wis.) Yacht Club takes place on Lake Winnebago, Thursday, July 11, and boats from Chicago, Racine, Milwaukee, Green Bay, Oshkosh and Fondulac are expected to be present and take part in the race. Leo.

YACHTING DRIFT.

Addie Taylor will be matched against *Sophia Emma* for $500.....*Susie S.* offers to sail any of the first-class boats race in the New York Bay regatta, for $500 a side.....*Dreadnaught* was not injured materially by going ashore on Mamaroneck.....Sloop *Ella Treadwell* is cruising on the Potomac .....*North Star* cruises eastward.....*Resolute*, schooner, will soon be in commission.....*Vidette*, steamer, at Newport..... *Sophia Emma* has accepted challenge from *Addie Taylor*..... Old Brooklyn Club House sold for $175.....*Fleur-de-Lis* at Newport.....*Fleetwing* hails from Whitestone.

OAR AND PADDLE.

The Event of the Year.—Harvard has won! This was almost a foregone conclusion, for the new and green men of Yale could never have stood much of a chance against the old stagers of Cambridge. Yale was simply overpowered, and the best she could do was to make a brave fight and do justice to the indefatigable zeal and hard work of their famous coach, Mr. R. J. Cook, who has certainly done more than any other man to rid America of the chop stroke and battery style of pulling, and to replace an old-time, worn-out dip, with the steady swing of old England. The course has been reverted to in these columns on previous occasions, and our predictions that the Thames would be found eminently fitted for the great race, and New London well able to entertain the thousands of visitors from all parts of the country without the infamous extortion practiced at other places, have been fully verified. The New London course may now be definitely accepted as the regular Putney-Mortlake of America, and ere long Winthrop's Point, the Navy Yard and Bartlett Point will become as historical in the annals of boating as the Crab Tree, Soap Works or Barnes Bridge on the namesake of New London's River, near Old London.

Of the race itself little is to be said. With the start it practically ended. Yale went ahead the first few moments, but in an instant Harvard came out in the lead, and there remained. At the half mile she led Yale by two lengths, Cambridge pulling thirty-three and New Haven thirty-two. At the mile the blue had spun out its lead to four lengths, at two miles to six, and finally Harvard crossed the line a twelve-lengths winner, in 20m. 44 7-4s.; Yale's time, 21m. 20s. The crews were as under:

Harvard University Crew.—Bow, A. Crocker, class '79, age, 19.8, 152lbs., Fitchburgh, Mass.; No. 2, L. N. Littauer, '78, 19.5, 161, New York City; No. 4, B. J. Legate, '77, 23, 167, Leominster, Mass.; No. 4, M. R. Jacobs, '79, 21 9, 176, Brownsville, Pa.; No. 5, Van Der L. Stow, '80, 18.9, 180, San Francisco; No. 6, N. M. Brigham, '80, 22, 170, Natick, Mass.; No. 7, F. W. Smith, '79, 18.9, 184, Worcester, Mass.; stroke, W. A. Bancroft, '78, 23.2, 161, Cambridge, Mass. Average age, 20.10; weight, 161lbs9. Cox, F. H. Allen, '80, 104lbs., Honolulu, S. I.

Yale University Crew.—Bow, J. W. Curtiss, class '70, age, 18, 148lbs., Fairfield, Conn.; No. 2, F. E. Hyde, '79, 20, 155, Hartford, Conn.; No. 3, C. A. Wight, '80, 21, 156, No. Hatfield, Mass.; No. 4, H. Livingston, '79, 22, 156, New York City; No. 5, H. W. Taft, '80, 18, 164, Cincinnati, O.; N. 6, G. B. Rogers, '80 S., 20, 170, Lexington, Mass.; No. 7, D. Trumbull, '80 T., 25, 160, Valparaiso, Chili; stroke, O. D. Thompson, '79, 22, 168, Butler, Pa. Average age, 20.9; weight, 160.lbs. Cox, C. F. Aldrich, '79, 114lbs., Worcester, Mass.

The two universities have been rowing against each other at different times since 1852, mainly in six-oared shells; but it was only in 1876 that the present programme of "eights," four miles straight away, was begun. The record since that time stands:

Year.	Course.	Winner.	Time.	How much won by.
1876	Springfield	Yale	22:02	30 seconds
1877	Springfield	Harvard	24:36	8 seconds
1878	New London	Harvard	20:44¾	44¾ seconds

In reference to the methods of training and coaching each crew underwent we have already spoken in these columns.

Henley Regatta.—The London *Times* does not speak very highly of either of the American crews on the Thames. Englishmen generally dislike their short stroke, as well they may. There is little hope for our oarsmen abroad as long as they jerk instead of swing.

University of Virginia Boating.—The second annual race between the River Boat Club of the University of Virginia and the Tobacco City Club of Lynchburg, took place June 28. The University crew took the lead with 38 strokes, while their opponents pulled 36, and later on spurted up to 40. The University crew turned the stake a length ahead and finally came in leading by nearly five lengths. Time 13m. 53s.

Pioneer Boat Club.—At the foot of 84th st., South Brooklyn, the Pioneers held their annual regatta June 29. The first race was for four-oared gigs with two entries, the Punch crew and the Judy crew. The former pulled 40 strokes and the latter 36. Both turned together. Punch took the inside course and won by one length in 5m. 15s. The second race was for single sculls with five entries, but only two starters, Geo. Cox, Jr., and Jas. R. Beard. The latter won by five lengths, time 7m. 40s. The last race was for barges for the club colors. Entered Pioneer and Nereid crews. Almost a dead heat, but Pioneers won on a foul. Committee: Messrs. Stillman, Swan and Gunther.

Arlington Regatta.—The annual regatta of the Arlington Rowing Association took place June 27 in rough and lumpy water. Ph. Biglin starter, and W. H. McFarland referee. First race for singles. White's boat filled after having rounded the turning buoy first, and F. Pidgeon came in first but was not timed on account of going to assistance of Mr. White. Second race for junior singles, E. H. Platt, G. W. Thomas, B. F. Briggs and J. S. Brinckman were the starters. Plat led until his boat filled, Brinckman followed, swamping likewise. Thomas won the race in 12m. 25s. The four-oared race was the last event. The starters were: The Harry Moore—George W. Thomas, bow; R. V. Young, stroke; Frank Logan and A. J. Valentine. The Denis Leary—William Rexter, bow; Frank Pidgeon, Jr., stroke; J. B. White and C. H. Platt. The Little Flirt—O. Bock, bow; A. Baultman, stroke; J. D. Brinckman and J. Hutchinson. Course was shortened to a mile with turn. Both crews rounded at same time. The Moore's crew came in first, time, 5m. 6s. The pair-oared gig race was postponed on account of the rough water.

A Long Pull.—The six-oared barge *Linda* of the Bachelor Barge Club, manned by Captain John W. Buckman, W. W. Righter, A. Maxwell Sheppard, S. B. F. Howell, Harry C. Miller, W. M. Gardner and John H. McFadden, started from the Market st. wharf for New York June 24, and reached Bordentown the same evening. On the 26th they pulled to New Brunswick and thence to New York in company with a crew sent out to meet them by the Alcyon Club of Brooklyn.

Canada Oarsmen—*Toronto, June* 28.—Bay of Quinte Rowing Club, Belleville, will hold a regatta the first week in August. The Leander Rowing Club, of Hamilton, held their four-oared club races on Burlington Bay, on Saturday, 23d June. The races were rowed in heats and created considerable interest; the first and last heats were well contested. The *J. A. McKenzie* crew were the favorites, and crossed the line in the final heat amid great cheering. Steamboats and railroads ran excursions, and it was a general gala day. The day's sport concluded with a tub race, and was of great amusement. They hold regatta in August.....Hanlon's achievement at the oar has awakened great interest in rowing in Toronto, and unless one takes a pull on the bay, they cannot realize the extent of the epidemic. Every night the bay is covered with craft of all kinds, and to get clear water one has to go well out into the bay, and here he is in danger of being run down by the numerous racing skiffs. It is a favorable sign that so many of the young athletic men are paying so much attention to this style of rowing, and gives hopes that when Hanlon lays aside the oar, some one will be found among them to maintain the credit of the bay. Just previous to Hanlon's going to Pittsburg he successfully conducted a skiff regatta at the Island. Since then the ferry-boat owners have purchased three medals—one gold, one silver and one bronze—to be offered for competion among amateurs. The gold medal becomes the property of the person winning it twice. The race will take place on the afternoon of Saturday, June 29, at Hanlon's Point. Distance, two miles, half a mile and turn repeated. Skiffs are to be eighteen feet and under; entrance fee, nominal. The entries will be numerous, as most of the available skiffs have been engaged. Ah Mik.

The World's Champion.—Later advices report that Trickett only lost the third joint of one little finger on his left hand, and that the accident will not interfere with his rowing. If he should accept Courtney's latest challenge the latter will leave for Australia from England, where he first goes to pull Higgins in September.

Washington Boating.—The tenth annual regatta of the Analostan Boat Club was held on the Potomac, June 29, and was a very successful affair. First race for single sculls. Entries: Mac D. Douglas and F. Whiting. The former upset, and Whiting wins in 11m.; distance, a mile and three-quarters. The second race was for four-oared shells. Entries: *Undine*—Mander, stroke; Dunn, No. 3; Elliott, No. 2; and McKinney, how. *Fraud*—P. Page, stroke; Campbell, No. 3; Jones, No. 2; Burdette, how. Won by the *Fraud*, 10m. 4s. Third race was for pair-oared gigs. Entries: *Jennie*—J. A. Campbell and E. S. Mander; *Maedel*—Parker Page and C. L Burdette. Won by *Maedel*, 10m. 5s. Fourth race, six-oared shell *Gainymede* against winner of four-oared race. The four-oared shell *Fraud* won, 11m. 4s. Fifth race, eight-oared barge *Falcon* and ten-oared barge *Analostan*. Hall and Brown steered the boats. *Analostan* won in 10m. 4s. A tub race and a dance finished up the day. Starter and Judge, Mr. White.

Carmansville Regatta.—The sixth annual regatta of the Carmansville Association was rowed June 29 at 152d street. Mr. L. S. Stockwell acted as referee, and Messrs. S. I. Knapp and C. G. Baker were the judges. The first race was for junior singles. Entries: H. A. S. Martin, George M. Cushing and A. J. Keegan. The former came in first in 14m. 44s. several lengths ahead. The next race was for senior singles. Entries: P. Hunt, D. De Long and A. B. Wilson. Won by Wilson in 13m. 19½s. The third race was for junior gigs. Entries: *A. L. Soulard* and *Kate C.* Won by the *Soulard* in 13m. 36½s. The last race was for four-oared shells. Entries as follows: B. Wilson, stroke; S. F. Knapp, Jr., No. 3; D. De Long, No. 2; V. G. Audubon, bow, of one crew, and P. Hunt, stroke; A. J. Keegan, No. 3; A. E. Mills, No. 2, and George M. Cushing, bow of the other. The former crew kept a little ahead of the latter all the way, and won in 13m. 10½s. A barrel race finished up the day's sport.

New Orleans Boating.—The fifth annual regatta of the Orleans Rowing Club took place at New Orleans, July 25. The first race was for wherries; won by J. J. Carroll in 6m. The second race was for single sculls. Entries: *Nameless*, C. N. Edwards; *Ripple*, Madison Dallas; *Fitz*, P. J. Gillen. Dallas unshipped his seat and Edwards caught a crab. Gillen was bringing up the rear. Edwards kept up his 38 stroke and came in winner in 6m. 10s. The next race was for four-oared gigs. Two entries—*Farwell* and *Wells*. The former went to the front and came in winner; time, 5m. 32s. The four-oared shell race was the last event. Entries: *No Name* and *Sam Boyd*. The former took the lead, and, pulling a 42 stroke, won in 5m. 33s. Judges, J. B. McConnell and R. H. Brown; starter, L. S. Waltros; timer, Y. A. Woodward.

A new rowing club, to be called the Bay of Quinte Rowing Club, has been organized at Belleville, Ont. It starts with a good membership, and bids fair to be a success. This organization will hold a regatta in August.

ROWING RIPPLES.

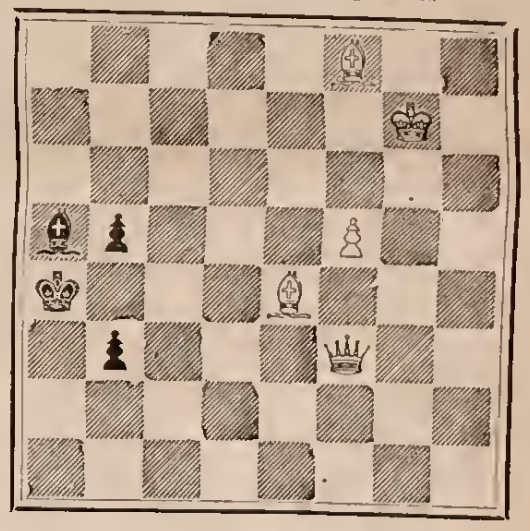
Thalian Dramatic Club offers a cup for the boat race at Norfolk, Va., July 10. Elizabeth and Chesapeake clubs have entered and Washington crews are expected .....Potomac Boat Club held their annual regatta June 26. Three races and very successful.....Elliott and Blackman, of England, will meet.....Newcastle folks charge Elliott with selling his race with Higgins.....Great times in Boston, July 4th..... American crews will not enter at Paris as they pull without coxswains, and our French cousins are not yet equal to that style; but Lee may pull in the single sculls.....Barry and McDevitt will row Brown and Brady at South Cove, Jersey City, July 8.....Kennedy, of Lowell, Mass., was beaten in a two-mile sculling race at that place by Michael Lynch, of Salem, June 28.....Cornell freshmen crew arrived at Ensenore, Owasco Lake, June 24, and have gone into active training.

The Game of Chess.

Notice.—Chess exchanges, communications and solutions should be addressed "Chess Editor Forest and Stream, P. O. box 54, Wolcottville, Conn."

Problem No. 20.

Tourney set, No. 16. Motto: Forget me not.



White to play and give mate in three moves.

SOLUTIONS TO PROBLEMS—NO. 18.

1—P becomes R	1—K moves
2—R-R8 ch	2—K moves
3—R mates	

Game No. 68.

A game in the International Correspondence Tourney between L. S. Atkinson, of Tilton, N. H., and Henry Weight, of England:

White. Atkinson	Black. Weight	White. Atkinson	Black. Weight
1—P-K4	1—P-K4	13—Q Kt-Q2	13—Kt-K2
2—K Kt-B3	2—Q Kt-B3	14—Q-Q3	14—Kt-Kt3
3—B-B4	3—B-B4	15—Kt K4	15—P-K B3 (d)
4—P-Q Kt4	4—B tks P	16—P tks P	16—P tks P
5—P-B3	5—B-R4	17—Q-Q5	17—P-Q B3
6—Castles	6—K Kt-B3 (a)	18—Q-K B5	18—K-Kt2
7—P-Q4	7—Castles	19—Kt-Q6	19—R-K R1
8—P tks P (b)	8—Kt tks K P	20—Q-K R5	20—R-K Kt1
9—Q-Q3	9—Kt-B4	21—Q B B1	21—R-K R1
10—Q-Q5	10—Kt-K3	22—B-R6 ch	22—K-Kt1
11—B-R3	11—R-K1	23—Kt-R R4	23—Kt-K4
12—P-Kt3 1 (c)	12—B-Kt3		

White announced mate in eight moves.

THE SOLUTION.

24—Q R-K1	24—B-B2 or 4 (best	29—Q tks R ch	29—K-K2 or B2
25—R tks Kt	25—B tks Kt	29—Q-Kt7 ch	29—K-K1
26—Q-Kt4 ch	26—K B2	30—Q-Kt8 ch	30—K-K2
27—Q-Kt7 ch	27—K-K1	31—Kt-B5 mate	

NOTES BY S. LOYD.

(a) A very risky line of defence. 6—P-Q3 is preferable.

(b) We see no harm in the capture of this pawn, although a better move would have been 8—Q-B2.

(c) A better move than it looks, not so much for the purpose of guarding B4 as preparing to play Kt-R4 and advance Bishop's Pawn—which line of attack Black does well to prevent. (A wag at our elbow suggests that if White had played 12—P-K R3, and if the game had proceeded as in the text, it would have given White a beautiful three-move problem on the twenty-first move.)

(d) This move seems equivalent to giving the game into White's hands. The impetuosity of our youth would have induced us to attempt to turn the attack by playing 16—P-Q3, which might have been followed by 16—P tks P, 16—Kt-K B5; 17—P tks Kt, 17—Kt tks P; 18—Q-B2, 18—B-K B4; and White has a most difficult game to defend.—*Hartford Times.*

CURSORY JOTTINGS.

—The award of the committee appointed to adjudicate the prizes offered by the American Chess and Problem Association in its first grand problem tourney has been made public, and from it we learn that the following are the winners: First prize set and best problem of the tourney, Samuel Loyd (motto: "A Fair Field and no Favor"), 63 points second prize set, Wm. A. Shinkman (motto: "Fair Play"), 59 points third prize set, Dr. C. C. Moore (motto: "Sic Transit Gloria Mundi, afternoon"), 57 points; fourth prize set, author unknown (motto: "Che Sara, Sara), 56 points; fifth prize set, X. Hawkins (motto: "Fellows, Stand Fast"), 55 points. The committee—Messrs. Reichelm, Elson and Neill, all of Philadelphia—are of so well known ability that to review this tourney competition hardly seems necessary. We have fully satisfied ourselves that the award of the first prize is open to no adversative criticism, relatively considered, and it is with considerable satisfaction that we congratulate the winner, Mr. Loyd, the famous problemist. The award of the prize for the best problem of the tourney to Mr. Loyd's grand four-mover is very good judgment on the part of the committee. This problem will not only add to the reputation of Mr. Loyd, but also always rank as one of the finest problems extant.

—Mr. Loyd, the St. Louis *Globe-Democrat* says, will shortly publish a book containing 500 of his problems. This will be a welcome addition, and still more valuable would be a book on the art of problem composition by this great problemist.

—Our exchanges and readers are informed that this is a season of the year wherein the FOREST AND STREAM has to too the mark, and Chess must, in consequence, suffer more than the other departments. There is no danger, we believe, of its annihilation.

Sea and River Fishing.

FISH IN SEASON IN JULY.

FRESH WATER.

Trout, *Salmo fontinalis.*
Salmon, *Salmo salar.*
Salmon Trout, *Salmo confinis.*
Land locked Salmon, *Salmo gloveri.*
Black Bass, *Micropterus salmoides; M. nigricans.*
Muskalonge, *Esox nobilior.*
Pike or Pickerel, *Esox lucius.*
Yellow Perch, *Perca flavescens.*

SALT WATER.

Sea Bass, *Centropristris atrarius.*
Sheepshead, *Archosargus probatocephalus.*
Striped Bass, *Roccus linneotus.*
White Perch, *Morone americana.*
Weakfish, *Cynoscion regalis.*
Bluefish, *Pomatomus saltatrix.*
Spanish Mackerel, *Cybium maculatum.*
Cero, *Cybium regale.*
Bonito, *Sarda pelamys.*
Kingfish, *Menticirrus nebulosus.*

TROUT FLIES IN SEASON FOR JULY.

Little Egg, No. 12.—Body and feet of orange and yellow, mohair and hare's ear mixed; wings, bright hyaline, slightly mottled; setæ, same as wings.

Lightning Bug, No. 10.—Body of equal parts, of dark brown, and black mixed, tipped with yellow; feet, of feathers from the English grouse; wings, double, the inner wing black, the outer wing a yellow brown.

General Hooker, No. 9.—Body made of bright yellow and green, ringed alternately; feet; red hackle; wings, of the tail feathers of the ruffed grouse.

Little Claret, No. 11.—Body and feet, dark claret mohair, slightly tinged with blue; wings, of the bittern, or brown hen; setæ, dark brown.

Claret Fly, No. 9.—Body, dark claret; feet, black; wings, of the brown hen.

Fetid Green, No. 10.—Body, feet and wings, a pale green.

FISH IN MARKET—RETAIL PRICES.—Bass, 18 cents; blue fish, 5; salmon, 20; mackerel, 18; Spanish mackerel, 15; green turtle, 10; terrapin, $18; halibut, 15; haddock, 6; king fish, 20; codfish, 5; black fish, 10; flounders, 8; porgies, 6; sea bass, 15; eels, 18; lobsters, 8; sheepshead, 15; whitebait, per pound, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.25.

Fish of all kinds is very plentiful. New York and its vicinity is beginning to appreciate more thoroughly the excellence of whitebait. Just now the demand is in excess of the supply. Some quite ingenious attempts have been made to palm off some small fish, notably spearing, on the gastronomic community, as whitebait, but the public having been quickly educated discard all such tricks. The new devices employed to secure whitebait are likely to teach us a good many points as to the young of fish. Quite small mackerel and bluefish, two inches long, have been caught at Gravesend Bay.

IDENTITY OF ENGLISH AND AMERICAN WHITEBAIT.—To satisfy himself that we were blessed with the daintiest of fish, Mr. E. G. Blackford addressed F. J. Moore, Esq., Curator of the Liverool Free Public, requesting him to send to the United States specimens of whitebait. Under date of June 19, Mr. Moore writes as follows: "I have much pleasure in sending you a few specimens of 'whitebait.' They are contained in two bottles, and are from specimens purchased in our Liverpool fish market. Those in one bottle were sold as 'London whitebait,' those in the other are from the river Mersey. They are *reputed* whitebait as sold by respectable dealers, but have not been critically examined." On examining the samples of whitebait, saw that the bottle with the London whitebait was a trifle smaller than our own. The fish are identical.

CANADA—*Lower Camp, Grand River, June* 22.—Great sport; so far thirty-one salmon; heaviest thirty-two pounds; average, seventeen pounds. IMBRIE.

Bay Chaleur.—A New York correspondent, "Novice," who has just returned from Bay Chaleur, sends this score of salmon for one rod, seven days: June 14: 38, 30, 24, 12—104; 15: 19, 24—43; 17: 25, 18, 22, 26, 23, 25, 14—153; 18: 34, 22, 24, 24, 22, 19—145; 19: 12, 24, 25, 26—87; 20: 26, 27, 12—65; 21: 22, 24, 24, 24, 20, 11, 23—148; total, 33 fish; 745 pounds.

EASTERN TOWNSHIP—*Montreal, June* 21.—Ash. Hubbard, of Magog, and myself have just returned from the "Bog" (East Branch), a few miles north of Magog. We have a fine lot, and of good size. The catch of trout has been very large for the township this season. I wish to again call the attention of the Vermont fishing officers to the fact that pot-hunters from this side of the line are playing sad havoc among the trout in Averill Pond. One party has some 1,200 feet of gill nets, that they often use in the pond, and during the spawning season they kill large numbers of trout. The Canadian sportsmen in that vicinity are very indignant about this poaching, and would gladly give information that would lead to the capture and punishment of those rascals. I have their names, and will give their address on application. Peveril Pond contains the finest and largest brook trout of any pond or lake in the State, and if the Vermont sportsmen would bestir themselves and co-operate with our sportsmen here, its waters would be protected, and the ring-leaders (three in number) of these pot-hunters would be effectually disposed of. STANSTEAD.

IN THE EASTERN TOWNSHIPS—*New York, June* 28.—We have just returned from a short fishing trip in the Eastern townships. Leaving the Passumpsic R. R. at Ayers' Flats, we had a pleasant drive to Magog, at the outlet of Memphremagog Lake; passed Lake Massiwippi, noted for muskalonge and lunge. At Magog, under the guidance of your occasional correspondent "Hubbard," we found considerable sport. The brook trout fishing was rather quiet, although by work one can always catch a mess; no large catches. In the lake lunge are now caught by deep fishing, the trolling season having gone by. Some good sized fish have been taken, and among one lot we saw several small shad. Pickerel fishing we found good, taking some weighing as high as three pounds, trolling with live bait. We found good lunge fishing in Orford Pond, and tried the trout in "Hopps' Pond," but without success, as it was too late. "Old Hopps," the noted bear hunter of the neighborhood, showed us the skull of the last one he killed. The bear dressed over 450lbs., and was killed about six weeks ago. This makes the eighty-fourth bear he has killed, and he now has track of three more. During our visit we made the ascent of Mt. Orford, the highest mountain in the Province of Quebec, and from the summit of which can be counted thirty-three sheets of water, and by the aid of a glass the spires in Montreal can be seen in clear weather. Mr. Furboye, the superintendent, and the employees of the Waterloo and Magog R. R., do all in their power to accommodate sportsmen as much as possible. Continuing our trip, we drove to Georgeville, some ten miles up the lake. This is undoubtedly the best spot for deep fishing on the lake, there being no less than eight or ten good fishing grounds, among which are the Drew Grounds, Bigelow, Packard and Black Points, etc., within a circuit of two miles. Lunge have been taken this season on these grounds weighing as high as 20lbs., and when we left about 100lbs. of fish were brought in daily. We fished in a boat on Sugar Loaf Pond, which is about four miles from Georgeville, and is noted for its fly fishing. The trout are small, the largest not going over 1½lbs., but are plenty and give good sport. As many as eighty fish have been taken by a single party in a day. To fish this pond properly one should go prepared to stay two or three days, and either camp out or stay at one of the two log cabins on the shore. We would advise camping. By reason of unfavorable weather did not make a large catch, but we are satisfied that there are plenty of trout in the pond. From Georgeville we drove to Newport, Vt., where there is good lunge fishing and excellent sport among the pickerel. Trout fishing is scarce, and we would not advise a stranger to go to Vermont with that idea as there is a State law prohibiting fishing without a permit, as we understood it. At St. Albans and Burlington we were informed of good fishing in the neighborhood, but cannot vouch for it from personal experience. On Lake George some trout are being taken. We made no large catches while in the townships, but by working we always could catch some fish. Every one tried to put us in the way of sport, and we feel sure that others would be treated in the same way. S. Q. J.

MASSACHUSETTS—*Boston.*—Mr. E. M. Messenger, the proprietor of the Bromfield House, 55 Bromfield street, Boston, has received from Luther Hayes, Esq., of the New Hampshire Fish Commission, eight beautiful black bass, the largest of which weighs about three pounds. They are all lively and doing well and are to be exhibited in the windows of the Bromfield House, where the lovers of bass fishing can daily study their habits and movements. They already show a decided preference for the live minnow as an article of diet.

GREENWOOD LAKE.—The hotels are rapidly filling up. The Montclair and Greenwood Lake Railway have reduced the fare from New York to Lake from $2.75 to $2 excursion ticket. There is every prospect that the railroad will be extended at least to the head of the lake, if not further, before the close of the season.

WEST VIRGINIA, *near Ronceverte, June* 24.—Last week a companion and myself went into Nicholas County, and fished the Cherry and Laurel rivers. With fly and bait we took 401 fine trout. J. N. H.

STRAY NOTES FROM THE EDITOR—*Kanawha Falls, West Virginia, June* 29.—The black bass are just beginning to show up. I spent this A. M. at the Falls, just at the town, and took fair bass and white perch. I have seen the head of an 8½ lb. bass. Pike perch are common here in March, and it is a delightful spot for anglers and shooters. Mountain trout all around in large numbers. Good hotel. HAL.

KENNEBEC ASSOCIATION FOR THE PROTECTION OF FISH AND GAME.—Our thanks are due to the secretary, R. B. Capen, Esq., for a polite invitation to a piscatorial *fete* at Cobbossecontee Lake on the Fourth of July.

MICE AND TROUT.—A gentleman just from the Adirondack region gives us the following information. Fishing in the head waters of West Canada Creek, Hamilton County, in the streams well known to certain trout, no fish would rise to the fly. Feeling certain that fish were there, a sinking bait was used and trout were readily caught. In opening some of them, the fish were found to be gorged with mice. In one trout of 1¼ pounds two mice were found, and one of six ounces had a mouse inside of it. The veteran of the party, the guide, told the story that some years ago he had taken twenty-two trout, and that many of the larger ones contained mice. This circumstance—not exceptional, of course—was accounted for by the fact that the winter having been an unusually open one, beech nuts had been in extraordinary quantity, and hence the woods were alive with mice. The omnivorous characteristic of trout are well known. Their feline instinct, then, as mouse catchers may be positively asserted. Perhaps cultivated trout might have a fat mouse thrown them from time to time. But we would not advise that this method of feeding be followed out. At the period of Mr. Blackford's annual trout show, a two pound cultivated trout with a mouse inside of him might not be relished by the *bon vivants* who pay a dollar a pound for him.

ARABIAN NIGHTS FISHERMAN.—The glorious days of the Arabian story-tellers have come again. Here is a modest tale in confirmation from Dubuque, Iowa, June 24, 11:30 A. M.:

A fisherman caught a catfish (channel) weighing three hundred and twenty-one and a half pounds (321½), head, 24 inches in length, 15½ inches in width, having a turtle in his stomach weighing 13 pounds, a brass watch and a tapeworm 36 feet long. J. L. C.

FISHING TACKLE.—You conceit that the fly you have been using for the last half hour has no attraction for the trout. You want to change. You dive into your old-fashioned fly-book, and in your excitement drag out, instead of one fly, a half-dozen of them, and they are all mixed up and tangled. Now, had the angler one of the "Hyde Clip" fly books, where each and every fly is kept separate, such as Messrs. Wm. Mills & Son, of No. 7 Warren street, sell, no such trouble could arise. For complete outfits for bass and trout fishing we can particularly recommend the work of this house. There is what this firm calls their No. 2 outfit. Here is a three-piece, full mounted fly rod, of lancewood middle and tip, with a neat rubber click reel, twenty-five yards of oiled silk line, a dozen first-class trout flies, a dozen hooks on gut, a leader and a fly-book, all for $10. For $20 Messrs. Mills & Sons will let the angler have a full-mounted black bass rod, with all the rigging. All these rods are as good as care in finish and choice in selection of material can make them. Of six-strip split bamboo fly rods an infinite variety is offered, costing from $17 to $30.

FISHING STEAMERS.—The proprietor of the mills of the American Net Co., Boston, having written to our Shelter Island correspondent, asking the effect upon the fish of the fishing steamers employed in the bunker fisheries there, he says in reply:

"The steamers that do not seem to alarm or break up the schools any more than do the sailing vessels are propellers, and move but with little noise. As soon as the fish are seen the steamer is stopped at a remote distance, the two boats with their seine are manned and start in pursuit. The school is surrounded and taken; the steamer is brought along side of the boats and the catch transferred to the vessel, which returns without delay to the factory. Notwithstanding the great number of vessels and steamers engaged in this business (and there must be as many as fifty such in these waters) the numbers of bunkers do not seem to suffer any perceptible decrease, and they are as plenty as ever. But as I said in a previous letter, the sailing craft work at great disadvantage and the steamers are so much more successful that it is likely that sail in most cases will be superseded by steam. A steamer carries a crew of ten men, viz., one engineer, a cook and eight boatmen, and of course is more expensive than a sailing craft, but the success is so much greater that steam will have to be used. The bunker fishing has but little or no effect upon the taking of food-fish, but the numberless pounds that line these shores catch up most of the food-fish and greatly interfere with the hand-line committee. ISAAC MCLELLAN."

For Forest and Stream and Rod and Gun.

BASS AND BASS FISHING.

SECOND PAPER.

THE most remarkable thing about fish and fishing is the few anglers who ever notice the markings of their game, and who, having noticed them, can give a lucid idea of their distinguishing characteristics. With the exception of Audubon, Wilson and Thoreau, our naturalists are very rare. Not that there are not abundance of men who can give you all the markings of a brown thrush or a blue jay, who could not tell a bream from a black perch to save their lives. They think it beneath their dignity to fish or to write about fish. With such would-be naturalists this paper has nothing to do. With the sole exception of Charles Hallock, Esq., and William Henry Herbert, no writer has thought proper to write of the game and food fishes of North America. Herbert was a poet naturalist, and gave us some good points in his "Fish and Fishing," but he knew next to nothing of bass; for I doubt if he ever caught a Western bass, beside which all other game fish, in my estimation, are as nothing. Herbert speaks in three places of the striped bass of the Passaic River. They were simply small sea bass. We shall find in fresh water fishes an analogical counterpart in the ocean. For example, the bream is the fresh water sheepshead. The same shy, nibbling bite; the same gallant conduct when hooked, and often the same markings. But this paper has to deal with bass, and principally with striped bass, not the great, lumbering fellow who lies in full ten fathoms of salt water, and has to be dragged out of the depths by main force and with a hand line; but a clean, active game fish that never saw salt water and could not live in it, should he be so very unfortunate as to come into the "briny."

Our fish, then, is *sui generis;* he is the counterpart of the sea bass, and only a naturalist can tell the difference. (In my humble way I claim to know something of natural history). Well, mark well, here is the difference: The stripes are precisely alike, or nearly so; the general shape of the fish the same, but the gentleman who lives in fresh water has a smaller mouth, and he is broader in proportion to this length than his salt water congener, and the anal fin is much broader and the tail is not quite so much forked. I send you a drawing from memory. So very small is the mouth of this fish that a No. 7 salmon hook is the only one upon which you can depend; and even then you will fail to hook specimens that weigh under two pounds. There are but few streams in the West that contain this noble fish: the Green River in Kentucky, all the streams of Missouri that empty into the Missouri, and the tale is told. The Merrimac, about fifteen miles below St. Louis, contains the finest that I ever saw; for, while in the Greene River a striped bass that weighs five pounds is considered an exceptionally large one, I have caught them in the Merrimac weighing full seven pounds. A bold biter and a hard fighter, this fish affords to the true angler some of his rarest hours of enjoyment. I remember once, in the autumn of 1857, that I went upon the Merrimac for a day with the striped bass. My companion was a retired Indian fighter and Rocky Mountain hunter. In equipment and outfit in those days I was a dandified angler of the first water. Old Jim, the hunter, had a

long cane and a grass line. He caught more fish than I did, but I had more fun with one of mine than he did with all his, for he thought the whole duty of man to consist in hauling one in when he bit. Never shall I forget that day. The gentle murmur of the placid stream; the rosy light of the sun made rosier still from its reflection from the crimson leaves of the maples and sycamores that overhung the stream; the sweet stillness of the purple day, broken only by the whirr of the reel or the boisterous shouts of my companion, all conspired to make this day one of the few perfect angling days over which my memory fondly lingers, and even now I can recall the thrill that shot through my frame as a six-pounder would run out fifty yards of line and then settle down to hard work. Ah me! As I recall those glorious days of bass fishing, of deer shooting, of turkey hunting, I can scarcely realize that I am no longer young and that these hands may never more capture a bass. But a truce to this.

I made the statement a few paragraphs back that the striped bass could only be found in Green River and the streams of Eastern Missouri. It is also found in countless numbers in the White River in Arkansas. Those in the White River are hardly so large as I have found them elsewhere, but they afford fine sport. There is a fish found in the White River and St. Francis River very much like this fish, but he is a perch. In fact the striped bass is shaped very much like the red perch. Hence, many persons on White River call them "striped perch." Nor must the striped bass be confounded with the rock fish (*Roccus C.*) of Southern waters. He, too, stays in fresh water, but he is nothing but a sea bass out of his element. The genuine (*Roccus C.*) never was in salt water, while his brother, the rock fish, lives in either salt water or fresh. Following I give you the marks of each:

Rock Fish (mouth, large).—Body, long and round; tail, very forked; eyes, rather large; stripes, close and light.

Striped Bass (mouth small).—Body, broad and thick; tail, scarcely forked; eyes, rather small; stripes, wide and dark.

Color of both, a pale white.

The striped bass feeds on minnows and crawfish. In the White River he will rise to a gaudy fly with as much gusto as e'er a mountain trout. In no other stream have I been able to catch them with the fly, and then in June only. Make the body of your fly of black silk, the wings of red silk, and you have a killing delusion. What the bass mistakes it for is one of those things "past a fellow's finding out." I think that he takes it out of pure "cussedness," for he is a bottom feeder, and crawfish are his main food in White River. However, we all know too much to guess at fish vagaries! But in all my angling I never knew a striped bass to be caught with a worm. His instincts are too gentlemanly. And indeed, I never know but one black bass caught with a worm. What he may do, transplanted into your waters, I cannot say, but I think with the poet:

Cælum, non animum;

he may change his water, but not his mode of feeding. The striped bass is not so wary as the black bass; but even he loves a fine light line and a small book. *Ceteris paribus*, the angler who fishes finest will always kill most bass. And so with all angling.

It is very remarkable that the attention of fish culturists has never been drawn to this valuable fish. He is unexcelled for the table, and is, in my opinion, not inferior to either the speckled trout or salmon. He is very prolific; multiplying with amazing rapidity in rocky ponds that are fed by springs. As a proof that even the salt water perch will live and thrive in fresh water, I call attention to the fact that Waccamaw Lake, in South Carolina (head of Waccamaw River) abounds in salt water perch.

None of your four ounce fellows, but a fine, clean, striped fish, weighing from one pound to four, and as game as any trout, and nearly as toothsome, and "millions" of them. Nor again, must the striped bass be confounded with a fish found in the Great Peedee, South Carolina. It is called "Virginia perch" there (*Cui?*), but it is no bass. At first sight they are very similar, but on examination I found them to be nothing but salt water perch developed into aldermanic size by good feeding. They often weigh five pounds.

Now, Mr. Hallock, I have thrown down the gage of battle. I know that many will doubt the truth of my statements and rush into print with loud objugatory cries and annihilating vituperations, but I expect to survive them. This paper is written solely for those who use their eyes, and not for pot-fishermen. In my next I will enlarge upon some points merely touched here. Fraternally, ST. CLAIR.

Rational Pastimes.

UNION ATHLETIC CLUB.—The spring meeting of the Boston, Mass., Union Athletic Club were well contested last Saturday, the events being as follows:

Throwing sixteen-pound hammer—R Johnson, Brookline; W W O'Connell. Won by the latter, whose best throw was 84ft.

One hundred yards' run—Twenty entries—First heat. J B Elliot, S A C, N Y, 10⅘s; second heat, J G Lathrop, 11 1-5s; third heat, W A Morrison, 11⅘s; fourth heat, F J McQuigin, 11⅘s; final heat, Lathrop, 11s; Elliot, second; McQuigin, third.

Hop, step and jump—Unsuccessful attempt by Johnson, U A C, to beat best recorded distance; five trials. First, 42ft; second, 41ft 4in; third, 43ft 6in; fourth, 42ft 4in; fifth, lost his footing.

Running high jump—Five entries—Won by H Carven, whose best jump was 5ft 2in.

One mile walk—Eight entries—Won by T H Armstrong, H A C, N Y, in 7m 8s; E E Merrit, U A C, second in 7m 16s.

Running broad jump—Won by McQuigin, whose best jump was 18ft 2in.

Hurdle race, 100 yards, 10 hurdles—Three entries—Won by F Burgess in 19⅘s.

One-half mile run—Seven entries—Won by F Banham, U A C, N Y, in 2m 14s.

Three miles walk—Nine entries—Won by Armstrong in 24m 37½s.

Quater-mile run—Seven entries—Won by Banham in 55⅘s.

One mile run—Twelve entries—Won by J M Soule, U A C, in 4m 54⅘s.

Tug of War—Norway Iron Works team defeated the Jack Tars in 59s; the German team pulled the Organ men over the line in 24s; final heat between the Celts and Teutons won by the former.

A game of lacrosse between two teams made up of members of the Union Athletic Club as follows—Flannery team—Flannery, home; Ferris, goal; Thomas, pointer; and Hook, Hathaway, Marquand and Williams, fielders; McDonald team—McDonald, home; Matamoran, goal; Jacobs, pointer, and Howard, Wood, McLee and Eller, fielders; resulted in a victory for the former.

MANHATTAN ATHLETIC CLUB.—Annual Spring Meeting, at Club grounds, 56th st., New York, June 29:

Two hundred and twenty yards' run—Twelve entries—F V Brown, handicapped 20 yds, won in 24½s.

Running high jump—Four entries—Won by H E Fickon, N Y A C, 5ft 3in.

Throwing hammer—W T Livingston, H C, 76ft; George D Parmly, M C, 75ft 10in.

Quarter mile run—One heat—E C La Montague, N Y A C, won in 54⅘s.

Running long jump—Won by W T Livingston, H C, 19ft 6in; G McNichol, M C, 19ft.

Putting the shot—E H Buermeyer, 35ft 7in, J Britton, 33ft 7⅝in.

One hundred yards' run—Trial heats, eight entries—R L La Montague, N Y C, won in 10s; J Lafon, M B C, second.

Half mile run—Won by E Merritt, N Y C, in 2m 10⅘s; J Stewart, P C C, second.

Two mile walk—T A McEwen, M C, won in 16m 16¼s; J V Woolcott, second.

Vaulting with pole—Won by George McNichol, M C, 9ft 3in; A Ing, S H (N J) C, second, 9ft.

One hundred yards' hurdle race—ten hurdles, two heats—E H Ficken, N Y C, won in 15s; J Lafon, second.

Three mile run—V H Smith, M C, won in 16m 51⅘s; T B Bates, H C, second.

The prizes awarded were gold and silver medals.

CRICKET.—In a game at New Bedford, Mass., last Saturday, the club of that city was defeated by the Fall River Club 148 to 59.

The Onondagas, of Syracuse, N. Y., defeated the Coburgs, of Canada, last week, 98 to 41.

The St. George's were defeated by the Staten Island Club at Camp Washington, last Saturday, 150 to 151.

Brooklyn has a new club—the "Royal"—which has secured the old Capitoline Ground.

The match between the Australian players and the Gentlemen of England, at London, resulted in a victory for the latter in one inning, with one run to spare, the scores standing: Australians, first inning, 75; second inning, 64; total, 138. Gentlemen of England, first inning, 139. The Australian team returns to this country Sept. 20.

—Beagle Hounds from fine stock and fine hunters, $20 a pair. Address Dr. Kennedy, Auburn, N. Y.—[*Adv.*

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

M. D. H., N. Y.—A very fair gun.

N. D. Mills.—The solution will be credited you.

J. C. G., Cortlandt, N. Y.—See our Game in Season.

NAHANT.—The Moosehead Lake trout season opens Sept. 1.

A. L. L., City.—Woodcock season on Long Island opened yesterday.

J. W. G., Philadelphia.—Have copies of Aug. 3, 1876. Price 10 cents.

C. A. S., Woodside, N. J.—The woodcock season in New Jersey opens July 4.

W. G. S.—Probably your postal card was not well directed. The party is perfectly reliable.

T. R. K., Wheeling, W. Va.—The rifle used to be made at Worcester, Mass. A very fair arm.

T. B. C., Watertown, Conn.—The Connecticut season for woodcock and partridge opens Oct. 1.

SECRETARY, Akron, N. Y.—There is no limit for bore of gun in the N. Y. rules for pigeon shooting.

A CONSTANT READER, Fall River.—Have not heard of him. Do not think he is a well known maker.

BLACK BASS, Phila., Penn.—Yes, the new law passed in June makes the black bass season begin in June.

R. L. G., Louisville.—Send your address to Trimble & Kleinecker, 200 W. Baltimore st., Baltimore, Md.

H. W. B., Lowville, N. Y.—For the rules you wish address the Sec. Narragansett Gun Club, Newport, R. I.

H. P., Sextonville, Wis.—We know nothing of the parties. Have refused the further advertisement of one of them.

F. G. Montgomery Co. Pa.—To subscribe to the Deutsche Yagdzeitung address Her Von Ivernois, Eilenberg, Prussia.

J. H. S., Boston.—You will find salmon fishing with moderate charges in New Brunswick, in the Nepisiquit and Miramichi Rivers.

W. A. Briggs.—B R7, we do not think, will solve that problem. S-Q S is transinted into Kt-Q Kt. Game will appear next week.

J. H. E., New York.—Would Tenafly, N. J., be a good place to break my setter dog on woodcock? Ans. Yes. The season in N. J. opens July 4.

C. C. E., Boston.—Lake Winnipisiogee, N. B., is a good fishing ground. You will find partridges in the vicinity and upland plover on the islands.

T. P. Butl.—Set received. The four-mover is unnecessary, and will be considered as withdrawn. The balance will make a set which will duly appear.

J. C. M., Easton, Pa.—The rates of fare per steamer from New York to New Orleans are: cabin, $50; excursion to N. O. and return, $80; steerage, one way, $25.

W. D. T., J. O., Jr.—The compass advertised in the paper is a very good one, and is exactly as represented. Would not think of going into the woods without one.

W. H. W., Millbury, Mass.—The gun you mention is an excellent gun and we do not deem it complicated. We must decline most respectfully making comparisons.

OLD SPORT, Van Buren.—The cuts of the choke-bores may be found in the last edition of Greener. No. 6 St. Louis is special as to size and we cannot fix any special rule. Your target is quite an excellent one.

J. B. McKim.—Don't for a moment imagine that we allow our judgment to run wild as others—you probably are aware—have too often done. Have no misgivings; it was pity alone that actuated us to speak out in an advisory manner.

R. L. N., Salem.—Have tried to procure Herrenhoff's time table for you, but have failed to find one in New York. Write to him at Bristol R. I., and tell him to advertise his works with us, so that we may supply many other inquirers.

H.—What is a good pattern for my S. & W. shot-gun (breech-loading weight 7¾ pounds, bore 12 straight, load 3½ drs. Hazard FG and 1⅝ oz. No. 8 shot; target 30 inch circle 40 yards and same at 30 yards? Ans. At 40 yards, 250; at 30 yards, 300.

Henry H. Miller.—Your set is at hand, but contains no extra problem in the shape of a four-mover. See above for further particulars.

J. B. Boston.—Three men might make a living in Texas, or Arkansas by hunting and trapping, provided suitable arrangements could be made for marketing the game. If you have any capital you can do better by putting it into Texas sheep raising.

R. S. C., Reno, Nev.—In using two glass ball traps the screening them is optional. A good trap should throw a ball a distance of from 60 to 80 feet and proportionately high. The direction of the ball is the same, or is varied just as the club agree.

L. C. G., Homosassa, Fla.—For "pot leading" a boat's bottom give a thin coat of boiled linseed oil; then sprinkle, or dust on the blacklead powder and rub down smooth. Write to Waddell, 52 Beekman st., for it. Price 10 cents a pound. Get 25 pounds.

John G. Belden.—We have heard nothing from you in relation to the Challenge Cup. Cunningham will energetically back you up, and you can depend on the FOREST AND STREAM to support you from the front. No danger, is there, if you are thus propped up?

Max H. Peller.—When this you see, etc., you will doubtless have made all necessary preparations. We are prepared, not only for a week's good fishing, but also to play for the chess championship of that sheet of water. Be sure to bring along some sort of a cup for the championship emblem.

ENQUIRER, Belleville, Ont.—The "medium" rig of Susie S., formerly the Bella, is 33ft. on boom, 27ft. hoist, 17ft. gaff; jib, 23ft. 6in.; foot, 31ft.; leech and from mast to tack of jib, 26ft. She is 27ft. 4in. long on water line. Beam and depth will be given in next issue, inquiries for same having been made.

B. F. H., Baltimore.—Your gun we do not think can be a full choke. Whatever make it is the targets you write about are not good; quite below the standard and very uneven. We do not think you could get good pattern with 4½ drs. of powder; use 3½ and try that. You probably will do better.

REG. SUB.—Please state where description of the palace of the "Trianon" is found? Ans. The Trianon is a part of the palace of Versailles, and owes its celebrity in history as having been the favorite residence of Marie Antoinette. You would find a description of it in any encyclopedia treating of Versailles.

BEARS, Boston.—At Bethel, Me., You will be in communication with the Rangely Lakes and the Megalloway River and will find trout in the neighborhood. The game of the country is deer, caribou, bears, water fowl and partridges. Near Mount Monadnock, N. H., you will find trout and pickerel fishing, and bears in the mountains.

FIRST ATTEMPT.—Cannot supply you with model desired, as we have none on hand and it would be too expensive and require more time than we have to spare to make you one. Boat builders will charge you $10 to $25 for a model. We can supply you with plans of the boat you speak of for $2. Such a boat would exactly suit your purpose.

FIRST SERGEANT.—Is there any grade in marksman's badges in New York State? I see where New York State troops were presented with badges, some received one, two and three bars. What are the bars for? Ans. There are no degrees in marksmanship. The bars are given for each year the holder of the badge has qualified. His score is published in General orders to show his skill.

DR. M. E. L., Frederick City.—Is it actually necessary to load a breech-loading shot-gun heavier than a muzzle-loader of the same gauge in order to get the same penetration? Please give ordinary load for breech-loading gun 12 bore of powder and shot, Dixon's measure? Ans. Same loads for muzzle-loader, or breech-loader? Use 3 drs. Dixon's measure of powder, 1⅛ oz. shot.

S. T. C., New York.—1. Are the Berdan shells so hard to prime? 2. Should there be any more trouble to prime a shell for breech-loader than to put a cap on a gun? 3. What shell is best? Ans. 1. Berdan shells are primed the same as all other shells. A tool called a reprimer to put primer on will be useful. 2. A breech-loading primer needs to fit tight to prevent escape of gas. 3. None better than the Berdan—made by U. M. C. Co.

J. C. McI., Utica, N. Y.—In a pigeon match between A and B the latter shot at and apparently missed the bird and thereupon an outsider before the bird was out of bounds, shot at the bird, which fell dead within the limits. The referee decided the bird lost to B. Was his decision correct? Ans. The outsider had no business to shoot at the bird. It may possibly have been hit by B. He has the benefit of the doubt and may claim another bird.

X. Y. Z., Bowmanville.—1. Would Greedmoor rules allow, for the purpose of receiving the recoil, the following contrivance: A strap is buckled firmly around stock just beh'nd the pistol grip, and fastened to this a loop of leather large enough to receive the thumb; with this the thumb instead of second finger takes chief part of recoil? 2. On a perfectly calm day at 800 yards how much should be allowed for the "drift" of the bullet and how much at 1,000 yards? Ans. 1. It would not be against the rules. 2. There have been made careful experiments on drift; at 1,000 yards of a perfectly calm day the drift would be a trifle less than 18 feet.

W. E. B., Philadelphia.—Your case, we are pretty positive, arises from over feeding. You *must starve* him until you get him to take other food than meat. Have courage with your skill and he will gladly take to bread. It is not at present serious, but it might develop into a nasty disease. A mild astringent of chloride of zinc, one (1) grain in one ounce of distilled water, applied to the parts, should be used. Use it three times a day. Wash the dog carefully. If the trouble with the bowels continue, give the dog a dessert-spoonful of castor oil with two drops of turpentine in it. It is a disease of the gland, which may extend if not treated at once. Observe the greatest cleanliness this warm weather, or he might get worse.

J. E., Middletown, Conn.—The relative speeds of two boats differing in any elements of design is obtained by applying the following formula: Take the cube of the speed in knots, multiply this by the area of the immersed midship section, and divide the product by the indicated horse-power—obtained from indicator diagram. The higher the resulting quotient (coefficient of performance) the better the performance of engine, screw, model, clean bottom, etc., taken all together. Two boats of similar model and engine power, but differing in size, will therefore perform alike relatively, though positively the larger one will be the faster; that is, she will go over a measured mile in less time than the smaller boat, but, relatively to her size, she will not be faster.

GREENONE, Brooklyn.—1. On what terms are non-members admitted to test their guns, or shoot glass balls to the J. C. Heights G. C. at Marine? 2. What are the terms of membership? 3. Are meadow hawks protected in Jersey, or New York State in July? 4. Where on the Palisades did your correspondent on "Pan Fish," of some months ago (I forget the date), find trout fishing? Ans. Members of the J. C. H. G. C. would be glad to see you at any time. There is always a man on hand to attend to traps and balls. 2. Address H. W. Levering, Sec., Newark Ave., opposite Court House. J. C. Heights Club practices Wednesdays and Saturdays at 4 P. M.; at other times open to all. Initiation fee $10 and 25 cents monthly. 3. Yes, in both States. 4. Do not know ourselves.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, JULY 4, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, July 5.—Seawanhaka Y. C. Corinthian Cruise. Savannah, Y. C. Corinthian Race. Royal Henley Regatta, Eng. Cricket: Young America vs Manhattan, Turnpike Bridge. Trotting: Cincinnati, O.; Detroit, Mich.; Bay City, Mich.; Dover, N. H.; Findlay, O.; West Meriden, Conn.; Robinson, Ill.; Tiskilwa, Ill.; Clyde, N. Y.; Youngstown, O.; Denver, Col. Running Meeting at Denver.

Saturday, July 6.—Beverly Y. C. Regatta at Nahant. Cricket; St. Timothy vs Merion (2d) at Wissahickon; Belmont vs Manhattan, at West Philadelphia; Germantown vs Philadelphia, at Nicetown. Trotting at Denver, Col.

Tuesday, July 9.—Cricket: Staten Island (2d) vs Manhattan (2d) at Staten Island. Trotting: Bradford, Pa.; Topeka, Kan.; Suffolk Park, Phila.; Hartford, Conn; Columbus, O.

Wednesday, June 10.—Creedmoor: "Appleton" and Winchester matches. Newburgh Bay Open Regatta. Trotting as above.

PLAIN WORDS ABOUT SANTO DOMINGO.

SEVERAL persons who contemplatee migrating from the United States to Santo Domingo, have written to us seeking information in regard to that island. We have been at some pains to secure what we believe to be most trustworthy and in every way reliable information, which we shall give as succinctly as possible to our readers. It may be premised that the views here presented are those of a gentleman, at present residing in Santo Domingo, whose general information, extensive travel, intelligent observation and experience as a resident in different parts of the world, attach to his opinions an exceptional value.

The climate, fertility of soil and natural resources of Santo Domingo have received a very large share of extravagant and undeserved praise. Especially may this be remarked of the Santo Domingo Report, compiled and issued by the United States Government at the time of the Santo Domingo Annexation period of Grant's administration. In this, apart from the roseate hues with which a tropical land is always colored in the eyes of visitors from colder climates, which we may reasonably believe to have influenced the United States Commissioners in their examination of the Island, much of the testimony of the residents was a distortion of the truth, given under intimidation; and, further, much testimony of a nature adverse to annexation was withheld by persons who feared to tell the truth, and who would not give false views. The simple fact is, that the island of Santo Domingo is no more fertile than scores of other islands in the Atlantic and many localities in Central and South America. Any one who expects to sit idle and see the land yield a fortune will be most sadly disappointed. Landed proprietors refuse, save in rare instances, to sell their estates, but are perfectly willing to lease them for a term of years, well satisfied to see their neglected acres improved by foreign energy and capital. Beyond so serving as an instrument for the aggrandizement of Dominican indolence and shiftlessness, the successful foreigner is regarded with envious displeasure, which, growing apace with his continued fortune, harasses his peace, and eventually destroys his prosperity. To these untoward circumstances we must not forget to add the difference of habits and customs between the native and foreigner, the ignorance of the latter in the ways of the country, and the thousand and one difficulties never before dreamed of, but every where encountered by a settler in a tropical country, and which are well-nigh insuperable obstacles in the path to success. Theorizing aside, the most convincing argument is this: Of all the commercial and agricultural enterprises engaged in by foreigners on the island of Santo Domingo during the last five years, with a single exception, none have yielded any satisfactory or adequate returns for the expenditure of time and money. The single exception was that of two Cubans, who, with unlimited capital, have successfully engaged in sugar raising.

When, in addition to what we may term the private and personal difficulties everywhere surrounding the path of the immigrant, we reflect that the country is subject to continued and repeated insurrections, and that in these uprisings the foreigner may see his house and property burned about his head, and he himself subject to draft to quell the insurrectionists, the outlook is anything but inviting. If, with these facts before him, any one of our correspondents elects to leave the jurisdiction of the Stars and Stripes for that of Santo Domingo, he will probably meet with as much good fortune as he deserves, and no more.

THE PLAINSMAN.

IT is wonderful how persistent are false ideas. A good many honest people would rather throw overboard their entire creed, every article of it, than disbelieve that Frenchmen eat anything else than frogs, or Russians tallow. Now, as impossible a picture as we know of, false in every way, is the one the East has painted for itself of the Western man—the man of the plains. Many a New Yorker cannot divide the man from his clothes. Buffalo Bill may be a spectacle in his fringed buckskin shirt and ornamented leggins, but take Bill and put him in store clothes, and he is just like anybody else. The broad felt sombrero the plainsman don't like to put aside—and here he shows his wisdom. We stand to it, in hot weather the big felt hat is the best protection for the head. But it is not the outer man we want to talk about. Now, we of this paper have as good an opportunity as any one else of judging of the manner, of the talk of some of the most noted hunters, trappers and plainsmen of the far West. We declare them to be the most quiet and gentlemanly men we know of, and with the least brag and bluster about them. Something more, they are a peculiarly sober and temperate sort of men. Intoxication is rare with them, and they are by no means as much addicted to tobacco as are Eastern men. Your Western rowdy, the associate of the outcasts, the worst riff-raff of the plains, certainly exists, but in very much diminished numbers. Take some vile creature in our over-vaunted East and transplant him to the West, and the bad that was in him here comes out neither better nor worse in Indian Territory than in New York State. It is time that we should better understand the frank, the hearty, honest, and whole-souled manners of the plainsmen. A free, open-air life has given most of them a superb physique. We are shrunken up and pigmy when we stand alongside of these men. Somehow—and no one knows how it comes—these men are mostly imbued with a certain simplicity and straightforwardness of manner which has a peculiar charm of its own. They say what they mean without guile, and their word is their bond. It is a poetic type in form, shape and word, and is imbued with wonderful shrewdness. How long it may last no one can say. As he exists, as we have seen him, we are bound to express our admiration of the true plainsman, who is as honest, hospitable and courteous as he is brave and reliable.

THE FOURTH OF JULY.—This week's FOREST AND STREAM AND ROD AND GUN is of twenty-eight pages. This issue we are forced to send out on Wednesday, as mailing facilities are not to be had on the Fourth of July (Thursday), our usual day of publication. The Fourth! We shall hie to some far distant island on that day, where the small boy with his cracker is unknown. We want holidays—more of them in this country. It is true that on the 5th there will be no end of burnt fingers to record; still we hope all our readers who want to explode things will have a good time of it, and be as noisy as the character of the day justifies. Be (bang!) free (whizz!!) and be happy (boom!!!)

FISH AND SKULLS.—A paragraph has been going the rounds of the papers about a fish recently caught at San Francisco embedded in a human skull. It was probably a sculpin, though it is not so stated, and the fisherman a skulking sculler, who in due time, we presume, handed it over to the scullion. But our point is this: That this item should have gone the rounds from California to Pennsylvania simply demonstrates that the average newspaper paragrapher knows very little of natural history. It is nothing at all unusual for fish to inhabit skulls—in fact, there is a well recognized proclivity among the inhabitants of the saline deep to sequester themselves in the cavernous recesses beneath the scalphoid and semi-lunars. This was known as long ago as the time of Milton, who has embodied the belief in his verse as follows:

> "Fish that, with their shining scales,
> Glide under the green waves in sculls that oft
> Bank the mid sea."

We wonder that, while the poet was about it, he did not speculate upon the eternal fitness of things so strikingly illustrated in this curious finny instinct, and, reasoning from the proverbial connection between fish and skulls, or brains which are supposed to be in skulls——

THE IRATE EDITOR AS A NATURALIST.—A suggestive but hitherto unappreciated field of investigation for the student of natural history is found in the leaded brevier of the wrathy Western editor. If the subject of the editorial be a personal one, the reader will in all probability find references to numerous lower and unsavory varieties of the animal kingdom, some of which are not down in the books; and, if the reader be a naturalist, he may, with profit to himself and science, devote himself to a careful study of certain of these creatures. For instance, when the editor of the *Idaho Avalanche* calls another editor a "Piratical Skunk" the student may well ask, "What is a piratical skunk? How does it differ from the ordinary skunk of science, fact and fiction?" A further perusal of the article in question will cast some light upon the characteristics of what we may designate the *var. piraticus* of the *Mephitis Americana*. We learn among other things that this animal—peculiar, let us hope, to Idaho—is inclined to be "bigoted," "prejudiced," "by nature and practice a stranger to those better impulses that are supposed to actuate the better class"—of skunks, and, moreover, upon the presumed theory that each part of the creation has its appointed purpose, this interesting specimen "fulfills his mission in life by revelling in slime and putrescence, and berating all who will not descend to that unholy and debased level which he occupies. That's what's the matter with—" This is all here given of what we may term the diagnosis of the beast; but if the student be enthusiastic he will not stop here; nothing but a personal observation of its habits, together with a stuffed specimen, should satisfy his thirst for knowledge. Let him beware, however, of falling into the error of the good-hearted person who attempted to soothe an indignant shyster whom an editor had called "a Texas tarantula" by assuring him that, although he was a tarantula, he was nothing more than a perfectly harmless spider. We published in FOREST AND STREAM, a year ago, valuable papers showing that the bite of the Texas tarantula is poisonous and dangerous. In his investigations, rather let the student regard only the strictest scientific verity without reference to the personal feelings of the specimens under examination.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2. Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

MAINE.—Kennebunk sportsmen have organized the Kennebunk Fish and Game Protective Association, with the following officers: Joseph S. Sandus, Pres.; Allen G. Littlefield, Vice-Pres.; George C. Lord, Sec.; W. H. Cloudman, Treas.; Z. M. Cusbman, E. M. Dutch, C. W. Stoney, Executive Committee. The club has an ample field of work, and as it is composed of influential citizens promises to accomplish desirable ends.

CONNECTICUT.—The following very excellent act was passed at the last session of the Connecticut Legislature under the title "An Act in addition to an Act for the Preservation of Game:"—

Be it enacted by the Senate and House of Representatives in General Assembly convened:

SECTION 1. No person shall shoot, kill, attempt to shoot, or attempt to kill, any wild duck, goose, or brant, in, on, or over the waters, bays, channels, islands, marshes, mudflats, pondholes, or any part of the bed of the Housatonic river below or south of the bridge across said river known as Washington bridge, and above or north of the beach on which the house of George Smith stands, and a line from the middle of the west end of said beach to the middle of the mouth (south side) of Neck bridge creek.

SEC. 2. Every person who shall violate the provisions of the preceding section of this act shall be punished by a fine of not less than seven dollars nor exceeding thirty dollars, or by imprisonment in a common jail for a term not exceeding thirty days, or by such fine and imprisonment both; and all complaints for violations of this act may be made by any proper officer in either of the towns of Milford or Stratford, and may be heard and determined by any justice of the peace residing in either of said towns of Milford or Stratford.

SEC. 3. This act shall take effect from its passage.

The mouth of the Housatonic River, to which this act refers, has been from time immemorial a favorite feeding ground for

wild geese and ducks of various species, and in former times these birds wintered there in large numbers. Of late years, however, the destable practice of erecting brush houses on their feeding grounds has so increased that the birds have been driven away or else rendered so suspicious that they do not come into feed until after dark. These wild fowl at present pass the entire day upon the waters of the Sound, but if this law is enforced there will be constant trading backward and forward between the mouth of the river and the open water, the birds flying low over the narrow beach which separates the two, thus furnishing excellent pass shooting.

As is well known wild fowl will bear almost any amount of persecution if only they are left undisturbed while on their feeding grounds, and with proper care to see this act enforced there is no reason why there should not be each year hundreds of wild geese and thousands of black ducks, pintails and widgeons on the Housatonic flats throughout the winter. The friends of game protection in Connecticut should feel greatly encouraged by this wise and far-seeing ac'ion of their legislature, and we congratulate them on the good shooting that they are sure to have from the effects of this law. The bill in question was introduced by Hon. Albert Peck, of Milford, and among the gentlemen who have actively interested themselves to secure its passage are Judge Henry Stoddard, of New Haven; Mr. James L. Miles, and Mr. Z. Franklin, of Milford.

Pennsyvania State Association.—The officers of this association are: Pres., B. F. Dorrance, Wilkesbarre; First V. P.. B. W. Richards, Phila.; Second V. P., D. W. Seeler, Harrisburgh; Third V. P. J. B. Reno, New Brighton; Fourth V. P., R. M. Linsay, Scranton; Rec. Sec., W. W. Dorris, Huntingdon; Cor. Sec., J. Ross Thompson, Erie; Treas. W. C. Macrum, Pittsburg; Com. on Rules, Regulations and Game Laws, J. Ross Thompson, B. W. Richards, Jno. C. Brown; Com. on Fish, Jno. E. Reyburn, M. Hargden Brooks, Dr. W. F. Funderburg.

National Association.—Delegates but from two States were present. None of the officers present. The treasurer reported in writing $240.07 in the treasury. Pennsylvania has $50, which she proposes to pay whenever a sufficient number of delegates can be gathered together to constitute a quorum. It was thought advisable by those present to call a meeting in September, at the rooms of the Philadelphia Sportsmen's Club, northeast corner of Thirteenth and Chestnut streets, and consequently the meeting was adjourned to meet at that place in the early part of September. It seemed to be the desire of the delegates that the money in the treasury be expended for prizes to be offered for essays on subjects pertinent to the objects of the association. B. B. Dorrance.

New Iowa Game and Fish Law.—Sportsmen generally will be interested in the new laws enacted by the last Legislature of Iowa regarding game and fish. The following is the game law, the season in which it cannot be killed: Grouse, or prairie chicken, from Dec. 1 to Sept. 15; woodcock, from Jan. 1 to July 10; ruffed grouse, wild turkey, pheasant or quail, from Jan. 1 to Oct. 1; wild duck, goose or brant, from May to Aug. 15; bear, elk or fawn from Jan. 1 to Sept. 1; beaver, mink, otter or muskrat, from April 1 to Nov. 1. None of the above can be trapped or caught at any time. No person can buy or sell any game during the closed season except during the first five days thereof. No game can be shipped out of the State at any time; but during the open season game may be shipped within the State, not to exceed one dozen in one day, provided they are not shipped for sale or profit, and before shipping the sender must give the common carrier an affidavit that they are not for sale or profit, which affidavit shall be a release of the carrier from liability for carrying in violation of the law. The penalty for any violation of the law is not less than $10 for each bird or animal, and possession of any bird or animal is to be *prima facie* evidence of violation of the law. Common carriers will be fined not less than $100 for each bird or animal transported. The new fish law is also very stringent. The law prohibits catching or killing any fish of whatever kind in the waters of this State, except private waters, between March 1 and June 15, brook trout excepted. The closed season for brook trout and salmon is Nov. 1 to Feb. 1. The penalty is $10 for each fish found in possession. No person can use any seine, net, trot-line, outline, or spear, or fish-dam to catch fish. The penalty is $25 for a violation of the law. The law also provides that all mill-dams in the waters of the State shall be provided with fish-ways, to be constructed under the supervision of the Fish Commissioners. The plan of fish-way is the same as adopted in Michigan, which is not expensive, and gives free passage to fish by a series of step-pools in the centre of the dam.

Rover.

The Rifle.

Maine—*Kennebunk, June* 21—Fifty yards, off-hand, Creedmoor target:

Crain	4 4 4 4 4 4 4 4 3 4—39	J H Goss	2 4 3 4 4 3 4 3 3 4—23
Larrabee	0 4 4 4 3 4 2 4 3 3—31	Carr	2 4 5 4 4 4 4 4 4 4—39
Cushman	4 4 4 4 3 5 4 2 4 4—37	Littlefield	0 3 4 0 0 4 0 3 0 2—16
Stanley	0 0 3 2 4 2 3 2 2 2—20	Downs	4 3 4 4 5 4 4 4 3 4—39
J W Goss	3 3 0 4 4 3 4 3 3 4—34		

June 26.—Regular weekly target practice of K. F. and G. P. A.; 100 yards, off-hand; possible 50:

Crain	5 4 5 5 3 4 4 5 3 4—42	Goss	3 4 2 3 3 2 4 2 2 3—23
Cushman	2 3 4 3 2 4 5 0 3 3—29	Bailey	3 2 3 3 3 3 3 3 0 4—27
Lord	0 3 0 0 3 0 2 3 3 3—17	Gillman	3 3 3 4 3 2 4 3 3 3—31
Carr	4 3 3 4 3 3 4 3 3 2—32	Gray	2 0 0 3 2 0 0 0 3 0—10
Goss	4 4 2 3 0 0 0 4 0 2—19	Littlefield	3 0 2 2 0 2 3 0 0 0—12
Stanley	2 0 2 0 5 0 3 3 0 3—18	Downs	4 3 0 3 3 0 3 4 3 3—26
Stevens	4 4 0 3 2 2 3 0 0 4—22	Drown	4 3 0 2 2 3 3 2 4 3—25
Larrabee	3 4 4 3 4 5 0 3 2 4—32	Cloudman	2 3 4 4 4 4 4 2 2 3—32

Massachusetts—*Boston, June* 29.—Amateur series, 200 yds:

J N Frye	4 4 5 4 5 4 4 4 5 5—44
E B Souther	5 4 5 4 4 5 4 5 4 4—44
E Bennett	4 5 5 5 5 4 4 5 3 4—44
W Gunther	4 5 4 4 4 5 4 4 4 5—43
L L Hubbard	4 5 5 4 4 4 4 4 4 5—43
J Borden	3 5 5 4 5 4 4 4 5 4—43
F Butler	4 4 5 4 5 4 4 4 5 4—43
H E Lord	4 5 4 4 4 4 4 5 4 5—43
G Williams	4 5 4 4 5 4 4 5 4 4—43
T Sias	4 5 4 4 4 5 4 5 4 4—43
H Lee	4 5 4 5 4 4 5 4 4 4—43
F J Nichols	4 4 5 4 5 3 4 3 4 4—42
W Bartlet	4 4 5 4 5 5 4 3 4 4—42
E Lawson	4 4 4 4 4 5 4 4 4 4—41
C U Meigs	4 5 3 5 4 5 4 4 4 3—41
J B Parker	4 4 4 5 4 5 4 3 3 2—38

For the no-cleaning match there were but two entries.

Boston, June 26.—The closing match of the series for the shot-gun, it was supposed, would have taken place, but the small number of contestants will cause another match to be in order. Conditions—800, 900 and 1,000 yards. The following are the scores:

J S Sumner.	
800	5 5 5 5 3 5 5 4 5 5 4 5 5 5 4—70
900	3 5 5 5 5 5 5 2 5 4 5 4 5 4 4—66
1,000	4 5 5 4 3 5 5 5 5 5 4 5 5 5 4—69—205
J F Brown.	
800	3 2 5 5 3 5 5 5 4 5 5 5 0 4 4—60
900	3 4 4 4 5 5 5 5 5 3 5 5 3 4 5—65
1,000	3 5 4 4 3 5 4 3 5 5 5 5 3 3 4—60—185
S Wilder.	
800	5 5 5 5 5 4 3 3 4 0 4 4 4 5 4—60
900	4 3 4 4 4 2 3 5 5 3 4 5 3 5 5—59
1,000	4 5 3 3 5 5 4 4 5 3 4 5 0 4 0—54—173
J H Williams.	
800	5 5 5 4 5 5 5 5 4 2 4 5 4 3 0—61
900	4 3 4 0 5 4 4 4 5 5 5 4 3 5 5—60
1,000	5 3 5 5 0 5 5 4 5 4 w

Dr. Carver in Boston.—On Saturday, June 29, this great rifleman gave an exhibition at Beacon Park, which was well attended. Of 120 balls thrown at a distance of 50 feet the Doctor only missed nine. In 100 consecutive shots he broke 96 balls. A number of balls were thrown 100 feet in the air, and very few reached the ground unbroken. Coin shooting was next attempted. Pennies and quarters were thrown up into the air. (Boston don't throw away whole silver dollars much.) The Doctor was wonderfully successful, hitting 20 out of 29. A new feature was introduced, that of throwing torpedoes in the air. These the Doctor invariably hit, exploding them in mid-air. Now just think of a man's hitting a lead pencil with a rifle ball. A Faber being twirled into the air, the unerring bullet from the Winchester cut it neatly in two. From across a fence balls were thrown at the Doctor, and he shivered all of them. The next performance was that of breaking balls on time. 100 balls out of 113 were broken in 4 minutes 34½ seconds, Carver using four rifles. Exchanging his Winchester for the Parker shot-gun, the Doctor made any and every shot he attempted—high balls, low ones, doubles, balls thrown in different directions, it was all the same, they all were broken.

Deerfoot Park, Parkville, Long Island, has been engaged by the Doctor for a series of performances, to be given on the 4th, 5th and 6th of July. We trust that a numerous audience will be in attendance, drawn from New York and vicinity to witness the most marvellous skill of Dr. Carver.

Dr. Carver at Meriden.—It seems to make very little difference to Dr. Carver whether he uses a shot-gun or a rifle. At Meriden the Doctor gave an exhibtion with a Parker gun and smashed things right and left. The *Meriden Daily Republican* says there was a stream of balls going all the time, which were resolved into fine fragments by the Doctor's gun. The skill of this distinguished marksman, with his Winchester rifle, concluded the performances. The effort was made to break 80 out of 100 balls, and to see how many balls could be hit in a minute with the rifle. This is what was done:

Score of 90 out of 100—0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 0 0 1 1 1—90.

Thirty in one minute; 5 misses—1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1 0 0 1 1—25.

A Big Score.—The score made by W. C. Dole, Jr., at Bridgeport, on the 14th of June, with a Remington rifle is worth preserving. Here it is. Distance, 500 yards: 5 4 5 5 5—24 5 5 5 5 5—25 5 5 5 5 5—25 4 5 5 5 5—24. A total of 98, with only two 4s in twenty shots is an unparalleled score, and speaks well for the man and the gun. "*Arma virumque!*"

Creedmoor.—The 26th was ladies' day at the range. Two neat canopies had been erected at the firing point. Of course the ladies were coached, and that pleasant duty was assigned to the grave Judge Stanton, to the polite Mr. Walters, and to the courteous Major Fulton. In fact the gentlemen sacrificed themselves to the occasion, and were the rests, offering their arms and shoulders as supports for the ladies' rifles. If not exactly according to the rules of the N. R. A., the ladies, with a few exclamations, in which the monosyllables "Oh!" and "Oh, my!" were most prominent, acquitted themselves quite handsomely. Miss Briggs, of Texas, fired but one shot, which was off-hand, and scored a centre (4). Mrs. G. W. Wingate scored two bull's-eyes, off-hand, and the Misses Walters and others scored centres. The result of the first two regular shots was: Mrs. Judge Stanton, 4, 5; Mrs. G. W. Wingate, 4, 3; Mrs. Dr. Morris, 5; Miss Man, 3, 3; Miss Dodge, 5; Miss E. Walters, 4, 3; Miss Frances Walters, 4, 4; Miss Rosa Klein, 4, 3. The new club house was opened for the first time, and the ladies took supper there. W. M. Farrow, who was crowned King at Union Hill last week, won the Ballard mid range rifle on a score of 67 out of 75 points. F. L. Eames, of the Stock Exchange Rifle Club, won the Woerishoeffer $300 gold badge for the third and last time.

— The Fifteenth Battalion of Brooklyn met at Creedmoor on the 29th. There were 142 men, 104 of them having qualified for the third class. Only 14 were, however, successful at the 300 and 400-yard range. For the marksman's badge, which took place later, the following men secured it: Sergeant Gottleib, 35; Private Wittchen, 27; Lieutenant Colonel Meyenborg, 27; Lieutenant Schiellein, 27; Lieutenant Werner, 27; Private Ahlers, 25; Private Brunning, 25. The battalion gold medal for the best score at 200 yards was won by Sergeant J. Gottleib, on a score of 10 out of a possible 25 points. He also won the Company F medal.

June 30.—The Remington match having been called, there being but seven entries, and the rules calling for ten, the match was postponed. In the afternoon the Amateur Rifle Club had a contest for a gold badge; conditions, 15 shots, 200 yards. The leading scores were as follows, the highest attainable number being 75 points: C. E. Blydenburgh, 68; Dr. S. T. G. Dudley, 66; Isaac L. Allen, 65; Dr. M. M. Malthy, 64; N. D. Ward, 63; F. H. Holton, 62; Captain A. Anderson, 62; G. L. Morse, 61; Homer Fisher, 60.

Members of the Seventh Regiment had practice at 200 and 500 yards for selection of team. The three prize medals were won as follows, the highest possible number being 70 points, 7 shots each at 200 and 500 yards: C. H. Eagles, 58; Serg. John B. Holland, 53; C. M. Englis, 53. Captain J. L. Price won the "Trophy" on the score of 30 out of a possible 35, at 500 yards, and the "Shells" were carried off by E. W. Price, at the same distance, upon the score of 23 out of a possible 25.

The Dunkirk Amateur Rifle Club, N. S.—This club was formed last fall, and on May 7, 1878, commenced practice at 500 yards under the rules of the N. R. A. On June 28 the following scores were made:

R J Gross	5 4 5 4 5 5 5 5 5 5—48
H J Jackson	3 4 5 5 5 5 5 0 4 4—40
A J Miller	5 5 4 5 5 3 4 5 4 4—44
H J D Miner	4 5 5 4 3 5 5 4 4 5—44
H P Monroe	5 5 4 4 3 5 3 5 5 3—44
W L Slater	5 4 3 3 5 4 5 5 4 5—43

N. R. A.—At a meeting held on the 24th, Judge Gildersleeve offered a gold badge to be shot for upon the same conditions as those governing the "Champion Marksman's Badge." In case there should be no appropriation allowed for moving teams of regulars from the posts adjacent to New York, so that the soldiers could not partake in the fall meeting at Creedmoor, Col. Wingate proposed that the N. R. A. should pay their expenses. This was referred to a committee.

A New Sight.—Some weeks ago we noted the fact that a new sight of peculiar construction had been sent us for examination and trial. This sight we have placed in the hands of a leading expert, and we trust to report on it at some future date. The inventor has sent us the following description of the sight:

Richmond, June 8, 1878.

Editor Forest and Stream:

In your last week's issue (No. 18, Forest and Stream) I find a notice of a new sight, which, if alluding to my new sight, conveys a very erroneous idea of it. To cut and shape a crystal sight so as not to refract light is just contrary to my object and the advantages of my invention. I deem it, therefore, in justice to myself as well as you, and necessary for a better understanding of the theory and merits of this sight, to present you with one of them, which I made and fitted to a Ballard rifle, together with my description of the same, which I herewith do, I assure you, with much pleasure, hoping that you will be so courteous as to give the sight your inspection and trial, and if you find it possessed of the merits I attribute to it to bring it once more to notice in the columns of your valuable journal, and permit it to shine in its proper light. The sight consists of a small crystal, mounted on the sleeve of an arm in the shape of a pin-head or globe sight. The faces of the crystal are prismatic in shape, so as to make it a refractor of the rays of light, by which it becomes highly illuminated without however producing any glare. It appears as a sharply-defined, round, bright, white little spot on the black target or object aimed at. The advantages of this sight are: First, that it enables the marksman to take aim at the very centre of the black, be it large or small, at long or at short ranges. Second, it assists more than any other sight to bring the nerves to steadiness, and train them to centre the black, inasmuch as the eye, although focussed on the centre of the black, is enabled by it to observe with precision the motions of the bright sight produced by the body. Thirdly, it is much easier to bring this sight to coincide than any other one heretofore known or used. It is evident, as the sight is illuminated from the sky at an angle of 30 to 40 degs., that the sky in front of the marksman must be unobstructed at and above that angle, so as to permit the rays of light to fall upon it. That side of the sight-disk marked with a bright dot must be set toward the eye. I have secured a patent for this sight in the United States, and applied for patents in all the European countries.

Conlin's Score Cards.—For our team match at the Schuetzen Park we had prepared special score cards. Had we known that Mr. Conlin had had on hand such scores neatly printed, and far more handy than ours, we certainly would have used them. We can recommend Mr. Conlin's score cards as being just what is wanted.

A Card.—*Editors Forest and Stream:* We have been told that some malicious person has said that Mr. William Hayes had sold out his "Kingship," at the Union Hill Shooting Festival, in the interest of the Ballard rifle, and as such is a base falsehood you will oblige us, in justice to Mr. Hayes and to ourselves, by publishing these few lines in your valuable paper. Respectfully, Schoverling & Daly.

New York, June 27, 1878.

Tar.—"Buck Shot," of Tiffin, O., sends us a tar target about four inches in diameter, into which twenty consecutive rifle balls were put at 200 yards, with a rest. The peculiar excellence of a tar target is that when a man once begins to hit he sticks to it.

— Mr. Farrow, whose skill we noted last week, left on Saturday last for Europe.

Penetration Trials.—The following experiments, which were made by an expert, with great care, possess a value in demonstrating the power of penetration of the ball fired from the ordinary army rifle of the Springfield pattern and breech mechanism. The targets fired at were four in number, prepared as follows: No. 1—Rectangular, 5x3⅞in. thick, made of five alternate layers of chrome steel and wrought iron (two of the former and three of the latter). No. 2—Disk 6in. in diameter, ⅜in. thick, entirely of wrought iron. No. 3—Plate 8in. square, ⅜in. thick, forged from an excellent quality of cast steel (tool). No. 4—Plate 8in. square, ⅜in. thick, of an excellent flange iron. The arm used was a heavy telescopic rifle barrel, re-rifled in Springfield system, its length 26in. The ammunition was Service metallic cartridge, with Service bullet weighing 405 grains, with varying charges of Service and Hazard's electric rifle powder No. 3. The targets were placed at a distance of 50 feet from the muzzle. In cases where noted as backed, a block of white pine was used for backing; in the other cases the plates rested upon the lower edge and were supported at sides.

Trial—*Target No.* 1, *Chrome Steel and Wrought Iron.*—Shot No. 1—Target backed; effect, first thickness wrought iron penetrated, second, third, fourth and fifth thicknesses bulged to the rear, broken off in circular form, 1⅛in. in diameter, and driven into the pine backing. Shot No. 2—No backing; same effect, except that the circular button was driven to the rear and entirely detached.

Target No. 3, *Cast Steel.*—Shot No. 3—No backing; velocity of impact 1696ft., slight penetration; plate broken. Shot No. 4—Target backed; velocity of impact 1696ft., slight penetration; no fracture.

Target No 2, *Wrought Iron.*—Shot No. 5—Target backed; velocity of impact 1090ft., penetration complete. Shot No. 6—Target backed; velocity of impact 1088ft., penetration incomplete. Shot No. 7—Target not backed; velocity of impact 1088ft., penetration complete. Shot No. 8—Same as No. 7.

Target No. 4, Flange Iron.—Shot No. 9—velocity of impact 1463ft., target slightly indented. Shot No. 10—Velocity of impact 1696ft., complete penetration; a circular button detached from plate and driven with the bullet with considerable force, striking a brick wall in the rear. Target No. 4 was further tested, as follows: Two shots were fired with the same barrel, the ball weighing 250 grains and with 120 grains of powder; two others with the service rifle bullet, 405 grains, and 120 grains of powder. The velocity of impact of the first two was 1714ft., of the last two, 1463ft.; the penetration of the smaller balls with the greater velocity being the greater; it was, however, somewhat diminished in the latter case by the bending of the plate.

Target No. 2 was still further tested by shots fired at it from an ordinary Sharp and Hawkins boat or cavalry carbine, the distance being 50 feet and the target backed by a white pine post, the ordinary Service metallic shell being used. Neither shot produced more than a slight indentation.

Conclusion.—All the plates yield to the impact of a service bullet driven with the initial velocity of 1690 to 1700 feet—the steel plates by cracking, the iron ones by penetration. The ordinary boat or cavalry carbine does not possess with its ordinary charge sufficient powder to effect this work. PISECO.

EXPRESS RIFLES.

I cannot let "Bear Paw's" letter on Express rifles pass unanswered, as from want of a practical knowledge of that rifle it gives a wrong impression as to its capabilities. In the first place, as to what "Bear Paw" says about so many animals escaping after being hit by other rifles: This is the strong point of the Express, not one animal in six getting away after being struck by it, and fully two-thirds dropping where they stand. I see from my game diary that I have killed twenty-seven buffalo with mine, besides many deer and antelope, and I have not lost a single animal as yet after wounding it. A friend of mine in India killed sixteen tigers in a fortnight, and no one took a second shot, and this peculiarity of the rifle can be confirmed by at least two thousand sportsmen who are using them in India and Africa. They are not recommended for very large game, such as Indian buffalo and elephants, rhinoceros and hippopotamus, but for bears, lions, panthers, and all animals of the kind, they are most deadly. One would think from reading the few letters which have appeared on the Express rifle in this country, that a knowledge of dangerous game shooting with the rifle was in its infancy in India and Africa, and that English sportsmen must come to America to learn how to kill big game, the truth being that that knowledge is infinitely more advanced in the former than the latter, sporting having long been reduced to a science there. Every kind of a rifle has been tried there up to eight-bores, with a charge of sixteen drachms of powder, and it has been found that Express rifles are more immediately fatal to dangerous game than even these could be, always excepting the animals I have named. As to shooting at four, five and six hundred yards, very few sportsmen ever do so, finding that with any rifle much more game is wounded than bagged. As for these distances, an Express bullet has not sufficient accuracy, being too light, but up to 200 yards a .450 Express, using 140 grains of powder, will, nine times out of ten, instantly paralyze any animal in America, even a grizzly bear. I recollect two shots made by a friend of mine in Texas at deer in high grass; they were both struck high up in the back, and in each case a piece was torn out as large as the crown of a "wide-awake" hat, leaving nothing but the skin of the stomach to connect the fore- and hindquarters. The hole in the skin, when taken off, was fully sixteen inches square. I shot a puma in Texas, and the ball striking in the neck blew the whole of the inside of the throat to pieces, leaving only the skin to hold the head on. I have frequently found the inside of a deer reduced to a pulp by an Express bullet. "Bear Paw" says that he found a Sharps bullet flattened out against a bone after passing through every rib of a deer. Now, the difference between the shock caused by this ball and an Express is very great, as the latter when fired into a deer, even into a fleshy part, expands almost at once, and, continuing its course, tears everything to pieces over a large surface, besides small portions flying from it and penetrating all the neighboring organs;—the Sharps ball only expanded when striking the last bone. As to penetration, by having several plungers to one's mould one can make the hollow deeper or shallower, and thus add to or diminish the penetration. I have several times broken the shoulder of a buffalo all to atoms with a common Express ball. The difference between an explosive ball and one on the Express principle is very great. In the former the bullet is blown almost entirely to pieces soon after entering, and thus loses penetration, whereas in the latter the bullet remains nearly whole, the base being driven through the point, spreading it out like a mushroom, and continues its flight in this form, and the damage is simply awful.

As to the "exaggerated statements of the destructive effects of the bullet," if "Bear Paw" or any other American were to go to India and join in one hunt with English sportsmen there, they would not, on their return, talk of gentlemen by birth and education making any such statements. After nine years' hunting in all parts of America I can easily excuse "Bear Paw's" saying this, as the Western hunter cannot tell a hunting story without exaggerating, and really does not mean to tell an untruth in doing so; but the same class does not exist in India. Professional hunters there are none, and I have not found that "gentlemen" anywhere exaggerate. The only reason why an Express bullet cannot be used with equal effect from an American rifle is that no American shell will hold powder enough, 140 grains being, I believe, the limit. As to a longer range than 200 yards being required, this can be obtained in the Express by using a solid ball and smaller charge. In conclusion, I may say that after twelve years of big game shooting, eight of them in all parts of western America (during which time I have killed over sixty bears) and three of them in Africa, and after having owned nearly forty rifles of all kinds, I have found no rifle with which I would as soon face a grizzly as an Express. VIATOR.

P. S.—I do not wish to be understood to say that all English Express rifles will do what I have stated in the foregoing letter. "Very few" makers can make them correctly, but any one who goes to such men as Henry, Turner of Birmingham, Rigby, Purdy and one or two others, will not be disappointed.

PURDY BREECH-LOADERS.—At Messrs. Schuyler, Hartley & Graham's, a brace of superb Purdy guns were shown us. They are 10s and 12s, 30-inch barrel, weighing 9 and 7¾ pounds. The outfit is complete. More superb guns no one would wish for. In point of finish, in excellence of material, they are unsurpassed. Everybody knows that Purdy is a gun-builder without a rival for care and accuracy, and these two guns are about as good ones, we fancy, as this well-known maker can turn out.

Game Bag and Gun.

GAME IN SEASON FOR JULY.

July is a close month for game, except as to woodcock, in certain States.

☞ NEW YORK LAW.—The open season for woodcock in New York State begins August 1; for quail, Nov. 1; and for ruffed grouse or partridge, Sept. 1.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Game—Wilson Snipe, $4 per dozen; wild pigeons, flights, $1.25 stall fed do, $1.75; Philadelphia squabs, $2.50; wild do. $1.25

Poultry.—Philadelphia and Bucks County dry picked chickens, 18 cents per pound; do fowls, 16 cents; do turkeys, 16 cents; do ducks, 20; do geese, 16; State and Western chickens, 15; do turkeys, 15; do fowls, 15; spring chickens, 20 to 30 cents.

MARYLAND, *Salisbury, June* 20.—Quail have suffered much by heavy rains. Rabbits more numerous than I ever knew them before. L. S. P.

WEST VIRGINIA—*Near Ronceverte, June* 24.—The country around here is full of game. Deer and bear I have seen in the neighborhood. J. N. H.

TENNESSEE—*Savannah, June* 18.—The prospect for quail is unusually fine. A much large area than usual has been sown in grain and quantities of birds were left over this spring. We have had much rain recently, and if this continues it may affect the prospect disastrously. WILL.

SPORT IN THE INDIAN TERRITORY.—If variety is the spice of life, a sporting excursion in Indian Territory must be decidedly spicy. Our Indian Territory correspondent, "D. G.," of Muskogee, Creek Nation, writes of a fishing trip to the Middle River, some forty miles west of that station:

"The party of five went in wagon and on horseback, provided with three days' provisions; pitched their camp on the river bank and found the fishing good, beyond the best catch related by the Judge in the numerous reminiscences of sport of former days with which he beguiled the leisure hours of the camp. Wearying at length of the unvarying success, the party started for home. The third day out brought an exciting chase, as the dogs started four wolves in plain view across the prairie. They were immediately followed by one of the party. The boys and the portly Judge brought up the rear in fine style, offering fabulous bets first on the wolves then on the dogs. Five miles of racing, as they doubled and chased over mound and ravine. One bet already lost as Falstaffian William was pitched at least twenty feet over the head of his floundering steed. But both recovered bottoms, and again essayed the chase, urged on by the Judge jumping up and coming down in the wagon two miles away. As they circled they discovered the den and captured seven young wolves, which now grace the Zoological Garden of St. Louis. Several times the wolf was overtaken, when he would double, and again the chase would be resumed, until after one hour's hard riding, between wolf, dogs and men, the former was killed and brought in as a trophy of the chase in the beautiful Indian territory.

IRA A. PAINE.—Mr. Ira A. Paine has entirely recovered from his recent serious illness. He played at the Opera House, Providence, all last week to good house, and returns to play for the benefit of the managers on Friday evening next, when he will undertake to load his own gun and break nineteen glass balls in one minute. The old Narragansett Club had a gala day last Thursday on the occasion of the visit of Mr. Paine to his native city. Two hundred and fifty pigeons were shot off all at English rules, 30 yards, and 300 feather-filled glass balls, after which, there being plenty of loaded shells left, bottles, barrels, chairs, baskets, table-legs and then the table, all in turn, until the last shell was gone, when the party all adjourned to a clam bake. What followed, never mind, but we all wished Greene Smith was there. P.

A TRIUMPH FOR CAPTAIN BOGARDUS.—The following has been received by telegraph:

London, June 28.—The pigeon-shooting match between Captain Bogardus, the champion of America, and Mr. Cholmondeley-Pennell, member of Hurlingham Park and Gun clubs and winner of the Grand Prize of Monaco, took place to-day in the Gun Club inclosure upon Wormwood Scrubbs. The terms of the match were: To shoot for $1,500 a side at 100 birds; thirty yards rise; from five traps five yards apart; double guns and 1¼ ounces of shot. Captain Bogardus won the match, killing 70 birds out of the 100, while Mr. Pennell killed 68.

This is indeed a very notable performance, when we think that the birds were the most vigorous blue-rocks, and sprung with ground traps. We have to congratulate Captain Bogardus on his victory.

WILD RICE.—We have had numerous inquiries in regard to wild rice. A letter from a correspondent throws a good deal of light on the subject. We have asked "Lutron" if he will give us the name of any one who would gather and sell the seed. Our correspondent, writing from St. Joseph, Mich., under date of June 21, says:

The wild rice grows here at the mouth of the St. Joseph River in the marshes and bayous in abundance; there are hundreds of acres. It is found in plenty around most lakes and rivers with mucky bottoms; grows in water from a few inches deep to two feet or more; height, three to seven or eight feet. The seed ripen in September and fall very readily when the ear becomes full, before it hardens much. It drops into the water and does not sprout till the last of March or first of April. The husk runs to a long serrated point, so that when it falls into the water the weight of the berry sinks it immediately to the bottom with the germ end down. The action of the water on the long point buries it in the hottest mud by the aid of it serrates, and nature does its season's planting in the fall and sleeps till spring. About the first of May it is well sprouted and rootlets put out, and it is the food of ducks and other wild fowl. It grows slowly till it reaches the top of the water. The leaves lie flat on its surface for quite a length of time and then rise up and begin to grow rapidly about the first of July. Where the water falls so as to leave the ground bare, or an inch or two of water, I have seen stocks ten or twelve feet high. The object of writing this article was to give an opinion as to the time of planting it. Now, as the stalk does not ripen or the seed harden till the seed falls into the water, will the seed grow if it gets dry? I have supposed that it would not; yet I do not know. I have gathered it to send a short distance only—thirty or forty miles—and was very particular to send it as fresh as when gathered, and immediately planted. I will now make suggestions to my brother sportsmen how I think they can obtain this attractive wild fowl food and make its growth a success: Gather it and keep it from drying; sow in from one to two feet of water on muddy bottom (grows poorly or not at all on sandy bottom). If not dry will plant itself in the mud. It must not be in quantity enough to heat before it is planted. I have thought, perhaps, that it might be gathered and put at once in the water and sent in barrels or smaller casks, if not kept long enough to kill the germ by fermentation. I would try it, however. Once get it started, and I think it might keep growing in a marsh. It is an annual, and it is doubtful whether birds or water fowl would get all the seed. Blackbirds are very fond of it, and begin to feed on it while in the milk; in fact, it hardly gets out of the milk before it falls into the water. I think some party here might gather some. If any sportsmen wish to get any they must seek to get it by the first of September, at least. The seed can only be gathered a few days. LUTRON.

THREE FINE GUNS.—Mr. H. C. Squires, of No 1 Courtland street, has them. One is a 10-bore Purdy, eight pounds weight, elegantly finished in every particular, in best black sole-leather case, with full set of implements. This cost to import it $550. It was built last year, and has all the latest improvements. The second beauty is a Premier Scott. This is as choice a gun, and was built for the Centennial Exhibition. No Scott gun which ever came to this country cost more or was finer. Best case and implements go with it, and the gun has never been used. The third gun is an excellent little 20-bore Greener. Its weight is six pounds, and is one of the best pieces of work made by this celebrated maker. It has the treble-wedge fast, one-half pistol grip, large gilt strikers. The left barrel is bored to make a pattern of 176 inches, 30 inch circle, at 40 yards, with 1⅛ oz. No. 6 English shot, and right barrel, with same charge, 120 pellets. Any one of these guns is worthy of a visit.

THE OLD-FASHIONED FOWLING-PIECE.—Sixty years ago, when young Colquhoun took the field—a schoolboy under the care of a keeper, and staggering under the unaccustomed weight of a rudely primitive piece of ordnance—we fancy that the venerable flint-locked single-barrel was in fashion. The author of the Oakleigh Shooting Code, writing many, many years ago, concedes certain merits to that exploded weapon. He says that it made steady and deadly shots, because knowing that you had but a single chance, you were constrained to dwell deliberately on your aim. Those flints and single-barrels may have been sure, but they were abominably slow. The woodcock would have dipped under the bough and twisted away behind the tree-trunks while your fingers were fumbling with the lock and the charge was in course of kindling. The rabbit jerking across the ride, or the grouse cock topping the crest of the brae, would have laughed at the beard of the baffled shooter. No; the single-barrel was emphatically the weapon of the old school, and must have bred a race of potterers who would prematurely develope into fogies. A vast stride was made in advance with the introduction of double-barrels and percussion-locks. Then Joe Manton and his less famous rival Stevens attained, according to their lights, to the perfection of finished workmanship. Curtis and Harvey followed with their lively "diamond-grain," and Eley with his caps and wired cartridges. Given tolerable weather, and but a fair sprinkling of wild game, and the shooter had good reason to be content with the readiness of his new fangled tools. But there are occasionally dripping days to the north of the Border, and then to what misery and provocation that painful muzzle-loading used to lead! The wads in your open pocket grew saturated, and bulged when you thrust them into the barrels. The powder half choked the damp measure in the mouth of the flask. The slender ramrod bent and sometimes broke, when you were cramming down the reluctant charge in a series of frantic contortions; and it was a god-send when it was replaced by the more substantial loading-rod. Above all, the best barrels would hang fire, and then you were placed *hors de combat* till you had cleaned the touch-hole and replenished it with dry powder in the drip of a driving rain. That, with the nuisance of seeing birds getting up about you before you had reloaded and were ready to drop them, might have been admirable discipline for the patience which should be one of the fundamental virtues of the sportsman. But too often your temper flashed up when the powder refused to burn, sending you on your way sulking and shooting wildly; and altogether there was great reason for thankfulness in the introduction of the swift and simple breech-loader.—*Blackwood's Magazine.*

BELL BALLS.—A San Francisco genius has invented a "bell ball" which takes the place of the glass ball. Every time the bell ball is hit it rings, giving a clear and distinct note distinctly heard at the distance of 800 yds.

For Forest and Stream and Rod and Gun.

WOODCOCK SHOOTING ON THE UPPER MISSISSIPPI—No. 1.

BY T. S. VAN DYKE.

Of all the sport to be had with dog and gun in the glorious game section of the Northwest, there is nothing equal to the woodcock shooting that may be often had by one who knows just where to go. But one not accustomed to western grounds may hunt several days and give up in disgust without hearing the twitter of a single wing.

A small skiff, containing two men and two dogs, is winding up one of the numerous sloughs that run through the "bottoms" of the upper Mississippi, where it divides Minnesota from Wisconsin. Let us follow them. One of them,

Mr. Horton, is an experienced sportsman; the other, Mr. Newville, a friend of his from the East, is a mere novice in the noble art of hunting, but is brimming over with enthusiasm. After picking their way through narrow channels, fallen tree-tops, lodged drift wood, shallow sand-bars, heavy reeds and wild rice for about a mile from the river, they land and go ashore. The ground is low and flat, and, robed in the luxuriant full-grown vegetation of the last of July, looks more like a tropical than a northern country. Basswood, cottonwood, oak, elm, maple, ash and other trees, some of great size, tower in all directions; and here and there an aged monarch, still proud in death, brandishes its ragged arms on high in defiance of the elements. Many are festooned with various vines of immense growth, and the grapevine at times forms an almost impenetrable tangle. In places there is a dense undergrowth of young timber, but much of the ground is comparatively open. The highest open ground is covered waist-high with long matted grass, but the most of the open ground consists of sloughs and ponds of all shapes and sizes. Some of these are covered in the middle with pond lilies; nearer the edge the wild rice waves its stately head, and along the muddy edge there is a thin growth of reeds, which get thicker as the ground gets drier until it merges in the long grass. Others are quite open, with low, flat, muddy shores, covered a little way back with grass or weeds. Decaying logs, tree trunks, dead brush and drift wood of every variety lie scattered on all hands in charming adaptation for stumbling-blocks.

"How do you expect to find anything in this hole? Its worse than an East Indian jungle," says Newville, after following Horton about fifty yards from the boat.

He is answered by a heavy beating of wings, mixed with a dolorous, long-drawn "wee-wee-wee-wee," a sudden *bang! bang!* from H's gun, and a couple of splashes in the water; and just above the smoke of H's gun we see a flock of ducks wheeling up over the trees that skirt an opening ahead of us.

"Wood-duck!" says H., with a chuckle of satisfaction.

His dog, Spot, is ordered to fetch them, and disappears in the reeds in the direction where they fell. But by the time we reach the opening there is no sign of the dog. There is no motion of the reeds or grass to show his whereabouts, and all is still except the tattoo of numerous woodpeckers, the jangle of bluejays, the occasional drumming of a ruffed grouse, the bark of a squirrel, and the snorting of the high-pressure steamer on the distant Mississippi.

"The old scamp is on a point somewhere," says H. They take a few steps ahead, when, with a sudden flirt, a royal cock clears the top of the reeds and wheels away on his swift twittering wing for the brush. As Horton raises his gun, *bang* it goes, and the bird vanishes into the long grass and reeds, leaving a cloud of fine feathers floating back on the air.

H. turns around in surprise at N., who stands with his whole countenance swamped in a bottomless smile, with just the tips of his ears visible on the edges.

"My first cock!" gurgles in tones of delight from his throat, as he reloads his gun.

The whistle of another cock from nearly the same place, as H. moves a step or two, calls together N's scattered features in such haste that he nearly snaps his tongue in two, and *bang! whang!* go both barrels of his gun almost before he fairly sees the bird. Away it spins unharmed around a narrow point of timber that makes out from the main body, with one barrel of H's gun scattering a cat-tail to pieces in its immediate rear, and the other crashing through the green leaves of the trees, behind which it vanished.

"You shot entirely too quick, Newville, and demoralized me, too," says H. "Take it cooler next time."

By the time Spot has retrieved the first woodcock and the two ducks, Chase, Newville's dog, is missing.

"You must watch him very closely in here. Where did you last see him?" says H.

"He went toward that pond there with that rice in it."

They go there and look, whistle and call in vain. There is no sign of Chase, and Spot is plainly seen in another direction by the motion of the reeds and grass above him.

"Why, here's the rascal right here," says N.

Sure enough, not ten yards from where his master stood whistling and calling, the tip of his nose is just visible popping out of a heavy fringe of grass which surrounds the reedy edge of the pond. On an open space on the mud a few feet ahead of the nose sits a big woodcock, apparently as cool and unconcerned as an iceberg. His lustrous black eye is quizzing us with a mild, inquiring expression; on his long bill projecting in front of him fresh mud is plainly visible; the black bands upon his head and the rich rosewood colors of his back look like velvet in the morning sun, which is just beginning to strike in there.

"Now, Newville, you take first shot on him, and be cool, and take good aim before you pull," says H., starting the bird.

Away goes the cock with a twisting flight, like the thread of a screw, over N's head, with the smoke of his first barrel in distressing proximity to his tail feathers; away he goes with a charge from Horton, who was partially blinded by the sun and the smoke from his gun, singing harmlessly below him. Away he goes with his second barrel, making a tunnel through the smoke of his first; away he wheels up over the point of timber, and darts down behind it as H's second barrel shivers the tree-tops behind which he disappears.

"We'll look for him. I think I hit him," says H.

Spot is soon sent in its direction, while the men take a short cut for the end of the point of timber.

On the way a cock whips out of some rice by the side of them and darts away backward in the direction they have just come. Horton, who has just accidentally planted one boot in about six inches of seductive mud, attempts to wheel suddenly for a shot. The result is not necessary to state. N. succeeds in wheeling and opens his full battery. Result also unnecessary to state.

On reaching the point Spot is seen a few yards off braced up in Arctic firmness by the side of an old log, overgrown with grass and weeds. His tail trembles at the tip like an aspen, his four feet are almost together, as if he had just gathered himself to spring over the log, and his head is turned short to one side. His whole body is as motionless and stiff as sculptured marble, and far handsomer, and his eyes are glazed in a stare of monumental importance. In his mouth sits a woodcock, with head and long bill sticking out from one side, and the mud on the long bill looks just like what we saw on a woodcock's bill a moment ago. Yes, it's the same bird, only winged. He sits in the dog's mouth apparently as unconcerned as before. The deep, liquid, black eye wears no sign of fear, but only one of solemn and dignified tranquillity.

As we advance closer the bird in the dog's mouth shows a little uneasiness, and whiz go two more from the weeds and grass toward which the dog's nose is turned, one twisting up through the trees that cover the point, and the other scudding away for the timber across the opening. Like a flash comes H's gun to his shoulder, going off as it touches it, and the first one wilts in his swift career; then dropping on one knee to see under the brush, H. soothes the second one, which had in the meantime been sadly distressed by an eruption of country store powder in front of its nose from N's gun. Spot unbraces; trots in with smiling countenance to deliver the first cock as soon as the guns are loaded; while Chase, who has dropped at the report of the guns, starts for one of the cocks, which he feels sure his master shot.

They now cross through a little belt of timber to another pond containing rice, out of which rise a flapping and squealing huddle of wood-duck. N's gun goes off as usual almost before he catches sight of his game; but two ducks sink with sullen splash from before it, while two more, one from each of H's barrels, come down with a splash and a *flop* into the water and mud along the shore.

Around the pond the mud is perforated like a sieve with thousands of holes, but they find no cock.

"This mud is more open than the last. Besides, it's getting toward the middle of the morning, and the birds will work further back into thicker shade as the sun gets up. We'll have to hunt now in the long grass and reeds further back and in the timber," says H. "As it's getting rather warm in the sun, we will go inside the brush, I guess."

We soon enter one of the numerous strips of sapling and scrub-oak brush which, instead of the heavy timber, cover the ground between the ponds and sloughs. Now the dogs must be more cautious, for the ground is quite bare of grass or weeds. And right well the happy brutes know that fact. Both are old woodcock dogs, and know their business perfectly. With slow, even trot they travel to and fro, quartering short and close to their masters. At the faintest scent they stop, and do not move on until they know positively what it is, or, rather, is *not*. Each little clump of brush of unusual thickness they approach with the care of scouts toward a hostile camp.

Presently Chase stiffens and settles down to a rigid point at a fallen tree-top some fifteen yards away. Spot, just turning in his beat some thirty yards to one side, freezes into rigid beauty the instant he sees him. As we take a step forward a ruffed grouse bustles with obstreperous wing out of the edge of the fallen tree-top, and like a shaft of darkness vanishes in the thickest brush before either of the sportsmen get a chance to break the game-law of Wisconsin. An old cock, likely; for grouse, though often found in these bottoms, especially in the fall, seldom breed here. Chase trots on three or four steps and stops again, with tail like a frozen poker and glistening eyes fixed on the same tree-top. Spot, who had canceled his endorsement of Chase at the rising of the grouse, again renews it with his stiffest posture of graceful beauty. As they take a step ahead of Chase a woodcock with a sudden spring flashes out of sight in the thick, low foliage, and we can only hear his whistling wing careering swiftly upward. But for an instant, however, for Horton's charge with a crash riddles the thick leaves just where we last saw the bird, and it returns to earth almost as quickly as it left it. In the meantime N. has topped a sapling a few feet ahead of him with one barrel, and with the other brought down a shower of dead twigs and leaves from another sapling.

After loading the guns Chase is sent for the bird; but he stops again as he gets to the fallen tree-top and turns his neck short to one side, with one fore foot upraised and tail quivering with anticipation. Spot ratifies his opinion again. And well he may, for but a few yards from where the last cock was whirls out another, which, after a few feet of upward flight, darts off downward at an acute angle to his line of ascent, leaving Horton's shot singing through the tree-tops just above him as he turns, and Newville's never-failing two barrels demoralizing caterpillars' nests and leaves on each side.

In a few moments more the strip of timber in which we are becomes narrower and thicker. On each side we see the rice of a large pond in the open, and almost at the same time see Spot square around into a handsomer piece of statuary than sculpture ever dreamed of. Chase, too, some twenty-five yards off, indorses him and stands like a rock with head toward him. As we go up to Spot two whistling brown streaks flash up from the ground and take opposite directions. One is tripped in its whizzing course before it gets out of sight, and, almost before it touches the ground, Horton turns his second barrel on the other's track. Dimly, by the eye of faith, he seems to see what cannot be seen; quickly, with an eye of intuition, he sees that his gun lies in its direction; instantly, with automatic finger, he pulls the trigger, and down through the open place near the ground comes down the swift careering beauty. A fine double shot that, Mr. H. A delay of a quarter of a second and both would have been safe.

"But look at Chase! Is he still ratifying Spot?" says H.

"Look rather at Spot and tell me why he still keeps his point," answers N.

No. His head is now turned toward Chase, and each is gazing stiffly at the other.

A careful search between them reveals no bird, and each comes drawing in toward the other looking both puzzled and cheap.

"That's mighty funny," says H. They both seemed quite certain of another bird.

Funny indeed, but not strange, Mr. F. I saw the whole performance while you were loading.

Chase did not drop to shot as usual, but remained standing. Spot did not know he was backing him, and, catching sight of him then for the first time, very naturally thought he was on an independent point, and backed him. Chase seeing Spot do this, thought he had still another bird there, and continued his first backing. So they were only backing each other, and might have starved each other to death if we had not been here.

The shooting now becomes much more exciting. So many birds have run into this strip of brush from the reedy shores of the adjoining ponds that one of the dogs is on a point, or backing the other nearly all the time. The cock fly, too, in all sorts of ways. They are all full-grown now, strong and active of wing, and know right well how to use it. Here one wheels suddenly out of the outer edge of the brush, twists away upward to the level of the tree-tops, and scuds away over them; another bounces straight up into the thick foliage and then skims away on a horizontal course through some avenue in the brush seen only by it. Some flirt up before the men get within twenty feet of the dog and vanish like a meteor in the dark night of underbrush. Sometimes only a brown streak can be seen, like a rocket, out of reach before the startled eye can catch its course.

But Horton does pretty well despite the difficulties. Now he clips the whistling wing with a shot of amazing quickness, before it gets ten feet from the ground; now he seems to fire only at the sound of a wing that vanished almost before the eye could catch it, and knows not whether he hit it or not until the dog, sent to look in the direction of his flight, comes trotting back with it. Sometimes he catches a bird that has flashed too quickly out of sight just as it crosses a few feet of opening thirty or forty yards away, and sometimes, dropping on one knee, he snaps a bird that has got out of his sight when standing erect before it gets a yard further into the foliage.

"Newville, I've got enough sport for to-day," says H., as he pockets the twentieth bird. "I never believe in playing pig, and twenty woodcock a day is enough sport for any white man. So let's go home."

On our way to the boat, in a different course from which we came, two more woodcocks yield to weighty inducements to tarry. In a short time we are gliding swiftly down the winding slough for home, which we will reach in time for dinner, having been absent from the house less than four hours, of which time fully one-third will have been spent in coming or going. Not quite as good shooting, perhaps, as the old Warwick Woodlands of blessed memory have in bygone days afforded; but good enough for any human being, and far better than what thousands are amply satisfied with, except those few select spirits whose souls cannot be comforted unless they can surpass the immense bags made by some other average.

[*To be Continued.*]

SPORT AND BUSINESS IN TEXAS.

A young physician, who went from Brooklyn to Texas last spring, writes as follows:

MEXIA, June 10, 1878.

EDITOR FOREST AND STREAM:

I have been shown every kindness and attention since my arrival here. They think I am something wonderful, as I never drink, smoke nor chew tobacco, which, as you probably know, are the three requisites of a representative Texan. I have a number of horses at my disposal when I want to do any riding, and, as for hospitality, I can say that I am never at a loss for that. There is an organized yearly hunt, on which a number of the most influential men of Mexia go, lasting from ten days to two weeks, and consisting of from ten to fifteen men and as many horses, together with supply wagons and dogs, and all the necessary paraphernalia of a backwood's hunt. On this I was invited to attend, and from the card it gives a man I considered myself fortunate, and accepted. We went off on the Trinity River and remained upward of two weeks. On the hunt we killed lots of deer, and almost everything in the shape of game. We were nightly surrounded by wolves, and I went out one night by myself still hunting for deer, and much to my surprise came upon two panthers, but succeeded in getting away without any fight, much to my delight, as I did not consider myself able for two. The last day we were in camp we went out before breakfast, and after a terrible fight succeeded in killing a catamount. That is a specimen of our adventures. We caught all the fish we could dispose of, and they averaged about twenty-five or thirty pounds a piece.

In reference to Texas and its productive qualities, I would say that it is one of the grandest in the world, and its farms indicate, from their appearance, the fertility of the soil. At any time in the year a man can take his gun out and kill enough game for his own use. Texas is a good place for a man with a small capital, but I should not advise a man to come without money, as it is a scarce commodity here. I would guarantee to double a thousand dollars every year. There are inducements here such as I never saw offered by any country in the world for safe investment. I have some friends going into the sheep business this fall, and I would give anything if I could go in with them. They are going to invest $500 each, and if they stick to business they will be independent in five years.

Very sincerely yours,

JOHN GRANT.

DUCK SHOOTING OVER AN ARTIFICIAL POND IN MISSISSIPPI.

Last summer I had a pond made of about three acres surface, 200 yards in front of my house. About the first of October blue-wing teal began dropping in. I built blinds and baited with rice in the bundle, staked down to prevent it sinking or drifting off. The teal were followed by shoveler, pin-tails, pond-ducks, and the different mergansers. I did not disturb the mergansers, and they acted as decoys for me all winter. About the middle of November the mallard, green-wing teal, widgeon, pin-tail and other migrating ducks made their appearance in the pond. They all arrived at night or very early in the morning. A few wood-ducks came in, but it was too open for them, and they would soon return to the timber. I had just received an English breech-loader, 10-gauge, 32-in. barrels, 10 lbs. weight, cylinder bors, with a quantity of both brass and paper shells, the best powder and English chilled shot, 3 and 4, and was anxious to try my new gun, though I gave the ducks time to find the bait and get accustomed to the blinds. One cold frost followed the first, and within ten days there was a large number in the pond who had found the bait. I then commenced on them, and kept count of the number killed up to eighty-four, when I stopped, from losing the conut. I did not make a regular business of shooting them. I could stand in my yard and see where they were feeding. (I would sometimes not shoot a duck for ten days, as myself and family soon got very tired of duck.)

I would go down, get behind a blind, wait until they had huddled, give them one barrel in the water and the other just as they got out of it. In shooting teal, the range was about thirty yards, and my charge was 4 drs. powder, Orange No. 5, and 1¼ oz. of No. 8 chilled shot. I know it is not usual to shoot any kind of duck with shot smaller than a six: I wanted quantity not size. As the first barrel was at their heads I would whistle from the blind; they would stop feeding and stretch their necks to find out where the noise came from, when I would rake them with one barrel and give the other as soon as possible. I got fifteen one morning with both barrels. I seldom fired more than four shots at any one visit to the pond. The greatest number I killed on any one visit was twenty-six teal. Along in December the teal left. I then shot mallard, shoveler and pin-tail until I quit from disgust at the slaughter. During the winter I killed two red-heads, the only ones that I saw. One day I was returning from bird hunting (quail.) I saw a very large duck in the pond. I attempted to ride within range, He

flew. I killed him fully fifty yards with No. 8 shot, breaking both wings. He proved to be a canvas back—very poor and empty. As there are no hunters near me, there was not a gun fired over the pond but my own. The negroes kill large numbers during the winter in the lakes and ponds on the river; and my pond always had more decks when the negroes were stirring them up in the swamp than any other time.

We have a game law now, and there is no hunting from the 1st of May until the 15th of September, so that at this time my hounds are blocked and my gun oiled and put away. There are a half dozen deer within a half mile of my house, and I keep my dogs on chain so as not to disturb them. I can start a deer any morning in any direction. I am the only person who keeps hounds (as there are very few whites), and hunt deer, fox and cat. The deer have become very numerous. Whenever the river (Mississippi) overflows the Louisiana lands go under, and the deer swim the river to our side, and as they are not molested a great maey of them remale. Turkeys are plentiful, and during the fall the negroes kill a good number. I find the negroes respect the game law; they are never seen with guns during the close season. All their spare time is devoted to fishing—set lines and catch cats.

This will always be a game country, as there is an immense scope of country here that can never be cultivated or improved in any way.

I see in the FOREST AND STREAM some difference of opinion regarding the time and place when and where bucks shed their horns. Here they drop them from the 15th of March to 15th of February. I have found them recently dropped in fields along paths, and have never seen where any attempt had been made by the buck to conceal them. I believe they fall off one at a time with more or less interval between the cast. I killed a buck ahead of a pack of hounds with one horn remaining, which I could not pull off. The other had been shed several days. Three days ago a neighbor killed a very large bear with strychnine. The bear killed one of his hogs within two hundred yards of his house. He heard the rumpus, went to see about it, and the bear ran off. He found the hog, returned to the house, got the strychnine, made small incisions all over the shoulders and hams. The bear eat a part of the hog during the night, and died at the first water he came to within a short distance of the lake. R. D.

Wilkinson County, Miss., 1878.

SHERMAN HOUSE, CHICAGO.—The word *guest*, as far as regards the treatment one meets in most of our first-class hotels of the present day, is fast becoming obsolete, or rather, its significance has degenerated, and guest is used in the significance of boarder or lodger. Among the shining few who remain true to the old traditions, and make friends of their guests, the Sherman House, of Chicago, is pre-eminent. To this famous hotel the traveler may go as if he were visiting the house of a friend, as indeed he is. Mr. Hulbert, the *de bonnaire* host, greets him cordially, Messrs Cobb and Hilton, the clerks, look with sincere interest after his welfare, and there is something in the very atmosphere pervading the house which makes him at home. Nor is this first impression belied by after events. Longer acquaintance, in fact, confirms it, and we venture to assert that no traveler ever stopped in this house without repeating his visit upon a subsequent return to Chicago. Its reasonable prices and superb accomodations, as well as its central location, on the corner of Randolph and Clark streets, commend it strongly to the traveling public If possible, a still stronger claim upon the public is found in the fact that the hotel is one of the most elegantly furnished in the world and supplied throughout with accommodations for the most luxurious. Every front room is provided with a bath closet, and the accommodations in the line of gas, water and heat are equally far in advance of the ordinary hotel. Only those who have stopped at the Sherman House can understand the advantages it offers.—*Omaha Herald.*

PIGEON MATCHES.

PEORIA TOURNAMENT.

The Peoria (Ills.) Shooting Club held their third annual tournament last week, commencing June 19.

First Day, Match No. 1—Ten single rises, 21 yards; entrance $5, including birds; four prizes—40 per cent. to first; 30 per cent. to second; 20 per cent. to third, and 10 per cent. to fourth:

Thomas.....1 0 1 1 0 1 0 1 1 1— 7 Davis.....1 1 0 1 1 1 0 1 1— 8
Stock.....1 1 0 1 1 0 0 1 1 1— 7 Porter.....1 1 1 1 1 1 0 0 0 1— 7
Shortliff....0 1 1 0 0 1 0 0 0 1— 3 Bruner.....1 0 1 1 0 1 1 1 1 1— 8
Wier.....0 0 1 0 1 0 0 0 1 0— 3 Rodman....0 1 1 1 1 1 1 1 1 0— 8
Shaw.....0 1 1 1 1 1 1 1 1 1— 9 Wiley.....0 1 1 0 1 1 1 1 0 0— 0
Martin.....1 1 1 1 0 1 1 1 1 1— 8 Henry.....1 1 1 1 1 1 1 1 1 1—10
Doup.....1 1 1 1 1 1 1 1 1 1—10 Holmes.....1 1 1 1 1 1 1 1 1 1—10
Palmer.....1 1 1 1 1 1 1 1 1 0— 9 Harbough..1 1 1 1 0 1 1 1 1 1— 9
Lester.....1 1 1 1 1 1 1 1 1 0— 9 Young.....1 1 1 0 1 0 1 1 1 1— 8
Stillman....1 1 1 1 1 1 0 1 0 0— 8 Morris.....0 0 0 1 1 1 1 1 1 1— 7
Cooke.....0 0 1 1 0 1 0 1 0 1— 5 McArthur..1 1 1 1 1 1 1 1 1 0— 9
Smith.....1 1 1 1 0 1 1 1 1 1— 9 Wells.....1 0 1 1 0 1 1 1 1 1— 8
Reen.....0 0 1 1 1 1 1 1 0 0— 5 Turrill.....1 1 1 1 1 1 1 0 1 1— 9
Hitchcock..0 0 1 1 1 1 1 0 1 0— 6 Kimble.....1 1 1 1 1 1 1 1 1 1—10
Joles.....1 1 1 1 1 1 1 1 1 0— 9 Lewis.....0 1 1 0 1 1 1 0 0 1— 6
Neill.....1 1 1 1 1 1 1 1 1 1—10 Pritchard...0 0 1 0 0 1 1 1 0 1— 5
White.....1 1 0 1 0 1 0 0 1 0— 5 Hough.....1 1 1 1 1 1 1 1 1 1—10
Doxey.....1 1 0 1 0 1 1 1 1 1— 8 Goembel....1 0 0 1 0 1 0 1 0 0— 5
Schuck.....1 1 1 1 1 1 1 1 0 1— 9 Widger.....0 1 1 1 1 1 1 1 1 1— 9
Crooks.....1 0 1 1 1 1 1 1 1 0— 8 Ruggles....1 1 0 1 0 0 0 0 1 1— 5
Greenleaf...0 1 0 1 0 1 1 1 1 1— 7 Turner.....1 0 1 1 1 1 1 1 1 1— 9
Hofstetter..0 1 0 0 0 1 1 1 1 0— 5 Grant.....0 1 1 1 0 1 1 1 1 1— 8
Elsesser....1 1 0 1 1 0 1 1 1 1— 8 Lindsay.....1 1 1 0 0 0 0 1 1 1— 6

Ties on ten—25 yards.

Doop.....0 w Holmes.....?...1 1 1 1 1—5
Neil.....1 1 0 w Kimble.....1 1 1 0 w
Henry.....0 1 1 1 1—4 Hough.....1 0 0 w

Ties on nine—25 yards.

Smith.....1 1 1 1 0—4 Turrill.....1 1 1 1 1—5
Schuck.....1 1 1 1 0—4 Turner.....1 1 1 1 1—5

All too rest withdrew with lower scores.

Second tie—31 yards.

Torrill.....1 0 1—2
Turner.....1 0 1—2

Third tie—31 yards.

Turrill.....0 1 0—1
Turner.....0 1 1—2

Ties on eight—26 yards.

Doxey.....1 1 1 1 1—5 Rodman.....1 1 1 1 1—5

Rest withdrew with lower scores.

Second tie—31 yards.

Doxey.....0 1 1—2 Rodman.....0 1 0—1

Ties on seven—26 yards.

Thomas.....1 1 1 1 1—5 Porter.....1 0 0 w
Stock.....1 1 1 1 1—5 Morris.....1 1 1 1 1—5
Greenleaf.....0 1 1 1 1—4

Second tie—31 yards.

Thomas.....1 1 0—2 Morris.....1 1 0—2
Stock.....1 0 0—1

Thomas and Morris divided fourth money, $13.80.

Match No. 2—Five double rises; 18 yards; entrance, $5; three prizes—50 per cent. to first, 30 per cent. to second, 20 per cent. to third:

Binley.....11 11 11 10 11— 9 Thomas.....10 11 11 10 11— 8
Hanworth.....11 11 11 10 11— 9 Wells.....11 11 11 11 11—10
Crawford.....11 10 11 10 11— 8 Turrill.....11 10 11 11 11— 9
Porter.....10 10 10 10 11— 0 Ruggles.....11 11 11 11 11—10
Doxey.....10 11 10 11 11— 8 Kimble.....11 11 10 11 10— 8
McKenzie.....11 11 11 11 11—10 Morris.....11 11 11 11 11—19
Wasson.....11 11 11 10 10— 8 Turner.....11 11 11 11 11—10
Schock.....10 11 00 11 10— 5 Heery.....10 11 11 10 11— 8
McArthur.....11 11 11 11 11—10 Dr Henry.....11 11 11 10 11— 9
Davis.....00 11 11 10 11— 8 Doup.....10 11 11 11 10— 8
Stock.....11 11 11 11 11—10 Hough.....10 10 11 11 10— 7
Joles.....11 11 10 01 11— 8 Palmer.....10 11 00 10 11— 6
Morris.....11 11 10 11 11— 9

Ties on ten.

Stock.....11 11 10—5 Capt Morris.....11 11 11—6
Wells.....11 11 11—6
Others withdrew.

Second tie.

Wells.....11 11 11—6 Morris.....11 10 10—4

Ties on nine.

Hanworth.....11 01 11—5 Turrill.....11 11 11—6
Wm Morris.....11 11 11—0
Others withdrew.

Second tie.

Wm Morris.....10 11 w Turrill.....11 11 11—6

Ties on eight won by George Wasson; others withdrew.

The next was sweepstakes; seven single rises, 21 yards; entrance $5, including birds; three prizes—50 per cent. to first, 30 per cent. to second, and 20 per cent. to third; not on regular programme:

Kimble.....1 1 1 1 1 1 1—7 Palmer.....1 1 1 1 0 1 1—5
Hanworth.....1 1 1 1 1 1 1—7 Thomas.....0 1 1 1 0 1 1—5
Porter.....1 0 1 1 1 0 1—5 Turrill.....1 1 1 1 1 1 1—7
McKenzie.....1 1 1 0 1 1 1—6 Harbough.....1 1 0 1 1 1 1—6
Stock.....1 1 1 1 1 1 1—7 Nusam.....1 0 1 1 0 1 1—5
Binley.....1 1 1 1 1 1 1—7 Smith.....1 1 1 1 1 1 1—7
Dr Henry.....1 1 1 1 1 1 1—7 Joles.....0 1 1 1 0 1 1—5
McClintock.....1 1 1 1 1 1 1—7 Wm Morris.....1 1 1 1 1 1 0—6
Hofstetter.....1 1 1 1 1 1 0—6 Geo Wasson.....1 1 1 1 1 1 1—7
Crawford.....1 1 1 1 1 1 0—0 Wells.....0 1 1 0 1 1 1—5
Bruner.....0 1 1 0 0 1 1—4 Farrell.....0 0 0 1 1 1 0—3
Shaw.....0 1 1 1 0 1 1—5 Schuck.....1 1 1 1 1 1 1—7
Doxey.....1 1 1 1 1 1 1—7 Davis.....1 0 1 0 1 1 1—5
McArthur.....1 1 1 1 1 1 1—7 Holmes.....1 1 1 0 1 0 0—4
Doup.....1 1 1 1 1 1 1—7 Widger.....1 1 0 0 0 0 1—3

Ties on seven—26 yards.

Stock.....1 1 1—3 Turrill.....1 1 1—3
Doxey.....1 1 1—3
Others withdrew.

In ties at 31 yards, Stock, Doxey and Turrill tied three times on three straight and divided first money.

Ties on six—26 yards.

Crawford.....1 1 1—3 Wm Morris.....1 1 1—3

Morris and Crawford tied on three straight at 31 yards and divided second money. The others withdrew.

Ties on five—26 yards.

Thomas.....1 1 1—3 Davis.....1 1 1—3
Joles.....1 1 1—3

At 31 yards Thomas and Davis tied on three straight and divided money, $21.60.

SECOND DAY, THURSDAY, JUNE 20.

Match No. 3—Fifteen single rises, 21 yards; entrance $10, including birds; 50 per cent. to first, 30 per cent. to second, 20 per cent. to third:

W B Crawford.....1 1 1 1 1 0 1 1 1 1 1 1 1 0 1—13
Ab Price.....1 1 1 1 1 1 1 1 1 1 1 1 1 0 1—14
Dr Henry.....0 1 1 1 0 0 1 1 1 1 1 1 1 0 1—11
W B Banworth.....1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—14
Geo Wasson.....1 1 1 1 1 1 1 0 1 1 1 1 1 0 0 1—12
B L Nichole.....1 1 1 1 0 1 0 1 1 1 1 0 1 1 0—11
G Donp.....0 1 1 1 0 1 1 1 1 1 1 1 1 1 1—13
Tom Watts.....0 1 0 1 1 1 1 0 0 0 0 0 1 0 1— 7
D G Cunningham.....1 1 1 1 1 1 1 0 1 1 1 1 1 1 1—14
J J Gillespie.....1 1 1 1 1 1 0 1 1 0 1 1 1 1 1—13
J Partington.....1 1 0 1 1 1 0 0 1 1 1 1 1 1 1—12
S R Porter.....0 0 1 1 1 1 0 0 1 1 1 1 1 1 1—11
F H McArthur.....1 1 1 1 0 0 1 1 1 1 1 1 1 1 0—12
Fred Kimble.....1 1 1 1 1 1 1 1 1 1 1 0 1 1 1—14
E Price.....1 1 1 1 1 1 1 1 0 1 1 0 1 1 0—12
J S Davis.....1 1 1 1 0 1 1 1 1 1 1 1 0 1 0 1—12
A Hofstetter.....1 0 1 1 0 1 1 1 1 1 1 1 0 0 0—10
J C Dunn.....1 1 1 1 1 1 1 0 1 0 1 1 1 1 1—13
J E Dye.....1 1 0 1 1 1 1 1 0 0 1 1 1 0 1—11
J J Schuck.....1 1 1 1 0 1 1 1 0 1 1 1 1 1 1—13
J A McKenzie.....1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Chas Young.....1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—14
M F Hamlin.....1 1 1 1 0 1 1 1 1 0 1 1 1 1 0—12
Geo S Wells.....1 1 1 1 1 1 0 1 1 1 1 1 1 1 1—14
G V Wells.....1 1 0 1 1 0 1 1 0 1 1 1 0 1 1—11
J S Joles.....1 0 1 1 1 1 1 1 1 0 1 1 0 1 0—11
S H Turrill.....1 1 1 1 1 1 1 1 1 1 1 1 1 0 0—13
E Thomas.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
E B McClintock.....1 1 1 1 1 1 1 1 0 1 1 1 1 0 1—13
W Barhongh.....1 0 1 0 1 0 1 1 0 1 1 1 1 1 1—11
Wm Morris.....0 1 1 0 1 1 1 1 1 1 1 1 1 1 1—13
G C Henry.....1 0 1 1 1 1 1 1 1 0 1 1 1 0—12
Geo W Binley.....1 1 1 1 1 1 0 1 1 1 1 1 1 1—14
Chas Ladin.....1 1 1 1 1 1 1 1 0 1 1 1 1 1—14
A B Rodman.....1 1 1 1 1 1 1 1 1 1 1 1 1 0—14
Chas Heber.....0 1 0 1 1 0 1 1 1 0 1 1 0 1—11
N Doxey.....1 0 1 1 0 1 0 w
G T Widger.....1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
G L Hutchen.....1 1 0 1 1 1 1 0 1 0 1 1 1 0—11
Chas F Stock.....1 1 0 1 1 1 1 1 1 1 1 1 0 0 1—12
Leon Ruggles.....1 1 0 1 1 1 1 1 1 1 1 1 1 0 1—13
"Betsey".....0 1 1 1 1 1 0 1 1 1 1 1 1 1 1—13
H P Palmer.....1 1 1 1 1 1 0 1 1 0 1 1 1 1 1—13
W H Smith.....0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
A Turner.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
H Watson.....0 1 1 0 0 1 1 1 1 1 0 w
John Hough.....1 1 1 0 1 1 0 1 0 1 1 0 1 1—11
Wm M Neill.....1 0 0 1 0 w
B Holmes.....1 1 0 1 1 1 1 0 1 1 1 1 1 1—13
L Harms.....1 1 1 1 1 1 1 1 0 1 1 1 1 1—14
A F Smith.....1 1 0 1 1 1 1 1 0 1 1 1 1 1—13
A Brooks.....0 1 1 1 1 0 0 w
A W Bruner.....0 1 1 1 1 1 0 0 w
Lew Weekley.....1 1 0 0 1 0 w
Capt Morris.....1 0 1 1 1 0 1 1 0 1 1 1 1—12
N T Wells.....1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
W G Leggert.....1 1 1 1 1 1 1 1 1 1 0 1 1 1—14
Wm Butterfield.....1 1 1 1 1 1 0 0 1 1 1 0 0 1—11

Ties on fifteen—26 yards.

Thomas.....1 1 0 1 1—4 Turner.....1 1 1 0 1—4
Widger.....1 0 1 0 w Wells.....1 1 1 0 1—4

At 31 yards Thomas and Turner tied on six birds straight and divided first money.

Ties on fourteen—25 yards.

Cunningham.....1 1 1 1 1—5 Ladin.....1 1 1 1 1—5
Kimble.....1 1 1 1 1—5 Leggert.....1 1 1 1 1—5
Wells.....1 1 1 1 0—4
Others withdrew.

At 31 yards Cunningham and Kimble tied again on four, and Cunningham won second money with four out of five.

Ties on thirteen—26 yards.

Dunn.....1 1 1 1 0—4 Ruggles.....1 1 1 1 1—5
S B Turrill.....1 1 1 1 1—5 Betsey.....1 1 1 1 1—5
Wm Morris.....1 1 1 1 1—5

At 30 yards Betsey won third money with four out of five.

Match No. 4—Ten single rises from ground traps; English rules; entrance $5; four prizes—40 per cent. to first, 30 per cent. to second, 20 per cent. to third, 10 per cent. to fourth.

Turrill.....1 0 1 1 1 1 1 1 1 1—9 Doup.....1 0 1 1 0 1 1 1 1 1— 8
Dr Henry.....0 1 1 1 1 0 1 1 1 1—8 Widger.....0 0 1 0 0 1 1 1 1 1— 6
Wells.....0 1 0 1 1 1 1 1 1 1—8 Cunningh'm 0 1 0 0 1 1 1 1 1 1— 7
Leggert.....0 1 0 1 1 0 1 1 1 1—7 Price.....1 1 1 1 1 0 1 0 0 0— 6
Butterfield..1 0 0 1 0 0 0 w McArthur...1 0 0 1 1 0 1 0 0 0— 4
Turner.....1 0 1 1 1 1 0 0 1 1— 7 Brooks.....1 1 0 0 0 1 0 0 1 1— 5
Nichols.....1 0 0 1 0 1 0 0 0 0— 8 Watts.....1 1 1 0 1 1 1 1 1 1— 9
Banworth..1 1 0 0 1 0 0 1 1 1— 0 Thorpe.....1 0 1 0 1 0 1 0 1 1— 6
Wells.....1 0 1 1 0 0 1 0 1— 6 Flint.....0 0 1 1 0 1 1 1 1 1— 7
Sharrow.....1 1 0 0 0 0 w Dunn.....1 1 1 1 1 1 0 1 0 1— 8
Crawford...1 1 1 0 1 0 1 0 w McKeozie..0 0 1 0 1 0 w
Stock.....1 1 1 1 1 0 0 0 0 1— 6 Miller.....1 0 0 1 0 0 1 1 1 1— 0
Smith.....1 0 0 1 1 0 1 1 1 1— 7 Holmes.....1 1 0 1 0 1 1 0 1 1— 7
Betsey.....0 1 1 0 1 1 1 0 0 1— 6 Palmer.....1 1 1 0 1 1 1 1 1 0— 8
Wasson.....1 0 1 1 0 1 0 1 0 1— 6 Davis.....1 1 1 1 1 0 0 0 1 1— 7
Kimble.....1 0 0 1 1 0 1 1 1 1— 7 Lewis.....0 0 0 0 w
Ladin.....1 1 1 1 0 1 1 1 0 1— 8 Young.....1 1 1 0 0 1 1 1 1 1— 8
Porter.....0 0 0 1 0 w Ruggles.....1 0 0 1 1 1 0 0 1— 6
Binley.....0 1 0 1 0 1 1 1 1 1— 7 Schuck.....1 0 1 0 0 0 1 1 1 1— 6
Bruner.....1 1 0 0 1 0 1 0— 5 Hough.....1 0 0 1 1 0 1 1 0 0— 5
Rodman.....0 0 1 1 1 1 0 1 0— 6 Panley.....0 1 0 0 1 0 w
Thomas.....1 1 1 0 1 1 0 0 1 1— 7

S. H. Turrill, of Chicago, and F. Watts, of Delivan, divided first money, $51.60.

Ties on eight.

Dr Henry.....1 1 1 1 0—4 Doup.....1 1 1 1 1—5
Others withdrew.

Ties on seven, three birds each—Smith, Thomas, Cunningham and Davis killed two out of three each and divided third money. Others withdrew.

Ties on six, 3 birds each—Betsey, Widger and Price killed three each and divided fourth money. Others withdrew.

THIRD DAY.

Match No. 5—A team shoot of two members from any organized club in the United States, entered together, for the Merchants' Hotel purse of $25; entrance, price of birds:

Bloomington Club.

Holmes.....1 1 0 1 1 0 0 1 0 1— 0
Widger.....0 1 1 1 1 0 1 1 1 1— 8—14

Delevan Prairie Club.

Watts.....0 0 0 0 0 1 0 0 0 0— 1
Cunningham.....1 1 0 1 1 0 0 0 1 1— 0— 7

Audubon Club, Chicago.

Turrill.....1 1 1 1 1 1 0 1 1 1— 9
Price.....0 1 1 1 1 1 1 1 1 0— 8—17

Buda Club.

Wells.....1 1 1 0 1 1 0 1 1 1— 8
Leggert.....1 1 1 1 1 1 1 0 1 0— 8—10

Beck Island Club.

Harme.....1 1 1 1 1 0 0 1 1 1— 8
Lafin.....1 1 1 0 1 1 1 1 0 1— 8—16

Geneseo Club.

McArthur.....1 1 1 1 0 1 0 1 0 1— 7
Young.....1 0 0 0 1 1 1 1 1 1— 7—14

Quincy Shooting Club.

Hanworth.....1 1 1 1 0 1 1 1 1 1— 9
Austin.....0 1 0 1 1 1 0 1 0 1— 6—15

Franklin, Columbus, Ind.

Doup.....1 1 1 1 1 1 1 1 1 1—10
Turner.....1 1 1 0 1 1 0 0 1 1— 7—17

Maple City Club, Geneseo.

Wells.....1 1 1 1 1 1 0 1 0 1— 8
Thomas.....1 0 1 0 0 1 1 1 1 1— 7—15

Henry Club.

Thorpe.....0 1 1 1 1 0 1 1 1 0— 7
Smith.....1 1 1 1 1 1 1 0 1 1— 9—16

Evergreen City Club, Bloomington.

Beetley.....1 0 1 1 0 1 1 1 1 0— 7
Straight.....1 1 1 1 1 0 0 1 1 0— 7—14

Galesburg Shooting Club.

Brooks.....1 1 0 1 1 0 0 1 1 0— 6
Bradley.....0 1 1 0 0 0 1 0 0 1— 4—10

Monmouth Gun Club.

Regnier.....1 1 0 1 1 1 0 1 0 0— 6
Conrad.....1 0 1 1 1 0 1 1 1 0— 7—13

Lacon Club.

Lester.....0 1 1 1 1 1 1 0 1 1— 8
Stire.....0 0 0 1 1 0 0 0 0 0— 2—10

Peoria Shooting Club.

Kimble.....1 0 1 1 1 1 1 1 0 1— 8
Stock.....1 1 1 0 1 1 1 1 1 1— 9—17

Jamestown Club.

Johnston.....1 0 0 1 1 1 1 1 1 1— 8
Ferry.....1 1 1 0 1 0 1 1 1 1— 6—14

Gem City Gun Club, Quincy.

Engel.....0 0 1 1 0 1 1 1 1 1— 7
Crawford.....1 1 1 1 0 1 1 1 1 1— 9—16

Brimfield Gun Club.

Miley.....1 1 0 1 0 1 1 0 1 0— 0
Camp.....0 0 1 0 0 1 0 0 0 1— 3— 9

Galesburg (Jr.) Club.

Hayes.....0 1 0 1 1 1 1 0 0 0— 5
Leggert.....1 0 1 1 0 1 0 0 1 1— 6—11

Chillicothe Shooting Club.

Heaton.....1 1 1 0 1 1 1 1 1 1— 9
Milkey.....1 1 1 1 1 1 1 1 1 1—18—19

Indianapolis Club.

Dunn.....0 0 1 1 0 0 1 1 0 1— 5
Dye.....0 0 0 1 0 1 0 1 0 0— 4— 9

Paris Shooting Club.

Davis.....1 1 1 1 1 1 1 1 1 1—10
Hamlin.....1 1 0 1 0 1 1 1 1 0— 7—17

Kennicott Club, Chicago.

Price.....1 0 1 1 1 1 1 1 1 1— 9
Gillespie.....1 1 1 1 1 1 1 1 1 1—16—19

Chillicothe and Kennicott teams divided the money.

Match No. 6.—Grand team shoot of the tournament for a Citizen's Purse of $300 in gold, open to any organized club in the United States. Each club represented by a team of four members of one club, organized prior to June 1, 1878; 15 single rises each at 21 yards; entrance, price of birds; first prize, $150; second prize, $100; third prize, $50. This shoot was one of the most hotly contested matches of the tournament.

Lacon Shooting Club.

Stire.....0 1 1 1 0 1 1 0 1 1 1 0 1 0 1—10
Lester.....0 0 1 1 1 0 1 1 1 0 1 1 1 0 1—10
Shaw.....1 1 1 1 0 1 1 1 1 1 1 0 1 1 1—13
Lane.....1 1 1 1 1 1 1 1 1 1 0 1 1 1 1—14—47

Delevan Prairie Club.

Clark.....1 1 1 0 1 1 1 0 1 1 1 1 0 1 1—12
Watts.....1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Cunningham.....1 1 1 1 1 1 1 1 1 1 0 0 1 1—13
Flint.....1 1 0 1 1 0 1 1 0 0 0 0 1 1 1— 9—48

Geneseo Sportsmen's Club.

McArthur.....1 0 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Doxey.....1 1 1 1 1 1 0 1 1 1 1 0 1 1 1—13
Schuck.....1 1 1 1 1 1 1 0 1 0 1 1 1 1 1—13
Young.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15—55

Maple City Gun Club, Geneseo.

Wells.....0 1 1 1 1 0 1 0 1 0 1 1 1 1 1—11
Thomas.....1 1 0 1 1 1 1 1 1 1 1 1 1 1 1—14
Wm Morris.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Joles.....1 1 1 1 1 1 1 1 1 1 0 1 1 1 1—14—54

Franklin Shooting Club, Indianapolis, Ind.

Neill.....0 0 1 1 1 1 1 1 0 1 1 1 1 1 0—11
Doup.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Smith.....1 1 1 0 1 1 1 1 1 1 1 1 0 1 1—13
Turner.....1 1 1 1 0 1 1 0 1 1 1 1 1 1 0—12—51

Audubon Club, Chicago.

Gillespie.....1 1 1 1 1 1 0 1 0 1 1 1 1 1 1—13
A Price.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
E Price.....0 1 1 1 1 1 1 1 1 1 1 1 1 1 1—14
Turrill.....1 1 1 1 1 1 0 1 1 1 0 1 1 1 1—13—55

Bloomington Gun Club.

English.....0 1 1 1 1 0 0 1 1 1 1 1 0 1—11
Thomas.....1 0 1 1 1 0 1 1 0 1 1 1 0 1 0—10
Hutchins.....1 0 1 1 0 0 0 0 1 1 0 0 1 1 1— 8
Widger.....w —29

Quincy Shooting Club.

Hanworth.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Crawford.....1 1 0 1 1 1 1 0 1 1 1 1 1 1 1—13
Miller.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Austin.....1 1 1 1 1 0 1 1 0 1 0 1 1 1 1—12—55

Evergreen City Shooting Club, Bloomington.

Bentley.....1 1 0 1 1 1 0 1 0 1 1 1 1 1 1—12
Straight.....0 1 0 1 1 1 1 1 1 1 1 1 1 1 1—13
Hutchins.....0 0 1 0 1 1 1 0 1 0 0 0 1 1 0— 7
Andrews.....w —32

Buda Shooting Club.

Butterfield.....1 1 0 1 0 1 0 1 1 1 1 1 1 1 1—12
Wells.....1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—14
Leggett.....1 1 1 1 1 1 1 0 1 1 1 0 1 1 1—13
Nichols.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15—54

Limestone Shooting Club.

Glenn.....0 1 1 1 1 1 1 1 1 1 1 0 1 1—13
Johnston.....0 1 1 1 1 0 1 1 1 1 1 1 1 1—12
Grant.....0 1 1 1 1 0 1 1 1 1 1 1 1 0—12
Ferry.....1 1 1 1 1 1 1 1 1 1 1 0 1 1—14—51

Peoria Shooting Club.

Stock.....1 0 0 0 0 1 1 1 1 1 1 1 1 0 0— 9
Haugh.....1 1 1 1 1 0 1 1 1 1 1 1 1 1—14
Nicholson.....1 1 1 0 1 0 1 1 1 1 1 0 1 1 1—12
Kimble.....1 1 1 0 1 0 1 0 1 1 1 1 1 1 1—13—48

Monmouth Gun Club.

Regnier.....0 1 1 0 1 1 1 1 1 1 1 1 1 1 1—13
Wells.....1 1 1 1 1 1 0 1 1 1 1 0 1 1 1—13
Conrad.....1 1 1 1 1 1 1 1 1 1 1 1 0 1 1—14
Allen.....1 0 1 0 1 1 1 1 1 1 1 1 1 1 1—13—2

Indianapolis Shooting Club, Ind.
Dunn..............................
Dye..............................1 1 0 1 0 0 1 0 1 1 1 1 1 1 1—11
Bailwig..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Paull..............................1 1 1 1 0 1 1 0 1 1 1 0 1 0 1—11
..............................1 1 1 1 1 1 1 1 1 0 1 0 1 1 1—13—50

Central City Shooting Club, Peoria.
Shoeoholder..............................
Lammer..............................1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—14
Reinhardt..............................1 1 1 1 1 1 1 1 1 1 0 1 1 1 1—14
Winke..............................1 1 1 0 1 1 1 1 1 1 1 1 1 1 1—14
..............................1 1 1 1 1 1 0 1 0 0 1 0 1 0 0— 9—51

Galesburg Shooting Club.
Bronks..............................
Fitch..............................1 0 1 1 1 0 1 1 1 0 0 1 1 1 1—11
Wakley..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Bradley..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
..............................1 1 1 1 1 0 1 1 1 0 0 1 1 1 0—11—52

Havana Shooting Club.
Ballentine..............................
Hamlin..............................1 1 1 0 1 0 1 1 1 0 1 1 1 1 1—13
England..............................1 1 1 1 1 1 1 1 0 1 1 1 1 1 1—14
Thorpe..............................1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—14
..............................1 0 1 1 1 1 1 0 1 1 1 1 1 1 0—13—52

Henry Shooting Club.
Ruggles..............................
Thorpe..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Doty..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—16
Lovett..............................0 1 1 1 1 1 0 1 1 1 1 1 1 1 1—13
..............................0 1 1 1 0 1 1 1 1 0 1 1 1 1 1—12—55

Rock Island Gun Club.
Harms..............................
Schmidt..............................1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
Rodwer..............................1 1 1 1 1 1 1 1 1 0 0 0 1 1 1—12
Laflin..............................1 1 1 1 1 1 0 1 1 1 1 1 1 1 1—14
..............................0 1 1 1 0 1 1 0 1 1 1 1 1 1 1—12—53

Ties on fifty-five—26 yards.

Geneseo Shooting Club.
McArthur..........1 1 1 1 1—5
Doxey..........1 1 1 1 1—5
Schuck..........1 1 0 0 1—3
Young..........0 1 1 1 1—4—17

Quincy Shooting Club.
Hauworth..........0 1 1 1 1—4
Crawford..........1 1 0 1 1—4
Milder..........1 1 1 1 1—5
Austin..........1 1 1 1 0—4—17

Audubon, Chicago.
Gillespie..........0 1 1 1 1—4
A Price..........1 0 1 0 1—3
E Price..........1 1 1 1 1—5
Turrill..........1 1 1 1 1—5—17

Henry Shooting Club.
Ruggles..........0 1 0 1 1—3
Thorpe..........1 1 0 1 1—4
Doty..........1 1 1 1 1—5
Lovett..........0 0 1 0 1—2—14

Second ties—31 yards.
Geneseo Shooting Club.
McArthur..........1 0 1 0 0—2 Schuck..........1 0 1 0 0—2
Doxey..........1 1 1 1 1—5 Young..........1 1 0 1 1—4—13

Audubon.
Gillespie..........0 1 1 1 1—4 E Price..........1 1 1 1 0—4
A Price..........1 1 1 1 1—5 Turrill..........1 0 1 0 0—2—15

Quincy.
Hauworth..........1 1 0 1 1—4 Miller..........1 0 1 1 0—3
Crawford..........0 1 0 1 0—2 Austin..........1 1 0 1 1—4—13

Audubon, Chicago, first; Maple City and Buda teams divided second.

Ties on fifty-three—26 yards.
Monmouth.
Regnier..........1 0 1 1 1—1 Conrad..........1 0 1 1 1—4
Wells..........1 0 1 1 0—3 Allen..........1 1 1 1 0—4—15

Three of the members of the Rock Island Club, which tied the Monmouths on third money, having gone home, Thos. Laflin shot at five birds as follows—0 1 0 1 0—2, and the Monmouths walked away with third money, $59.

Match No. 7—Sweepstakes; entrance $7.50, including birds; purse, $115.50; $40.20 to first, $34.65 to second, $23.10 to third, $11.55 to fourth; ten single rises each; Peoria rules to govern:

Widger.....1 1 1 1 1 0 1 0 1 0— 7 Shaw.......0 1 1 1 1 0 1 0 1 0— 5
Kimote.....1 1 1 1 1 1 1 1 1 1—10 Lane.......1 0 0 1 1 1 1 0 1 1— 7
Ferry.......1 0 1 1 1 0 0 0 1 1— 6 Palmer.....0 1 0 1 1 1 1 1 1 1— 8
Turrill......1 1 1 1 1 1 1 0 1 0— 8 Stire.......0 1 1 1 1 0 1 1 1 1— 8
McCulloock.0 1 1 0 0 0 1 1 1 1— 6 A Price.....1 1 1 1 1 1 1 1 1 1—10
Turner......1 1 1 1 1 1 1 1 1 1—10 Gillespie....1 1 1 1 1 1 0 1 1 1— 9
Cunningh'm1 1 1 1 1 1 1 0 1 1— 0 Stock.......0 1 1 1 1 1 0 1 1 1— 8
Donp.......1 1 1 1 1 1 1 1 1 1—10 McArthur...1 1 1 1 1 1 1 1 1 1—10
Schuck.....1 1 1 1 1 1 1 1 1 1—10 Shoenuelder0 1 0 1 1 1 1 1 0 0— 6
E Price.....0 1 1 0 0 1 1 1 1 1— 7 Hamlin......1 1 1 1 1 0 1 1 1 1— 9
Thomas.....1 1 1 1 1 1 1 0 1 1— 9

Ties on ten—26 yards.
Kimble..........1 1 1 1 0—4 Schuck..........1 1 1 1 1—5
Turner..........1 1 1 1 1—5 Price..........1 1 1 1 0—4
Donp..........1 1 1 1 0—4 McArthur..........1 1 1 1 1—5

Second tie—31 yards.
Turner..........1 1 1—3 McArthur..........0 w
Schuck..........1 1 0—2

A. Turner won first money, $16.20.

Ties on nine—26 yards.
Cunningham..........1 0 0 0 w Gillespie..........1 1 1 1 0—4
Thomas..........1 1 0 1 1—4 Hamlin..........1 0 1 0 w

Thomas and Gillespie divided second money, $34.65.

Ties on eight—26 yards.
Terrill..........1 0 1 1 0—3 Stire..........1 1 0 1 1—4
Palmer..........1 0 1 1 1—4 Stock..........1 0 1 0 0—2

Palmer and Stire divided third money, $23.10.

Ties on seven—26 yards.
Widger..........1 1 0—2 Lane..........1 1 1—3
E Price..........1 1 1—3

Lane and Price divided fourth money, $11.55.

The weather was good, and the tournament was a grand success. The Peoria House purse of $25, for the person making the best average score in the shoots proper, was awarded to A. Turner, of Franklin, Ind., his score standing 51 out of a possible 55.

GEO. W. BAKER, Sec.

ILLINOIS—*Tuscola, June* 20.—Match between teams of Tuscola and Arcola, 18 yards; Bogardus screened traps and rules:

Arcola Team.
Ward..........1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—18
Beal..........1 0 0 1 1 1 1 0 1 0 1 0 1 1 1 1 1 1 0 0—13
Boyd..........0 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 0 1 0 1—15
McCann..........1 0 1 1 1 0 1 1 1 1 1 1 1 0 1 0 1 1 1 0—15
Pilars..........1 0 1 1 1 1 1 0 1 1 1 1 0 0 0 1 0 0 1 1—13
Ervin..........1 1 1 1 0 1 1 1 0 1 0 1 0 1 0 0 1 1 0 0—12—86

Tuscola Team.
Jewell..........1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 0 1—17
Russell..........0 1 1 0 1 1 0 0 1 1 1 1 0 1 0 0 1 1 1 1—13
Griswold..........1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1—16
Almy..........1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1—18
Sandford..........0 1 1 1 1 1 1 0 1 0 0 0 1 1 1 0 0 0 1 1—12
Woody..........1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1—17—95

CANADA—*Ailsa Craig, June* 20.—Match between Granton and Ailsa Craig clubs; glass balls, Bogardus trap, 18 yards rise, Bogardus rules; weather cloudy:

Granton Club.
Sweet........0 0 1 1 1 0 1 1 1 1—7
Culbert......1 0 1 1 1 0 1 1 1 1—8
Lawton......0 1 1 1 0 0 0 0 1 1—5
Brooks.......1 1 0 1 0 1 0 1 1 0—6
Total..........26

Ailsa Craig Club.
Smith........0 1 1 1 1 1 1 1 1 1—9
Allen........1 1 1 1 1 1 0 1 1 1—9
Munro........1 0 1 0 1 1 1 1 1 1—8
Drought.....0 0 1 1 1 0 1 1 1 1—7
Total..........33

CANADA.—A gun club has been formed in the city of London, Ont. President, A. S. Murray; Vice-President, W. Humpidge; Secretary and Treasurer, Charles Stone.

AH-MIK.

MAINE—*Kennebunk, June* 24.—Regular weekly practice, K. F. and G. P. A.; 18 yards rise, Bogardus rules and trap:

Larrabee....1 1 1 1 1 0 1 0 1 1— 8 Drown.......0 1 1 0 0 0 0 1 0 0— 3
Stanley.....1 1 0 1 1 1 1 1 1 1— 9 Pitts........0 0 0 1 0 0 0 0 0 0— 1
Lord........1 0 1 1 0 1 0 1 0 1— 0 Cushman....1 1 1 1 0 0 1 1 1 0— 7
Stevens.....0 0 0 0 0 0 0 0 0 0— 0 Littlefield...1 1 0 1 0 0 1 1 0 1— 6
Cloudman..0 0 0 1 1 0 1 0 1 1— 5 Gray........0 1 0 0 0 0 1 0 1 1— 4

NARRAGANSETTS VS. PHILADELPHIAS.—A match between these clubs at Andalusia, Pa., last Saturday, was won by the Narragansett Gun Club with a score of 99 out of 125 birds to their opponents' 95.

TENNESSEE—*Murfreesboro, June* 13.—Shooting tournament. First match. Sweepstakes, 21 yds rise, Bogardus rules, Bogardus and Card's rotating traps:

Mosely......1 1 1 1 1 1 1 1 1 1—10 W Nelson..0 1 1 0 1 0 1 1 1 1— 7
Mitchell....1 1 0 1 1 1 1 1 1 1— 9 Rhodes....1 1 1 1 1 0 1 1 1 1— 9
Peyton......1 1 1 1 1 1 1 0 1 0— 8 Johnson....1 1 1 1 0 1 1 1 1 0— 8
Valentine...0 1 1 1 0 0 1 1 1 0— 6 Page.......1 0 0 0 1 0 0 1 1 1— 5
Williams....0 1 1 1 1 1 0 0 0 1— 6 Edwards....1 0 0 1 1 1 1 1 1 1— 8
J H Nelson.1 0 0 1 1 1 1 0 1 1— 7 Kimbro....0 0 1 0 1 1 1 1 0 1— 6

Stewart.....1 0 1 1 1 1 0 1 1 1— 8 Arnold......1 1 1 1 1 1 1 1 0 1— 9
Booth.......1 1 1 0 1 0 0 0 1 1— 6 Miller......1 0 1 1 1 1 1 1 1 1— 9
Smith.......1 1 1 1 1 1 0 0 0 1— 7 Hager.......1 1 0 1 1 1 1 1 1 1— 9
Childress...1 1 1 1 1 0 1 1 1 1— 9 Harding....1 1 0 1 0 1 1 0 0 1— 6

Tie of 9 won by Arnold with 3 out of 5; tie of 8 won by Peyton with 4 out of 5.

Third match—21 yds:
Nicholson..........1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1—22
Buckholz..........1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 0 1 1 0 1 1 0 1 1—21

Fourth match—Teams; 21 yds:
Nicholson.........1 1 1 1 1— 5 Buckholz.........1 1 0 0 1— 3
Gilbert.........1 1 1 1 1— 5 Mitchell.........1 1 1 1 0— 4
Bitterleck.........1 1 0 1 1— 4 Meadows.........0 1 1 1 1— 4
Phillips.........1 1 1 1 1— 5 Walterman.........1 1 1 1 1— 5
Ridge.........1 1 1 1 1— 5 Maskey.........1 1 1 1 1— 5
Lyle.........1 1 1 1 1— 5 Valentine.........1 1 1 1 1— 5
Nobel.........1 1 0 1 0— 3 Brackmann.........1 1 1 0 1— 4
Wallman.........1 1 1 1 1— 5 Carter.........1 0 1 1 1— 4
Total..........37 Total..........34

Fourth match—Sweepstakes; 5 balls; 21 yds:
Watterman.........1 1 1 1 1—5 Lyle.........1 1 1 1 1—5
Burkholz.........1 1 1 1 1—5 Carter.........1 1 1 1 1—5
Mitchell.........1 1 1 1 1—5 Noble.........0 1 1 0 0—2
Phillips.........0 1 1 1 1—4 Maskey.........0 1 0 0 0—1

Ties on five:
Watterman.........1 0 1 0 1—3 Valentine.........1 1 1 1 1—5
Maskey.........1 1 1 1 1—5 Williams.........1 0 1 1 1—4
Ridge.........1 1 1 1 1—5 Bush.........1 0 1 1 1—3
Meadows.........1 1 1 1 1—5

Watterman and Meadows tied twice again on 5 each, Meadows winning third shoot off with 3 straight.

Fifth match—Sweepstakes; double balls; 18 yds rise:
Mitchell..........11 11 11—6 Meadows..........11 11 00—4
Carter..........11 11 00—4 Williams..........10 11 10—4
Burkholz..........10 11 11—5 Phillips..........00 10 10—2
Valentine..........11 10 11—5 Noble..........10 10 00—2
Watterman..........11 10 10—4 Mocker..........10 00 00—1

Sixth match—Sweepstakes; double balls; 18 yds rise:
Valentine..........10 11 11—6 Carter..........10 10 00—2
Mitchell..........11 11 00—4 Phillips..........00 10 11—3
Gilbert..........00 11 11—4 Watterman..........10 10 11—4
Burkholz..........10 10 11—4 Noble..........00 10 10—2

J. D. H.

Match between the Clarksville Gun Club and the Rutherford County Gun Club, 250 balls to be shot at by each team; Card's Rotary and Bogardus traps; Bogardus rules; 21 yds:

Rutherford County Club.
A Kimbrough...0 1 0 0 0 0 1 1 1 1 1 1 1 1 1 0 0 1 0 1 1 0 0 1 1 0 1 1 0 1 0 1 0 1 0—20
H Childress......0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 0 0 1 0 1 0—21
H O Smith......1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1—31
J H Nelson......0 1 1 0 1 0 1 1 0 1 1 1 0 1 1 0 0 0 0 1 0 1 1 0 1 1 1 1 0 1 0 1 1 0—21
A Harding......1 0 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 0 1 0 1 1 0 1 0 1 1 1 1 0 0—25
A B Peyton......0 0 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 0 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1—25
M A Nelson......1 0 1 0 0 0 1 1 1 1 1 1 1 1 0 0 1 0 1 1 0 1 0 1 1 1 0 1 0 0 1 1 1 1 1 1—23
Total..........166

Clarksville Gun Club.
R D Mosely......0 1 0 0 0 1 0 1 1 0 1 1 1 0 0 1 0 0 0 1 1 1 0 1 1 1 0 0 1 1 1 0 1 0 1—19
E B Williams......1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—31
N A Johnson......0 0 0 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 [illegible] 0 1 0 1 0 1 0 1 1 1 0 0 0 1—22
W B Stewart......1 0 1 1 0 1 1 1 1 0 1 0 1 0 0 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1—25
R N Rhodes......1 0 1 0 0 1 1 1 1 0 1 1 1 1 1 0 0 0 1 1 1 0 0 1 1 1 1 1 1 1 0 0—23
Henry Ligon......0 1 1 0 1 0 0 0 1 0 0 1 0 1 1 0 1 0 0 1 0 0 0 0 0 1 1 1 0 1 0 0 0 0 1—14
J C Brooks......1 0 0 0 0 1 1 0 1 1 1 1 0 1 0 1 1 0 1 0 1 0 1 1 0 1 1 1 1 0 1 1 1 1 1 0—22
Total..........156

As there were seven shooters on a side at 35 balls each there remained five balls to each side to be shot at, so it was agreed that the highest score in each team should shoot at five balls and add the number he might break to his score. Thus it is that the count of Williams and Smith are so large.

TEXAS—*Marshall, June* 21.—Sweepstakes, 12 birds each, plunge traps six single rises at 25 yards, and three double at 21 yards. Wild pigeons; clippers.

Elstner....1 1 1 1 1 1 11 11 11—13 Pope......1 1 0 0 1 1 00 10 11— 7
Stuart....1 1 1 1 1 1 11 10 10—10 Newlin....0 1 1 0 1 1 01 11 00— 7
Turner....0 0 1 1 1 0 11 11 10— 9 Blalock...1 1 0 0 0 1 10 10 11— 7
Haggar....1 1 0 0 1 0 11 11 10— 8 S Austin. 0 1 0 1 0 1 10 00 11— 6
Phillips...1 1 1 1 0 0 11 00 11— 8 E Austin..0 0 1 0 0 1 11 01 00— 5

After this a sweep was shot with eight entries, two birds each at 30 yards rise. Mr. Stuart, being the only one that killed both his birds, took the prize.

VENATOR.

SHAKOPEE SHOOTING CLUB.—*Shakopee Falls, June* 17.—Shoot took place on June 15; 18 yards rise; Bogardus rules.

President Wm. Willson..........11 11 11 11 11—10
Treasurer Jno McMullen..........11 11 11 00 01— 7
Secretary Chas Bornarth..........01 01 01 01 01— 5
H J Peck..........10 11 11 11 11— 9
F J Lord..........01 11 01 11 10— 7
H Heintzelman..........11 11 11 11 11—10
L C Cummings..........00 00 00 10 11— 3
M M Tuels..........11 11 01 11 01— 6
Geo Kinsio..........01 11 01 10 11— 7
A F Priest..........11 10 00 11 11— 7
Ed Gellenbeck..........11 11 11 11 11—10

Heintzelman and Gellenbeck tied on nine at 21 yards, the latter winning with two at 26 yards. Mr. L. C. Cummings made the following score at 26 balls, 18 yards, to-day:

L C Cummings....11 11 10 10 11 11 11 11 11 11 10 11 11 11 11—23

ST. PAUL TOURNAMENT.—The Minnesota State tournament at St. Paul, which closed 21st, resulted in the following scores:

Veazle......1 * 1 1 1 1 1 1 1 1— 9 Huddleston.1 0 * 1 1 0 1 * 1 0— 5
Camp........0 0 * 1 1 1 1 1 * 1— 6 Dreis.......1 1 1 0 1 1 1 1 1 0— 8
Judd........0 0 1 1 1 1 0 1 1 1— 7 Uline.......1 1 1 1 1 1 1 1 1 1—10
Poehler....1 1 1 1 1 0 * 1 1 1— 9 Davis.......1 1 0 * * 1 1 1 1 1— 7
Paine.......1 1 1 1 1 0 1 1 0 1— 8 Zimmerman1 1 1 1 1 * 1 1 1 1— 9
Frankenf'ldt 1 1 1 0 1 0 1 1 0— 7 Morse.......1 1 0 1 * 1 0 1 0 1— 0
Taber.......1 0 1 0 1 1 0 1 1 1— 7 Wilde.......1 1 1 1 0 1 1 1 1 1— 9
Butler......1 0 1 1 1 1 1 1 1 1— 9 Taylor......1 0 1 1 1 1 1 1 1 1— 9
Baldwin....1 1 0 1 1 1 1 1 1 1— 9 Van Vliet...1 1 0 1 1 1 1 1 1 1— 9
Mitchell....0 0 1 1 1 1 1 1 1 0— 7 Benson......1 * 1 0 1 1 1 1 1 1— 7
Cundy......1 0 1 1 1 1 1 1 1 1— 8 Castle......1 1 1 1 1 1 1 1 1 1—10
Legreve....1 1 1 1 1 1 1 0 1 1— 9 Wheeler....1 0 * 0 1 1 1 1 1 1— 7
Sisson......1 1 0 1 0 1 1 0 1 1— 7 Hart........1 1 1 1 1 1 1 1 1 1—10
Day........1 1 0 1 1 1 1 1 1 1— 9 Warner......1 1 1 1 1 1 1 1 1 1—10
Cummings..1 1 1 0 0 1 0 0 0 0— 4 Lawrence...1 1 0 1 1 1 1 1 * 1— 8
Beaupre....1 1 1 1 1 1 1 1 1 1—10 Pfister......1 1 * 1 0 1 1 1 1 1— 8
Aldrich.....1 1 1 1 1 0 * 1 1 0— 7

In ties on ten Beaupre won first with five straight. Ties on nine—Poehler, Butler and Baldwin tied again on five, Poehler winning second shoot off with five. Ties on eight—Paine and Cundy tied again on four and divided. Ties on seven, Frankenfeld won with five.

Second Match—21 yards:
Aldrich.....1 0 1 1 1 1 1 1 1 1— 9 Frankenf'ld0 0 1 1 1 0 1 1 1 1— 7
Butler......1 1 * 1 1 0 1 0 1 1— 7 Poehler.....0 1 1 1 1 1 * 1 1 1— 8
Tabor.......1 1 0 1 1 1 1 0 1 1— 8 Beaupre.....1 1 1 0 1 * 1 1 1 1— 8
Benson......1 0 0 1 1 1 1 1 1 1— 8 Taylor......1 0 0 0 1 0 1 0 0 1— 4
Sisson......1 0 1 0 1 1 1 0 0 1— 6 Uline.......1 1 1 1 1 1 0 1 1 1— 9
Legreve....1 0 0 1 1 1 0 1 1 1— 7 Huddleston.1 1 1 1 0 0 1 1 1 0— 7
Mairs.......0 0 1 1 1 1 0 * 0 0— 4 Cummins...0 0 0 0 0 0 1 0 0 0— 1
Meloy.......0 0 1 0 1 1 1 * 1 1— 6 Pfister......1 0 1 1 1 1 1 1 1 1— 9
Day.........1 0 1 0 1 0 1 1 1 1— 7 Becker......0 1 0 0 1 0 1 0 0 0— 3
Mitchell....1 0 1 1 0 1 1 1 1 1— 8 Zimmerman0 1 1 1 1 1 1 1 1 1— 9
Cundy......1 0 1 0 1 1 0 0 1 1— 6 Wheeler... 1 0 1 1 1 0 1 0 1 1— 7
Baldwin....0 1 1 1 1 1 1 1 1 1— 9 Castle......1 1 0 1 1 1 0 1 1 1— 8
Davis.......* 1 1 * * 1 1 1 1 0— 6 Hart........0 1 1 1 1 1 * 1 1 1— 8
Simmons....1 1 1 1 0 1 1 1 0 1— 8 Mulliken....0 1 1 1 1 0 1 1 1 0— 7
Wilde.......1 1 1 0 0 0 * 1 * 1— 5 Finch.......1 1 1 1 * 1 1 1 1 1— 9

Van Vliet...1 1 1 1 1 1 1 1 1 1—10 Shepard....1 1 0 1 0 1 1 1 0 0— 6
Veazle......1 0 0 1 1 1 1 0 0 1— 6 Follett.....0 0 1 0 0 1 0 1 0 0— 3
Judd.......1 1 1 * 0 * 1 1 0 1— 6 Campbell...1 * 0 1 1 1 1 1 0 1— 7
Paine.......0 0 1 1 0 * 1 1 0 1— 5

In the shoot off Baldwin and Zimmerman tied at 26 yards with five each, Baldwin winning second shoot off at 31 yards with four. Ties on eight—Mitchell, Simmons and Castle tied on four at 26 yards, and Simmons won with four at 31 yards. Ties on seven—Butler and Legreva tied on five at 26 and two at 31, Butler then winning with four at 31. Meloy won ties on six with five at 26.

Third Match—Double rises, 21 yards:
Mitchell......11 11 11 11 10 00— 9 Baldwin.......10 11 11 11 11 11—11
Veazle........11 00 10 11 10 11— 8 Shepard.......10 11 11 10 10 10— 8
Hamilton.....11 10 *1 01 11 1*— 7 Aldrich.......11 11 11 11 11 10—11
Van Vliet.....11 10 10 10 11 11— 9 Uline.........10 00 11 11 11 11— 9
Zimmerman..11 11 11 11 11 11—12 Wilde.........11 10 10 11 11 11—10
Taylor........11 10 11 00 11 10— 8 Huddleston..10 00 1* 11 1* 11— 7
Paine.........11 10 11 01 11 11—10 Pfister........11 11 11 10 01 10— 9
Judd..........10 10 10 1* 10 10— 6 Becker........11 10 00 11 10 10— 7
Butler........11 10 10 11 11 11—10 Day...........10 10 11 1* 11 11— 9
Cundy........00 10 11 11 10 00— 6 Campbell......01 11 11 10 10 11— 9
Frankenfeld..11 11 11 11 01 10—10 Warner.......10 00 01 w
Benson.......11 11 01 10 11 11—10 Castle........10 10 00 10 11 11— 7
Beaupre......00 00 01 11 10 10— 5 Hart..........11 11 11 10 10 11—10
Johnston.....11 01 00 00 01 10— 5 Finch.........10 11 11 01 00 11— 7
Tabor........11 01 00 00 01 10— 7 Wheeler......01 11 00 01 11 10— 7
Poehler.......10 00 10 11 11 11— 8 Lagrove......01 10 00 10 00 10— 4
Rogers........10 00 00 00 10 10— 3 Sisson........11 10 11 11 11 1*—10
Timberlake...10 01 10 10 01 01— 6

Ties on eleven won by Baldwin with five at 21. Ties on ten—Frankenfeld with five. In ties on eight Mitchell and Campbell tied on six and four, Campbell winning with another four. Ties on eight won by Taylor with five at 21 yards.

APOLLINARIS WATER.—Now what is Apollinaris water? A year or so though we read of it in English journals, and heard its excellent qualities extolled, it was an unknown water in America. To-day, however, thanks firstly to its inherent excellence, and secondly to the lavish use of printers' ink, Messrs. F. DeBarry & Co., of 41 and 43 Warren street, New York, have given it such publicity that everybody calls for Apollinaris and drinks it, instead of Congress water. But still the reply is not given us to whence the Apollinaris is derived. In the neighborhood of the Ahr valley, near the village of Heppiogen, there is a hill called Apollinarisberg. Once an old saint blessed this place, and many a votive shrine was dedicated to good old Saint Apollenaris. Vines grew luxuriantly on the hillside, and lucious wine was made. But some time ago the vines, which had borne their rich fruit for centuries, utterly failed. It was not philoxera. Professor Bischoff, of Bonn, the famed geologist and chemist, was called on, and he declared that the vines died from an overdosage of free carbonic acid. "It must be a spring," said the Professor. "Dig there," he added. And dig and delve they did, and out gushed from the recesses of the earth the most sparkling, the most healthful, the most healing of waters—the famous Apollinaris. An English company, seeing its value, entered into the business of bottling it just as it came from the rocks; and now, though this water has been placed on the general market not more than a few years, and in the United States for hardly eight months, its popularity is so great that to-day twice as much more Apollinaris is imported into this country than of all other medical waters. The water is brilliant like molten crystal, goes down the throat like fluid satin, while the constant sparkle of carbonic acid gives it just that amount of piquancy which is so pleasant. Did any of our readers ever "notgohometillmorning?" Of course no one ever did. Well then, did any one of them ever taste the whole copper sheathing of a ship's bottom in his mouth after having taken too much milk the fortnight before? The saint that watched over Apollinaris water for so many centuries before giving it to the world, kept this pure, soothing water for all unfortunate people. One glass of Apollinaris knocks a headache or a *katzenjammer* endways. "More Apollinaris, if you please"—for our stomach's sake.

BOWS AND ARCHERY MATERIAL.—The attention given to archery of late has induced Messrs. Holberton & Co., of No. 107 Fulton street, to import from the first bowyer in England—Aldred—a superb assortment of all the implements in use for this recreation. We have examined bows at Messrs. Holberton's which were unsurpassed for beauty and finish. Here were bows of from four and a half to five feet for women, with six feet bows for men. Spanish jewulth, yew and hickory or snake-wood, and lemon and lance-wood were the woods principally used. There are a good many little trappings which are used with archery, such as finger-stalls, knuckle-protectors, wrist pads and tassels. All these Messrs. Holberton keep in stock, with score-books and cards. In arrows, the true fletcher's work, the selection was beautiful. Mostly, people interested in archery have had to send abroad for choice articles. From the fine collection we saw, the most fastidious follower of old Roger Ascham could be satisfied at No. 107 Fulton street.

$20,000 for $275 Invested!—Drawing, Aug. 24.—The safest and best investment to-day is a share of the "Point Pleasant Land Company," entitling to a beautiful seaside lot at Point Pleasant, N. J. (below Long Branch), one of the most delightful resorts on the Atlantic coast. Each purchaser of a share will, after the drawing, receive a deed for a lot (50 x125ft., or 50x250ft.), which, within a short time, it is confidently believed, will be worth from $500 to $1,200—or one of the five lots with cottages thereon, present value from $1,000 to $5,000, or the handsome new hotel. "Point Pleasant Resort House," valued at $20,000. Price of shares only $275, payable $100 down, balance by installments. If you desire to invest, send for map and full particulars. Address G. Duryee, Agent, 176 Broadway, N. Y.—[*Adv.*

THE DOUBLE-HEADED BABY.—The Aquarium have secured it or them. Whether singular or plural you can't quite decide, though it or their sex is unmistakable. Two girl babies are they, with two pretty little heads joined to one body. Poor minute monstrosities! Will they live and gain notoriety like Chang and Eng, the Siamese prodigies! Go and see them at the Aquarium, and you will be astonished. Double-headed trout we have noticed in quantity at the Aquarium, but these are the first double-headed babies ever exhibited alive.

ARCHERY AND LAWN TENNIS—We are not surprised tha archery is attaining a high place among the out-of-door sports in which our lady friends participate. Besides the amusement afforded by the game, there are very positive advantages in the healthful exercise. The demand for the implements of the sport is increasing, and to meet and foster the demand, Mr. E. H. Horseman, of 80 and 82 William street, N. Y., has a fine display of most excellent archery and lawn tennis goods.

TREE-FELLING MACHINE.—An English firm has invented a tree-felling machine, and at a recent series of experiments to test its powers Mr. Gladstone was present:

The tree-feller had been operating before his arrival, a row of oaks and elms which lay on one side of the meadow attesting its capabilities. When Mr. Gladstone reached the scene, the tree-feller was carried to the base of a solid young oak, between two and three feet in diameter. All the fixing it received was a man thrusting a crowbar into the ground behind to steady it; while a second steadied the saw blade at the free end with his hands until a few strokes gave it a bearing in the trunk of the tree, just clear of the ground. The operation of the saw blade was precisely analogous to that of a carpenter using a ripping saw to cut a sapling close to the ground. In four minutes after steam was turned on the tree fell, and a measurement of the section gave a diameter of three feet 1 inch in the widest part, and two feet 3 inches in the narrowest.

Mr. Gladstone watched the process with a critical eye, and declared that he had been most interested, but that the machine was susceptible of larger application in other countries than in this, Scotland even offering a better field for its operations than England. On being asked by a bystander how long such a tree would take an expert woodcutter to fell, he said he thought it would be very nearly a day's work; but on this point he consulted his son, who seems to have inherited the paternal taste for felling timber. The honorable member for Whitby did not think it was quite a day's work. Then Mr. Gladstone explained to a little circle of interested auditors, in response to queries, or by way of comparing notes with one or two experts among them, that from the kind of the labor six hours' continual wood chopping was a very good day's work. There would be great economy of timber from the use of the machine, as it cut close to the ground; whereas a man must have "face" of at least a foot. His own experience was that oak, though very hard, was not a bad tree to cut, for the grain broke off easily, and did not cling to the axe. Beech was far tougher, that and ash being the two most difficult to fell of our English trees on account of their bending to the axe. Ash was subject to fracture in felling, and he had a splinter of ash that had broken off in this way, in his own experience, two feet eight inches in length. The pleasantest timber to cut was Spanish chestnut, because it came away so freely, the grain breaking easily. Yew was the most horrible thing to cut of all forest trees. Of holly he had no experience beyond a specimen twenty inches in diameter.

AMERICAN TEA.—Recent experiments at the Government Department of Agriculture at Washington would seem to show that we may cultivate as good tea in this country as can be imported from the Flowery Kingdom. Two veteran tea importers of Baltimore, who having spent some years in China were thoroughly acquainted with all the varieties of the tea plant, and the methods employed in curing it, were invited to experiment with the plants at Washington, and the result is thus printed in the *Washington Post:*

"The leaves gathered were the young tips, two or three only being taken from the top of each plant. They were then carried to the laboratory and turned over to Messrs. Gill to be cured. They began operations by placing a portion of them in a sieve and holding it over a pan of boiling water until the leaves were thoroughly wilted. They were then put in a thick cloth and subjected to a heavy pressure to express the juice or sap, which contains a large quantity of tannic acid. When taken from the cloth they formed a solid mass, very glutinous, and somewhat difficult to separate. In this stage the leaves can be made to assume any shape desired, and it is when they are in this condition that the Chinese make them up into the different brands, like gunpowder, imperials, etc. After having been thoroughly separated, the leaves were next 'fired.' This was done by placing them in a tin pan over a gas fire, taking care not to permit the bottom to get hot enough to burn, and gently stirring them with the hand until perfectly cured. When the process was complete, the tea was of a deep green color, and resembled very much Chinese Oolong, or a Japan tea, such as is used by the natives of those countries. In appearance, it compared very favorably with a sample, shown by the Messrs. Gill, which cost $3 per pound in Japan. The whole process did not take an hour from the time the leaves were first plucked, and so soon as boiling water could be procured tea was made and presented to the ladies and gentlemen who had witnessed the experiment. It was pronounced excellent, the experts present saying that the flavor was between that of a high grade of Japan and the finest Moyune China green teas."

DISEASED FISH.—Any one who has seen the graceful snout of a salmon or a trout, especially if he has looked upon it after an hour's exciting spin on a river or Highland loch, will be filled with disgust and, if an angler, with grief, on beholding the horrible head of a smolt figured in the *Gardeners' Chronicle* of May 4. It is positively loathsome. And this is the effect of the disease which has been proving so destructive to the helpless creatures in some of the Northern rivers, especially the Esk, Eden, Kent, and even the Tweed we believe. Mr. Worthington Smith has been making some inquiries into the nature of this disease which is killing not only salmon and trout, but eels, flounders, and other fish. He finds it to be a fungus (*Saprolegnia ferax*), which attacks mainly the head, tail and fins. The scales appear to be covered with a fine white cottony bloom, which at length blinds the fish, envelops the gills, or even entirely closes the gills and mouth. Mr. Smith thinks the reason for the extraordinary abundance of the fungus this year is the unusual mildness of the winter. It seems only to attack the fish in fresh water, those in the estuaries escaping. We trust for the sake of our food supplies as well as on account of our genial friends, the anglers, not to mention the poor fish themselves, that some means will be found of preventing the spread of the disease.—*Nature.*

A NOVEL RUDDER.—The commander of one of our immense ocean steamships must be a man fertile in expedients. The National Line steamship *Denmark*, on a recent voyage from England to this port, when 1,320 miles from New York was struck by a heavy gale, and her rudder carried away. This is what Captain Williams did:

"He first used a drogue, employing for the purpose sixteen feet of spar bound astern by a fourteen-inch hawser, which was worked with the guys through the sheaves on the arms of the main-top-sail-yard, which was placed athwart the quarter-deck. After this had been arranged the ship was brought to the wind and made headway at full speed. When off Shinnecock light, on the 22d inst., they were spoken by a White Star Line steamer, which reported them at Sandy Hook. Meantime, for narrow sea sailing, Captain Williams devised a new steering apparatus. He cut away two iron fidley gates, strapped them together and backed them with wood. These he lashed to a spar which, by means of a derrick, was held in position. Lines were run from it to the ends of the maintopsail yard, placed as before, and then carried to a winch with port and starboard drums, by which the spar could be worked as a rudder and serve its purposes. By means of this contrivance the *Denmark* was able to make nine and a half knots an hour from Shinnecock to the lightship, and came up the bay till taken in tow by tugs."

A PATENT FISH BASKET.—The best part of some stories comes at the very end. For that reason we give only the concluding paragraph of a Sandy Hill, N. Y., yarn:

It's tiresome work following a brook, and thirsty. Toward night, by the time they had reached At. Babcock's, William was nearly parched; so he got over the fence into B.'s yard, started for the well, meeting At. "What luck?" said At. "Good," said Bill, "got thirty nice ones—I'll show you," and he carefully undid the cover and looked into the wicker. As he did so his eyes expanded, his chin dropped and a look of bewildered astonishment overspread his features. It was marvelous! And "still he gazed and still his wonder grew" at the sight—nothing but a few chips, a small hard-head and a piece of broken rail to be seen—not a fin of fish! Raising his head he slowly repeated in a wondering voice: "Chips, stones, piece of rail. It beats the devil!" Babcock approached the basket, looked in, burst into a laugh and thrust his hands clean *through* it. C. had been gazing through that basket at the chips, etc., upon the ground. All day long, with Job-like patience, had this weary fisherman trudged beside and through the brook, catching "thirty nice ones" and depositing them one by one upon the ground, through the basket. After a time Liakum came up. There was a smile upon his face, for he had a good string. He had been following behind William.

DRESSED FISH SKINS.—In the Japanese exhibit at the Centennial, the prepared skins of the shark and sturgeon were very remarkable. The former are much used by the Japanese as handles for their swords, and the skins of the sturgeon for various ornamental purposes. The preparation of the sturgeon skins was remarkably beautiful, the difference of coloring being of the most artistic character. At the Paris Exhibition, Norway will send fish skin gloves, eel skins prepared for harness, with shark skins ten feet long and three feet wide, with whale skins sixty feet long, which can be used for driving hands.

—A child's bed should slope a little from the head to the foot, so that the head may be a little higher than the feet—but never bend the neck to get the head on to a pillow. This makes the child round-shouldered, cramps the veins and arteries, and interferes with the free circulation of the blood. Even where a child is several years old the pillow should be thin, and made of hair, not feathers.

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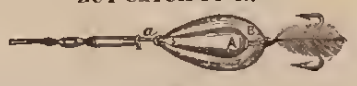

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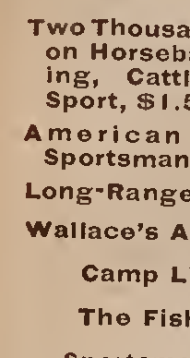

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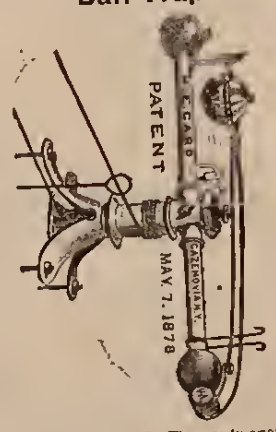

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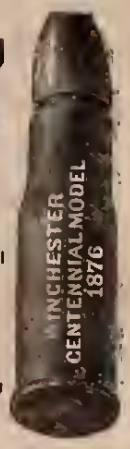

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BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
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Dec14-1y

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The Wisconsin Central Railroad

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HENRY PRATT, G. T. A.
my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in counties new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds send to

A. B. LEET, G. P. A.,
Grand Rapids, Mich.

A. ROPPE,
Eastern Agent, 116 Market St., Phila., Pa.

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TAKE THE

People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, including Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only night line of steamers selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.
EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the office on the pier, at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. R. MAYO, Gen'l Passenger Agent.

St. Louis, Minneapolis AND ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids. C. J. IVES,

E. F. WINSLOW, Gen. Passenger Agent.
General Manager. tf

Hotels and Resorts for Sportsmen.

Grand Fishing.

ROBERTS' SUMMER RESORT,

DOTY ISLAND,

NEENAH, WIS.

FISHING AND ANGLING.—To the sportsman and angler no place in Wisconsin offers greater inducements, the catch of fish during the season being at all times good, and the varieties such as to make it first-class sport. Black and silver bass, muscalonge, pike, pickerel, catfish, sturgeon, rock bass and perch, are the common varieties caught, and as the best fishing grounds are within a few rods of the house, no time is lost in going or coming. Je20 3m

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Sportsmen's Headquarters.

Bromfield House,

AND

LADIES' AND GENTS' DINING ROOMS,

55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER, Proprietor.

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Sportsmen's Routes.

LONG ISLAND RAILROAD, MAY, 27, 1878—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 2:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4:30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 6:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M. Garden City and Hempstead, 9 A. M., 9:30 and 6:30 P. M., and from Long Island City only 9:30 A. M. and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.
J. CHITTENDEN, Gen'l Pass. Agent. Je6 tf

Cromwell Steamship Line.

NEW YORK, HALIFAX, N. S. AND ST. JOHNS, N. F.

THE FIRST-CLASS STEAMSHIPS

CORTES, Capt. Bennett, and
ALHAMBRA, Capt. McIlhiney,

form a regular line between above ports, leaving Pier 19, North River, New York, three times a month. Persons visiting Nova Scotia, Newfoundland or the Lower St. Lawrence will find this the cheapest and most direct route, avoiding changes and detention. Time between New York and Halifax about sixty hours, one half of trip through Long Island and Vineyard Sounds, in smooth water.

Cabin passage, including stateroom and meals, New York and Halifax, $15 gold; New York and St. Johns, $30, gold. Excursion tickets at reduced rates. For schedule of sailings and further particulars apply to

CLARK & SEAMAN,
56 West Street, N. Y.

AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. Je206m

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Hotels and Resorts for Sportsmen.

Invalids' and Tourists' Hotel,

BUFFALO, N. Y.

A new and elegant summer resort; overlooks Lake Erie and Niagara River, and is in the midst of beautiful parks. The Canada shore and the spray from Niagara Falls may be distinctly seen from its Tower. Trains run to the Falls every hour. Climate delightfully cool, equable, and invigorating. The cool lake breezes so temper the atmosphere that no summer day is too warm for comfort, while the temperature at night is appreciated by all who have sojourned here during the warm months.

What man with a family, having once been crowded into some small "sky parlor" in that hotest of all known places—Saratoga—or has been continually jostled and elbowed by the metropolitan throng that rolls alternately in dust and surf at Long Branch, that has vowed never again to repair to summer resorts! And yet with each returning season, comes the query, where shall we go? No place on this continent possesses more advantages for the tourist, pleasure seeker, or those in search of rest and relaxation from the cares of business, than this hotel. 1st, its accessibility. 2d, its cool, bracing and salubrious climate; the thermometer ranging in summer from 65 to 75 degrees Fahrenheit. 3d, The attractions of the hotel and its environs. All these combine to render it the most desirable resort for those in search of relaxation and rest. The architectural features and interior finish of the house are said, by good judges, to be the finest of any hotel in the world. Its furnishing is unique, and superbly rich. Table unsurpassed. Elevator, hot, cold, Turkish, Russian, electric, needle, and other baths; billiard room, bowling alley, speaking pipes communicating from every room with the office; telegraph and R. R. ticket office, and all modern conveniences are provided. Advantages for fishing and boating are unsurpassed. Terms, $3.00, $3 50 and $4.00 per day, according to location of room. Address,

MANAGER INVALIDS' AND TOURISTS' HOTEL,
Buffalo, N. Y.

Mt. Kineo House,

MOOSEHEAD LAKE, ME.

A delightful resort for the sportsman, summer tourist or invalid. Good trout fishing. For circulars address O. A. DENNEN, superintendent, as above, or W. L. CHENERY, 196 State street, Boston, Mass. Je20 6t

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Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. Je6 tf

Hotels and Resorts for Sportsmen.

Sherman House,

(CLARK AND RANDOLPH),

CHICAGO.

Rates reduced to $4 per day for all rooms above the parlor floor, without baths.

Rooms with baths, $3.50, $4, and $4 50 per day.

ALVIN HULBERT, Prop'r.

We challenge any Hotel in the World to show as large and as elegantly furnished rooms as those of the SHERMAN. je20 tf

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NEW SUMMER BOARDING HOUSE

Situated three miles from Bethel Station, in the vicinity of good brook trout fishing. Healthy location and pleasant drives. Address H. R. GODWIN, North Bethel, Maine. Je13t6

"AVON HOUSE," LAKEPORT, N. Y.

Lakeport is handsomely situated on the banks of Oneida Lake, four miles north of Chittenango Station, on the New York Central Railroad. Bathing, boating, fishing and hunting in season. Experienced guides. Steam, sail and row-boats to let; good livery. Special inducements for families by the week. For further particulars apply to or address, J. J. DEMPSEY, Lakeport, N. Y.; formerly of Union Club, also Windsor and Union Square Hotels, N. Y. je13 1t

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CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 1t

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THE BARNEGAT HOUSE,

Forked River, Ocean County, N. J.

The nearest house to the finest fishing and gunning of Barnegat Bay. Superior accommodations for families or transient guests at reasonable rates. Access via N. J. C. R. R. Address S. L. ATKINSON, Manager. Refer to C. Smith, 44 West Broadway. Je20 4t

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Greenwood Lake.

MONTCLAIR & GREENWOOD LAKE RAILWAY.

THE ONLY THROUGH ROUTE TO GREENWOOD LAKE.

Splendid Bass and Pickerel Fishing—Beautiful Lake and Mountain Scenery.

Trains leave New York, foot of Cortlandt and Desbrosses streets, daily (Sundays excepted) at 6:20 A. M. and 4:30 P. M.

Leave Brooklyn, via Annex boats foot of Fulton street, at 8 A. M. and 4 P. M.

Pullman Parlor Car in 4:30 P. M. train.

Through coach daily between Hackensack, Paterson and Greenwood Lake.

Excursion fare from Brooklyn, New York or Jersey City, $2 75. Parties of fifteen or more persons, $2 20 each.

J. F. MACKIE, Gen. Pass. Agent.

Notice to Anglers.

THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle

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Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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THE SUBSCRIBER desires a capitalist or association of gentlemen to join him in the erection of a select family hotel or club house on the most beautiful and eligible situation at Greenwood Lake, N. Y., with from twenty to fifty acres of land, as may be desired, and will take one-third of the purchase price of the property in stock or shares in the enterprise. Choice building sites, with water frontage, also for sale, in plots to suit, on favorable terms. Circulars can be had at office of FOREST AND STREAM. Apply to or address S. CALDWELL, Greenwood Lake, Orange County, N. Y. may16 tf

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BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y. Splendid bass fishing good boating and bathing. Telegraph office in house. Take Montclair and Greenwood Lake Railway.

TRAPHAGEN HOUSE, GREENWOOD LAKE, Orange County, N. Y., L. Y. JENNESS. An excellent family hotel. Also good accommodations for the sportsman. Good boats and every facility for fishing. Je13 3m

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BRADNER HOUSE, GREENWOOD LAKE, ORANGE COUNTY, N. Y., May 15, 1878. Terms—$2 per day, $8 to $10 per week. Free stages for guests to and from the steamboat dock at ARLINGTON to the house. G. S. BRADNER, Proprietor. Je6 3m

Sportsmen's Goods.

GOOD'S OIL TANNED MOCCASINS.

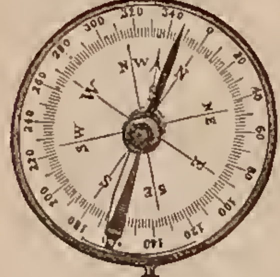
The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article.* Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

PRINCIPAL AGENTS—W. Hulberton & Co., 117 Fulton street, New York; Jos. C. Grubb & Co., 712 Market street, Philadelphia, Pa.; Bradford & Anthony, 374 Washington street, Boston, Mass.

LOST

BECAUSE HE HAD NO

COMPASS.



THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

BOUDREN'S PATENT COMBINATION

Jack, Dash and Fishing LAMP,

For NIGHT HUNTING Deer and other animals, SPEARING FISH. Indispensable on any Boating, Yachting or Camping Trip.

Not affected by Wind, Rain or Jolting. Burns kerosene safely without a chimney. Throws a powerful light 200 feet ahead. As a DASH LAMP for CARRIAGES it has no equal. Fits on any shaped dash or on any vehicle.

PRICE.

Jack and Dash............$6 00
Fishing Lamp............ 8 00

C. O. D., with privilege of examination.

WHITE M'F'G COMPANY,
BRIDGEPORT, Conn.
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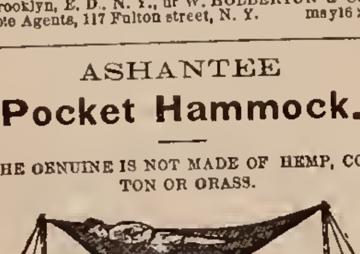
FERGUSON'S

Sportsman's Lantern.

WITH HEAD AND STAFF ATTACHMENTS.
(Patent Applied For.)

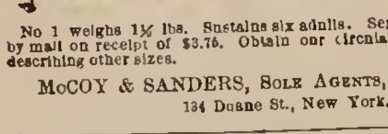


Light, Strong, Compact and very Effective. It is the BEST lantern for Sportsmen and Camping Parties yet offered. UNEQUALLED either as a CAMP lantern, HAND lantern, "HEAD JACK" or "STAFF JACK." Can be worn over any size or style of hat, and can easily be carried in the knap-sack or pack-basket. No chimney, no smoke; cannot be extinguished by wind, rain or jolting. Send for descriptive circular to A. FERGUSON, 137 Wilson street, Brooklyn, E. D., N. Y., or W. HOLBERTON & CO., Sole Agents, 117 Fulton street, N. Y. may16 2m

ASHANTEE

Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.



No 1 weighs 1½ lbs. Sustains six adults. Sent by mail on receipt of $3.75. Obtain our circulars describing other sizes.

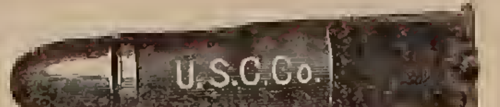
McCOY & SANDERS, SOLE AGENTS,
134 Duane St., New York.

DECOY DUCKS.

M. C. WEDD,

Manufacturer of Decoy Ducks, Mallards, Blacks, Canvas-Backs, Blue-Bills and Red-Heads. Extra size and very nice, by my customers sending their best models to copy. 60 cents each. 67 Manhattan street, Rochester, N. Y. je27 3t

United States Cartridge Company,



LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and in use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

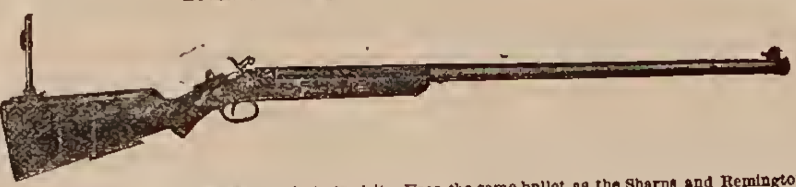
Cartridges for Target Practice.

Send for Illustrated Catalogue.

FOWLER & FULTON, General Agents, 300 Broadway, N. Y.

Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.



This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.

BARTON & CO.,

337 Broadway, New York.

IMPORTERS AND MANUFACTURERS OF

GUNS, PISTOLS, POCKET CUTLERY, FISHING TACKLE, Etc., WHOLESALE AND RETAIL.

REDUCED PRICE LIST OF SPLIT BAMBOO RODS, WARRANTED THE BEST IN THE MARKET FOR THE PRICE.

Six-strip hexagonal fly rod, German silver mountings, three-joint, extra tip and tip case	$18 00
Six-strip hexagonal fly rod, German silver mountings, three-joint, extra tip and tip case, solid reel plate	25 00
Six-strip hexagonal, black bass rod, German silver mountings, three-joint, extra tip and tip case, solid reel plate	27 00
H. L. LEONARD'S six-strip hexagonal light fly rod, two-joint, German silver mounting, extra tip and tip case	17 00
H. L. LEONARD'S Six-strip hexagonal fly rod, German silver mounting, three-joint, extra tip and tip case, waterproof ferrules	30 00
Black bass rod, ash and lancewood, brass full mounted, two middle joints and three tips, 10½ft	7 50
Black bass rod, ash and lancewood, German silver, full mounted, whipped butt, two middle joints and three tips	15 00
Russia-leather fly-book, with the "Hyde" clip, large size	5 00
Russia-leather fly-book, with the "Hyde" clip, small size	3 50
Best enameled waterproof taper fly lines, from	6c. to 10c. per yard
Belgramites or Dobson bait for black bass, each	60
A large assortment of trout and black bass flies from	$1 to $2.50 per dozen

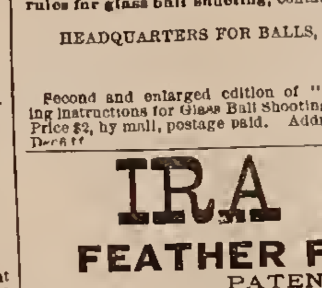
All kinds of Snelled Hooks tied to order. Also Flies dressed to any desired pattern.

United States Arms Revolver, 7 shot, .22 cal., nickel, each	$2 50
United States Arms Revolver, 5 shot, .32 cal., nickel, each	4 50

THESE PISTOLS WARRANTED.

EVERY REQUISITE FOR SPORTSMAN'S OUTFITS.

Agents for Huber's Champion Glass Ball Trap.................each $9 00
" Amateur " " .... " 5.50



Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. Price $8. Old style, $6.

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

HEADQUARTERS FOR BALLS, HAGGERTY BROS. & CO., 10 Platt Street, N. Y. City.
FOR TRAPS, HART & SLOAN, Newark, N. J.

Second and enlarged edition of "Field, Cover and Trap Shooting," by A. H. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill. Dec6 tf

IRA A. PAINE'S

FEATHER FILLED GLASS BALL.

PATENTED OCTOBER 23, 1877.

The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade

HEADQUARTERS BOHEMIAN GLASS WORKS, 214 Pearl Street, N. Y.

Sportsmen's Goods.

INDIA RUBBER

Fishing Pants, Coats, Leggins and Boots,

RUBBER CAMP BLANKETS,

COMPLETE

SPORTING AND CAMPING OUTFITS,
AND
India Rubber Goods of Every Description.

HODGMAN & CO.,

SEND FOR PRICE LIST. 27 MAIDEN LANE, N. Y.

FINEST

Blue Flannel Suits,

FOR GENTLEMEN.

WARRANTED FAST COLORS,
From $12.50 to $16,

The price depending on Size and Style.

Sample of Goods, Price List and Measurement Blank furnished on request by post.

GEO. C. HENNING,
Washington, D. C.
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PERFECTION BALL.

(Patented May 28, 1878.)

No Glass to ruin Cattle, Horses and Dogs. An excellent fertilizer for the land.

ECONOMY.

It is sold for less money than any ball upon the market. Liberal discounts to the trade.

Send for circular. Address

GORDON & KEYSER,
78 BARCLAY STREET,
New York.

Proprietors and Sole Manufacturers.

PHOTOS of Actresses, comic, etc., 10 for 25 cts. List of books, &c. S. R. LUDDEN, E. Lincoln, Me. je13 1yr

Fishing Tackle.

Craige's Full-Length Fly Book

with the "Hyde Clip," bound in fine Russia Leather and sewed.

No. 1 book, stiff cover, holding 1 gross flies, $7 00
No. 2 " flexible " " 8 dozen " 6 00
No. 4 " " " 6 " " 2 75

Sent C. O. D. or upon receipt of price. Steadman's Flies Powder and Areca Nut, each 50 cents per package, postpaid. TEMPLE F. CRAIGE (formerly at W. Hulberton's Sportsmen's Emporium), Sportsmen's Purchasing Agent. Office, 95 Maiden Lane, N. Y.

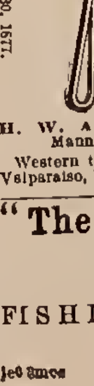
THE STRONG BLACK BASS ROD--IN TWO PIECES.

The undersigned is making a rod for Black Bass fishing, to which the attention of anglers is called. It is made from drawings and suggestions furnished by the well-known expert, Dr. J. A. Henshall, of Ky., who says of it: "It is the finest rod made, and just 'the thing' for the best black bass anglers." The two-joint principle, applied to rods of this style and class, Dr. Henshall considers by far the best. The butt of the STRONG ROD is of the choicest second-growth ash, and the top-joint of Cuba selected lancewood. The rod is finished with solid German silver mountings; reel bands above the hand, and standing guides throughout. Length, 8ft., to 8ft. 6in.; weight, 8 ozs. to 9 ozs. The finish of the STRONG ROD is equal to any rod made. It is warranted in every respect. Price complete, as above, $10; price with extra top joint, $13. Address

F. A. STRONG, Honesdale, Pa.

Rods of all kinds made to order. Send for price list. je27 tf

EDGAR'S



Patented October 30, 1877.

PATENT BARBLESS FISH HOOK.

The Only Reliable Hook Made.

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COLLIE.

Selected.

OLD Shieways, up! You harrow your track
As if every muscle had gone to rack;
Ho, Sirrah, see that chuck on the knoll!
Time was when you'd cropped him atop his hole.
Ah, collie, it's over; you've had your "day."
Death whistles, and you must hobble away!
Fat chuck, you're safe; keep end as you are,
My collie can't focus a barn so far;
Black blessed, he's old, and it hurts my soul
To see him blink tow'rd the chuck on the knoll.
What! a touch of youth those bones still feel!
Down, plucky tyke, settle back to my heel:
Back, fellow, back! Death's calling, I say;
He whistles you off another way.

This is the last time I shall bless
His poor old patient shagginess.
The rhythmic beating of that tail,
No wonder it at last must fail;
He thwacks it feebler, less and less—
Spent pendulum of p'easantness.
The humor of that hairy handle,
Pumping joy into this world of jangle,
As though two hearts took turn about,
One thump inside, and then one out;
Pacific gesture (mercy's plan)
Betwixt the animal and man!
Up, fellow, up—begone, I say—
Dead! yes, the old dog's had his day.

He's happy in some sort of heaven;
With him that watched the sleepers seven,
And thousand sainted Towzers there,
He frisks it in the fields of air.

—JOHN VANCE CHENEY *in Harper's for July.*

Black Bass Fishing in Florida.

I WAS idling away the delightful, sunny February days at San Mateo, on the St. John's River, Florida, eighty-five miles south of Jacksonville. The rainy season was over, or had not begun; the sun shone each day with undimmed brightness; there was occasional light morning frost that showed on the mulch heaps, and the weather was as delicious, late spring days, as any heart could wish. I was the guest of a generous, whole-souled friend, Capt. L——. He was busy building a new house and clearing a wide space of hammock land for a great orange grove. I put in my time wandering about among the workmen, in the fields and orchards and woods; occasionally varying the programme by a few shots at squirrels and quails that fairly invaded the village, or by a sail on the placid river. There were plenty of oranges, lemons and limes yet in the orchards, and strawberries were beginning to ripen in the gardens. On the wharf there was a large fruit depot and packing house; shad fisheries just below and above town. From twenty to thirty steamers per day passed up and down the river, so that, although but a rural, scattered village, it was not lonesome by any means. At length, on a Saturday, the Captain announced that his work was now going on so that he could run away for a few days, and, if I were willing, would start up the river Monday morning to catch some trout. Nothing could have pleased me better, and preparations were begun at once. The Captain invited four of his neighbors to join us. On Monday morning his pretty little steam launch, the Grace Darling, was hacked out of the boat house, wooded and provisioned, but it was after noon when we got away. Six captains and no crew make slow work. The Grace Darling is twenty-eight feet long and six feet beam, built of cedar, copper fastened, trim as a clipper, with two-horse boiler and engine, and equipage complete. Ballasted for her best speed she draws thirty inches of water, and that and her unhoused screw are the only possible objections to such a boat as the *ne plus ultra* for sport in all the Florida waters. Shallow water and the great profusion of aquatic plants often keep her off shore and out of creeks, lagoons, ponds and lakes where the sportsman would like to go. For this reason we towed a skiff, and that seriously impeded our progress. The route was up the river to great Lake George, to fish in the wonderful springs that flow into that beautiful sheet of water. Tide and wind were against us, and instead of reaching Salt Spring (some fifty odd miles) before night, darkness caught us plowing through the white caps of Little Lake George. The Captain fired and run the engine. My task was at the tiller. The others amused themselves in shooting at the countless water fowls that are all the time skimming over the river, or darting in and out of the dense forests on either side. Occasionally we came near enough the bank to enable them to pour a broadside into an alligator, who was taking his siesta on a floating log or on a little hammock of earth that rose above the water. As dusk settled down the gunners had fine sport dispersing the vast flocks of turkey buzzards that had settled down upon the spreading tops of ghostly old cypresses for their night's roost. Although there was half a moon the night proved dark. Extensive fires were burning back in the pine openings of the high land, from which dense smoke filled the air like a thick haze. Good camping places are not universal along the St. John's. The banks are mostly submerged, and the shores are lined with fallen timber and cypress knees, and it is dangerous running a boat ashore in unfamiliar places with the best of daylight. The islands, which are numerous, are worse than the mainland. For every mile of dry land there is ten miles of swamp bordering the stream, from head to mouth, except perhaps, in the dryest season of the year. We felt our way tediously in the darkness, searching for a landing. It was long after dark when the whistle was answered by a light that came slowly out along a thousand-feet wharf on piles that led from the just-begun village of Georgetown to the steamer channel. Under its lee a good anchorage was found, and we camped on the porch of the post office, which had been completed that day. The next morning, heading up through the middle channel, with Drayton Island on the left and Hog Island on the right, we soon encountered Big Lake George, a beautiful sheet of water sixteen miles long and half that in width. Myriads of ducks and other water fowls were resting upon or skimming over its surface, but the season was late for good shooting or the best birds. Once, years before, when I sailed through this lake in December, birds fairly covered its surface, and rolled back right and left in advance of the steamer like great black waves.

Entering the lake at its lower end, and rounding a promontory on the right, we headed for the inlet of Salt Spring, marked by a leaning palm in the middle of a long rank of those trees that fringe the shore. There is a bar just outside the mouth, over which we had to lighten by dividing cargo with the skiff. Then we steamed over and into the stream, laying the boat handsomely in a little cove just within the mouth, where the shelter was perfect. The wind was piping up again, and Lake George is not to be despised in even a moderate gale. The water is shallow, and gives a sea so rough that the largest of the river boats often have to lay by at its head or mouth and wait for better weather. A little side-wheel steamer, the Erie, was lying at anchor just outside the bar when we arrived, and we soon learned that she was under charter by a party of Virginia gentlemen who were hunting in the neighborhood. We camped on the point under the palms, and the captain and myself set out with the skiff to explore the stream, with a faint hope that we might be able to take the launch to its head. The creek is from seventy-five to a hundred feet wide for the first two miles above its mouth, winding through groves of palm and live oak and meadows of very tall grass and rushes. The channel is amply deep, and the current strong, but so filled with eel grass, reeds and rushes that a screw cannot possibly work. At the end of two miles we gave that up and turned back for dinner. The captain suggested trolling for trout as we went down, and I threw out a "spinner;" soon had a strike, and hauled in a two-pound black bass. I recognized the fish and the peculiar odor of the bass as soon as he came over the side of the boat, though I had not caught one for more than twenty years before. The channel was so tortuous and the vegetation so much in the way, that we caught no more on the way down. At the camp they had caught some bream, or, as I learned to call them when a boy, sunfish, which with the bass made us a dinner.

After dinner three of us again started up the creek in the skiff. At the end of two and a half miles we found open water; a stream from three hundred to six hundred feet wide, and much of it of great depth, with a gentle current and water of crystal clearness. I was generously awarded the place of honor, and began trolling; first with two lines, but soon found that one gave all the work I wanted. The spinner was allowed to trail from thirty to fifty feet astern, but often it would be taken almost as soon as it struck the water. I hauled in fish of from two to four pounds weight literally as fast as I could handle my line, take them off the hook and kill them. It was another two miles from where the sport began to the head of the stream, and before reaching there I had fifty or sixty pounds of fish lying at my feet. I gave up the line, took an oar, and trout (bass) fishing had no more attraction for me in that stream. (Almost everybody in that region call them trout.) The others caught a few, after which we went ashore and walked up a dim wagon trail to the top of the ridge, through an extensive but abandoned cotton plantation. On the other slope we went down to Lake Churchill, which stretches away out of sight in the then smoky condition of the atmosphere. Returning we caught several fish, and wasted a good deal of time shooting at ducks, which very strangely always managed to disappear. At length a couple were killed too dead to dive, and we found that they were all coots. We heard the Virginians' hounds baying in the scrub, and became aware that a high wind was blowing. When we reached the camp the Erie was in distress. The gale was slowly driving her directly ashore, and her captain was storming worse than the wind, trying to get his sportsmen and their "cracker" beaters and dogs aboard so he could run for shelter or sea-room. But they were indifferent alike, and the captain had to take it out in swearing. Fortunately, as darkness came on the wind went down, and ere long all was peace and quiet. We took possession of a hut for the night that was built entirely of palm leaves; the framework and rafters of the stems, and the sides and roof of the leaves themselves.

The next morning the Virginians invited us to join them on their deer drive, but our party all wanted to visit the great spring—some for the first time and others again. We pulled up speedily to the trolling ground, and again caught fish as rapidly as the day before. The bed of the stream is mainly covered with a luxuriant growth of grass and other plants, many of them exceedingly beautiful, looking like trees and shrubs and thickets of coral. But among this arborescent growth there are wide openings, like prairies in a forest, and long avenues of bare ground, or rather a pavement of shells of snowy whiteness. As you float over the crystal surface the scene is surpassingly and indescribably beautiful.

At the head, about the great springs, the water is filled and choked with enormous canes and rushes and gigantic water ferns, but the Captain and I, taking the boat alone, at length pushed and worked our way through it and to the main springs themselves, in a semi-circular cove of the high ridge, overhung by live oaks and other trees, all heavily draped with Spanish moss. The water comes up in immense boiling fountains through fissures of coquina rock (cemented shells). The largest opening is of irregular, star-like shape, apparently fifteen or twenty feet in diameter. It was impossible to hold the boat over the boil. Several other springs are nearly as large. Scores of fishes were sporting in the impetuous current to its very bottom. The others walked around the shore near to the spring, and all were given an opportunity to explore them. Not a trickling stream comes from beyond. A very river boils up from the earth in this one place. The water is quite salt, about 70 degrees temperature, and transparent as the air itself.

One of our company, Captain S., had a very fine trout rod, with which he had whipped Northern streams for many a day. He would not be content without trying it on the bass, against the advice of all the others. He played and landed two very handsomely. The third was a big and gamy fellow, and when the captain thought the battle was almost over and was chuckling over his success, the fish made a dart under the boat and in a twinkling the Captain's rod was converted into toothpicks. Going down we hauled in half a dozen more fish, worried the coots a little, and reached camp just as our neighbors of the Erie came in with their game—two fine Florida deer. We invited them to dinner and grog; sent aboard a couple dozen bass as we had done in the early morning. They gave us half a deer. Our captain inquired of their chief what he (the latter) did with his best uniform when he gobbled it in a little episode they had on the "Jeems" River in the Old Dominion.

Then we gathered up traps and steamed out and up the west coast for Silver Spring, twelve miles further south. The Erie was getting ready to head down the river. Her charter party had been cruising for a month on the Upper St. John's. Darkness caught us out again, but at length our whistle was answered by a light and we hauled inshore to a little wharf stuck up on stilts nearly a mile from land. There the lantern met us in a boat from shore, manned by three or four young men who were employed clearing and grafting an orange grove. From them we learned that we had passed the spring, to which they offered to pilot us back. They were on the lookout for a down river boat else we probably would not have found our destination at all. We ran back to the mouth of the stream from the spring, found a good berth for the Grace Irving, and made our camp under a magnificent palm tree on a bed of snow-white periwinkle shells on the bank of the stream. Young bull aligators, moving up and down the stream, kept up their bellowing all the night. At daylight leaping fish fairly churned its water into foam. We were tired of fish and fishing; had more than we knew what to do with, and supplied the neighbors. Going out at daybreak in the hope of getting a shot, I found the whole country covered with wild orange trees bending under their golden fruit. After breakfast we took the skiff and rowed up to the spring—less than a mile. If Salt Spring was beautiful, this is enchanting. Perhaps the rising sun and the just perceptible haze had something to do with it; but, in looking back now, I think I never sailed over any other three-quarters of a mile of water quite as charming as this. Like the other, this stream is filled and choked with herbage; the same coral-like plants and mosses; a world of long grasses waving in the swift current; a snowy floor beneath them half revealed in strips and patches and wild fields. Here and there are springs that would be considered immense in any other neighborhood, boiling up in the crystal depths with dancing domes of white sand and powdered shell. All is alive with fish of every size and hue darting in and among the verdure. In the bottom the turtles have their walks like rabbit paths, along which they were taking their morning promenades, hurried sometimes by the approaching boat or the dip of its oars. Not least of the beauties of the scene was a certain irridescent tinting upon the patches of white floor, caused, as I imagined, by the sun shining through the water at a low angle. The great spring is a single up-boiling fountain with its dome of white sand and shells at the bottom and a dome of water on the surface. It is inclosed in a semi-circular sweep of a shell ridge twenty or thirty feet high. The edge of the water is fringed with overhanging trees, a sugar field is beyond, and a rude sugar mill and row of boiling kettles near at hand. A few days before the steamer Erie had paddled up to the spring and tried to station herself over the fountain, but found it impossible to

remain there a moment. Returning over this enchanted way to the margin of the lake, we quickly gathered up our traps and headed homeward, where we arrived about sundown with black bass for the whole town. Boz.

Fish Culture.

KENTUCKY FISH COMMISSIONERS' REPORT.—Through the courtesy of Mr. William Griffith, of Louisville, we have become possessed of the (first) report of the Fish Commissioners of Kentucky for 1878, of which only 100 copies were printed. This report embraces the operations of the Commission from the date of their beginning, in 1876, until Nov. 1, 1877; and besides, we have an unpublished statement of the work done subsequently, from both of which we are enabled to make an intelligent summary of all that has been done.

Although some ten years behind the foremost of her sister States, Kentucky has accomplished a great deal in the brief two years of her endeavor, considering the small appropriation allotted for the purpose ($3,000). She has built a convenient hatching house near Louisville, on the farm of Col. Allen Polk, in Jefferson County, with a capacity for hatching and nursing 300,000 young fry, which was erected under the supervision of John O. Palmer, Esq., the well known fish-culturist of Boscobel, Wisconsin; she has imported and hatched out California salmon fry enough to amount to about 210,000 in all, which have been widely distributed through the State; and she has liberally planted land-locked salmon, shad, salmon trout and wall-eyed pike (*Stizostedion americanum*), called salmon, pike-perch, etc. The latter is indigenous here; it is a fine edible and game fish, and ought to thrive. Every endeavor should be applied to its cultivation. Up to Nov. 1, 1877 (the period covered by the report), 46,225 California salmon (*S. quinnat*) had been placed in forty-four tributaries of the Ohio, Green, Kentucky, Licking and Cumberland rivers. These fish were a modicum saved from an importation of 200,000 from California, the greater part of which was destroyed by an October freshet in 1876. The fry were in the troughs of the hatching house at the time, and, it is believed, were killed by some poisonous substance washed into the spring by the rains, as the muddiness of the water would not of itself be fatal. Up to Nov. 1, 150,000 shad had been deposited in the Licking and Green rivers. All the fish planted are thriving and doing well, so far as is known.

The Commission has been especially busy during the spring just passed. In January and February, 71,500 additional California salmon were placed in tributaries of the rivers already named, and also in the Big Sandy; in April and May 5,500 land-locked salmon were distributed among the waters of seven counties; in April, May and June 45,000 salmon trout were planted in twenty-five counties; and in May, over a half million of wall-eyed pike were deposited in twenty counties. This is a very good beginning, and the results are sufficiently encouraging. Many of the waters of Kentucky are excellently adapted to fish propagation, and should eventually become as well stocked as in the days before they became depleted and barren. At present, Louisville alone pays a quarter of a million of dollars for table fish brought from other States, and possibly the consumption of the whole State is as much more. A half million dollars is worth saving, and a not too liberal appropriation of $10,000 to $15,000 per annum for the next three or four years will guarantee it. Some fish-passes must be constructed over dams, and money must be paid if necessary to prevent illegal netting, etc. The capacity of the hatching-house should also be increased.

Park Thomas, Esq., was the pioneer of practical effort. He was the first President of the Commission of ten gentlemen, among whom Mr. William Griffith, of Louisville, has perhaps been most prominent for industry and perseverance. We believe that the feeling of the community throughout the State sustains the Commission in its commendable labors. The number of the members of the Commission should be reduced to three.

NEW HAMPSHIRE—*Nashua, July* 6.—Salmon are running freely in the Merrimac. Some large ones were taken at Amoskeag Falls, Manchester, the 2d, and were seen by some who have hitherto been skeptical on the subject of the fish coming up over the Lawrence fishway. WEBB.

SALMON IN THE MERRIMAC.—The Fish Commissioner of New Hampshire, Samuel Webber, Esq., writes us from Manchester as follows, under date of June 30:

Having heard such wonderful stories about the swarms of salmon coming up the Merrimac River, I went up to Amoskeag Falls this morning to look for myself. I saw two beauties—one of eight to ten pounds and one of fifteen pounds apparently—lying in the eddy below the main fall; and one of from fifteen to twenty pounds—at any rate as long as my walking stick—in the canal above the fishway, where he had been detained by the closing of the canal gates, in order to allow the workmen to do some stone-laying on the new fishway which we are building. Mr. Kidder, the late warden, had seen him, about fifteen minutes before I got there, just below the mouth of the fishway, and in that time he had gone up and got trapped in the canal. The gates will be opened again in a few hours, and he will undoubtedly go on up the river and join his companions, several of whom have already been taken in one seine and placed in our storage pond at Livermore's Falls, to await their proper time for spawning next autumn. The run of full grown fish this year is gratifying to all of us, and we hope to get a good lot of spawn to restock the river with. The young fish put in in 1876 seem to be going down to salt water this year, as we hear of them in various localities all the way down the river. This does not agree with old theories, as it proves a full residence of two years in fresh water before they return to the sea, but it is an unquestionable fact. I hope to get a full grown fellow to-morrow or next day to send Prof. Baird for his collection at the Smithsonian Institute.

HABITS OF EELS.—*Editor Forest and Stream:* I have but one question to ask your correspondent "B. T. B." How did he know whether the eels he saw in the Susquehanna were going up or down the river? R. B. ROOSEVELT.

TO PREVENT DISEASE IN TROUT—*South Side Sportsmen's Club, Oakdale, L. I., July 5.—Editor Forest and Stream:* Having read an article on the aquaria disease in brook trout by Mr. Fred Mather, I would like for the benefit of those engaged in raising trout to say a word in regard to this disease. I find by experiment that this disease can be produced in a healthy trout in from ten to twelve days, with the water at 60 deg. F., by being irregular as to time and quantity of food given. I have trout that are doing well with water at 74 deg. F by being regular as to time of feeding, quantity of food given and keeping a constant supply of fresh water running through the ponds. As often as once a week I brine the water with pure rock salt, which purifies the bottom of the ponds and prevents accumulations of unhealthy gases in food, which is liable to collect on the bottom. Regularity in time, quantity and quality of feed given seems to effectually prevent the aquaria disease in trout. I feed beef hearts and lungs, chopped fine, once a day, to all my old trout, and twice a day to the yearlings, all of which are in fine condition. Would like to hear from others on this subject through the columns of your paper. R.

FURNISH FOOD FOR FISH.—*Editor Forest and Stream:* While the different States have become enthusiastic in the business of fish culture, wonderfully increasing them by art of production, hatching and protecting the young fish till they can take a fair start in the race of life, it is astonishing to me that they are not making provision to feed them. It seems to me that in all waters where fish are planted their natural food should be planted also. I know of lakes in Michigan where foreign fish have been put, and little or none of the natural feed for them. I know one lake where land-locked salmon were put, and no other fish in it except an occasional minnow. Our fish commissioners have mastered the art in hatching young fish, and beat nature itself. Now, let them turn their attention to give them food. Many of our inland waters are not sufficiently provided with food for the kind and numbers of fish put into them. The consequence is, the predacious fish, like "kilkina'lato," devour one another or starve. In some waters there is a super-abundance of small fish, minnows and the like, not used as game fish. Here, at the mouth of the St. Joseph River, spring and fall, are millions of small fish, an inch to an inch and a quarter long. They appear to be a lake shiner; slim, symmetrical, fine, soft, shiny scales; in shape like a ciscoe or herring; lack second dorsal like those fish, otherwise look almost the same; not as blue on the back as ciscoe. These shiners are from three to four inches long when mature. They are the climax of bass and pickerel bait; in fact for any fish. The mature ones are caught along the lake shore with mosquito-net seines. They would be, I think, fine, put up as sardines; no bones. These fish, that can be caught by the millions, could easily be put into all inland lakes to feed other fish; take those an inch long. The small worm that whitefish feed on put in lakes for whitefish, etc. LUTRON.

St. Joseph, Michigan, July 1.

Natural History.

BREEDING HABITS OF THE GOLD-FINCH.

SOME interesting features are connected with the domestic life of this common and well known bird—the black-winged yellow-bird, hemp-bird, salad-bird and goldfinch of common speech, and the *Chrysomitris tristis* of systematists. It being distributed over the northern United States in summer, from Atlantic to Pacific, and by no means rare or retiring in disposition, we ought to be well informed in regard to its breeding habits (as indeed we are); but in looking into the subject, I find several gaps in our knowledge—or, more accurately, perhaps, I find gaps in *my* knowledge, which I am in hopes of having filled by observers who may care to read a brief review of present information upon the subject.

Of the courtship of the goldfinch Mr. Thos. Gentry paints a very pleasant picture. Whether all the details are to be relied upon as solid facts the reader himself can judge. Mr. Gentry's statements of bird life, especially as regards their nesting, often cause us to wonder how the fortunate observer could have ascertained such minutiæ. I quote:

"In the month of April the flocks dissolve into small parties, preparatory to mating. It is quite common to see two males and one female together, the former lavishing the most endearing attentions upon the latter, and besides occasionally regaling her with the most delicious melodies. Whimsical and exceedingly variable, she selects one suitor and almost the next moment discards him for the other, which at this moment is perched near by, pouring out his love in the most charming manner. This condition of things lasts during a couple of days before the final choice is made. It seems to require the utmost condescension, as well as the greatest effort, for the successful suitor to retain his hold upon her affections, for she is likely to waver in the interval of time which elapses before nidification is begun. This duty so completely engrosses her time and attention that the tendency to flirtation, so to speak, has not time to manifest itself, and is soon abandoned.

"Subsequent to mating, and just before nidification, the successful mate and his partner ramble together in quest of food. When weary of this business they may be seen perched upon a common twig, when the former with his sole energy pours out his passion in the most charming language, ever and anon turning toward the object of his love as if to ascertain whether it meets her approval or not. A soft, low note, which may be expressed by *twe-yah*, is her sign of recognition. The song of the male is loud and clear in intonation, and produced with the varied moderation of *Fringilla canaria*."

The site selected for the nest is a tree or stout bush, in an upright crotch of which, or among supporting twigs that sprout from a horizontal branch, perhaps far from the trunk, the nest may be securely fastened. Apple, pear, maple and birch trees, willow, and other thornless shrubs, are the most common choice. Mr. Gentry asserts that in his region it requires six days to complete the structure, and that "oviposition commences on the ensuing day." Dr. Brewer saw a nest built and one egg laid in half that time in Boston, while a Michigan correspondent alleges two weeks as necessary there. Probably circumstances alter cases. The female appears to be the sole artificer. Sometimes dire destruction, in the shape of a gale of wind, or otherwise, overtakes the half finished homes of these birds and wrecks all their labor; but they will courageously rebuild, as witnessed by Mr. J. P. Hutchins in Central New York, and Gentry tells of a pair renewing the attempt to erect their nest in the same place after being baffled four times.

Few specimens of oriuthic skill in architecture have been more elaborately dwelt upon than the nest of the goldfinch. Yet, although very attractive in its result, it is by no means a conspicuous example of a bird's ingenuity, as is the well woven purse of the Baltimore oriole; for the goldfinch simply mats her pretty materials together by movements of her feet and body, not attempting to interweave much or knit by the aid of the bill.

Not being particular as to kind, so that the requisite softness and pliability are obtained, and gathering materials close by, the various substances entering into the composition of half the goldfinch's nests collected would make a long catalogue. Outwardly the ordinary nest, which is about the size of a large teacup (only in most cases much higher), exhibits a felting of vegetable fibres, shreds of reddish bark, fragments of ragged grasses, leaves, hemp, bits of fungus, tassels and flowers of various delicate weeds and grasses, with more or less vegetable wool, spiders' webs and lichens loosely attached. Through the surface, in such a way as to hold it stoutly in place, pass the supporting twigs of the crotch in which the whole rests. The mass of these materials, in which often a great deal of wool, fern-down and the like stuff is mixed, causes the walls to be thick and dense. Interiorly a receptacle for the sitting bird is hollowed and lined with fine rootlets, horse-hair, "plumose appendages, or pappus of the seeds of composite plants," raw cotton and fern-wool. In all these nests one element is sure to be present—thistle-down. The goldfinch adorns the walls of her boudoir with its glistening silk, and makes her bed of the elastic gossamer that floats through the summer air.

As I have remarked, the date of egg-laying varies greatly. It seems to occur earliest on the Southern Pacific coast, late in May; at Sacramento and in Utah about the middle of June; at Trenton, N. J., Dr. Abbott tells me he found their eggs from May 17 to August 3; Gentry puts the time at Philadelphia as "generally from the 10th to 15th June;" in New England, Samuels gives June 10 as the earliest date, while Dr. Brewer says it is usually past July 10 before their nests are constructed, and September before the broods are able to fly; in Michigan, eggs are recorded from May 20 to September 25, the first week in August being regarded as the height of the season. It is evident, then, that though the goldfinch breeds late, as a rule, yet sometimes it nestles quite as early as the majority of birds. Upon this point we need more observations. That the same individuals may and do vary greatly in the time from year to year I have no doubt; why, it is impossible, perhaps, to guess. That they have the power of retaining their eggs, or rather of repressing their desire to lay to a much greater extent than is supposed to be the case with most birds, is proved not only by the long delays which have been known to take place in their nest-building, with a successful *finale*, but also from the fact that those specimens dissected in April show an equal readiness and development of ovaries and testes with those shot late in the summer. I doubt whether anything more rational than caprice can be assigned as the cause of their anomalous irregular breeding; the usual explanation, scarcity of proper food for the young in early summer, has no supporting evidence in what we know of the bird's diet, and is distinctly proved of no weight by the fact that frequently some goldfinches do nest early, while others postpone it until very late, and this in the very same district.

The eggs of this species are five, and often six, in number, and in color faint bluish-white immaculate, the blue tint appearing less strongly in empty specimens. Measurements of an average clutch were: .66x.51, .64x.50, .63x.50 and .62x.50 of an inch. Occasionally, as noted by Dr Abbott and others, spotted examples are seen—the markings faint and scarce—but this is very rare and exceptional. The elaborately blotched eggs described by Wilson, Richardson and some other early authors, are surely erroneously identified.

About ten days appears to be the period of incubation. As no second brood (invariably?) is to be anticipated, the young are diligently attended by both parents, who exhibit the most clamorous distress whenever danger threatens. Cases are recorded of their returning not only to the same locality two or three successive summers, but even constructing a new nest upon the foundation of the old. I have seen such a structure, and observed not only that the height was twice its diameter, but that the materials of the second were precisely similar to those used in the first nest. It is said, also, that this species will bury under a "second story" the parasitic egg of the cow-bird, when it is so unlucky as to have one thrust upon it, as does the other yellow bird, *Dendroeca æstiva*. When almost a fortnight of age, the young leave the nest, and soon the little family groups combine into the merry flocks that we see gaily playing about the sere reeds in autumn, or drifting away in a cloud of thistle-down before the October breeze.

ERNEST INGERSOLL.

PROPAGATION OF SKATES.—*Editor of Forest and Stream:* The communication on "The Procreation of Skates" in the last number of FOREST AND STREAM (June 27, 1878) induce me to believe that a little further information may be acceptable. In the order of *Raiæ* viparity is the rule, and oviparity the exception. These facts have long been known, and have been co-ordinated with morphological characteristics. Thus, after the definition of the family *Rajæ* or *Raiidæ*, Muller and Herb state that "they are the *only egg-laying rays.*" (*Sie sind die einzigen eierlegenden Rochen.*) The facts that the *Trigonidæ* as well as the *Myliobatidæ*, *Cephalopteridæ*, *Torpedinidæ*, *Rhidobatidæ* and *Pristidæ* are viviparous were long ago recognized. It is therefore singular that Professor Agassiz, as late as 1855, should have alluded to the information conveyed to him by Mr. Thayer S. Alert—that the stingray of the coast of North Carolina brings forth

young alive—as being, "so far as [he knew], the first example of a viviparous species in the family [*i. e.* order] of rays." At present I cannot recall any instance on record of an egg-laying ray outside the family of *Raiaidæ*. *Platyrhina*, which is egg-laying, and which has been referred to the family *Rhinobatidæ*, seems to me to belong rather to the *Raiidæ*, and as to the statement of Mr. Jonathan Couch that he had satisfied himself that *myliobates* was oviparous, I simply do not believe him, and prefer rather to regard him as an incompetent witness, and to rely on the statements to the contrary made by Aldrovondi and Lorenzini.

In answer to "Moxon," it may be added that all vertebrates (including man and other mammals) produce their young through the intervention of eggs. In mammals the eggs are very minute; in others they attain a considerable size.

Washington, D. C., June, 1878. THEO. GILL.

—The following quite interesting letter from Mr. Stearns throws additional light on the stingrays. Mr. Stearns has made some very valuable collections of fish, etc., for the Smithsonian Institution, and is thoroughly conversant with the ichthyology of Florida:

Editor Forest and Stream: Being several years in the fish business, and a few months engaged in collecting specimens of the fishes of this vicinity for the Smithsonian Institution, I have had the opportunity to examine species of *Myliobatidæ*, *Trygonidæ* and *Raiaidæ*. Of the *Myliobatidæ*, I have examined some specimens of *Rhinoptera quadrilota*, a few of which contained young, sometimes two, but usually one only with no trace of eggs in any of them. In April I secured one, of this species, of a size convenient for shipment, which contained young, and forwarded it to the Smithsonian Institution. I presume this is the one mentioned by Professor Benn. *Trygon centrura* being very abundant, I have secured and examined many. I think they attain a much larger size than *R. quadrilota*; one that was caught in a seine this spring measured six feet and eight inches across the back. In many that I have cut open I have found young, varying in size, that were quite lively, and when once free seemed able to take care of themselves; in others the young were small and without much life. *Four* is the greatest number that I have taken from one individual. I have never found the leathery eggs or sacks in the stingray, but have often picked up on the sea-beaches dried sacks, somewhat different from those of the *Raiaidæ*, which I always supposed belonged to some species of *Gaborhinidæ*. The fishermen here say that "the stingray brings forth young alive twice a year," in April and in October; but from my own observations I can only assert that it brings forth young alive in April, a fact I have noticed several years. SILAS STEARNS.

A SEA LION WHELP.—I have been awaiting the birth of the sea lion for some time. For a few days past I noticed that the mother became very uneasy and restless, constantly swimming and diving about the basin, frequently keeping it up until late at night. On the night of the 24th inst. I concealed myself and watched her until after ten o'clock, when she seemed more uneasy than usual, several times stopping and resting her chin on the lip of the basin, peering out through the railing and moaning in a very peculiar manner, as if she would like to get out. The next morning I was up bright and early, and on getting in sight of the tank saw Prince, the male, swimming back and forth as if he had something worrying him; but the female was missing. I immediately hurried around so as to look into the door of their house, which is built of stone in the centre of the basin, and as soon as Dolly, the female, heard my footsteps she put her head around the jamb of the door and gave that peculiar hollow common to the females while nursing their young. Then it was a race between Prince and myself who should reach the roof first. I scrambled up the ladder, flew across the bridge and sprang on the roof; but he was too quick for me, and was quietly awaiting my arrival, duly expecting his breakfast of fish. Finding himself disappointed he gave a snort and sullenly plunged into the water, while I as quickly disappeared through the "man-hole," intent on penetrating the mysteries of Dolly's bed-chamber. So soon as my eyes became accustomed to the gloom, I found that she had waddled alongside of me and was looking back over her shoulder at the baby, which was squalling its best, no doubt started out of its morning nap by my sudden appearance. I could have fairly hugged the mother with delight if I had not feared an attack in the rear from Master Prince, who had come in by the door, and by his voice and actions seemed disposed to resent my intrusion on his wife's privacy. By dint of coaxing and wheedling I managed to get him outside and fastened the door, while Dolly, taking it all in good part, had waddled back to her babe, rolled over on her side, and was busily engaged in giving it its morning's ratious; and I, by way of quieting my nerves, struck a match, lighted my matutinal pipe, squatted down on the floor and began to muse over my new role of playing dry nurse to a baby sea lion, the first, I believe, ever born and bred in captivity in the United States. I would like to forward you its weights and measurements, but mamma strongly objects to have her darling handled. As soon as I can do so with safety both to the youngster and myself you shall have them. FRANK J. THOMPSON.

Cincinnati.

BIRTH OF YOUNG SNAKES.—Dr. Bean of the Smithsonian Institution, informs us that their garter snake (*A. eutaenia*), was safely delivered of twenty-six young on the 2d of July. Mother and young doing well. Experiments will be made with a view of learning whether or not this snake will swallow its young.

HOW THE CAT JUMPS.—Some time ago an article went the rounds of the papers as to the actual distance cleared by a cat. The cat wanted a canary in a cage and sprang from the ground eleven feet up. A gentleman employed as shipping clerk on the wharves informs us of having measured a cat-jump of twelve feet two inches, straight up. The cat belonged to a vessel, got off on a barge and made a clear spring from the deck of the barge to the bulwark of the vessel.

ALBINO FISH.—In the winter of 1874 and 1875, in company with W. B. R., known to the readers of the FOREST AND STREAM as "Lutron," we started from Benton Harbor for Stony Lake, in Oceana County, Mich., to fish for pickerel and bass through the ice, with spear and decoy. We used a small tent made of common sheeting and painted with a composition made by boiling linseed oil and putting any old rubber boots or shoes into the oil while it was boiling. When cool we added lamphlack and a little japan to dry it. This makes a tent impervious to water, air or light. Our tents are just large enough for one person to sit in with ease. We fished on the lake about three weeks and caught 1,300 pounds of fish, mostly pickerel. During our fishing we saw three pickerel that were half white from the tail forward to about the middle, the other part the natural color of pickerel. I saw two, one of which would weigh about six pounds, the other about three. The one W. B. R. saw he judged to weigh from four to five pounds. We did not succeed in getting either of the fish out of the water, however. W. B. R. hit the one he saw with the spear, but lost him before he could get him out. We were told by the people there that there had been several caught out of the lake that were nearly all white. S. OODEN.

Benton Harbor, Mich., June, 1878.

THE BUTEO ALBI CAUDALUS.—I desire briefly to record the capture of *Buteo albi caudalus* (Vieill), near Fort Brown, Texas, where it is rather common during the summer months. A more extended notice of this addition to the avifauna of the United States will soon appear.

Washington, D. C. DR. J. C. MERRILL, U. S. A.

A GOOD MOVE.—Louisville, Ky., is soon to have a Zoological and botanical park.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING JUNE 29.—Two flying squirrels, *Pteromys volucella*, presented by Mr. Joseph H. Choate, New York city; 2 rabbits, *Lepus cuniculus*, presented by Mr. Eastman Johnson, New York city; 2 razor-billed curassows, *Mitua tuberosa*, presented by Mr. R. M. Everit, New Haven; 2 Zenaida doves, *Zenaida amabilis*; 12 pea-fowls, *Pavo cristata*, and 20 Guinea fowls, *Numida meleagris*, bred in the Menagerie.

W. A. CONKLIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING JULY 2, INCLUSIVE.—One lizard, *Scelokorus*, purchased; three garter snakes, *E. sirtalis*, presented; one garter snake, *E. sirtalis parietalis*, presented; five snakes, *Coluber vulpinus*, presented; one copperbelly snake, *T. sipedon erythrogaster*, presented; one water snake, *T. sipedon*, presented; three hog-nosed snakes, *Heterodon platyrhinus*, presented; one ringed snake, *Cemophora coccinea*, presented; one milk snake, *Coluber obsoletus confinis*, presented; one Boscanion constrictor, presented; one song thrush, *Turdus musicus*, presented; two American robins, *Turdus migratorius*, presented; two gray foxes, *Vulpes Virginianus*, presented; two prairie wolves, *Canis latrans*, purchased; two swift foxes, *Vulpes velox*, purchased; one belzebuth spider monkey, *Ateles belzebuth*, presented; one coati red var, *Nasua nasica*, purchased; one opossum and ten young, *D. Virginiana*, presented; one mule deer, *Cervus macrotis*, born in Garden.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

DOGS IN SOUTHWESTERN GEORGIA.

EDITOR FOREST AND STREAM:

We have no red foxes in this vicinity. They are, however, numerous in middle Georgia and to within fifty miles of here. But they seem to be gradually approaching and will possibly be here in three or four years more. The gray foxes are numerous, and a hound that can pick them up in two or two and a half hours is as fast a one as we want. Any shorter time spoils the sport. Several of us keep two, three, or four dogs apiece, and when we want a chase we meet at some designated time and place. These hunts are generally appointed from one to the other, but when disappointments occur on account of weather, they are appointed, perhaps, weeks ahead, and Lorenso Dow never filled his appointments with any more punctuality than we fill these. We run these same hounds after deer. Deer are becoming very scarce, and as we have no game law, we have made a compact among ourselves to shoot no more deer for three years, from the first of February last. We have some little trouble in keeping would-be hunters off, but we talk big, and make a great noise, and thereby make them shy. In counties south of us—Irwin, Worth, Wilcox, etc.—deer are hunted incessantly, and though the practice is an outrage, I expect some of those settlers have the best trained hounds in the world. These same dogs are made to take the thick branch, while the men ride on the open hill-sides. Not a whimper do they make until the deer is jumped; then comes a keen squall, and out hounds the deer like a streak of scared lightning, and, with ears laid back, goes his course, regardless of men or horses. If he goes off severely crippled, the dogs will follow in full cry, and you must keep up. If he goes off unharmed, you can sit down, for the hounds will be back in thirty minutes to try further on for another deer; and so the sport goes on till you are satisfied. Then these dogs will "Slow Track"—following a trail either in a walk or run, as you may wish, without a whimper. When we are driving through large swamps the dogs can be put in, and, by a peculiar whistle and hollow, can be made to trail and run in full cry, the same as our hounds. Many other things these hounds are taught to do too incredible to be told to one who never saw them hunt. If the laws of Georgia would afford proper protection, this is the finest deer hunting country in the world. Our bird dogs are almost entirely pointers The hot weather and immense quantities of cockle burrs that grow in the fields make setters undesirable. There are only two setters in the vicinity; one is a Gordon and the other an imported English dog. But our pointers beat them badly. There are no regular kennels in this portion of the State. Some twelve or fifteen of us, who live in three different counties, hunt together and club together, so to speak, and we keep up our dogs among ourselves, and nearly all of them can be traced back to Chapman's "Dash" and Dick Brown's "Belle." Perhaps it may seem strange to you how men living ten, fifteen and twenty miles apart, can hunt together, but, as a friend once said to me, this is a country of "magnificent distances," and with us a good horse is a *sine qua non*—as much so as a good barn to a Western granger. We think nothing of driving ten miles by sunrise to meet for a bird hunt. We invariably hunt on horseback, getting down to shoot. This takes but a moment, as most of our horses do not require hitching. Our pointers are mostly medium sized dogs, heavily muzzled—solid liver and black and white being the leading colors. I should add that the running of our red fox hounds is almost incredible. I never would believe, until I saw them run, and I can't venture to describe them. A rail fence six feet high seems to be just touched with the hind feet, then a few short, chopped yelps, and they are gone. Don't talk about riding to them in a country like Middle Georgia. Some one who has more knowledge of them, and who has more notoriety for veracity, must carry you through the chase. Your Tennessee and Gaston correspondents talk red fox dog better than any one I have read before. Things have a different ring on paper from what they do across the country. If they only would write it up, M. J. Hatcher or L. M. Felton, of Marshallville, Hum Ridley or Dr. Hamilton, of Clinton, can give you the red fox dog to perfection.

Americus, Ga., July 1. M. B. C.

[We should be most happy to hear from the gentlemen thus introduced to our readers.—ED.]

SALT FOR DISTEMPER.—Seeing the article from "R. O'C" on treatment of distemper, induces me to say what I have often thought of saying through your paper before, but the remedy was so simple I feared your readers would not believe it. For years our remedy has been the same as given by "B. W. B." except, instead of salts, we have used castor oil and laudanum. Perhaps the salts is better—we have never tried it. In severe cases, that have been neglected, I have known it to fail; but taken when the disease first shows itself, it is undoubtedly the best remedy I ever tried. Sometimes the dry table salt answers every purpose, without the oil and laudanum. A tablespoonful is the dose we give, but sometimes it will fail to vomit. When it does not we repeat in ten minutes—the second dose always accomplishing the result. I think any one who will try the remedy once, and carefully note its effect, will be convinced of its efficacy. Of course, the dog must be otherwise taken care of—kept comfortable and fed on soft food. Where we got the remedy, I do not now remember—perhaps from Columbus, Ga. When I say "we," I mean "us," and this, you know, is very explicit—embracing the bird-shooting fraternity of two or three counties in southwestern Georgia. I give our experience for what it is worth, as it corroborates the statement of your Dublin correspondent.

Americus, Ga., July 1st, 1878. SHOT.

HOW A NEBRASKA DOG DIED.—This story of a dog's devotion, grief and death comes from Lincoln, Nebraska, and is told by the *Journal* of that town:

"Our readers will remember the drowning last Sunday of the little six-year-old boy, Dany. The child had a little dog who was his constant companion and playmate. When the accident occurred that resulted in the drowning of the boy, the dog was with him, and by his strange conduct and uneasiness be attracted the attention of those present. While the boy was lying in the bottom of the stream, the dog would run to the child's mother and then toward the place where the boy was supposed to be, and finally plunged in and swam around or over the spot where his little master lay. After the body had been placed in the coffin, the dog manifested a strong desire to see the child, and when the lid of the coffin was raised, he licked the dead face and seem to feel intense grief. In a short time the dog went out to the railroad track and lay down upon the road, as it had done many times before; but upon the approach of the train, he laid himself upon the rail and deliberately permitted the train to pass over his body—being killed. The whole actions of the dog were such as to convince one that it was governed by reasoning powers, and is another illustration of the remarkable love or attachment that some animals have for their masters. The mother, at the time of the drowning, supposed the child was at home, and, therefore, neglected to obey the hint given by the dog that might have saved the boy's life."

DEATH OF ISLAND BELLE.—The many friends of Mr. Clint. Wisner will be pained to learn of the death of Island Belle, who was exhibited at the last N. Y. Bench show. While at the show she caught the distemper, and while at one time it was thought she could be saved, all efforts went for nothing, and she died on the 1st of July. She was (although young) a splendidly broken bitch, with all the best qualities.

LEO.—*Putnam, Conn., June* 24.—Mr. E. T. Whitmore's fine pointer dog Leo, which recently died of cerebro-spinal meningetis, was among the most intelligent and best trained dogs we had here. After several days of great suffering, the kindly aid of chloroform was called in and the poor brute's sufferings ended. His pedigree none could find fault with or question, as his mother was Mr. Murray's Jet; father, Martin Keith's dog Browney, and Browney's father, Colonel Colt's famous dog Phil, of Hartford. Leo was four years of age, brave, faithful, intelligent, loving, and beloved by all of Mr. Whitmore's family and friends. Peace be to his ashes. If there is a dog's heaven, Leo has gone there. A. M. G.

VERY CHOICE DOGS.—A gentleman of Baltimore, a member of the Kennel Club, is desirous of disposing of some of his choicest stock. Dream, as fine a black and tan bitch as can be found, is to be disposed of. In the lot are puppies by Flake and Lillie. Our own personal knowledge of this stock induces us to speak of these animals in the highest terms. It is rarely that so fine a lot of dogs are put on the market. Address J. A. S., care of FOREST AND STREAM. See advertisement.

SALES.—The Irish red setter Rake, by Patt O'Rooney, ex Sal, has been sold by Mr. John M. Niall, Killaloe, Ireland, to Count Schimmelmann, Ahrensburg Castle, Prussia, for, we understand, a "century." Rake is litter brother to Dash, first prize winner at Londonderry show. He is half-brother to Mr. Fottler's recently imported bitch Kathleen.

WHELPS.—Mr. E. S. Wanamaker's red Irish setter bitch Leaf (Plunket—Stella) whelped, June 28, one dog and two

bitches; sired by Ripple (Pride of the Border—Jessie). Mr. E. Orgill's Romp, winner in the champion class of New York, had twelve puppies, nine dogs, three hitches, all lemon and white, on the 2d of July, by Rush.

— Rev. Wm. McGuinness, of Brooklyn, N. Y., has placed in Mr. Wanamaker's hands, for thorough breaking, his all red Irish setter dog Tara, by Rufus, out of Belle Mead. Tara is 10 months old, very handsome and promising, and won second prize in his class at late N. Y. Bench Show.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
July 12	2	44	M		11	15
July 13	3	24	12	44	11	59
July 14	4	18	1	28	12	43
July 15	4	52	2	12	1	27
July 16	5	36	2	56	2	11
July 17	6	20	3	40	2	55
July 18	7	14	4	24	3	49

FITTING OUT FOR A CRUISE.

The time being near at hand for our yacht squadrons to heave up and head to the eastward, they will do well to overhaul not only their provisions, but the boatswain's locker also. There may have been cases on record where provender ran short, there never has been a case where the brandy (taken along for medicinal purposes, of course) came to an end before the cruise; but it is just as certain that the boatswain's and navigator's departments have been found seriously lacking the very first day away from regular moorings. We remember, for example, during the cruise of one of our most prominent clubs, to have sent all round the fleet for a spare double block, and there was not one to be had. Spun yarn, seizing stuff, watch tackles, binnacles, charts, sailing directions, leads and logs, yes, even such small things as a sheath-knife, marlinspike or palm and needle, were as scarce and far between as sperms in a wash tub. With the spread of Corinthian knowledge and the jack-tar spirit on the increase from year to year, we hope to see a little more regard paid to the first elements of sound seamanship, hitherto sadly neglected among our amateur sailors. When you are about to make sail for foreign parts observe the following: Select what you will most need of such a class and kind that will be within your means from the list subjoined, and what else your experience has taught you to be of service and likely to be wanted. In the way of spare spars take as little as possible, as light sticks can be procured and made at any port along the coast, no matter how small. Take account of stock of provisions and water, and don't trust to luck that you may have enough. There are some handy little arrangements in the market which will distill salt water and may come into requisition should the regular tanks run dry through want of foresight or accidental leakage. It is a good plan in large yachts bound on a long cruise to keep a regular account of the water on hand and the amount daily issued. Coils of spare rope should be so stowed that any one of them may be readily got at separately; hawsers or tow-ropes should be specially supplied, for to use the running gear of a vessel for any other than its proper purpose will be found more expensive in the end than an outfit of towing and anchoring gear. See that your spars are properly stayed, rigging set up for a full due, gaskets, stops and furling lines on hand as required, the ends of all running rigging neatly whipped or hitched;—nothing looks more slovenly than fagged rope-ends. Reeve off life-lines on cabin trunks, taffrail and ladders, knot ends of all ropes likely to unreeve during a squall or through carelessness, and put "square marks" on jib sheets and other gear on sails that cannot be readily seen by the skipper aft, so as to know when they are "down" or "home." See that sails are securely bent and fully "hauled out" by the casings, that spare sails and light canvas is fitted ready for use before being consigned to the sail room, and that they are tallied, if many. See that all dead-eyes are set square, that sheer-poles run with the sheer of the rail, that awnings, boat sails, oars, painters, fenders, and plugs are in place, the latter attached to a line, balers for each boat, hand jigger and spare tackles supplied.

In general, that all blocks and thimbles shall be well slushed and work easily and noiselessly, and that chaffing-mats and battens are seized on to save the gear where required. If about to go to sea, be prepared to secure everything, such as galley, spare spars, anchors, etc., and have tarpaulins at hand to batten down in case of meeting rough water, and have stops and staples in place for that purpose. Provide life-buoys, one on each quarter, lightly lashed to the bulwarks or in the cockpit with split ropeyarn, or, what is better still, fit your vessel out with deer-hair mattresses and cushions, which form the best life-buoys known, being lighter, more buoyant, and neater than any other, as well as cheaper. Keep a liberal amount of oil and wick for lamp use in stock, and do not overlook side-lights and deck lanterns. See Government Regulations on this head, as well as for fog-horn called for by the Rules of the Road. Have an assortment of tools on board, which should include an ax or hatchet, saw, hammer, steel wedge, small handspike, marlin-spike, serving-mallet, large knife, screws and nails, a few sheets copper or zinc, old bolt of canvas, palm and needles, with sewing twine, beeswax pencil and combination rule, paints, and as many more articles in this line as you can conveniently stow, or have found necessary by experience. Have also spare thimbles, sister hooks, blocks, and small stuff to suit the size of the vessel. Before getting under way ascertain beyond doubt that the pumps are in good working order, that all openings can be closed, and have a spare tiller at hand. In relation to navigation instruments, very much depends upon the discretion of the captain, as long as we confine our cruising to home waters, where "dead reckoning," at most, will come into play. The more water you draw, the greater should be the detail and variety of your charts; one general, a set of detail and harbor charts make up a full complement. Use only a good, reliable compass, placed strictly fore-and-aft in a binnacle furnished with ample facilities for lighting; the liquid compasses of Ritchie are the best. For ascertaining speed and distance run a patent log is preferable, and a lead line, properly marked, should be deemed indispensable. For "plotting" or laying out a course made or proposed, as well as for obtaining bearings, do not fail to have a parallel ruler and a pair of ordinary dividers. A log-book, with full record of events and sailing, should always be kept on a cruise. Overhaul your ground tackle, have marks put on at certain intervals, so that you may know the amount of chain you are riding to, and be prepared to "slip" in the event of sudden emergency. Keep what powder and flash signals or rockets you may deem needful in a safe dry place, not to be opened except by the skipper or his deputy, and to contain no other article but explosives. Finally, see to it that every man on board knows his duties, has a place to stow his duds and to bunk at night; assign him to his place at mess, and have him provide himself with ample clothing, light and heavy, and a set of tarpaulins. Take along a sea chest of medicines (homœpathic are easiest to administer, if you can only screw up your gullibility to the necessary point), and remember that in all cases the perfect seaman should bear in mind that "an ounce of prevention is better than a pound of cure," and that with the skipper "forewarned should be forearmed." Preserve discipline among the hands before the mast and order among the cock pit tars. Under such circumstances, cruising will not degenerate into a genteel mob afloat on a spree, but will result in a vast deal of benefit to both body and mind, and will be remembered by all with advantage and pleasure. Cabin stores and a full outfit, with all the advice which long experience can give, may be obtained from Messrs. Wheelock, Sloner & Co., of this city. Their card will be found in another part of the paper.

The Prettiest Yacht in America.—Certainly Mr. James Stillman is to be congratulated upon the possession of what is undoubtedly not only the prettiest yacht in America, but also the best fitted and most seaworthy afloat. She was not built for speed, but with a view to wholesome cruising on or off soundings in fair or dirty weather. That she will come fully up to expectations on these points there can be no question, for, designed by Mr. A. Carey Smith in close resemblance of the finest type of the British cutter, neither too narrow nor too deep, the experience of our cousins across the sea in such craft is enough to assure us of the perfect sea-going qualities of this new craft without waiting for her trial. When she comes out her beauty will not be denied, even by the greatest stickler for the stereotyped American sloop. Concerning her speed we are not at all loth to give an opinion. She will outsail our sloops twice out of three times anywhere outside of a mill-pond, on the wind and off the wind; we expect her to do wonders in smooth water. This new craft is of the full-blooded cutter type, no compromise with the sloop whatever, and we could sit for days on the pier, alongside of which she lies, without getting tired of looking at her. To those who may wish to see what a real yacht, a perfect little ship in fact, ought to be, we would advise a trip to the foot of Kent street, Greenpoint, where the new cutter now lies fitting out. Be sure and go early, for you will not be able to tear yourselves away from such a pleasure as a view of her affords. It does one good to look at the wholesome stuff that has been put into her, double frames of siding and molding that come very close to the figures called for by "Lloyd's Yacht Register," and clamps of yellow pine and deck beams of a size and kneed as they would be in a big sloop of twice her size. There is a look of business about the whole boat, model, scantling and rig, that puts to shame the flimsiness of our smooth-water, fair-weather sloops. She seems to speak to one all over with an air of "Go thou and do likewise." When she gets out to sea in a little bit of a kick-up, there will be no parting of gear, no drawing of cleats, twisting of rudder heads, filling of cock-pit and leaking at the seams; not much. She can stand a gale, she can ride one out in safety and with ease of motion; she can cruise to Australia and back. As for the joiner-work, outside and in, take a look at it and let us know where else you can see the like. Nothing gaudy, but tasty and substantial, the workmanship on the new cutter may be equalled, cannot be surpassed. We think yachtsmen generally will agree with us on this if they once cast their toplights on this beauty. Only 40ft. on load line, 46 over all, with 9ft. 3in. beam, and 7ft. 6in. depth of hold, she is the most perfectly planned and fitted yacht in our waters. Small, is she? Don't you believe it, friend reader. She looks like a very small concern end on, or for that matter even right abeam, but just step aboard with us. Do you notice the ship-shape fashion she is got up in from stem to stern? Here we are on the quarter-deck; look forward and examine her beautifully-laid flush deck; no big cabin trunk rising like a six-story hotel to bark your shins on; no narrow gangways to balance along on like a tight-rope dancer; no ugly cock-pit to take up valuable stowage room below, but broad gangways, plenty of room to cross from side to side before and abaft the hatches. An honest, stout stick for bowsprit, to rig in or out at will, and that without blistering your hands or raising your ire, by simply taking a turn with the fall around a windlass and heaving away, a stout pair of bits and a large forecastle hatch to supply air below. Mast nearly amidships, with a neat little fife rail round it, to which all the gear will be belayed, doing away with the plugging of cleats to the mast itself. Next, the main saloon skylight and the companion-hatch in one, and abaft that, a low combing on deck, to keep the helmsman's feet dry. Inside of this combing there is a circular deck scuttle of brass leading to the sail-room below, and in which the man at the tiller can stand in heavy weather, and abaft all a clear counter for handling the main sheet. Combings are kept narrow and take up little room, so that the cutter may be said to have a genuine spar deck to her. But how about her below? Can so small a craft have much accommodation? Well, see for yourself. Descend the companion. Forward, in the "eyes," are the boatswain's lockers; next, the forecastle, with a galley that would do a sloop-of-war no discredit, a sink and a pump, and two berths for the crew. Amidships, where, *a la* White Stars, "the motion of the vessel is least felt," we find a snug main saloon, with broad and easy sofas on each side, and, what is more, no prison wall centreboard to keep you in close confinement and prevent talking across the ship. On the starboard side is the owner's private stateroom—small, to be sure, but still bulkheaded off from the rest; on the port side the pantry. Just forward of the stateroom and reaching into the forecastle, is a spacious ice-house. Aft of the *grand salon*, on either side of the companion ladder, we find a w. c. and a wash-room, and aft of those again the ladies' stateroom. The latter will be furnished with large bunk and sofa, and has a dead light in the ceiling. This cabin is bulkheaded off from the run, the fine ends being devoted to the stowage of sails, gear, etc. A best and second best bower of Martin's patent, with chains leading into lockers under the floor, constitute her ground tackle. Aloft, this craft is rigged as a full cutter, short lower mast, long topmast, fitted to house, its shrouds spread by a hardwood cross-tree, three wire shrouds a side rattled down and set up by stout tarred rope lanyards that will do some real service and not be merely for show, brass sheer poles and rudder cap. Dimensions of spars: Mast, 32ft., deck to hounds; boom, 34ft.; gaff, 20ft.; topmast, 25ft.; and bowsprit outboard, 18ft. 6in. She has only a short rig for cruising. But no description can give an adequate idea of the appearance as a whole of this pretty cutter. One must see her close by to fully appreciate her many excellences. She was built by Mr. Henry Piepgrass, and, as may be expected, is the apple of his eye. Mr. Roosevelt Schuyler superintended her construction, Captain David, of the *Wanderer*, has in charge her rigging, and A. B. Sands furnished the plumbing work. We have been thus particular in the description of Mr. Stillman's new cutter, as we regard her as the forerunner of a class which we are most anxious to see introduced into our waters. They will do more to promote honest yachting and make seamen of our amateurs than any other type. This cutter will make many converts this season, to whom an entirely new chapter of yacht sailing will be opened by her advent.

YACHTING NEWS.

Boston City Regatta.—As customary, July 4 was celebrated in Boston by our open regatta for prizes offered by the municipality. There was a large list of entries, and the wind was fresh from the N. E., but unfortunately died away during the afternoon; and the boats of the first class, which sailed over an eight-mile course, did not make the race within the stipulated time and no prizes were awarded them. The following is a summary of the race:

Yacht.	Owner.	Length.	Actual time. H.	M.	S.	Corrected time. H.	M.	S.
SECOND CLASS SCHOONERS.								
Anonyma	N. D. Sohier	26 06	5	39	25	4	55	10
Lolierer	W. W. Kellett	30 04	5	41	13	5	03	09
SECOND CLASS CENTREBOARDS.								
White Cap	J. M. Forbes	34 10½	4	36	23	4	08	36
Shadow	J. Bryant	38 06	4	40	56	4	06	42
SECOND CLASS KEELS.								
Annie	W. M. Anderson	27 06	5	10	27	1	29	39
E. A. West	A. E Gill	32 05½	5	13	26	4	40	14
THIRD CLASS CENTREBOARDS.								
Fannie	W. L. Dean	21 05	1	40	19	1	11	11
Nellie	J. P. Phinney	22 00	1	41	33	1	13	02
Posy	H. J. McKee	21 03	1	46	23	1	16	04
THIRD CLASS KEELS.								
Unknown	J. G. Chambers	23 03	1	55	25	1	28	09
Sunbeam	W. S. Nickerson	24 06	1	54	41	1	28	36
Veronica	S. Chamberlain	20 11	1	59	11	1	29	20
FOURTH CLASS CENTREBOARDS.								
Fancy	P. Grant	18 05	0	54	51	0	41	06
Psyche	King and Clarke	18 09	0	57	33	0	42	13
Druid	F. A. Drew	18 07	0	59	32	0	49	19
FOURTH CLASS KEELS.								
Coselle	J. F. Robinson	19 06	0	59	46	0	46	09
Ruby	R. Heard	19 07	1	01	01	0	47	21
Chequita	John Buckley	17 09	1	04	01	0	48	51

Emma T.—Early this season Commodore Baker gave due notice that he did not propose to race his sloop this year, and that her spars would be cut down. Consequently it is a little late in the year to take exceptions to her not appearing at the starting line in the recent regatta of the Columbia Club. Her owner proposes to enjoy cruising at his leisure, but even under her short canvas we understand that she holds her own with the best of them.

Violet's Cruise.—Mr. Chas H. Whiting has been cruising in New York waters in the *Violet*, purchased from Com. Frank E. Peabody of the Dorchester Yacht Club. He sailed again for Newport, July 1. The *Violet* has not been sold to New York parties as previously reported.

Empire Yacht Club.—This club held a regatta on the national holiday, but owing to the scant wind only four yachts entered. The *Dart* led across the line off the club house, Harlem, followed by *Inspector*, *Emma D.* and *Lanthier*. The course was from stake-boat at club house to Throgg's Neck Buoy and return. The yachts had a fair wind both ways. *Lanthier* bore up for North Brother Island during a thunder squall, *Inspector* turned the buoy first and *Dart* close astern of her. This order was maintained all the way home, *Inspector* winning in 2h. 57m., *Dart* second in 3h. 17m., and *Emma D.* third in 3h. 22m.

Lake Yachting—*Belleville, Ont., June* 28.—In the annual regatta at Trenton on the 26th there were seven entries in the third class race, which resulted as follows: *Idler*, of Brighton, first; *Wideawake*, of Trenton, second, and *Mystery*, of Kingston, third. The second class race had only three entries, and proved virtually another match between the *Katie Gray*, of Belleville, and the *Surprise*, of Trenton, which the *Katie* again succeeded in winning, though by half a minute only. The wind was very light and variable, and greatly favored the *Surprise* toward the close of the race. The famous *Annie Cuthbert*, the champion of the lakes, has been sold to parties in Chicago for the paltry sum of $1,800.—A regatta is to take place at Kingston on Monday, when three yachts of the local fleet, the *Surprise* and a large number of other yachts from a distance will compete. Of the result of this race and that at Clayton, N. Y., on July 4, I will apprise you in my next. Port Tack.

Belleville, July 3.—Another victory awaited the Belleville yachts in the regatta at Kingston on the 1st instant. There were a large number of competitors, but the *Kathleen* and *Katie Gray*, of this place, took the first and second prizes, the third falling to the *Victorine*, of Alexandria Bay, a craft built in New York, with the intent of "scooping" all the lake boats, a feat which she has been unable to perform, although she is undoubtedly a fast one. The third class race resulted in the success of the *Comet*, of Chaumont, N. Y.; *Wideawake*, of Trenton, second, and *Eclipse* third. The *Minnie A.*, of Belleville, which was fourth, would have got a prize but for her sailing-master mistaking the course on the first round. There will be a race here about the end of the month for a silver cup, offered by ex-Commodore Kelso, of the Bay of Quinte Yacht Club. Port Tack.

YACHTING DRIFT.

San Francisco Yacht Club will soon be quartered in their new club house.....Vice-Commodore Harrison sails in his yacht *Frolic* in San Francisco Bay.....*Resolute* has been chartered by a Boston gentleman.....Steam yachts *Ideal* and *Vidette* are likely to have a match race; who is going to sit on the safety valves?.....*Volante*, cutter, is in Boston waters; also sloop *Siren*, which had been to Newport on a cruise ..... Steam yacht *Day Dream* has arrived at Galveston via New Orleans.....Somebody doubts whether the next annual N. Y. Bay Regatta will be a success. Of course it will; the Hoffman House surely has nothing to do with next year's regatta .....Steamer *Ibis*, from Philadelphia, is at Newport.

OAR AND PADDLE.

THE HENLEY REGATTA.—The first day of the Henley Regatta was all that could be wished as to weather and water. The Columbias were in fine condition. Their opponents on the first day—July 4—were the Dublin crew in the first heat for the Stewards Challenge Cup, and, oddly enough, the only other American crew, the Shoe-wae-cae-mettes, of Monroe, Mich. The first race on the programme was the first heat for the diamond challenge sculls, between George W. Lee, of the Triton Club, Newark, N. J., and Edwards Moss, of Oxford University fame. A good start was made by both men, Moss pulling thirty-four and quickening up to thirty-six. Lee led from the beginning, and when Poplar Point was reached, had a full length ahead. Lee, when only twenty feet from the finish, ceased rowing suddenly, having passed a stump which he supposed to be the finish. The Englishman then rapidly drew up and passed him, being declared winner through the oversight of Lee, the latter virtually having won the race, but the prize going, of course, to Moss on a purely technical ground. How Lee came to make such an inexcusable mistake is more than we can surmise. Moss crossed the line in 9m. 8s., and Englishmen felt happy that they had won by a scratch, and the "blarsted Yankee" had lost his chance.

The first heat for the Steward's Cup followed, crews and weights as follows:

Shoe-wae-cae-mettes—Moses Nadeau, 144lbs.; H. W. Durrell, 149lbs.; J. Nadeau, 146lbs.; S. Dusseau, 168lbs.

Columbia College—E. A. Sage, 170lbs.; C. Edson, 161lbs.; H. E. Ridabok, 170lbs.; J. T. Goodwin, 153lbs.

Dublin University Rowing Club—R. H. Courtney, 150lbs.; R. H. Lahat, 150lbs.; J. Cooper, 165lbs.; G. Hickson, 161lbs.

Columbias had the inside position, near the Berks shore, and the Shoes were over on the Bucks side, with the Irish crew between them. The Shoes made a poor start, but immediately went to the front, and soon had lots of water between them and the Dublins. Columbia received the wash of the Liffey crew, which crossed over and took the Americans' water, in spite of being hailed by the umpire repeatedly. This ungentlemanly and unsportsmanlike trick, unknown to American amateurs, is one of the distinguishing traits of the English snob at the oar. Finally, Columbia finding herself being pressed ashore by her tricky opponent, steered out to pass, and in so doing, fouled the Dublin crew, the referee promptly deciding against Dublin. The Shoes in the meantime had been at their old tricks and came in brilliant winners, one hand on their oars and swinging caps in the other. John Bull became disgusted. This was the second race of the day, and the second in which America proved herself too much for his best sons. The second heat for the Stewards Cup was won by the London Rowing Club in 8m. 23s., against the 8m. 4s. of the Michigan crew in the first heat. The second heat for the diamond sculls was won by Lowndes, Mr. Lee, of Boston, having been readily defeated. In the first heat for the Visitors' Cup, between two English crews, the Hertford College Crew of Oxford won in 9m. 12s., after taking a foul.

The last race of the day was the second heat for the Visitors Challenge Cup. The competing crews were the Columbias, as before given, the University College, Oxford, and Jesus College, Cambridge. The names and weight were as follows:

University College, Oxford—S. Sandbach, 160lbs.; G. D. Rowe, 164lbs.; W. H. Cross, 181lbs.; W. A. Ellison, 155lbs.

Jesus College, Cambridge—W. W. Baillie, 149lbs.; C. Gurdon, 181lbs.; T. E. Hockin, 169lbs.; E. H. Prest, 157lbs.

The three crews made an even start. At the half mile America had left the inferior oarsmen of Britain in her wake, and crossed over to the Berks shore. The Jesus College crew now made a dash for the Columbias, with the deliberate intention of fouling, so that the other English crew might go by. This was another exhibition of the spirit which seems inseparable from the amateur oarsmen of England, but which would not for a moment be tolerated in America. But Columbia was too quick for any such trick, and ran clear away from the discomfited Bulls, widening the gap clear up to the finish. Jesus College essayed a spurt at the last quarter, but it did not amount to much, Columbia crossing the finish with a lead of two lengths, Oxford second and the other English crew bringing up the rear.

Second Day—In the final heat for the diamond sculls Moss won, and the sculls Lee so richly deserved go to the Englishman. Mr. Lee will probably meet Moss again on the 17th or 18th inst. on the lower Thames, when the tables will probably be turned. At two o'clock the Columbia and Hertford College crews were sent off, the former pulling 40 and the Hertfords about the same. At Fawley Court Columbia led by a length, the Hertfords finding it impossible to close on them after repeated spurts. A crowd of Oxford lads coached their comrades all along the shore, and finally seeing it impossible to do anything with honorable means, sung out to the Hertfords to spurt and foul Columbia. This was the third instance in these few races that Englishmen allowed their envy to rise beyond their discretion, and stooped to unsportsmanlike conduct in the hope of at least preventing America from winning, as long as they could not themselves. Such is the gentleman amateur of England at the present day! But Hertford could not raise the wind or muscle to foul Columbia, and so the British trick was foiled by American prowess. The Hertford crew finished up ignominiously by running into the mud. Columbia then paddled in an easy winner, time 8m. 41s. In the final heat for the Stewards Challenge Cup, the Michigan crew met the London four. The Shoes again took the lead, but the London men had caught up again at Fawley Court. The bow oar of the Western crew then called on his men for the usual spurt, but one of them failed to respond for any length of time, though they again went ahead of the Englishmen. No. 3, of the Shoe-wae-cae-mettes, Mr. Joseph Nadeau, suddenly gave out, being ill, and having been sick even before the start. The London crew then went rapidly ahead, the Americans soon ceasing to row. London crossed a winner technically in 8m. 26s. The remaining races were of a local character only, and call for no notice. In the evening Lord Carnoys presented the prizes, and in handing over the Visitors' Cup to the Columbia crew, made an acceptable speech, and the two days' sport came to an end. The members and weights of the London crew are appended:

Sleb Smith, 156lbs.; F. S. Gulston, 177lbs.; A. Trower, 180lbs.; F. L. Playford, 170lbs.

BOSTON CITY REGATTA.—Unlike our New York city fathers, those of Boston have devised worthy means of celebrating the nation's holiday without din and confusion, and the absence of an official programme altogether. They have met the wishes of the citizens by offering liberal prizes for regattas open to all, both at the oar and sail. Five races were announced for the day, to be pulled on the Charles River during the afternoon, July 4. The race was for single sculls. Five men came to the line. At the word "Go" Johnson, the well-known colored knight of the oar, at once took the lead, Lane second, Morris third and Lynch fourth. At the mile Morris spurted and closed up on Johnson, but could not run up even, Frenchy turning first with a good lead. He kept to the front easily all the way home, winning in 21m. 42s., Morris pulling in leisurely, saving his wind for the four-oared race. In the second race for double sculls three crews started: Hill and T. C. Butler; Hegner and T. F. Butler; and McGahey and Hosmer. Hill and Butler got off first, but were lapped soon by McGahey and Hosmer. Before the turn, however, they had regained first position, and kept it all the way home. Time, 22m. 6s. For the pair-oared race the following entered: The Ward Brothers, Biglin and Mahoney, Casey Brothers and Conwell and O'Brien. The Caseys got the best of the start, Mahoney and Biglin second, and the Ward Brothers third. Mahoney and Biglin spurted up to 40, took the lead, but were passed by the Wards, who turned first with a lead of three lengths. Conwell and O'Brien had been doing good work, and turned second. This order was maintained, the famous Ward crew coming home in 20m. 35½s., Conwell and O'Brien second. In the race for four-oared working-boats there were ten starters. The Lakeman crew got away first, with the West End and House crews closely following, the rest some distance in the rear. The race soon resolved itself into one among the first two boats. The course was a mile, three times over. West End made the turn first. At the second mile both crews were neck and neck and they went off on the home stretch together, West End making a neat turn inside their competitors. The last turn was made by the Lakemans first, West Ends next, and Chelseas third. The finish was as follows: Lakemans, first, in 27m. 15s.; Chelseas second, in 27m. 24s., and West End third. The last race was for four-oared boats, and three crews came to the line: Portland crew, Boston B. C. and Biglin and Mahoney crew. They kept well together the first half mile, pulling a stroke of 40. Boston gradually went to the front and Portland met with an accident. Boston came in winner in 27m. 13s., finishing up with a stroke of 36, Biglin's crew 19s. behind.

METEOR BOAT CLUB.—The members of this club held a series of races, July 4, at their club-house in the Elysian Fields. In the first single scull race Messrs. Myers and Allers, two new hands, were the contestants. They could not keep their boats, and finally went home wiser if wetter. Second race was for single sculls. Entries: F. Walters, H. Miller, and B. L. Dusenbury. Walters led, Miller broke an oar, and Walters came in winner in 5m. 40s., Mr. Dusenbury pulling in a working boat. In the third race C. Schoenfeldt beat J. Foster in 7m. 30s. The four-oared gig race was won by R. Kammerman, bow; H. Allers, stroke; F. Chipchase, 1; P. Otman, 2; C. Schoenfeldt, coxswain. Time, 5 minutes. The pair-oared race was won by L. Meyers and B. L. Dusenbury. Time, 6 minutes 20 seconds. The 100-yards tub-race was won by C. Schoenfeldt.

ALBANY REGATTA.—The municipal authorities held an open regatta July 4 at the State capital. The four-oared shell race was won by the Olympics, of Albany. The Saugerties Club were leading somewhat until they run against an abutment on the home stretch. The second race for four-oared shells was won by the Mutuals. In the single scull race F. E. Holmes, of the Pawtucket, R. I., Club, won. In the double sculls Davy and Thomas, of the Mutuals, won, and in the race for six-oared gigs the Olympics led the Mutuals five lengths.

ARGONAUTA ROWING ASSOCIATION.—This club held their annual regatta July 4, the event proving very successful and entertaining.

VALENTIA BOAT CLUB.—The fourth annual regatta of this club took place July 4 off the Elysian Fields, Hoboken. The senior single scull race was won by E. W. Wagner in 6m. 45s., and the junior single scull race by A. Schultz in 7m. 32s. E. Hanger and A. Southard won the pair-oared gig race in 6m. 30s.

FLUSHING BAY REGATTA.—The Nevens Boat Club held their second annual regatta at Flushing July 4. The first race was with four-oared gigs, three entries, mile course, and was won by the blues. Time, 7m. 22s. The second race was by the same, two entries, and was won by the blues. Time, 8m. 46s. Both crews won by about four lengths. Messrs. F. A. Guild and F. F. Northrup were the strokes of the winning crews.

HANLON'S VICTORY AT BROCKVILLE.—The four-mile race at Brockville, Ont., for professionals took place July 1, and resulted again in favor of the Canadian champion. The entries were: Hanlon, McKen and Elliott, Toronto; D. Kennedy, Lowell, Mass.; J. A. Kennedy, Portland, Me.; F. A. Plaisted, New York; James A. Ten Eyck, Peekskill, N. Y.; J. A. Riley, Saratoga, and Pat Luther, Pittsburg. They were spaced twenty-five yards apart, the St. Lawrence being about a mile wide at the place of the start, off the Brockville and Ottawa Railway wharf. The turning buoys were opposite Maitland village. First prize, $500; second, $300, and third, $200. Hanlon was of course first choice, and Plaisted and McKee were second. Colonel Shaw, the American Consul at Manchester, acted as referee. At 5h. 42m. the men were sent off. Hanlon went to the front at once, and led four lengths at the first quarter, with a stroke of 30. At the half mile he led by seven lengths, and Kennedy, McKen and Plaisted close together. The turn was made in the following order: Hanlon, Kennedy, McKen and Plaisted together, Ten Eyck, Riley, Elliott and Luther last. Hanlon soon increased his lead to ten lengths, and slowed down to 28. Among the rest Plaisted worked to the front, Kennedy and Riley following, and McKen capsizing. They finally crossed the line as follows: Hanlon, Plaisted, Kennedy, Riley, Ten Eyck, Elliott, Luther, McKen. Time of winner, 29m. 30s. Hanlon left next day for St. John, N. B., where he will row Wallace Ross on the 25th inst.

HANLON AGAIN VICTORIOUS.—In the single scull race at Cape Vincent Hanlon came in first, Plaisted second, Kennedy third, McKen fourth.

COURTNEY AND HANLON.—Though it was stipulated, for some occult reason, that the United States representative should not be admitted to the Brockville races, there seems a fair prospect of the Canadian and American oarsmen meeting in September. Hanlon has been in training ever since April, and desires a rest before meeting the toughest man he has to tackle in America. Courtney has all along been willing to meet the Canadian, and it is to be hoped that as soon as both have made all the money out of the small fry to be picked up, something may come of the much-talked-of match between these two knights of the oar.

COURTNEY-DEMPSEY RACE.—As might have been expected, this race turned out simple play for Courtney. It was the fourth time the two had met, heretofore always without result. This last race was pulled July 4, the course running south from the village of Skaneateles, two and a half miles and return. Charles H. Poor acted as referee. At the mile the two were eight lengths apart; at the turn Courtney was over a minute ahead. He paddled along leisurely at a 28 stroke, finishing with a long lead in 39m. 15s.

NORTHWESTERN ROWING ASSOCIATION.—At the special meeting of June 12 it was resolved to hold the coming annual regatta jointly with the Detroit River Navy, at Detroit, July 23, 24 and 25; the latter to make all necessary arrangements, but not to be responsible for any expenses incurred by the other organization.

NARRAGANSETT BOAT CLUB.—A challenge has been issued from the Providence Club to the Dauntless Boat Club for a race in six-oared boats, to remain open until July 15.

BRASS BUTTONS AT THE OAR.—Seven members of the New York police force had a race on the Harlem, July 3. All backed out but three, Gillighan and Phillips of the Broadway Squad, and Walsh of the 29th Precinct. Phillips came in winner; time 21¼m.; Gillighan second, and Walsh distanced. Course 2¼ miles, including one turn.

CANOEING—STOWAGE IN CANOES.—We take the following letter, by F. B., from our contemporary, *Pacific Life*: "Sir—I was thinking that instead of using a rubber bag, as is used in the *Rob Roy*, or storing behind an open bulk-head in the *Nautilus*, or using hatches water-tight in the *Shadow Canoe*, build a perfectly water-tight bulk-head directly behind the seat, and, having two water-tight doors opening on each side, about five inches from the floor. The canoeist can thus in heavy weather reach directly at the side and get any article of comfort that he wishes. In the *Shadow Canoe* the canoeist has to reach forward or crawl aft to get at the water-tight hatch, at the risk of the canoe dumping him into the water without his consent; and this bulkhead does not interfere with the sleeping accommodations, as the space between the middle bulk-head and forward one is over six feet, thus allowing abundant sleeping room, unless the person is of the Friedlander build."

RICE LAKERS.—Although cheaper than home-built canoes, and suitable in many cases where the more complete and costly *Shadow*, *Nautilus* or *Rob Roy* is not desired for up-river navigation and hunting, we hear from a Canadian canoe-builder that he cannot succeed in selling many of his boats in the United States, owing to the tariff of thirty per cent., which people do not seem willing to pay. The same builder is engaged on a large order for the English market.

CANOE-RACING.—So far there has been no regular canoe-race this season. We had hoped to see such races engrafted upon the programmes of some of the boat clubs, but as yet nothing has come of this. Canoemen had better start an open race on their own account. If properly brought to the public notice there will be no lack of entries.

CANOEING—*Boston, July* 1.—Our boat was a common canvas canoe, ten feet long. We started at the bridge over the estuary which connects Billingtou Sea with the Meadows. We had hardly started when snap! went my friend's paddle, and he relieved his mind by quoting Scripture. Arriving at Billington, we found it somewhat rougher than we would have wished to try our light craft upon, but we were bound on a cruise and nothing short of our boat's sinking could stop us. Accordingly we laid our course for Little Island, which we reached after twenty minutes' hard paddling. Rounding the southern point of the island, up with a merganser, and bang! went my friend's gun, and down dropped the bird. After picking him up we started for Cotton's Dam, where we arrived without further incident. Proceeding up the stream, I had the good fortune to obtain a shot at a weasel, but somehow or other he disappeared and I have not seen him since. We went on for about a mile further, when we were obliged to return on account of the choked nature of the stream. We arrived in town in time to take the afternoon train for home, which we reached at 6 P. M. rather tired, but well satisfied that one of the best sports is canoeing, and the best place in Massachusetts to pursue it is in Plymouth County, on account of the large number of ponds and streams and the easy carrys.

W. D.

Sea and River Fishing.

FISH IN SEASON IN JULY.

FRESH WATER.	SALT WATER.
Trout, *Salmo fontinalis.*	Sea Bass, *Centropristris atrarius.*
Salmon, *Salmo salar.*	Sheepshead, *Archosargus probatocephalus.*
Salmon Trout, *Salmo confinis.*	Striped Bass, *Rocous linneotus.*
Land-locked Salmon, *Salmo gloveri.*	White Perch, *Morone americana.*
Black Bass, *Micropterus salmoides*; *M. nigricans.*	Weakfish, *Cynoscion regalis.*
Muskalonge, *Esox nobilior.*	Bluefish, *Pomatomus saltatrix.*
Pike or Pickerel, *Esox lucius.*	Spanish Mackerel, *Cybium maculatum.*
Yellow Perch, *Perca flavescens.*	Cero, *Cybium regale.*
	Bonito, *Sarda pelamys.*
	Kingfish, *Menticirrus nebulosus.*

TROUT FLIES IN SEASON FOR JULY.

Little Egg, No. 12.—Body and feet of orange and yellow, mohair and hare's ear mixed; wings, bright hyaline, slightly mottled; setæ, same as wings.

Lightning Bug, No. 10.—Body of equal parts, of dark brown, and black mixed, tipped with yellow; feet, of feathers from the English grouse; wings, double, the inner wing black, the outer wing a yellow brown.

General Hooker, No. 9.—Body made of bright yellow and green, ringed alternately; feet; red hackle; wings, of the tail feathers of the ruffed grouse.

Little Claret, No. 11.—Body and feet, dark claret mohair, slightly tinged with blue; wings, of the bittern, or brown hen; setæ, dark brown.

Claret Fly, No. 9.—Body, dark claret; feet, black; wings, of the brown hen.

Fetid Green, No. 10.—Body, feet and wings, a pale green.

FISH IN MARKET—RETAIL PRICES.—Bass, 20 cents; blue fish, 7; salmon, 20; weak fish, 10; Spanish mackerel, 15; green turtle, 10; halibut, 15; haddock, 6; king fish, 18; codfish, 6; black fish, 10; flounders, 8; porgies, 6; sea bass, 15; eels, 18; lobsters, 10; sheepshead, 18; Canada brook trout, 50; do. Long Island, $1; pompano, 50 cents; whitebait, $1; hard crabs, per 100, $3; soft crabs, per dozen, $1.25.

Spanish mackerel have been taken in small quantities off Long Island and New Jersey coast, and are selling for 50 cents a pound. Salmon coming in in limited quantities. Striped bass scarce. Soft crabs are abundant. Gray fish from Wisconsin are coming into market.

SALMON FISHING IN QUEBEC.—Since the government of the Dominion have protected the rivers, preventing netting and spearing, except in particular rivers, and adopting the plan of leasing them to gentlemen for fly-fishing only, salmon have certainly increased nearly fifty per cent. in numbers, and are much larger in form. The best opportunities are allowed for our Eastern sportsmen to go there and fish for salmon, at an expense of about six dollars per day per rod. Many gentlemen have taken from one to six fish per day, which sport is certainly of the most satisfactory character, especially when you take into account the fact that each salmon takes from fifteen minutes to one hour to kill. The river, Grand Metis, which derives its source from a chain of lakes some twenty-five miles long and enters into the Gulf of St. Lawrence, about thirty-five miles below Father Point on the south shore, is leased by the Hon. A. M. DeLisle, ex-Member of Parliament, and fished only by him and our old friend and neighbor, Malvin Hard, of 25 Beekman street, New York.

We have just received word that Mr. Hard has returned from the river, where he had unprecedented sport, killing his thirty salmon, some weighing as much as 42 pounds. The whole thirty fish scaled 702 pounds, making an average of 23⅓ pounds for each fish. Mr. Hard found the salmon unusually strong and gamy. They came this season much earlier than in former years, taking the fly with much engerness.

PHILOSALMO.

A CANADIAN WELCOME.—A correspondent who has recently returned from a fishing expedition to the lakes near St. Leon, a Canadian village between Montreal and Three Rivers, writes:

"I must in some way do justice to my old friend, Mr. Wm. L. Parker, who, being necessarily absent, gave to five of us—three total strangers—*carte-blanche* in his lodge. And royal sport we had, too. Procuring guides, and with Mr. Parker's canoes, we made an expedition to Lac a l'Isle, carrying over several portages. We found excellent sport, though the trout were small. Our trip to Lake Souris was similar to that to Lac a l'Isle, only the portages were longer and rougher. It is really astonishing to see one of those guides travel through thick woods with a canoe on his head. I consider myself a pretty good walker, but it was all I could do to keep up with these men. It must have been 1 P.M. before we put a line in the water, and we landed at our return (first portage) at six o'clock with seventy-two as fine trout as were ever laid in green grass, the largest fish, weighing 5¾ lbs., caught by Mr. Floyd. These trout are speckled, and the flesh red, and are almost as game as a salmon. Mr. Floyd used a rod, trolling with a spoon. I have traveled a very great deal, and fished in Cape Breton, Nova Scotia, Maine, and West as far as Southern California, and nowhere have I ever seen such beautiful lakes and had such good trout fishing as in those surrounding Mr. Parker's property. By using portages one can go through twelve lakes from my friend's house. Mr. Parker has his canoes built at Peterborough, Ontario, and they certainly reflect credit on the builder. Should this letter be perused by an acquaintance of my friend, and who has never visited "Willie" at his country home, I advise him to fish for an invitation, for never was a gentleman possessed of means to entertain his friends who could more thoroughly do it than Mr. Wm. H. Parker, of St. Elie Lodge. S. C. H.

Niagara Falls, June, 1878.

—A. N. Shewan, Esq., of Montreal, is in New Brunswick to try his practiced hand on the salmon.

MASSACHUSETTS—*New Bedford, July* 3.—The quantity of bluefish caught is very great. The waters in this vicinity seem full of them. Several fine bass have been caught at Cuttyhunk and No Man's Land. Capt. J. L. Sisson launched his new pleasure yacht *Metric* to-day, and in a few days will be ready for fishing parties, and no one knows where to catch the large bass or bluefish better than "Lafayette."

CONOHA.

MOVEMENTS OF THE FISHING FLEET.—The leading feature of the fish market the past week has been the large receipts of Georges fish, 56 arrivals having been reported, with 1,280,000 lbs. codfish and 17,000 lbs. halibut; the scarcity of mackerel along this shore keeps a large summer fleet upon Georges, and this branch gives better promise of successful operations than the mackerel fishery. The receipts of Bank halibut have been small, 5 arrivals bringing 175,000 lbs. and prices have ruled favorably. 11 mackerel arrivals have been reported for the week, but the receipts have not amounted to anything worth noticing. Whole number of arrivals for the week, 72. But little is known concerning the doings of the Bay fleet, but the catch has probably been small so far. One vessel is reported to have taken 300 bbls. on the hook, which would indicate a good prospect for this fishery.—*Cape Ann Advertiser, July* 5.

SALMON IN THE CONNECTICUT RIVER.—Desirous of learning whether salmon were still running in the Connecticut River, W. M. Hudson, Esq., Fish Commissioner of the State, has kindly sent us the following information:

"July 2—I learned to-day that three seines fishing at Glastonburg and Rocky Hill had taken respectively ten, six and four salmon, averaging about twelve pounds each, during the season. On the 7th of June a fifteen-pound salmon was speared at the foot of the Holyoke dam, and I believe that the person at fault has been prosecuted for the offence. On the 11th of June a twenty-pound salmon, and on the 17th of June a fifteen-pound salmon were hauled in by Chas. C. Smith in his seine, at South Hadley Falls, Mass., and when near the shore were liberated. These are all, so far as I know, that have been seen above the Mass. line."

NEW JERSEY—*Kinzey's Ashley House, Barnegat Inlet, June* 30.—Sheepshead still biting freely; from 200 to 300 taken daily. Bluefish plenty, but run small, from twenty to forty per boat taken. Blackfish never more plenty. J. Reeves caught on the Old Mediator in four hours over 100 fish. They run from one pound to 3½.

Barnegat House, July 5.—Bluefish are now in the bay in large numbers, and biting well. Our yachts came in as follows: Captain Wilburt, with Mr. R. L. Newcombe, of New York, 40 bluefish; Captain Anthony Parker, with Mr. Ed. Howell and friends, of Philadelphia, 56 bluefish; Captain Bill Predmore, with Messrs. Worthen and Aldrich, 41 bluefish; Captain John Bunnell, with Warnock & Co., of Philadelphia, 11 bluefish, 1 sheepshead, weighing 10 lbs; Captain Forman Mathews, with Messrs. Dolson, Whiteley and Craven, of Philadelphia, 17 bluefish, 1 sheepshead; Captain Theo. Predmore, 62 bluefish, 2 sheepshead. ARTHUR.

Forked River, July 2.—Bluefish have been biting well for the past week, and some large ones have been caught outside. Mr. D. Chamberlain caught a sheepshead weighing 12 lbs.

ARTHUR.

FISHING IN LAKE BORGNE.—Lake Borgne, La., formed by the Gulf of Mexico, offers as fine sport for anglers as any sheet of water we have in the South. The fish are not perhaps so game as those caught in the colder waters of the North, although there are some few species caught there that, were they fished for with the same tackle as is used for taking the striped bass off the New England coast, would require nearly, if not quite, as much skill. These are the redfish and speckled trout. The best place for taking these fish is close to one of the "coquilles" or shell-banks, of which there are a great many scattered over the lake, and which at high tide are covered from two to three feet, and which are the chief feeding places for these fish. In order to reach these banks a sail boat has to be taken from the mainland, and the start made to suit the hour when the tide is running in. Once at the place and the boat anchored, the fishing begins. The mode of catching them down there is to have a large cotton line, upon which from two to three large hooks, with brass snells attached, are fastened, and on each of these a half of a mullet is placed for bait, one end of the line being tied to the boat, and the other part thrown out as far as possible, directly over the submerged bank. The fish come in schools, and as they are very voracious it is not very long before you have a bite, sometimes as many as two or three fish striking at a time; then you have it, making your line whiz through the water, and if your tackle is not strong they will get away, unless managed with a good deal of skill. I am of the opinion, from my experience in fishing with the above described tackle, that it would take a very good fisherman to capture a ten-pound redfish with a rod and reel. The trout (as they are called there) are very game for a short while, but soon tire. In addition to the above fish, red snapper, sheepshead and an occasional striped bass are caught also, but in different localities. Of small fish, the croaker (so called from a peculiar noise it makes in being taken from the water) is the most plentiful. At times they bite very rapidly. As many as a hundred can be caught in an hour or two. For this kind of fishing hand-lines are used, and, consequently, but little sport in it. J. D. H.

MICHIGAN—*Bay City, July* 1.—As the Michigan Central R. R. have put a fast train on the J. L. & S. R. R. North, four to six hours will put you where all the lovers of Old Izaak would like to be, among the famous grayling and trout. This famous country for game has been practically closed to the sportsman because of trains only running every other day, and only freight or logging trains at that. Now they run fast trains both ways each day except Sundays. This gives a man or a party a chance to go in and take grayling for supper the first day from Bay City, and to bring out fresh fish or game the day it is caught. You that are weary and want a few days' rest and a little sport, and easy access to it, can here find it. I do not invite you to come and destroy our grayling, but come and help to enjoy them as a true sportsman should—live and let live. It has been said to me that you do not want people to know where your game is. I do. There is not a tired man on earth whom I would not be glad to see and to give cheerfully the directions to go and take our game or fish, and more than all else, our pure air and water. I do not want to be called selfish: come and enjoy this great luxury with us; eat, drink and sleep as you never have since you were a boy; become young again, as you will in thought and action. When you return to your labors again, whatever they may be, it will be easier, and the memory of any man who enjoys the comforts of a week or more in the Northern woods of Michigan will ever turn to it with extreme pleasure; but woe be unto the man or men who come to catch game to sell; we cannot bear to thus see our beauties taken from us. This invitation is given especially to tired souls who need a rest—clergymen, editors, lawyers, merchants, M. D's, etc. I believe these beauties are there especially for you who love the solemn grandeur of the wilderness and need rest. We refer you, by permission, to T. C. Phillips, of Bay City and *Daily Tribune*, either by mail or in person as to the Au Sable, Manistee or Cheboygen Rivers and Lakes Higgins, Houghter and Otsego.

HOGGISHNESS.—Not a very refined word that! But one must adapt his vocabulary to the subject he is treating, and when the topic is an uninviting one, what wonder that impolite language presents itself? Hoggishness is a good old English word, signifying, in general, conduct becoming a hog; in particular, the action of sundry trout and grayling fishermen who have been exploiting on the rivers Boyne and Manistee, Michigan. Six hundred grayling for three men in parts of two days' fishing is, to be sure, a big score, but if we were one of the party we should never tell of it. It is too suggestive of the yank-em-out-before-any-one-else-gets-a-chance style of doing things. If these Michigan rivers are soon as barren of sport as a greedy fisherman's soul is of sportsmanlike sentiments, anglers may thank this display of—hoggishness.

WISCONSIN—*Neenah, July* 3.—A. J. Cooper, of Milwaukee, and his little boy caught, one day this week, forty-two, the next day, fifty-three black and silver bass. Weight of the fish was 189lbs. S. P.

WILDERNESS WISCONSIN.—We have several times called attention to the locality referred to in the following letter, which has been forwarded by Mr. Hallock, of this paper, who is now in Wisconsin. This letter is writen by Mr. Pratt, Auditor of the Wisconsin Central Railroad, but we hope to have another from brother Hallock's own pen:

June, 28, 1878.—During our tramp in the woods we visited two very beautiful and picturesque falls scarcely known to white men. The whole country about there is wild and broken, the streams run through gorges 75 to 100 feet high cut in solid rock. The falls are of this height. We went out and took a few trout in silver Creek where our car was set, but the water had not subsided enough to make good fishing and after a half hour's sport we came in to dinner. We caught enough for breakfast, however. The following morning we started from the railroad at Trout Brook two and a half miles north of Silver Creek, and after a delightful walk of two miles through mostly hard wood timber clear of undergrowth reached Lake Harriet. Fresh deer tracks interested the ladies especially, but we did not happen to see the deer. Last year at Trout Brook, in August, one was attracted by our camp fire and his eyes glistened through the foliage until he was frightened away.

We reached Lake Harriet at about 11 A. M., and before long three of us were in the boat owned and paddled by our guide, C. W. Davis, who lives on a homestead at Silver Creek. As the three ladies of our party—the first white women who ever visited the lake, which itself was discovered last fall—were anxious to drop a line, the gentlemen were one by one left "lone fishermen" on extempore rafts or logs while the guide returned for the fair ones. At 1 o'clock Mr. Davis proceeded to withdraw the picquets, as lunch time had arrived and on rallying on the reserve it was found we had the following strings of black bass: Two ladies, 27; gentlemen, 54 (the subscriber taking 30). We did not think it right to fish longer, but one of the ladies and two gentlemen thought they must catch a few more and went out for a short time and returned with 29, making a total of 110. They ran very even in weight, though the largest was but two pounds, but they were very gamy. D. M. Belden, of Milwaukee, an old bass fisherman, was with us, and said he never saw such fishing. We took along minnows, but one of the party who was left alone used a frog. We still fished, casting occasionally, and frequently would have one hooked before the hook was a foot under water. In honor of Mrs. Talbot, who caught 20 fish, we named the lake "Harriet." It covers perhaps 90 acres.

The night we left Milwaukee there was a violent storm at Ashland, and consequently the rock fishing was spoiled for three days it was so rough. They are taking large ones up Fish Creek, and it would seem fishing was never better. I would you had been with us, and send this brief account of a portion of the trip as it may be of interest. Wish I had time to describe the running of the rapids of the Elk and the excursion to Long Lake below Phillips, but this must suffice. The muskalonge (this don't seem the right orthography, but I must follow example of good men) are biting nicely up in Butternut, but we couldn't do everything, and left the choice of routes to ladies. They are trumps you may be sure or they couldn't have kept with us.

Yours, hoping to see you before winter, HENRY PRATT.

[Mr. Hallock and his wife contemplated being of the party named, but untoward circumstances prevented.—EDS.]

MINNESOTA—*Hokah, July* 3.—Fishing is first class, and bass and trout are being taken in large numbers. One hundred and twenty-seven trout taken by three rods one day last week. FINE SHOT.

WANNINISH FISHING AT LAKE ST. JOHN.

THE Wanninish or land-locked salmon are found in great numbers at the outlet of Lake St. John, situated about 120 miles by the Government road from Quebec, and 60 miles above Chicoutinia, the head of navigation of the Saguenay River. One of the comfortable passenger steamers of the St. Lawrence Steam Navigation Company leaves Quebec daily during the summer months for Chicoutinia, affording one the most interesting trips on Canadian waters, taking in the beautiful scenery of the St. Lawrence to Tadousac, and of the incomparable Saguenay its entire length. The angler will find salmon, sea, river, and lake trout, and, last but not least, the wanninish fishing in perfection. This word has been spelled by many writers differently, some wininish, other ounimish. A missionary priest assured me that Wanninish is the proper way. Certainly it is so pronounced by the inhabitants. It was my good fortune to form one of a party of four gentlemen who left Old Quebec City on Tuesday, the 11th June last, on the steamer St. Lawrence, which unmoored from the wharf, or rather pontoon, at 8 o'clock in the morning. The weather was cool and bracing, and the few passengers, including two newly married couples, very sociable and gay. At about noon the next day we landed at Chicoutinia, where the leader of our party (the Admiral) had some business matters to transact, which detained us until after 3 o'clock in the afternoon, when we found ourselves crossing the river in a large skiff called the ferry boat. Arrived on the opposite shore, two four-wheeled back-board wagons, drawn by hardy Canadian ponies, were obtained to convey us, and a horse and cart to convey our provisions, tents and baggage, about fifteen miles over the very steepest hills, to the house of a family named Savard, consisting of five sons and a daughter grown up, with their mother. Two of the sons are married, and, with their wives and one child and six hired men, all live in one house, in fact, one large room and loft, the whole forming the happiest family of the size that I ever met. Their usual occupation is driving saw logs through the rapids and over slides, and some farming. We engaged four of them, with two canoes. After partaking of a good meal, cleanly cooked and nicely served, and spending a pleasant evening, we went to our clean, comfortable beds, high posted and surrounded with neat printed cotton curtains, and early the next morning we arose refreshed and ready to begin a day's journey in bark canoes, which were carefully repitched to cover leaks before being put in the water. Two of our companions were from New York, Messrs. Charles S. Milliken and Henry S. Gillespie, who were on visits to some of their friends in Quebec; the others being Lieutenant-Colonel Montizembert of the Canadian Artillery (B Battery) and myself (styled the Admiral). We Canadians each took a New Yorker in our respective canoes. With two men and a fair share of the luggage these tiny crafts looked fearfully frail and cranky for such loads, but the fishing fever was in us, and although we squatted down rather timidly at first, all fear of upset soon left us. We were paddled up stream against a stiff current for about fourteen miles. When we came to a two-mile portage each man shouldered a pack and one carried a canoe on his head, and away we marched, under a broiling sun, till we reached the head of the rapids, at about half-past five o'clock P.M. Our men set to work getting supper and pitching our tents. Milliken from off the rocks soon hooked a fine fish of about four pounds weight. This so spurred me on that I beckoned two of the men to join me for a short trip. While supper was cooking we quietly slipped away, and before five minutes were over I was fast to a five-pounder, and found him the liveliest fish I ever played. No fifteen-pound salmon could have created more excitement; he dashed off soon as he felt the hook, leaping six times in rapid succession high out of the water, and then rushing down into the deepest hole, tugged away till he was worked up to the surface, when as soon as he caught sight of me off he went again like a shot, and kept up this kind of work till exhausted, and was landed by a hand net, when he had to be struck over the head to be made to lie quiet in the canoe.

I fished with an ordinary trout rod, ash butt, hickory centre

Second Match—Five bird sweep, 21 yards.

Smith	1 1 1 0 1—4	Barker	1 0 1 1 1—4
Jones	1 0 1 1 1—4	Layman	1 1 1 1 1—5
Williams	1 1 1 1 0—4		

Smith won second with three at 26 and two at 31 yards.

Three double rises; 18 yards.

Smith	11 11 1*—5	Barker	11 00 11—4
Jones	11 01 11—5	Layman	10 10 w
Williams	00 11 11—4		

Smith won first with five at 21 yards; Williams and Baker divided.

Same Day—Five single rises, 21 yards.

H G Davis	1 1 1 1 1—5	Layman	1 1 1 1 0—4
Clarke	0 1 1 1 1—4	Barker	1 1 0 1 1—4
Corbet	1 1 0 1 1—4	Post	0 0 1 1 1—3
Jones	1 1 1 0 0—3	Klug	0 0 0 1 0—1
W B Davis	1 1 1 0 1—4	Williams	1 1 0 1 0—3
Smith	1 0 1 1 1—4	McKevitt	1 1 0 1 1—4

Davis first, Mc. second, Post third.

Three double birds; 18 yards.

H G Davis	11 11 11—6	Williams	10 11 11—5
McKevitt	11 11 11—6	W B Davis	10 01 10—3
Jones	01 10 00—2	Barker	10 11 10—4
Layman	11 11 11—6	Smith	11 10 11—5

H. G. Davis first, with six at 24 yards; A. B. Smith second, with eleven out of twelve.

Five bird sweep; 21 yards.

B Davis	1 1 1 1 1—5	Layman	0 1 1 1 0—3
McKevitt	0 1 1 1 1—4	Clarke	0 1 1 1 1—4
Smith	1 1 1 0 1—4	Williams	1 1 1 1 1—5
W Davis	1 1 1 0 1—4	Barker	1 0 1 0 1—3
Baily	1 1 1 0 0—3	Wilcox	1 0 0 1 1—3

H. Davis first, with three at 26 and two at 31 yards; Smith second, with three at 26 and six at 31 yards.

TUNA.

Williamsville, July 4.—Match for gold medal.

Eggert	0 1 0 1 1 1 1 0 1 1—7	F Persons	1 1 1 1 0 1 1 1 1 0—8
Stacy	1 1 0 1 0 1 1 1 1 1—8	G Persons	1 0 0 1 1 0 1 0 1 1—6
Miller	1 0 1 0 0 1 1 1 0 1—6	Hinckley	1 1 0 0 1 0 1 1 1 1—7
Keiffer	1 1 0 1 1 1 0 1 1 0—7	Rinewalt	1 0 1 1 1 1 1 1 1 1—9

THE BADGE SHOOT.—The eighth regular shoot for the gold badge of Northwestern Shooting Club took place at the Head with these conditions, Purdy trap, Bogardus rules, weather fine, 18 yards rise, with the following result:

Will Tracy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—20
Capt J S Riddle	1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1—18
Jake Graham	1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1—18
W W Deroy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 0—17
S S Burton	1 1 0 1 1 1 1 1 1 0 1 1 0 1 0 1 1 1 1—16
T Lynch	1 0 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1—16
Charles Lynchburg	1 1 1 1 1 0 1 0 0 1 1 1 0 1 0 1 1 1 1—15
Harry Van Velsor	0 1 1 1 1 1 1 1 1 0 1 0 1 1 1 0 1 1 0—15
Captain Hayward	0 1 1 0 1 1 1 1 0 1 1 0 1 1 0 1 1 1 1—15
Charles Fitch	1 1 1 1 0 1 1 1 0 0 1 1 1 1 1 0 1 1 1 0—15
Samuel Thompson	0 1 0 0 1 0 1 0 1 0 1 1 1 1 1 1 1 1 1—14
T W Jarecki	0 1 1 1 0 1 0 1 1 0 0 1 1 0 1 1 0 1 0 0—11
John Graham	0 1 0 0 1 0 0 1 1 1 0 1 1 0 1 0 0 0 0 1—9

Captain Riddle killed twenty-four wild pigeons out of twenty-five, and Mr. Derby twenty-three out of the same number.

W. W. DERBY, Sec.

AUDUBON CLUB—*Chicago, July 6.*—Regular quarterly shoot for the diamond badge at Dexter Park; five ground traps, five yards apart; 30 yards rise, 80 yards boundary; gun to be held below the elbow until bird takes wing; wild pigeons, very strong flyers. The above badge was first shot for by the club in March, 1875. Any member of the club winning it three times then becomes its possessor. Mr. S. H. Turrill first won it last November, and again in January, being the only member of the club having won it twice, and to-day, as he captures it for the third time, it now belongs to him. We feel somewhat proud of Mr. Turrill's performance, as the skill of our Western representative sheds additional lustre on the FOREST AND STREAM AND ROD AND GUN. Score:

S H Turrill	1 1 1 0 1 1 0 1 1 1 1 1—10
W T Johnson	1 0 0 1 0 0 1 1 0 1 1 1—7
A Cook	1 0 1 1 0 1 0 1 0 1 0 1—7
Dr Haven	0 1 0 1 0 1 0 1 0 0 1 1—6
W W Foss	1 0 0 1 1 1 1 0 1 0 0 1—7
Abner Price	1 0 1 1 1 1 1 1 1 1 0 1—10
C Morris	0 1 1 1 1 0 1 1 1 1 1 1—10
C E Felton	0 1 1 0 1 1 1 1 0 1 0 1—8
J Thompson	1 1 0 0 0 0 w
T Stagg	1 1 0 0 1 0 1 0 1 1 0 0—6
C Kern	0 0 0 1 1 1 1 1 1 0 1 1—8
N Rowe	0 1 0 1 0 0 1 0 1 1 0 0—5

Ties at 31 yards.

Turrill	1 1 1 1 1—5	Morris	1 0 1 0 1—3
Price	0 1 1 1 1—4		

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

R. C. C., Sing Sing.—Address John Bonnell, Forked River, N. J.

D. D. D.—For map of New Jersey send to the Coltons, 172 William st., N. Y. The Woodbury, N. J., course is a small place.

W. M. E., San Diego.—Sorry to inform you that the best authorities declare such vices to be incurable. Get rid of him.

W. Y. W. R., Rutland, Vt.—Send fifty cents to F. O. De Luze, and he will send you the mange ointment. See advertisement.

J. W., Pittsburg.—You will find it most satisfactory to send your hunting coat to a good dyer. The process will require several days.

C. N. C.—Are dew claws considered an indication of ill breeding? Ans No; it is an atavism, which means the recurrence of a former type.

B. P., Pittston.—My setter has a large wart on the roof of his mouth near the front teeth. Must I use caustic? ANS. Yes, destroy by caustic.

J. B. H., Buffalo.—The printer who set up "deer claws" for "dew claws" has gone to his happy home. Who sent him there will never be known. Live in hopes about that cocker.

H. B. W., Sag Harbor.—A good common school education suffices. Address American College of Veterinary Surgeons, 141 W. Fifty-fourth st., New York, A. Liautard, Pres.

C. B. H., Coolville, O.—I wish to correspond with some one in whom I can confide, who is well acquainted around Spirit and Okoboje Lakes Iowa. Ans. Write to Mr. O. E. Day, Waterloo, Iowa.

H. W., Woodbridge, N. J.—Who could spay a slut for me in N. Y., or vicinity? Ans. We do not know just now who could do it. The party we recommended is out of town. A local surgeon might be glad to do it.

J. B. WARD, Brooklyn, N. Y.—Will you kindly furnish me with the name of the maker of the rifle used by Mr. H. W. S. Cleveland, of Chicago? Ans. We think that Mr. Cleveland uses the Express, although we are not certain.

PLUVIER, Boston.—How should the following be decided? A takes the Boston, Providence and Indianapolis clubs against the other three league clubs with B for $1 a game, nothing more being said. The Bostons and Providences win and the Indianapolis and Cincinnati play a tie game. Ans. A wins on the Boston and Providence games. The other is a tie.

J. J. J., Jersey City.—You can take a small sail-boat up the Hudson to Lansinghurgh, where you will be checked by falls and a dam. Charts of the river can be got from J. D. Negus, 140 Water st., or from Merrill's Sons, 179 Water st., New York.

T. C. H., Philadelphia.—1. What is the best food for a setter? Have given him corn meal and oatmeal, with rice. 2. Give me the address of a good dog breaker. Ans. The food you mention cannot be improved; perhaps he needs a purge. 2. See advertisements.

L. A., Mount Carmel, Conn.—What will remove the dead hair from a dog? He is a setter 14 months old. Shed his hair early, all but six inches back of his shoulder. Have given him exercise and kept him clean. Ans. Wash and groom him frequently and give a little sulphur now and again.

G. F. A., Fishkill.—Mr. Van Dyke speaks of a dog pointing a woodcock with one in his mouth. How can a dog scent a bird at a distance with one in close proximity to his nose? Ans. The act is frequently performed by the dog, but he probably points in such a case from sight and not from scent.

A. C. W., N. Y.—Our spitz (a slut) has two large raw spots on her back which are very sore and seem to be growing larger. She continually licks them. What remedy would you advise? Ans. Very probably mange. Cleanse with soap and water, then apply kerosene once a day. Lower her diet.

J. P. L., Indianapolis.—Englehardt's "Rowing Almanac" costs fifty cents. We can furnish it. You will find diagrams of boats in a complete series in Nos. 25 and 26, Vol. VIII.; and Nos. 1, 4, 7, 8, 13, 14, 20, 23 and 26, Vol. IX.; and Nos. 1, 4, 10, 16 and 19, Vol. X. Can send them to you on receipt of $1.15.

S. W., St. Clair.—I have an Irish setter pup, four months old, who is blind. The pupil of the eye has become enlarged. He is feverish, but not weak. His eyes are glassy and bulging. Ans. The case is such as should be seen by a surgeon. There is probably inflammation in the interior of the globe of the eye.

C. E. E., St. Clair, Pa.—I have a rabbit hound who is gun shy when not chasing. When chasing does not mind the report of a gun, but if not engaged will put down tail and leave me and go home. How shall I break her of this habit? Ans. Hard case to prescribe for. Advise you to use a leash, and not let her go.

F. J. H., Newark.—Have a valuable dog which is sick. Nose running, and discharging green matter. Drinks, but won't eat. What shall I do? Ans. Description very insufficient. A little sulphur once a day, and a small dose of castor oil twice a week, may do good. Also, give him two grains quinine three times a day.

M. P. R., Pottstown, Pa.—1. At what age should a young setter dog go into training? 2. Which is the best and proper mode for training a dog to retrieve? Ans. 1. Should be taken in charge when about six months old. 2. For methods of training see works on the subject. Consult "Hallock's Gazetteer," or former articles in this paper.

D. H. F., Port Richmond.—Good taxidermists are: J. H. Batty, Parkville, L. I.; Bell, 335 Broadway, N. Y., and Wallace, 19 N. William st., N. Y. The use of decoys in snipe shooting depends upon whether the birds are shy or not. If they are wary and fly in flocks, decoys are necessary. You can find cheap sporting pictures at the store of Currier & Ives, Nassau st., N. Y.

H. P. A., Boston.—1. My large Newfoundland has a thick phlegm over his eyes. How shall I cure it? 2. Is East Sandwich, Mass., good as a gunning resort? Ans. 1. Cleanse the eyes with tepid water, and then use as a wash a solution of alum, two grains to an ounce of water, twice a day. Feed no meat, and give a purge now and again. 2. No very great quantity of game there.

W. E. L., Cincinnati.—Is there a law in Ohio and Kentucky prohibiting blackbird shooting? My bitch was in heat last December; when will she be in season again? Ans. 1. A fine of $2 to $50 in Ohio; and under the head of insectivorous birds, $3 in Kentucky, except where injurious to crops. 2. The regular time is sixty-one to sixty-five days. The sixty-second is the average.

H. T. D.—What is the best food for setters? How often should they be fed? I notice English breeders object to feeding bones to dogs. Ans. Corn meal mush, with table scraps containing a little meat, makes the best food. A dog needs his bone occasionally. It is not well to feed small bones, but large ones to gnaw at. There are a great many varieties of mange, and the cure must depend on cause. Describe your case.

INQUIRER, Louisville, Ky.—Among the cow-hunters and old settlers of Florida the lily pad or lily leaf is known as "bonnet." If you have ever been on those "dead rivers" (bayous) or lakes of Florida, you may have noticed the resemblance of the lily pads, when ruffled by the breeze, to the waving of the old-fashioned sun-bonnet when the wind doubles and twists the pasteboard. Nearly all the "Cracker" women wear sun-bonnets.

SUBSCRIBER, London, Can.—Trickett has claim to the world's championship, having defeated the English champion, who, in turn, had defeated all comers. Trickett is now open to challenges from abroad, and the man that beats him will then hold the championship. Do not know his age. He keeps a hotel at Sydney, Australia. Have no record of five-mile races. Hanlon's time, in his race with Morris at Pittsburgh, was 37m., five miles with turn.

H. E. R., Harrison.—Have a red Irish setter 12 months old. Has been chained most of the time. Took him out for woodcock. He would work well enough at the start and then get shy, lie down and act as if he had been thrashed. Am disappointed, as he is a fine animal and of prime stock. What ought I to do? Ans. The dog may turn out well, but such an animal requires great care at first. It would be well to take out a dog of courage with him for a short time.

A. N. C., New Haven.—The region about the Second Connecticut Lake, N. H., we think you would find an excellent country for August and September camping. The route is via Grand Trunk Railway to Island Pond, Vt., thence Wilderness road; or, leave the Grand Trunk, R. R., at Strafford, stage to Colebrook, wagon to Ewall's Falls, boat up river to Dakee's Landing Megalloway River, and thence to Parmachene Lake, for carry to Connecticut Lakes. Moose, deer and trout are to be found.

C. W. L., Boston.—I have an excellent shooting gun of 12 gauge, but it will not shoot buckshot. Have loaded my shells in every possible way. Will breech-loaders shoot them well? Ans. Your gun is probably somewhat choked; that is the reason why it may not shoot buckshot well. All you have to do is to chamber for buckshot from the muzzle. Take a wad fitting the muzzle and lay on that the number of buckshot it will hold on its surface, then load shells with just that quantity and you will be all right.

W. B. R., New Albany.—My Gordon, nine months old in July, had distemper in March, and has not been able to get on his legs. At first had twitching of the body, but these have passed away. Lately he is picking up in health. Have about exhausted my skill. When a dog has gone through what mine has, does he ever recover? Is there any cure? Ans. It is not probable that the dog will ever fully recover. A pill containing ½ gr. nux vomica and 2 grs. quinine, given three times a day, will be of some service.

VIRGINIAN, Norfolk, Va.—A purchases a farm, for which he pays $40,000; he sells it to B for $45,000, and afterward buys it back for $35,000. How much money did A clear? Ans. A clears $5,000. We have had this same question before in a different dress. There has been but one completed transaction in the statement. If "Virginian" is perplexed let him remember that A has paid out $75,000 cash, has received $45,000, and now has the farm, what over that may be worth. If "Virginian" thinks A has made $10,000 we advise him to keep out of the real estate business.

H. P. S., New Brunswick.—Have a setter bitch ten months old. Seems to have come in heat; hair around the right eye dropping off, and skin inflamed; she scratches herself; difficulty in passages; have given her castor oil; seems to have imperfect action of her hind legs. Has she spinal meningitis? Ans. You give no symptoms of cerebro spinal meningitis. Give her a teaspoonful of sulphur twice a week, and one dose of castor oil—a tablespoonful in a little hot milk. Give no meat for a time. She may have a bone to pick.

M. G. M., Newburgh.—My setter is sixteen months old. Was sick during the winter with distemper, since which has had trouble with his throat and head. Affected now with a gathering on his head and discharge from his ears. Eyes are filled with yellow mucus. Keeps shaking his head. Seems to be in great pain at times. Have thought of giving him tonics, etc. Ans. With your ideas of toning, or bracing up, it is a wonder you have not applied them. Give him two grains of quinine three or four times a day. Keep his ears clean and pour in a little weak lead water twice a day, and report if not better in a fortnight.

T. N. T. B.—1. How long can soft and hard crabs be kept alive and fresh, and what is the best method of doing so? 2. Is it possible to artificially breed the common crab of these waters, and is their fecundity anything as great as fish—shad, salmon, etc.? 3. Would it pay, and what capital would be required? Ans. 1. Soft crabs can be kept, with proper precautions, three to four days. Hard shell crabs an indefinite time. They should be packed for market in damp grass or moss. 2. The artificial propagation of crabs is quite possible. Their fecundity is not as great as that of the fish you mention. 3. Do not think it would pay, as at times there is, at least in N. Y., a superabundance of both hard and soft crabs.

J. Y. J., Philadelphia.—For a good boat go to Ward, in Fairmount Park, or to Albertson's, on Beach st., opposite Cramp's upper ship yard. A new oilnker built boat should not cost over $6 a foot, possibly you could have one built considerably cheaper. Have her copper fastened, however, and properly riveted to last any time. Good builder in New York is Desmond, boat builder, Peck Slip, N. Y. Write to him. Take a friend along who knows something about a boat, and with his aid you may select a satisfactory and second-hand one at one of the boat club houses on the Schuylkill, or on the Delaware River front.

BILLINGS, Cambridge.—I was referee in a glass ball shoot. Two or three boys in front of me obstructed my sight so that I did not see a ball, and consequently did not know whether it was broken or not. Though the shooter did not claim another ball, I ordered him to shoot again, which he did, breaking the ball. The rest of the party knew that the first ball was not broken. Was it right? Ans. You should not have given another ball unless it was claimed by the shooter on a substantial claim of doubt. In the present case he did not claim it and should not have had it. The moral is: What mischief the small boy doth at a trap shoot all the newspapers in the land cannot undo.

J. G. S., Santa Rosa, Cal.—1. Do Smith & Wesson make a breech-loading shot-gun? Where can prices and description be found? 2. Where is the Allen shot gun, if any, made? 3. Where is the Ward-Burton rifle made? Where can prices and description be had? Is it a repeater, or a single shot? 4. Please give me the names and addresses of some of the English and Canadian sporting publications. Could I obtain specimen copies from you? Ans. 1. Do not make them any longer. 2. In Worcester, Mass. 3. Does not make them any more. It is a repeating arm. 4. The *Field, Land and Water, Country, Bell's Life and Sportsman* are published in London; the *Canadian Sportsman* at Quebec. They may be obtained through the Witmer & Rogers News Co., 31 Beekman st., N. Y.

W. F. C., St. Thomas, Ont.—1. My dog in passing water voids blood. He has passed a teacupful of dark, almost black, blood. He is lively and only at times seems sickly. He is said to be a pure Labrador and weighs 120 pounds. I feed him on raw meat. What shall I do for him? 2. Describe a Labrador dog? Ans. 1. Stop meat diet gradually and substitute corn meal, or table scraps. Give sulphur and castor oil once a week. 2. Head long, large and moderately square; long from the eyes downward, and fairly flewed. Broad across the eyes. Eyes small and piercing. Nose large, with expanded nostrils. Neck strong, enlarging toward the shoulder, and muscular. Legs powerful and rather short in proportion to the body. Back broad, loin wide and muscular—and the great point with a dog which must swim is that the thighs should be wide. Fore legs feathered to ankle; hind legs rather bare. From 27 to 30 inches in height.

GUMO, Memphis, Tenn.—1. Are "any" and "all" identical terms in meaning, or is "any" one, and "all" the whole? 2. Is a dog a native whose mother is a native, and who was himself born in Tennessee, as, for instance, Joe, Jr., from Echo and Buck? 3. If I name one dog against the whole field in a field trial, and that one is a native, am I not pitting this one native not only against all blues, but also against all other natives? 4. Would this last be fair or unfair as a test of Native vs. Blue, or would the native be fighting against his own race also? Ans. 1. "All" and "any" are not identical terms. "Any" means one out of many; "all" is collective. "Any" may, however, be as comprehensive as "all," that is, the individual may represent the ability of all. If a contestant defeats the champion, he is recognized as superior to all whom the champion may have defeated. 2. We are inclined to think Joe, Jr., a native. A "native," as we understand it, must be conceived and born in the country to be a native of it. Some maintain that the third generation first becomes natives, but such a rule is purely arbitrary. 3. Certainly, unless otherwise specified. 4. Manifestly unfair.

HAWK EYE, New York.—A local rifle company wants to shoot a match with pistols. Would members attending such competitions outside of the city limits, require a permit from the police authorities to carry pistols unloaded to and from such competitions? Ans. Having put this question before His Honor, Mayor Ely, he has kindly sent us the City Ordinances. Section 1 reads as follows: "Every person, except judges of the Federal, State, and city courts, and officers of the general, State and municipal governments, authorized by law to make arrests, and persons to whom permits shall have been issued, as hereinafter provided, who shall have in his possession within the City of New York a pistol of any description, concealed on his person, or not carried openly, shall be deemed guilty of a misdemeanor, and shall be punished, on conviction, by a fine not exceeding ten dollars, or, in default of payment of such fine, by imprisonment not exceeding ten days." If the pistol, then, is carried *openly*, we do not think there would be any hindrance. We shall be glad to hear results of this and other matches.

bottoms are covered with water, need I tell the intelligent reader the result?

We do not now need to go so far as on our previous hunt, but, gliding directly across the swift, but clear current of the great river, land at the first bit of dry ground. The water is some five feet above the stage at which we last saw it, and all the low grounds are covered. A long strip of timber runs up between two sloughs, and for this the boat is headed. It is about a hundred yards wide in the widest place; one edge is under water, and the other very nearly so.

As the boat touches and Horton jumps out, the well known twittering wing is heard just inside the brush, and Horton seems unconcerned; but Spot jumps out with a splash; Chase pricks his ears and makes a half point in the boat, on the sound only, and N. grabs his gun and shoots it off at the timber.

"Keep cool, and save your cartridges; you'll have plenty of use for them," says H. "You'd better take the outside, Newville, for you will get open shots in that way. Keep Chase to heel, and use him only to retrieve. I'll send you out plenty of birds."

N. takes the dry outside edge of the timber, while H. takes the inside, and we will follow him.

The sport is now such as is almost inconceivable to one who has never been so fortunate as to catch such rare occasions as the present combined situation of land, water, and birds affords. Spot is on an almost continual point, moving about only on a thievish walk, and stopping every minute or two to straighten out into icy grace. He is to-day on his very best behavior, and exhibits an extraordinary ingenuity in devising new forms of beauty into which to mould himself when he smells a bird.

His ingenuity in striking different positions is, however, fully equalled by that of the birds in flying. Nearly all of them are wilder than those we saw on our last hunt, and do not lie so close to the dog. Many rise far ahead of him; many lie in the edge of the strip of timber and wheel away upward on the outside, dart backward down the line of the strip, or send across the open for another piece of brush, making most always a successful run of N.'s blockade. Some shoot upward to the tree tops and skim away over them; some whirl upward on a spiral course that requires extra judgment to keep from shooting behind or below them; some whisk away so close to the ground that their brown streak is scarcely distinguishable from it; while others hustle out of sight in a twinkling through some dense thicket.

Meanwhile, Horton is doing some elegant work. Of course, he misses some, as who will not, especially under such circumstances? Even the steadiest and most hardened nerves would become fluttered by such fast rising of birds as we now see. To have a fresh bird bustling up as you go to pick up a dead one and, dropping the fresh one, see your dog on another point before you can get to either of the two dead birds, and then to have a couple more spring right and left in front of you before you can reach your dog, will turn into a shuttle the heart of the most experienced shot. At such times it is impossible to preserve that coolness which, though not always necessary for *quick* shooting, is indispensable for *good* shooting, whether quick or slow. The finger will sometimes betray one and pull the trigger, when the eye plainly sees that the gun is not in the right place; sometimes it will tremble and balk upon the trigger, and disobey one's will to pull at the right time. Sometimes, when a snap shot is necessary, the gun fails to come to the right place as you throw it up, and it cannot be moved in time. Sometimes, when thrown up at a crossing bird, it come, directly on, and the temptation to pull then, instead of shifting it ahead, is irresistible, and the shot goes behind. Sometimes it will strike, in coming up, an unnoticed branch or bush, or when wheeling suddenly, with heavy, swinging pockets, one is thrown out of balance and cannot catch it in time. These and a dozen other causes—above all, the mysterious "bad spell," which will at times attack the best of shots, make it impossible for any one to shoot without missing. Thanks to human infirmity that it is so. For my part, I am glad that I can never see the time when I shall never miss; for if such time should come, one half of my pleasure in shooting would be gone.

But in spite of all these troubles, the crack shot holds his own, and no exhibition of human skill is more beautiful than his shooting under such difficulties. Here he catches the line of a whizzing streak through the leaves, and like a flash of lightning the shot goes crashing across its path; there he trips with the second barrel before it gets ten feet further the whistling wing that escaped his first barrel. Now dropping on one knee as the bird flashes up into the foliage, the gun touching his shoulder and going off at the instant his knee reaches the ground, he clips a twittering pinion that it would seem impossible for men or gods to hit. Now following the course of a wild rising bird only by the sound of its wing, he catches it with a charge aimed a foot or two ahead of it, just as it crosses some small opening. Now, after a provoking miss, he cuts down the first of two birds rising together before it is fairly under way, and then, wheeling suddenly, makes the second turn a graceful somersault almost before the first one reaches the ground.

Such is the shooting that Horton now does, and in less than an hour from the time he enters the strip of timber pockets his twentieth bird, and is done for the day.

"An Utopian pancake!" I fancy some one exclaiming, as he reads this last sentence. Not at all, dear friend. Some such pancakes exist and feel far more solid satisfaction in enjoying such royal sport, like rational beings, than any one can in degrading it into boggish butchery. And instead of the slippery ice of arrogant assumption, such a man stands upon a rock of sense when he denounces pot-hunters and shrieks for laws to restrain them.

The habits of the woodcock on the upper Mississippi are somewhat different from those of the Eastern bird. They breed in about the same way, but on many kinds of ground, which at the East would be an almost sure "find" for them, they are never seen at all. Though capital shooting may be had, it can be had only by those who know the ground, and how to hunt it. Sometimes, for miles, there may be good looking ground on which a cock is never seen; then suddenly hundreds of acres on which there are nearly always plenty. Some grounds are too sandy, some too sour, some too dry; while others look as nice as one could wish, with all the elements, apparently, of good grounds, except the birds.

The shooting varies, too, with the rise and fall of the Mississippi. Nearly all the sloughs and ponds are so connected with the river that a rise of a foot or two in it will cover the soft, wormy margins of mud around them, on which the birds feed, and thus scatter them over the bottoms; though, when the rise is just sufficiently great, it makes such shooting as described above.

If there ever was any well-founded doubt as to where the woodcock goes to moult, there is none about the birds that inhabit these bottoms. The birds bred here remain on the same ground all the summer, unless driven off temporarily by exceptionally high water. Instead of disappearing, they are generally more plenty in September; though this is owing, I think, not to the arrival of birds from below, but to the concentration of the native birds by the drying up of the highest feeding grounds by the usual summer fall of the river. At such times I have had the best shooting of the season, and though some are found in such stage of the moult that their wings make no noise in rising, they are still quick enough in flight, and the great majority a little too much so.

Partly because of the difficulty in finding them, but mainly because of the limited quantity of meat that strikes ground after a successful shot, the woodcock is not disturbed by the majority of hunters in this section. He and Bob White, and the dear little Wilson's snipe, that illustrious trio so near to the hearts of most Eastern-bred sportsmen, are regarded with contempt by many first rate shots and capital companions, to whom the superior avoirdupois of the "chicken" and duck possesses a far greater attraction. Hence the Eastern stranger who would enjoy the superb woodcock shooting of these grounds may receive no aid from resident sportsmen; though I will guarantee him the warmest welcome, most polite attention, and fullest information, if they do happen to know. To ask sportsmen to tell a mere stranger of their best preserves, is a little thicker cream than can be naturally expected to rise on even the richest milk of human kindness. And yet the average western sportsman is capable of just that extravagance. "Go West, young man," if you would find good cock shooting; but don't blame me if you don't happen to strike it at once.

The fall woodcock shooting here does not bear the same proportion toward the summer shooting that it does in the East. There the fall shooting is often the best, and would always be, if the birds were disturbed no more in summer than they are here. But here, after September, there is a capriciousness about the action of the birds that is annoying. Sometimes they will still be found on their summer haunts in great numbers. At other times there will be none there, but quantities of them on ground that contained not one in summer. The sapling-covered slopes, the sunny hillsides of second-growth timber that line the little muddy brook, grounds which in the East are such favorite autumn haunts for the royal bird, contain here scarcely one. They prefer rather the low scrub-oak, birch or maple thickets close to wet grounds, the reedy and rice-fringed edges of ponds and sloughs, and are often found in the thick, dead reeds that stand farther back on ground that was wet in summer. But at this time the only place to hunt is where the birds *are*, and not where they ought to be, and no reliable rules can be laid down upon the subject. Hence fall cock shooting here is always liable to be a swindle, that is, a swindle as *cock* shooting.

But upon or near the same grounds the sportsman will find enough other game to well compensate for his disappointment. From along the reedy or rice-fringed shores of the ponds and sloughs the little snipe often springs, with his impudent "Scape," and twists away on his erratic flight. Perhaps as you check his wayward wandering with one barrel, the beautiful wood-duck or teal springs from the thick rice which hid your approach, just at the right distance for that left, choke-bored barrel to operate upon. From the dry thickets between the sloughs the hoarse, resounding wing of the magnificent ruffed grouse startles you almost out of your wits, which you recover just too late, perhaps, to overhaul him. Upon the higher grounds, between the bluffs and the bottoms, Bob White, the darling, loafs around the sunny edges of stubbles, hazel brush, and sapling groves. Here, too, on those warm, still days, when they will occasionally lie, the pinnated grouse, now wild and vigorous, may be sometimes pacified. Here, too, those who want them may roll in billowy somersaults the swiftly-scudding hare, and here again the noble ruffed grouse goes booming through the thicket across your path. And close by the same grounds will be found the favorite stopping places of the great northern horde of quacking, squealing and honking barbarians; and there, at evening, one may take a stand, and while the air all around him shakes beneath a myriad rushing wings, stand and gape in bewilderment without knowing what to shoot at.

PIGEON MATCHES.

CUSHNOC HEIGHTS GUN CLUB—*Augusta, Me., June* 27.—Regular weekly practice; two traps, ten yards apart; fifteen yards rise, both sprung at once; Paine's rules.

Fish	1	0	0	0	1	0	1	0	1	1	1	0—6
Clement	0	0	0	1	1	0	1	1	1	0	1	1—7
Higgins	1	0	1	1	1	0	1	1	1	1	0	1—9
Thorndike	1	0	1	1	1	1	1	0	1	0	1	1—0
Mackie	1	0	0	1	0	0	0	0	0	0	0	0—2
Haskell	0	0	0	0	0	0	0	0	0	0	0	0—0
Dyer	1	0	1	0	1	0	0	1	1	1	1	0—7
Farnham	1	0	1	1	1	0	0	1	0	1	1	1—8
Tinbetts	0	1	0	0	0	0	1	0	1	1	1	0—5
Moore	1	1	1	0	1	1	1	0	1	0	1	1—9
Loafellow	1	0	1	0	1	1	0	1	0	0	1	1—7
Tobey	0	0	0	0	0	0	0	0	0	0	0	0—0

Mr. Haskell and Mr. Mackie were unable to complete the shoot, and shot but six times each. HORACE.

NEW HAVEN SHOOTING CLUB. *July* 4.—First match; Bogardus traps and rules.

Folsom	0 1 1 1 1 1 1 1 1 1—9	King	0 0 0 0 0 0 0 0 0 0—0
Jackson	1 1 0 0 1 1 1 1 0 1—7	Potter	1 1 0 0 1 0 1 1 1 1—7
Bennett	1 1 1 0 0 0 0 1 1 1—6	Howard	1 0 1 1 0 1 0 0 0 0—4

Ties shot off—Jackson, 2; Potter, 6.

Second match:

Bennett	1 1 0 0 1 1 1 0 1 1—7	Potter	1 1 1 1 1 0 1 1 1 1—9
Folsom	1 1 1 1 1 1 1 0 0 1—8	Bradley	0 1 0 1 0 w
Jackson	1 0 1 0 1 1 0 1 0 0—5	Smith	1 0 1 1 0 0 0 0 1 1—5

Third match.

Folsom	1 1 0 1 1 1 1 1 1 1—9	Longdon	1 0 1 1 1 0 1 0 1 1—7
Bennett	1 1 0 1 0 1 1 0 1 1—7	Jorey	1 1 0 1 1 1 0 1 0 1—7
Jackson	1 1 1 1 1 1 1 1 1 1—10	Potter	1 0 1 1 0 1 0 1 0 1—6
Gaines	0 1 0 0 0 1 0 0 0 0—2	Hanson	0 1 1 1 0 0 1 1 0 1—6
Wilson	1 1 1 1 1 1 1 1 1 1—10	Smith	0 1 0 0 0 0 1 1 0 1—4
Strong	0 0 0 0 0 1 0 0 1 0—2	Salisbury	1 0 1 1 0 1 1 1 1 0—7

Jackson won ties of ten with four out of five; Sallabury won ties of seven with five straight; Potter ties of six with four.

Fourth match.

Howard	1 0 1 0 0 0 0 1 1 0—4	Penn	1 1 1 1 1 0 0 1 1 1—8
Bennett	1 1 0 1 1 1 1 1 1 1—9	Jorey	1 1 1 1 1 1 1 1 1 1—10
Jackson	1 0 0 1 1 1 0 1 1 1—7	Folsom	1 1 1 1 1 1 1 1 1 1—10
Longdon	1 1 1 0 0 1 1 1 1 1—8	Hanson	1 1 0 0 1 1 1 0 0 1—6
Gaines	0 1 1 0 1 1 1 0 1 1—7	Smith	0 1 0 1 0 1 1 0 1 0—5
Wilson	0 1 1 1 1 1 1 1 1 1—9	Strong	0 1 1 0 0 1 0 0 0 1—4

Ties of ten, won by Folsom with four out of five; ties of nine by Wilson, with five straight; ties of seven, Jackson and Gaines tied on five, again on three, then on five, Gaines finally winning with five straight to Jackson's four.

Fifth match.

Bennott	0 0 1 0 0 1 0 1 1 0—4	Wilson	1 1 1 1 1 1 0 1 1—9
Folsom	1 1 1 1 0 1 1 0 1—8	Jackson	0 0 1 1 1 0 1 0 1 1—6
Longdon	0 1 1 1 1 0 1 1 1 1—8	Gaines	1 0 0 1 1 0 1 1 1 1—7
Penn	1 0 1 1 1 1 1 1 1 1—9	Salisbury	0 1 1 1 1 1 0 1 1 1—8
Jorey	1 0 1 1 1 1 1 1 0—8	Howard	1 0 1 1 0 1 1 1 0—7

Ties of eight, won by Salisbury with five straight; ties of seven by Gaines with four; ties of nine divided. A match for pies between Hanson and Smith, won by Hanson with a score of seven to five.

Sixth match.

Bennett	1 1 1 1 0 0 1 0 1 0 0 0 1	1—9
Gaines	1 1 1 1 1 1 0 0 0 1 1 1 1	1—12
Wilson	1 1 1 1 1 1 1 1 1 1 1 0 1	1—14
Penn	1 1 1 0 1 1 1 1 1 1 1 0 1	1—13
Jorey	1 1 1 1 1 1 1 0 1 1 1 1 1	1—13
Salisbury	0 1 1 1 0 0 1 1 1 0 1 0 1	0 1—9

Ties of fourteen, won by Jorey with four out of five. Howard won a match of fifteen balls, with eleven out of fifteen.

Seventh Match—Balls thrown from the Card's revolving traps; Bogardus rules to govern; 18 yards rise.

Penn	0 1 1 1 1 1 1 1 1 1—9	Longdon	0 0 1 1 1 1 0 1 0 1—6
Gaines	0 1 0 0 1 1 1 0 1 1—6	Folsom	1 1 1 0 1 1 1 1 1 1—9
Bennett	0 0 0 0 0 0 0 1 1 0—2	Potter	1 1 1 1 1 0 1 1 1 1—9
Wilson	1 1 0 1 0 1 1 1 1 1—8	Howard	1 0 1 1 1 0 0 0 1 1—6
Smith	0 0 1 0 0 1 0 1 0 0—3	Strong	0 0 0 1 0 0 1 1 0 1—4
Hanson	0 1 0 1 1 0 0 1 1 1—6	Jorey	1 0 1 1 1 0 1 1 1 1—8

Ties of nine, Folsom and Potter tied again on five each, Potter winning with five to two; ties of eight, won by Wilson with five straight; ties of six, won by Hanson with four.

NEW YORK—*Cohoes, July* 4.—Bogardus trap and rules, 21 yards rise.

Lackman	0 0 1 1 0 1 1 1 1 0—6	Newby	0 1 1 0 0 1 0 1 0 1—5
Mills	1 0 1 0 1 1 1 1 1 1—8	Laing	1 1 0 1 0 0 0 0 1 0—4
Clute	0 0 1 1 0 0 1 0 0 0—3	Calkins	1 1 1 0 1 1 1 1 1 0—8
McCollick	0 1 0 1 1 0 1 1 0—6	Westover	0 1 1 1 0 1 1 1 1 1—9

Ties on eight—25 yards.

Miller	0 1 1—2	Westover	1 1 1—3
Calkins	1 0 1—2		

Ties on six.

Lackman	1 0 1—2	McCollick	1 0 0—1

BUFFALO CITY PRIZE BADGES.—Match for prize badges offered by the City of Buffalo, July 4, fifteen birds, 21 yards:

Wm Scheibert	1	1	1	1	0	1	1	0	1	0	1	1	0	1—11
J E Pierce	1	1	0	1	1	0	0	1	0	1	1	1	1	1—10
D Kaufman	1	0	1	0	1	0	1	0	1	0	1	1	0	0 1—8
G Fielachman	1	1	1	0	1	0	1	1	0	1	1	1	1	0 1—11
A Kornelius	1	0	1	0	0	0	1	0	1	0	0	0	1	0 1—6
J Beler, Jr	1	1	0	0	1	1	1	1	1	1	1	0	0	1—11
George J Marsh	1	1	1	1	1	1	1	1	1	1	1	1	1	0—14
C Link	0	1	0	1	1	1	1	1	1	1	1	1	1	1—13
J Franklin, Jr	0	1	0	1	1	0	0	0	1	1	0	1	0	1 1—8
H R Jones	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
George Smith	1	1	1	1	1	1	1	1	1	1	1	1	1	0—14
G Suckow	1	1	0	0	1	1	1	1	1	1	1	1	0	1—12
Robert Ward	1	1	1	1	1	1	1	1	1	1	1	1	1	1—15
C Heinold	0	0	1	1	1	1	0	1	1	1	0	0	1	0 0—8
B M Smeltz	1	1	1	1	1	1	1	1	1	1	0	1	1	0—13
Chas Kolb	1	1	0	1	1	1	1	1	1	1	0	0	1	0—11
W C Jacns	0	1	1	0	1	1	0	1	1	0	1	0	0	0 0—7
Chas Tabor	0	1	0	1	1	1	1	0	0	1	1	1	1	1 1—11
J P Fisher	1	1	1	1	1	1	1	0	1	1	1	1	1	0—13
Peter Heinz	1	1	1	1	1	0	0	0	1	1	0	1	1	1—11
V W Ringueberg	0	0	0	1	1	1	1	1	1	1	1	0	1	0—10
H C French	1	1	1	1	1	1	0	1	1	0	1	1	0	1—12
S Thompson	1	0	1	1	1	1	1	0	1	1	0	1	1	1—12
J A Dingens	0	1	1	1	1	1	1	1	1	1	1	1	1	0—13
L Sutter	0	1	0	1	1	1	0	1	1	1	1	1	1	1—12
G R Vine	0	0	1	1	1	1	1	1	1	1	1	1	1	1—13
C Weiss	1	1	1	0	1	1	1	1	1	1	1	1	1	1—14
W H Jaeger	1	0	0	1	0	1	1	0	1	1	1	1	1	1—11
Jno Grobe	0	1	1	1	1	1	1	1	1	1	1	1	1	1—14
J B Seymour	1	1	0	1	1	1	1	1	1	1	1	0	1	0—12
Herb	0	1	0	1	0	1	1	1	0	0	1	1	0	0 0—7
A Downa	1	1	1	1	0	1	1	0	1	1	1	0	0	0 0—9
J Rafferty	0	1	1	1	1	1	1	1	1	1	0	0	0	0 1—10
M Smith	1	0	1	0	1	0	0	1	1	0	0	0	0	1 1—7
B Talsma	1	1	1	1	0	1	1	1	1	0	1	1	1	1 1—13
Dr R V Pierce	1	0	1	1	1	1	1	1	1	1	0	1	1	1 1—13
Aid Quinn	1	1	0	0	1	1	1	0	0	0	0	0	0	1 1—7
J B Higham	0	0	1	1	1	1	0	0	1	1	1	0	1	1 1—9
E S Williams	1	1	1	0	1	1	1	0	0	1	0	1	1	0 1—10
R Ambrose	0	1	0	0	1	1	0	1	0	1	1	0	1	1 1—9

Jones won first, Weiss second, Fisher third, Seymour fourth and Heinz fifth.

THE PALISADE GUN CLUB.—The club celebrated the Fourth in appropriate style on their grounds at West Hoboken. Delegates from several other clubs were on hand. A strong force from the Jersey City Heights Gun Club made their appearance rather late in the day. The Palisades embrace the elements of an excellent club. They have ample enclosed grounds, good accommodations of easy access from the city. When we mention that the Paynes (Jolly Ben and Rollicking Will), with Von Lengerke (your well-known dog correspondent) are among its active members, we have said enough to ensure it your prompt approval. The first event was the first-class club contest for a twenty-ball gold medal. Three Bogardus traps, with Bogardus rules to govern. The following is the score:

B S Payne	1	0	1	1	0	0	1	1	0	0	1	1	1	1	1	1 0 0—13
Wat Payne	0	1	1	1	0	0	0	0	0	0	0	1	1	1	0	0 0 0 0 1—7
H Von Lengerke	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1 0 0 1 1—15
Oscar Heas	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1 1 1 1 0 0—16
J Corbet	1	1	0	1	1	0	1	1	1	1	0	0	0	1	1	1 1 1 1 1 1—15
L Palmer	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	1 1 1 1 0—16
Fred Von Lengerke	0	0	0	1	1	1	0	0	0	w						6
Ed Collins	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0 1 1 1—18
Justin Von Lengerke	0	0	0	1	1	1	1	1	0	1	0	1	1	1	0	1 1 1 0—13

P. Shark broke six out of ten and withdrew, after which a number of decidedly interesting sweepstakes at single and double balls took place. The shooting was kept up until a late hour. JACOBSTAFF.

PENNSYLVANIA—*Bradford, June* 28.—Two days' tournament at the Kendall Driving Park; wild pigeons; five pinnge traps; 80 yards boundary. First match, class shoot, five birds, single, at 21 yards.

Gun.		Gun.	
Post	Parker 1 0 1 0 0—2	Babcock	Parker 1 1 1 0 1—4
Baily	Forsythe 1 1 0 1 1—4	Young	Lelever 1 1 1 0 1—4
Layman	Clabrough 1 1 1 1 1—5	Smith, A B. "	1 1 1 1 1—5
Williams	1 1 1 1 1—5	Stoddard	1 1 1 1 0—4
McKenee	Chas Green 1 1 0 1 0—3	Barker	1 1 1 1 0—4

Ties on five—26 yards.

Layman	1 1 1—3	Smith	1 1 1—3
Williams	0 0 w		

Second tie on three—31 yards.

Smith	1 1 0—2	Layman	0 0—0

Second match, 21 yards, five birds.

Smith	4	Dodge	3
Baily	4	Barker	5
Young	3	Williams	4
Post	4	Layman	4
Dunan	2	Corne	0
Babcock	4	Bradley	4
McKenee	5		

McKevitt and Barker divided first money; ties on four won by Smith with three, at 26 yards.

Third Match—Sweepstakes; five single birds, 21 yards.

Smith	1 0 1 1 1—4	Williams	1 1 1 1 1—5
Post	1 0 1 0 1—3	Young	1 1 1 0 0—3
Bailey	1 0 1 1 0—3	Hirsch	1 0 1 1 0—3
McKevitt	1 1 0 1 1—4	Barker	1 1 1 0 1—4
Dodge	1 1 1 1 1—5	Layman	1 1 1 1 1—5

Layman and Williams divided first; Smith won second with three straight at 26 and 31 yards, Bailey won third with three at 26 yards.

Second Day—First Match—Five bird sweep; 21 yards; $10 entrance.

Smith	1 1 1 1 1—5	Barker	1 1 1 1 1—5
Jones	0 1 1 1 1—4	Layman	0 1 0 1 1—3
Williams	1 1 0 1 1—4		

Smith won first with two out of three at 26 yards, and Williams second with three straight.

and not unwisely substitute the modern spring-lock for the old-fashioned out-hanging latch-string. You may enter at your own sweet will the open door of the village cottage (or you might have done so before the age of tramps), but in the city you are barred out by double door, immovable knob, intricate lock and burglar alarm, the precautions of men against men, inventions of ingenuities which have been quickened by suspicion and fear. Ideal hospitality presupposes perfect confidence between host and guest. Now, remembering that FOREST AND STREAM has a large and important constituency among those good-souled people who are ever ready to receive the stranger within their gates, and an equal number of readers among those who are annually received as strangers within these hospitable gates, we may, with satisfaction to all, draw this deduction, that the mutual confidence of host and guest owes its origin and continuance in a measure to the consciousness of each in his own worthiness and integrity.

But not to take a too serious and speculative view of it, the fact remains, as every sportsman knows, that in the rough welcome of the woods and the wilds is a heartiness and joyousness which are as refreshing in their way as is the fragrance of the forest. And so it comes to pass that with the after memories of the vacations' sport are woven the pleasant remembrances of new friendships formed and old ones renewed and strengthened.

SUN STROKE.—We make the following abstract from a circular issued by the New York Board of Health. Sun stroke is caused by excessive heat, and especially if the weather is muggy. [We may remark that sun stroke does not exist in the topics.] It is more likely to occur on the second, third or fourth day of a heated term than on the first. The time when people are most prone to be sun struck is between 11 and 4 o'clock. Wear thin clothing, sleep in carefully ventilated rooms, avoid loss of sleep and over-fatigue. Put a moist handkerchief in the hat; lift the hat off from time to time, in order to obtain ventilation. Do not check perspiration, but drink what water you need in order to keep up perspiration. If you feel fatigue, dizziness, headache or exhaustion, stop work at once. Sit down in a cool, shady place. Apply wet cloths, and bathe the face and neck in cold water. If any one is overcome with heat send at once for a physician. While waiting for the doctor give the patient cool water or cold tea. Pour cold water on the neck and wrists and apply pounded ice wrapped up in a towel to the head. When a person is pale and faint, with a feeble pulse, give some ammonia to smell and administer a teaspoonful of aromatic spirits of ammonia in two tablespoonfuls of water sweetened with sugar.

OUR WASHINGTON LETTER.

WOODCOCK SHOOTING—DOG AND GAME PROTECTIVE LAWS —BLACK AND STRIPED BASS FISHING.

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., July 6, 1878.

The close season for woodcock expired on the first of July, and though these birds are quite plentiful in swamps and thickets in this vicinity, where they find plenty of food and are in excellent condition, they are not molested to any great extent before October, as the hot summer weather rather interferes with the sport of shooting them and makes it somewhat laborious. On account of the frequent rains this season, the birds have kept close to the thickets in low, marshy places, where the moist ground made it easy for them to procure an abundance of worms, and they have not been forced to the highlands, as they frequently are in dry seasons, to search for food among the leaves. There are quite a number of places along the line of the Washington branch of the Baltimore and Ohio Railroad which afford excellent woodcock shooting to the sportsmen of Washington and Baltimore, and at a point near Jessup's Cut there are so many swamps which they frequent that a number of dead birds have been picked up this season beneath the telegraph wires, which they struck in their flight. It is not a great while since I picked up a woodcock half dead beneath the telegraph wires on one of the busy streets of Washington, and only a minute or two after the bird had fallen. It must be remembered that the flight of the woodcock is always by night—indeed it may be classed as a nocturnal bird, as their principal feeding time is during the dusk of evening, when they frequently come to the edge of the swamp, rise clumsily into the air to the height of fifteen or twenty feet with a familiar whistle, and immediately descend to begin their feeding.

Reference to the shooting points along the line of the Baltimore and Ohio road brings to mind frequent complaints of negligence on the part of railroad employees toward dogs. I am glad to say such complaints do not apply to the road named. My experience in traveling over that road has been that the dogs are properly cared for, and the employees seem to understand their value to the owners. With other sportsmen, I only hope that the employees of other roads will profit by their example.

After the first of August, so far as the law is concerned, we can shoot ruffed grouse or pheasant, but, like the woodcock, they are saved to a great extent on account of hot summer weather. The young birds are now well grown and abundantly able to take care of themselves.

The first shooting worth speaking of will be at the ortolan (*Porzana carolina*) and reed bird (*Dolychonyx oryzivorous*) in the early part of September, when they return from their breeding grounds in the north. I have seen the first named species so plentiful on the Patuxent marshes that it was an easy matter to kill two or three hundred upon a tide. The new game law of Virginia recently passed by the Legislature of that State makes no effort to protect these birds, I suppose for the reason that they do not breed within her borders. They are migratory, and merely stop a few days upon our marshes on their return south. A great number of marshes in this vicinity are on the Virginia side of the Potomac, and the result of not protecting these birds in that State is to allow perpetual warfare upon them from the time of their arrival here, about the middle of August, when the birds are poor from their protracted flights, and not fit to shoot. They should be protected, at least until the first of September, by which time they are usually in good condition. Our new game law, just passed by Congress, very properly makes it unlawful to kill, or have in possession, either dead or alive, any ortolan or reed bird, between February 1 and September 1. These birds do not tarry here in their spring migrations northward, as they appear to be in a hurry to reach their breeding grounds; but upon their return in the fall, when the young birds are fully grown, they find abundance of food on our marshes in the wild oats, which are ripe at that season.

PROTECTIVE LAWS.

After a good many attempts and as many failures, we at last have a dog law which, if properly enforced, will rid the city of hundreds of worthless curs and protect the owners of valuable dogs. This law, of which I published a full abstract in a recent letter, passed Congress in the last days of the session, and was approved by the President. It provides for a tax of $2 per annum, makes the dog upon which the tax has been paid personal property, and any person injuring or destroying the animal liable to a civil action for damages, and also to have committed a misdemeanor to be punished by fine and imprisonment. The owners of dogs are liable in a civil action for any damage done by such dogs. It further provides for a tax tag to be attached to the collar of each dog, and all not having such tag are to be impounded and destroyed. The name of the owner of the dog must also be upon the collar.

A bill for the preservation of game and protection of birds in the district has been passed forbidding any person from killing, exposing for sale, or having in possession, either dead or alive, any partridge, otherwise quail, between February 1st and November 1st, under a penalty of $5 for each bird; any pheasant or ruffed grouse between February 1st and August 1st; any woodcock between February 1st and July 1st; prairie chicken or pinnated grouse, between February 1st and September 1st; snipe or plover between May 1st and September 1st; wild goose, wild duck, or wild brandt, between April 1st and September 1st; ortolan, or reed bird, between February 1st and September 1st; the penalty being the same as in the case of partridges first mentioned. The bill also makes it unlawful for any person to expose for sale or have in possession any deer meat or venison between January 1st and August 15th, under a penalty of twenty cents for each pound. It then forbids the killing of robins, blue birds, sparrows, blackbirds, and various other insectivorous birds found in the district, under a penalty of $2 for each bird; makes it unlawful to destroy birds' nests under a like penalty for each egg or young bird destroyed, unless in the necessary prosecution of farming business. All traps, nets, and snares are forbidden under a penalty of $5 for every bird or water fowl trapped, and a further penalty of $20 for having in possession such trap, net, or snare. The bill next very properly prohibits the use of any gun in killing water fowl, except such as are habitually raised at arm's length and fired from the shoulder, under a penalty of $5 for each bird killed with any big gun other than described, and a further penalty of $25 for firing such gun at any water fowl, or having it in possession. Water fowl are not to be killed in the night time under a penalty of $25 for each one so killed, and a further penalty of $10 for shooting at such fowl in the night time.

Persons in killing birds for scientific purposes, or in possession of them for breeding, shall be exempt from the operations of the Act.

The concluding sections of the bill provide that any person who shall knowingly trespass on the lands of another for the purpose of shooting or hunting thereon, after due notice by the owner or occupant of lands, shall be liable to such owner or occupant in exemplary damages to an amount not exceeding $100, and shall also be liable to a fine of $10 for each and every trespass so committed. The possession of implements of shooting shall be presumptive evidence of the trespass. Owners or occupants of lands are to erect and maintain at least two sign-boards for every fifty acres, and any person tearing down, injuring, or defacing such sign-board shall be liable to a penalty of not less than $5, nor more than $25, for each and every sign-board so torn down, defaced, or injured. All shooting, or having in possession in the open air the implements of shooting, on Sunday is punishable by a fine of not more than $25 nor less than $10.

Such are the provisions of our new game law, a bill of eighteen sections, very carefully prepared. True, we have not an abundance of game within our original ten miles square, but it is a wholesome example for Congress to pass such a law, and it is to be hoped that State Legislatures and county authorities will profit by the example. Another great benefit derived from this law will be to prevent the sale in our markets of birds unlawfully killed in Maryland or Virginia.

BASS FISHING.

The black bass of the Potomac have finished spawning, and now take a fly readily in rapid water. In this river the best time for fly-fishing is just about the close of the spawning season, and before hot weather drives them to deep holes. Their preference seems to be a red and white fly, though I have caught them frequently with a dead minnow securely fastened to the hook and thrown into the rapids without a sinker. They quickly rise to the surface for it, providing the minnow is kept in motion. As the summer advances and the water becomes warm, the fish seek deep holes, and are then best taken with live minnow. To my mind, however, there is more sport in landing a pound and a half fish out of the rapids with a fly than in taking a two and a half pound one by still water fishing. While on this subject of still water fishing, I may mention the fact that many inexperienced anglers, or indeed many who have had years of experience, rarely pay attention to the size of the minnow with which their hook may be baited. To such I have only to say that this is an important consideration for successful bass fishing. A minnow three or three and a half inches long is not often swallowed by a bass at one or even two gulps. I invariably keep in mind the size of my minnow, and give the bass time accordingly to swallow it. I have seen many fine fish lost by too suddenly jerking the line, which would pull the minnow out of the mouth of the bass before he had the hook. Bass do not always take the bait like a rock fish or brook trout, with a rush and a gulp, but seem rather to prefer to swallow the bait first and then bolt off.

ROCK OR STRIPED BASS

fishing near the Chain Bridge and the Little Falls of the Potomac still affords some sport during the month of June, but it is the smaller fish only which rise to a fly. The larger ones prefer to loaf among the rocky crevices of deep holes whence they cannot be attracted to the surface by any deceptive bait. The only way to take them is by still water fishing, with half of a fresh herring cut lengthwise, securely fastened to the hook, which must be attached to your line about ten or twelve inches above the sinker. By this means fish weighing from six to ten pounds are often caught; but the smaller ones, weighing a half or three-quarters of a pound, readily take a fly of the white miller description in rapid water, and often afford rare sport. The rock fish are steadily decreasing in numbers year after year. In a recent conversation with Professor Baird, the U. S. Fish Commissioner, he spoke of this matter, and suggested the wisdom of laws by the State authorities to forbid the marketing of rock fish when less than twelve inches long, for the reason that they do not begin to spawn until they attain a weight of eight or ten pounds at least. All fish beneath that size should be treated as immature, and it should be a penal offence to sell, buy, or have them in possession. An effort has been made to propagate rock by the U. S. Commission, but the difficulty has always been in obtaining spawners. Some few years ago several ripe rock fish were found in the Roanoke river, North Carolina, and about 100,000 young fish were hatched from the spawn obtained. Every year an attempt has been made to procure spawners, but without success.

I have listened to the venerable Andrew Hancock, William H. Prentiss, and other anglers of their age with much interest when they told of the successful rock fishing at the Little Falls and near Eads Mill in days of yore. It was here that Daniel Webster, Crampton, the British minister, Judge Bibb, Gen. George Gibson, and others, who have occupied prominent places in the history of our own as well as other countries, brought many fine rock to gaff from the pools, eddies and rapids of those waters. The ancient legend of the phantom drummer-boy of the Falls has almost been forgotten, and we no longer hear stories of

"Strange phantoms rising as the mists arise."

Time has worked its changes, and even the Falls have not been exempt from its devastation. Old rocks, which have often supported the men whom I have mentioned, after standing the ice of many winters and the floods of many springs, have at last been worn away and swept into the remorseless deep. The grave has long since closed over nearly all of those who were witnesses of the scenes I have described, and the few hoary-headed ones remaining no longer cast the luring fly. Probably it is best for them that they are not able to even visit the Falls to witness the work of the hand which will so soon gather them into the valley of death.

R. F. B.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2, Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

SUPERVISORS AND PLAIN ENGLISH.—There has been a great deal of unnecessary dispute in this State over the authority of county supervisors to alter the game law. The only section in the law at present defining their authority is section 32, which reads:

"It shall be lawful for the Board of Supervisors of any county to make regulations *touching other birds, fish or game, than those mentioned in this act*, and such ordinance shall be published, etc."

Even without the italics, which are our own, this appears to us to be very plain English, which means, provided it means anything, that the supervisors may enact laws for the protection only of such birds, fish or game, as are not already provided for by the State law. If, for instance, the supervisors of a certain county wish to make a close season for woodchucks, they are by this section authorized to do so, as woodchucks are not mentioned in the protective law of the State. The supervisors, however, have no authority to legislate concerning woodcock, for the simple reason that the close season for those birds is already fixed by the State, and the supervisors can neither extend nor shorten it. We have before expressed our conviction that this section of the game law should be interpreted in its obvious and common-sense meaning. We refer again to the subject because our attention has been called to the action of the Yonkers supervisors, who have extended the close season for woodcock in their county to September 1. The State law provides that woodcock shall not be shot before August 1, which is equivalent, we take it, to saying that after August 1 they may be shot. The Yonkers supervisors have no more authority, then, to say that they may not be killed after that date than they have to say that they may be killed before that date. We do not believe that their law can be enforced. We have received the following note upon this subject which we take pleasure in publishing, as confirming our view of the case:

"I have always interpreted the law to mean that the supervisors can only regulate other game than that mentioned in the statute, and cannot change what the Legislature has established. That would seem like common sense as well as common law, and the counsel of the Association for the Protection of Game took the same view; but there has been a decision of a court to the contrary, allowing the supervisors to add restrictions, not take from them, in any way they think best. A copy of that decision I sent to Mr. Thomas N. Cuthbert, 46 Cortlandt street, attorney for our association, although I still doubt if the decision will be sustained on appeal.

ROBERT B. ROOSEVELT,
"Pres. Ass'n for the Protection of Game."

INFRINGEMENT OF THE GAME LAW IN WESTCHESTER COUNTY.—On the 19th of June Mr. John H. Davis, the game constable of Eastchester, arrested four persons for drawing a seine in Hutchinson's River, half a mile above Pelham Bridge. On

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, JULY 11, 1878.

To Correspondents.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, July 12.—Trotting at Hartford, Conn. Columbus, O.; Sharon, Pa.; Watertown, N. Y.

Saturday, July 13.—Nova Scotia Yacht Squadron Race, Halifax, N. S. Creedmoor: *National Guardsman's* Match; Skirmishers' Badge Match. Trotting: Sharon, Pa.; Watertown, N. Y.

Monday, July 15.—Louisiana Amateur Rowing Association Annual Regatta.

Tuesday, July 16.—Louisiana Amateur Rowing Association Annual Regatta. Trotting: Belmont Park, Phila.; Plainville, Conn.; Toledo, O.

Wednesday, July 17.—Harvard vs. Cornell, at Owasco Lake. Creedmoor: Soldiers' Match; Competition for Gildersleeve Medal. Trotting as above.

Thursday, July 18.—Havre Regatta (France); open to the world. Trotting as above.

ABOLISH SUMMER SHOOTING.

WITH the opening days of July the thoughts of most sportsmen turn to the summer cock shooting. Years ago, when FOREST AND STREAM was young, we devoted no little space to the subject of woodcock shooting in July, and expended many a quillful of ink in endeavoring to show that to kill these birds in July was unwise and productive of incalculable injury to general shooting. In these endeavors we were not without able coadjutors, who lent us the aid of both voice and pen. That our efforts were not wholly unsuccessful is indicated by the fact that, since the arguments which we then used were brought to the notice of the general public, three States—New York, Connecticut and Massachusetts—all of them noted for their large representation of the best class of sportsmen—have so amended their game laws that July shooting is no longer permitted. Long Island is, it is true, exempted from the force of the New York law, a fact over which those of the fraternity who shoot in Pennsylvania and New Jersey should lament, for it will be likely to more or less injure their fall shooting. The objection to, and supposed advantages of, summer shooting have been so often stated in these columns that it is scarcely necessary to repeat them at any great length. The whole matter is succinctly discussed in the "Sportsman's Gazetteer," from which we may be allowed to quote a paragraph or two, as follows: "It is with pleasure that we notice the efforts made by gentlemen sportsmen of the country at large, in the direction of woodcock protection and the prohibition of summer shooting. Their efforts have been attended with success in some parts of the country, but until the law becomes universal a great deal of its usefulness is rendered *nil*. * * *. Granting that woodcock four years out of five are in condition to be shot in July, how much better, how much more sportsmanlike, would it be to allow them to remain unmolested until autumn, when no doubt can exist of their being in full plumage, strong and vigorous on the wing, and without the care of a family?"

We cannot, however, admit, that woodcock are usually in a condition to be shot in July, for they are usually occupied at that time with their second brood. There is no doubt that whenever it is possible this species hatches twice. An instance clearly showing this has this year come under our own observation. A brace of cock hatched last April, and by the last of that month the young were quite well able to take care of themselves. They confined themselves wholly to a small patch of ground, and were started two or three times a week, always in the same piece and always the same in numbers; about June 24th the patch of swamp was visited, the usual number of birds were started, and in addition three younger birds, still in the down and hardly able to fly more than thirty feet. If the spring had been a little more backward (and it must be remembered that it has been an unusually early one), these last birds would have been still *in ovo*, and, when the July shooting had killed the parents, would of course have perished.

There is one reason why the killing of woodcock in the summer should be prohibited which has had but little attention paid to it in the past, although deserving a great deal. The ruffed grouse, by all odds the finest game bird known to the sportsman in the East, usually hatches its brood late in May, and by the 1st of July the young birds are about the size of quails. At this age they are very gentle, and will lie so close before the dog that we have more than once seen a young puppy catch them in his mouth. They are at this time slow fliers, and are so easily shot that a boy of twelve ought to be able to kill them three times out of five. Now we all know that in every community there are plenty of men who are just weak enough to be tempted by these fledglings, and who, knowing perfectly well what they are shooting, and that they are violating the laws of God and man, will, when they come upon a brood of young grouse during the July shooting, follow them up until not one of them is left. Any one who has lived in a good ruffed grouse country, where summer shooting is allowed, must have observed that the number of grouse seen in autumn is always very much less than was promised by the broods and old birds observed in early summer.

Summer woodcock shooting having been abolished in some States and not in others, let us see what effect the prohibition has had, and, if the general result has been a beneficial one, we may fairly call upon the residents of States where no such law is in force to show cause why similar provisions shall not be enacted, so that there may be at least one game law uniform throughout the land.

It is of course a difficult matter, if not an impossibility, to arrive at any definite and exact conclusions in a matter of this kind. Opinions will differ, and a man's judgment will be likely to be influenced by his prepossessions in favor of or against the law; but we may take the general opinion of the sportsmen of a single State, say Connecticut; one where the law has been in force only a year, and one in which the prejudice against the amendment was originally very strong. In fact this feeling was so strong that there was at first a vigorous effort to secure at once the repeal of the bill; but the counsels of the conservative prevailed, and the law was put upon its trial. Owing in part to the vigorous action of the Hartford Sportsman's Association, and to the individual exertions of the other workers for the cause in different parts of the State, there were comparatively few violations of the act, and when the fall shooting was over, public opinion in regard to its wisdom had completely changed, and it was universally approved. The testimony of the oldest and most successful shooters of our acquaintance is unanimous that fall woodcock were much more plenty than they had been before for eight or ten years, and that ruffed grouse, *which nobody had thought of protecting*, had never, within the memory of the oldest gunners, been so abundant. It was a veritable case of firing at the pigeon and hitting the crow. This, of course, only shows how the matter has worked in one State; but we venture to say that it is a typical example. And just think what a superb addition to the ordinary fall shooting the woodcock is. Suppose that there were no birds at all shot during the summer, would not a charm be supplied to the autumn days in the woods and fields which they now too often lack?

There are other birds which need summer protection, but we cannot discuss them now. That it is utterly useless to protect woodcock in our State when there is a market for them just over the border in the next, is perfectly obvious, and we look forward to a time when lawmakers shall have enough knowledge on the subject to legislate intelligently with regard to all our wild game.

—Professor Charles Linden, of Buffalo, N. Y., is off for Labrador with the Boston party of fifteen *voyageurs*.

HENLEY.

TO say that the victory of the Columbia crew over the best men of Old England's colleges at Henley was unexpected is to say what nine out of ten would aver if questioned. That a crew selected from hardly fifty haphazard candidates should have been able to give their wash to the men of an older country—men picked not from a mere handful, as with us, but chosen with care and deliberation from a thousand or more of able candidates at the oar; from men who were not green barely a year or two ago, but who had been brought up to the oar long before they entered on their college course, redounds immeasurably to the honor of those concerned and to the boating fraternity of our country. If the Columbias can thus easily vanquish the very best men of Europe, what could not a more powerful crew, selected from a greater field than one college affords, effect in competition with the oarsmen of England? Columbia left them over two lengths astern. Then, is it too much to say that a picked crew, chosen with the discriminating preference shown in England, could have left Hertford six lengths in their wake instead of two? The Columbias aquitted themselves bravely and return covered with honors of an enviable sort, but no one for a moment would claim the fortunate four to be invincible in our own country. A boatful formed of the best there is in Harvard, Yale, Cornell and Columbia would in very short time make victory over England at the oar as thoroughly monotonous as America has already made competition in shooting, yachting and pedestrianism. When, in addition to this great feat, we bear in mind that among the single-scullers as well America went to the fore and virtually won the race, though the prize goes to the Englishman on mere technicality, the superiority of American amateurs becomes all the more conspicuous. It seems incredible that Mr. Lee should have erred through mere oversight on his part as to the true finish. Is it not probable that he was misled in some manner? That any one should go three thousand miles to pull in an international event, should practice for three weeks and then not know where to find the finish line does not seem probable. We await with some interest further details concerning this peculiar mistake of Mr. Lee. However, as we understand he is to meet Mr. Moss again on the 17th or 18th inst., he will have an opportunity of righting the unnatural result of July 4 at Henley. The Shoe-wae-cae-mettes gave our cousins a lesson in the physical prowess of America, for, winning in one heat against no mean adversaries, their victory was certainly not to be laid at the door of superiority in style, training, science or finish, but they carried their colors to the fore purely on the strength of their muscle and wonderful stay. A pity that the latter failed them in the final heat at the critical moment, or Englishmen might have beheld the lamentable spectacle (to them) of a clean sweep at Henley by their only rivals in the world. The last heat can only be looked upon by them, at best, as a race either "off" or else won by a fluke, on account of an accident to the Monroe crew, through the chronic sickness of one of them, wrongfully withheld from his brethren. What the Shoe-wae-cae-mettes might have done with a substitute in the place of Jos. Nadeau no one can say, but it is certainly true that his crew were well able to hold their own with the famous London four, and had No. 3 responded to the regular call for a spurt, their chances of landing the Stewards Challenge Cup for their country were excellent. In summing up the results of Henley, Americans may congratulate themselves that in four events out of five our oarsmen showed undoubted superiority to the British, and that the fifth race was lost through an accident, Englishmen barely saving themselves from a clean sweep on their own waters of all prizes by men from foreign shores. Full of pride at our great victories on the Thames, our crews may well look forward with more than hope to similar events in the future, and to fresh additions to the laurel wreaths of victory wrested from the hitherto invincible champions of the world. When Americans again go forth to hoist the Stars and Stripes above the Union Jack, we trust that England will buy a decent sized river and not pull on a mud creek, and that she may teach her oarsmen to guard against any imputation of unfair and ungentlemanly conduct in their rivalry with others. American amateurs are not given to the display of envious passion, and would never stoop so low as did their English brethren in their vain attempts to snatch from their rivals at Henley well-earned victory. May our cousins across the sea take a lesson, then, from us for once. They can certainly do so to advantage.

CONCERNING THE HOSPITALITY OF THE WOODS.

IN another column a correspondent tells us of the kind welcome he received at some of the fishing grounds of Canada. Such expressions of grateful guests have often been a pleasant and characteristic feature of our sportsmen's correspondence.

"Gentle hospitality," saith the Sanskrit sage, "dwelleth not in palaces. Rather, seeking, shall ye find her in the tent of the desert;" and had he lived in our day, he might have added as well "in the log cabin of the frontier." For far apart as they are in other traits—one the exponent of roaming thriftlessness, the other of enterprise and energy—the nomad of the plains and the pioneer of the forest are alike in one thing—their simple, whole-souled hospitality. The conventionalities of town and city close the door to the stranger

time matches. A description of the final performances of Dr. Carver, which took place on Saturday last, will suffice to give our readers a fair idea of the skill of the rifleman. On a long table were placed the four rifles, under the charge of the well-known Texas Jack, who superintended the loading and cooling of the pieces. From rapid firing, after some sixteen to twenty shots, the rifle barrel gets uncomfortable to handle, and water must be used. As there had been some comments made as to the character of the Winchester rifles used by the Doctor during his exhibitions, it having been alleged that they were peculiarly sighted, or more carefully made, the publisher of this journal, Mr. T. C. Banks, selected, at random, from the Winchester Arms Company, a brand-new arm, of their cheapest grade—one the Doctor had never shot with before. This was done without the knowledge of the rifleman. Being requested to shoot with this rifle at the opening of the match, Doctor Carver showed that it really made very little difference what kind of a gun he used, making the following handsome score with a rifle which worked rather hard in the lever, as it had never been shot before. The following was the score:

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1 1 1 1 1 0 1 0 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 0 1 1 1 1
1 1 1 1 1 1 1 1 1 0 1 1 1 —42.
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On concluding this feat the rifle was so hot as to scorch the fingers. Now the regular business of the day commenced; this was one of the off incidents. The breaking of 100 balls with the least misses was then attempted, and a wonderful score was made, the Doctor using his own rifles. There was a miss at the twelfth ball; then 88 balls were broken in succession. Score:

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1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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As somebody remarked in the audience, "that probably there was no bullet in the twelfth cartridge, or the Doctor would have broken the ball," the Doctor said, "it was perhaps better not to make a clean break of 100, or he would always be expected to do it." Now followed firing at bricks, sticks and stones, thrown into the air. The flying projectiles were never missed. Very frequently, after breaking a large piece of brick with the first fire, a bit of it would fly off like a fragment from an exploding shell, and quick as lightning the Doctor would catch it with a second ball, and it would be dissipated in a puff of red dust. A piece of wood, some two feet long by three inches wide, was thrown in the air. In four shots the Doctor had cut it in two, every shot striking in the same place. Now followed a wonderful shot. A small leadpencil, one of the thinnest, certainly not larger in circumference than a straw, was tossed up, and at the second shot was cut in two. Another bit of pencil, just a nubbin, with a rubber attachment, was also broken. Then followed the shooting of pieces of money. Dollars, halves, quarters, nickles and three-cent pieces were offered by the excited crowd to the Doctor to be shot at. The dollars were a shining mark, and were never missed, but with a sharp "ping" were whirled away off into the field. Think of a three-cent piece of the old kind, worn and used, thrown into the air as a mark for a bullet! These all were sent skyward. Of sixty-three pieces thrown up only thirteen misses could be recorded. In one case eight coins, mostly nickles, were hit consecutively. The distance at which the pieces were thrown varied from twenty to thirty feet from the rifleman. The delighted audience brought out most anything they had in their pockets as offerings to the Doctor's skill. A key, some two inches long, was sent into the air. Now followed tobacco boxes, knotted handkerchief, a lady's fan (hit right through the handle), sardine boxes, match boxes, pocket-books, a tape measure, a bunch of keys, and cartridge cases. Without a single exception all were smashed at the first shot. There is no rest taken by Dr. Carver in doing this. As long as there were cartridges or a rifle the Doctor seemed willing to go on. All the small property in the possession of the audience would have been smashed or splintered in process of time. During the three-days' performance this was the most wonderful coin-hitting we had yet seen. Following this, the feat of hitting two balls right and left was attempted. The two assistants stood some twenty yards apart and threw the balls right and left high in the air. In the first fourteen there were two misses, in the next twelve balls two, and in the last twelve only one. Now there was a recess of a few minutes, while the boys went over the fields hunting for the lost pieces of coin.

In about ten minutes the Doctor was again on the ground, ready to begin over again. Standing about forty feet from him Colonel Fletcher hurled at Carver, just as hard as he could, the glass balls. These were low balls, not more than ten to twelve feet from the ground. Almost all of them were stopped by the Doctor's unerring bullet in mid air. All the rifles were now loaded for the time match with 100 balls. The following is the score:

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0 1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
0 1 0 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1
1 0 1 1 1.—Time, 4m. 14.
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This is wonderfully rapid time; but we do not by any means think it is as fast as the Doctor could shoot, if he wanted to. No shot-gun, save a magazine-loading one, could keep up with him.

Potato-shooting was next in order. Right and left, no matter, anywhere, all over the field were they thrown, it made no difference. The potatoes were all cut, and the air was full of smashed raw potatoes. It is the rapidity of the thing, with the unerring character of the shooting, which is so wonderful. Two and three hits into the same object are frequently accomplished. The rifle was going off all the time. It was a *saturnalia, a fantasia* of rifle shooting, but then every bullet met its billet. With balls thrown very high in the air on this special afternoon the Doctor missed more than he usually did, as on former occasions he was seen to hit every one, no matter how far skyward it was. All this is marvelous. We have been accustomed to see these things done with a shot-gun, with 250 to 350 pellets, covering a space of thirty inches square. Here is a man who, with a single bullet from his rifle, executes even more difficult shots than have been attempted with a shot-gun.

Discarding that rifle, of which he is the consummate master, Dr. Carver now took to his Parker breech-loading shot-guns, two 10-bores, weighing 7½ and 10 pounds, loaded with 4½ drachms of Dittmar powder and 1¼oz. of Tatham's chilled No. 8 shot. The transition is a remarkable one, but a man who has graduated in the school of the rifle must take easily to the shot-gun. We have no hesitation in stating at once that Dr. Carver is the most prodigious of shots with a fowling-piece. He scorns the traps in shooting. On a prior performance a man standing some thirty yards off would throw two balls at once as far away as possible, and invariably when distant sixty or seventy yards both balls would be broken in the air. These shots were repeated in the first two performances over and over again, always with the same results. On the present occasion the glass balls, having given out, Colonel Fletcher's bell-metal glass ball was used as a substitute for the glass balls. No matter how thrown, Carver would hit it twice in the air, the clear ring of the metal bell which it gives out when struck being heard every time the gun went off. Dollars, coins and paper shells were thrown in the air, and no miss was recorded. Just like Grace, the famed cricketer, could find no bowling he could not bat, so we fancy there is no glass ball thrown from any trap known that Carver could not hit. With the shot-gun it seems absolute play for him. On the occasion of a double shot Carver made a wonderful one, shooting one of the objects with a hip shot. The greatest of all shots at moving objects refuses to shoot at pigeons. It is not, he says, "in his line," and we rather admire his taste than otherwise. A challenge to shoot pigeons having been sent to him when on the ground, Carver's response was somewhat as follows: "I am not in the bird business, but if the challenger or any other man will meet me on my own ground I will gladly accommodate him. I will give any man 500 balls in the thousand, to be broken with a rifle ball, and accept the wager."

Among those attending the performances were the leading New York riflemen, with many officers of the various military organizations in the neighborhood. All were unanimous in their opinion that the shooting was miraculous, and that a new school of rifle practice had been originated by Dr. Carver. We may expect, then, before long to record in our pages scores made by rifle shots at glass or ball balls. But whether, among the many who will attempt it, such a phenomenal shot as Dr. Carver can be found we are in doubt. Our Western rifleman was ably assisted by Texas Jack, the well-known scout and guide of the prairies, who apparently is as much delighted in Dr. Carver's skill as if he himself were accomplishing the feats we have described. We conclude by declaring that Dr. Carver's rifle shooting is just that exemplification of the rarest skill, nerve and steadiness in a man, when combined with an arm of precision.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

HORTICULTURE AT THE PARIS EXHIBITION.

We are informed that the display of flowers at the opening of the Paris Exhibition was somewhat unprecedented, and as they will be on exhibition during the season, a notice of a few of the principal groups may be of interest. The twenty houses placed here and there in the Champs de Mars and Trocadero are marvels of grace and beauty in horticultural buildings. The display made by Mr. Wills, of South Kensington, London, in Mr. Boyd's conservatory, has seldom been equaled, and deservedly holds the highest place. The house is supported by three pillars, which are entirely covered by pieces of natural cork bark, on which are growing Ferns, Bromeliads, Begonias, Mosses, etc. The bases of the columns are surrounded by charming groups, in which Palms play an important part, and on cork rock-work are Ferns, Dracænas, Anthuriums, Gloxinias, etc., while around the sides of the conservatory are other groups bordered by rock-work, containing all the new plants introduced within these last few years. The most notable are Dracæna ignea, D. Elizabethæ, D. Ernesti, D. Mrs. Wills, D. Voluta, D. Cantrelli, and, above all, D. Wilsi, a variety remarkable for its fine habit and bright color; Croton lancifolium, C. Queen Victoria, C. nobile, C. rex, C. challenger, C. disraeli, C. Maroqueanum. A number of Dieffenbachias, Lomarias and other novelties also challenge the attention of the lover of the beautiful, while the whole exhibit is one of the most tasteful and lovely ever shown by one nurseryman.

The outdoor display of Rhododendrons was simply magnificent. When we remember the exhibit made by Waterer, Veitch and Parsons at our Centennial, we can imagine a show of over 5,000 square feet at the foot of the terrace in the Champ de Mars. Seen from the terrace which overlooks them, the effect of these Rhododendrons, covered by millions of flowers, was magnificent. They consisted of the best varieties from the nurseries of Messrs. John Waterer, of Bagshot, and Anthony Waterer, of Knap-Hill, Messrs. Truffaut, of Versailles, Levigne & Sons, Mr. Margottin and M. C. Paillet, of Paris. Splendid groups of plants, flower, seeds, etc., connected with their various departments, were also made by Messrs. Vilmorin, Andrieux & Co., Duval and Charantier Bros., the Jardin du Luxembourg, of Paris; Messrs. Battillard, of Boulogne; M. Machet, of Troyes; and Messrs. Benary and J. C. Schmidt, of Erfurt.

FLOWERS IN TEXAS.—Texas abounds in beautiful wild flowers, many of which are in common cultivation. Drummond's Phlox abounds in the vicinity of Austin and in the counties south and southwest of this. In some of the sandy, open woodlands of Guadaloupe, Caldwell, Gonzales, Bexar and other counties, patches of this phlox, of great beauty, containing colors of the deepest red and scarlet, are quite common. It is in bloom throughout a large portion of spring and summer.

Verbena embletia, with purple and red flowers of various shades, laciniated leaves and prostrate form, is wild, and abounds throughout a large portion of the State. It is also cultivated, and some of its forms rival in beauty the verbenas of Asia and South America, which are so justly prized in both Northern and Southern States.

Of the Abronias, Western Texas has three species—the *cycloptera*, mellifora and fragrans, all found on sandy places along the Rio Grande, only one of them as far west as Fort Concho, and all of them are ornamented.

The Lepachys, called Obeliscaria in most of the floral catalogues, of which there are two species in cultivation. Both of these abound on the prairies and in cultivated fields of Central Texas, where they are so common as to be troublesome weeds.

Texas also has several species of the bright Gaillardia on its sandy prairies, where I have often seen large spots made gay by its showy flowers.

Callirhoes, both prostrate and erect, abound here with their brilliant red and purple flowers. They certainly deserve a more general cultivation, flowering as they do throughout a large portion of spring and summer.

Several species of the evening primrose (*Benothera*) grow wild here on both open prairies and in fields. I lately received seeds of one species from the Agricultural Department at Washington which is indigenous and very common here. Another species—the Oenothera speciosa has roseate flowers, varying to pure white. Its flowers are large, two or more inches in diameter. It continues in flower about three months, beginning in March. Some fade, and are followed by new flowers in succession. It is inclined to grow in groups, and here is very common and very hardy.

Of Penstimons we have a great number of species, some of which are cultivated, and others yet uncultivated, and very ornamental. On Limestone Hills along the Pecos River, and also on the mountains near Fort Davis, I found two species of Penstimon, both perennial shrubs, with bright red and scarlet flowers. Whoever introduces these into cultivation will add much to the pleasure of all lovers of flowers and be a public benefactor. To encourage the introduction of such beauties into cultivation, records should be kept of the time, when and by whom introduced, giving the native locality of the plant, etc., etc. This has been done to some extent in Egland and other European countries. Texas abounds in beautiful flowers, so many that a mere enumeration of their records would fill a volume.

Austin, Texas. S. B. BUCKLEY.

New Publications.

NUTTALL BULLETIN.—The July number of the *Bulletin* opens with one of Dr. Coues' inimitable pen-pictures of bird life, on "The Eave Swallow (*Petrochelidon lunifrons*)." Our only regret in connection with the perusal of this truly delightful sketch is that it is so short. Mr. Henshaw contributes to the present number a short, but very interesting, article on "The Nest and Eggs of the Blue Crow (*Gymnokitta cyanocephala*)," a subject about which very little was known until within a few years; and Mr. Brewster continues his series of papers on the "First Plumages of Some North American Birds." The same writer has also a brief article on "The Nest and Eggs of the Large-billed Water-Thrush (*Siurus motacilla*)." Our correspondent, Mr. C. Hart Merriam, contributes to his papers on the "Birds of Lewis Co., N.Y.," a charming description of the habits of *Molanerpes erythrocephalus*. Mr. Bicknell's observations with reference to the "Evidences of the Carolinian Fauna in the Lower Hudson Valley" are highly interesting, and we hope that his study of this subject will be continued. The last article of this number is devoted to a "Description of a Hybrid (*Hirundo horreori-lunifrons*) Between Two North American Swallows," by Mr. S. Trotter. The entomology of the specific name—and a very bad name it is, both on account of its bad Latin and its clumsiness—will at once suggest to our readers the supposed origin of the bird. If there be no mistake in the matter the case is a most interesting one. Recent Literature is as attractive as ever, and General Notes contain numerous bits of choice news, notably the announcement of the occurrence in Texas of two birds new to the fauna of North America. We shall endeavor to refer again to this number of the *Bulletin* in a subsequent issue of FOREST AND STREAM, for it deserves a more extended notice than we have at present space for.

THE CANOE AND THE FLYING PROA, by W. L. Alden. New York: Harper & Brothers. Price 25 cents.

It is not an easy thing to present in attractive form a lot of technical detail, or to unite in the shape of a consecutive story a description of widely differing subject matter, but in the little volume under notice Mr. Alden has certainly succeeded in embodying, in a very interesting account, a complete description of all the different kinds of canoes in common use. Moreover, the intensely droll and humorous strain in which the book is written will go far to reconcile those whom the author, for the sake of truth, finds it necessary to hit, and sometimes hit hard, to the terrible indictments which he brings with much force against the half-and-half canoeist, and against what he considers, in the light of his long experience, as perverted taste and the partionless idiosyncracies of others. The "Rob Roy," the "Herald" and the "Nautilus" are reviewed in turn, and the excellencies and advantages, as well as the faults of each, so clearly pointed out that there will be no excuse hereafter if the tyro, about to risk his first ducking, does not know just which particular type to adopt suitable for his particular purpose. The new "Shadow" type, for which we ourselves confess a weakness, is the last taken up, and, while there may be differences of opinion as to the best method of stowing cargo, keeping dry and such matters, we do not hesitate to indorse the midship section of the author's design as decidedly the best looking of the lot, and certainly far ahead of the English patterns, both in roominess and stability, while the tumble home of the sheer strake reduces the width to suit the action of the paddler. For general cruising and yachting purposes, for ordinary river and portage trips, especially if of some duration, the "Shadow" certainly offers many inviting points to the tourist which other canoes do not possess or can claim only in a less degree; while, on the other hand, such canoes as Rushton makes will find more favor where extreme lightness and ample room are required, and where camping is customary and hunting the main object of the expedition, the canoe being used simply as a local means of transportation for men, dogs and game. With the author's opinions concerning catamarans, or the flying proa, we are in a large extent in unison, and believe the catamaran destined to a great future for sailing on our inland waters. Altogether the little volume before us is very readable, and the glimpses given of Fiji life at sea will be read by all with interest, while the illustrations throughout the book enhance its value.

SPORTSMAN'S LIBRARY.—Messrs. Orange Judd & Co., of New York, have just issued their catalogue of the Sportsman's Library. This list contains all the best and reliable books which have been published in the United States on these interesting topics. Not only does the Orange Judd catalogue contain the characteristics of birds, fishes, horses and dogs, but natural history finds its place. We may mention among the latter "Baird's Birds of North America," with Wilson's and Coues' works on ornithology. Text books on rifle shooting, including "Wingate's Rifle Practice," "Rifles and Marksmanship" by Judge Gildersleeve are offered. Among the standard books are "Hallock's Gazeteer" and all Forester's works, with the leading treatises on fisheulture, etc. The Judd catalogue is in fact a complete compendium. Send to this office ten cents for a catalogue. We will furnish any of the books by return mail on the price of the work being sent us. See advertisement.

BOOKS RECEIVED.

UPLAND GAME BIRDS AND WATER FOWL OF THE UNITED States. Part seventh. By A. Pope, Jr. Published by Charles Scribner & Sons, New York, 1878.

—Tourists and travelers all know the comfort of having good glasses and telescopes. Rifle shooting cannot be carried on successfully without a good, handy telescope. Among the very best are those made by Voigtlander. Their excellence is known all over the world. Messrs. Robert Merrill's Sons are the sole agents in this country—their store is 179 Water street, New York. A poor glass is a nuisance. You cannot make your eyes believe that they can see with an inferior glass.

presenting the case before Magistrate Jenkins, His Honor decided that proceedings must be carried out in the civil courts. The clause under which Officer Davis arrested the parties is section 51. The section violated is the one numbered 25, which forbids the catching of fish in any other way than by hook and line in the streams of Westchester county, save minnow for bait, bull-heads and eels. The men in this instance were fishing with seines, the meshes being as small as 1¾ inch. The advantages of a vigilant supervision of these waters is quite manifest. One day this week, from Pelham Bridge, a fine bass of 12½ pounds was taken, and more blue fish and weak fish have been caught in this vicinity than for many years. Mr. Davis, who is a sportsman himself, is to be commended for the vigilance he shows in carrying out his duty.

The Rifle.

MASSACHUSETTS—*Boston, Walnut Hill, July* 4.—First match, amateur series at 200 yards.

Guerler	4 4 5 4 5 4 5 4 5 4—44	Borden	3 4 5 4 4 4 4 5 5 3—41
Frye	4 4 5 4 4 4 4 4 5 5—43	Nichols	3 3 4 4 4 4 4 4 3 4—37
Lord	5 4 4 5 4 5 4 4 4 3—42	Hadden	4 3 4 4 5 3 3 4 4 3—37
Mortimer	4 4 3 4 5 3 5 4 5 4—41		

Second match, same distance.

Jewell	5 5 5 4 5 5 4—33	Bradley	5 5 4 3 4 4 5—30
Kirkwood	5 4 4 5 4 5 5—32	Lawson	4 4 5 4 4 5 4—30
Borden	5 4 5 5 4 4 5—32	Nichols	5 2 5 4 4 5 5—30
Frye	4 5 5 4 5 5 4—32	Hadden	4 4 5 4 4 3 5—29
Hubbard	5 4 4 5 4 5 4—31	Howard	4 3 4 4 3 4 4—26
Evans	4 5 3 4 4 4 4—28		

Third match at 1,000 yards.

Hubbard	5 5 4 5 5 5 5 5 5—49	Shepard	5 3 4 5 5 5 4 4 4—44
Gerrish	5 5 5 5 4 5 5 5 4—48	Wilder	5 4 5 5 3 4 5 3 5 5—44
Jewell	5 5 5 3 5 5 5 5 4—47	Smith	4 5 3 5 4 5 3 5 4 5—43
Field	4 5 5 4 5 4 5 5 5—46	Sargent	5 3 5 5 5 5 3 4 3 5—43
Howland	5 5 4 5 3 5 4 5 5—46	Lord	4 5 5 4 5 5 3 3 5 4—43
Arthur	5 5 3 5 5 5 4 5 4—45	Miles	4 3 5 5 4 4 4 3 5 5—42
Willard	5 5 5 5 5 3 3 5 4 5—45	Sias	4 5 2 5 5 4 4 4 4 4—41

Mr. Hubbard, with his superb score of 49 out of a possible 50 at 1,000 yards, won the silver medal, and Mr. Gerrish, his close following with 48, took the second prize in cash, equal to two first entry fees. Taking it all together it was very fine shooting.

SPRINGFIELD VS. PITTSFIELD.—This pleasant contest between the Riverside and Rod and Gun teams came off on the 4th. The following is the score:

Springfield.

Bumstead	4 5 5 4 4 4 4 5 4 4—43
Mathewson	4 4 4 3 4 4 4 4 4 4—39
Wallace	4 4 4 4 4 5 5 4 4 3—41
Van Vlack	5 3 4 4 4 0 4 4 4 4—36
Geo B Clark	4 4 4 4 4 4 4 4 5 5—42
Mayott	4 4 4 4 4 4 2 5 4 4—39
Dr Young	4 4 4 4 4 4 3 5 4 4—40
Barrett	5 4 3 5 4 4 4 5 4 3—41—321

Pittsfield.

Tracy	3 3 2 4 4 4 3 4 4 5—36
Couch	4 4 4 5 4 4 4 4 5 3—41
W P Wood	4 4 4 4 3 4 4 4 3 5—39
Farrington	4 4 4 4 5 4 5 4 4 4—42
Wentworth	5 5 3 2 5 4 3 4 4 3—38
White	3 5 3 5 5 4 4 4 4 5—42
Gale	0 4 4 3 4 4 4 2 5 4—34
J H Wood	4 4 4 4 4 4 5 3 4 4—40—312

A TREMENDOUS SCORE—*Bridgeport, Conn., July* 6.—Wallace B. Gunn, on July 3 at Bridgeport, made 222 out of a possible 225 at 950 yards, using three guns of Sharp's new model. No sighting shots or coaching. Below is the order in which this was shot:

First gun	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5—75
Second gun	5 5 4 5 5 5 5 5 5 5 5 5 5 5 5—74
Third gun	5 5 5 5 5 4 5 4 5 5 5 5 5 5 5—73—222

I think this must put Mr. Gunn ahead as a rifleman.

On July 4 the Bridgeport Rifle Club had a match amongst its members, and Mr. Nichols made a fine score, 25 out of a possible 25 at 200 yards. Old hands must look out for their honors, or lose them at the hands of the young marksman. The Emmet Club and Company B, Fourth Regiment, had out their rifle teams in a match to see who held the gun best in line of the bull's-eye, and the Emmets got beaten, as some of their crack shots went to grass. WHITE DISK.

New Haven.—At Quinnipiac range, on the 4th, the following matches were shot:

Military Match—200 yards.

Stetson	4 5 3 5 5 4 5—31	Tinkey	3 4 4 5 4 4 5—29
Stetson	4 4 4 5 4 5 4—30	Nichols	4 4 4 4 5 3 5—29
Smith	4 4 5 4 4 5 4—30	Allen	5 3 4 4 5 4 4—29
Whitlock	4 5 4 4 4 5 4—30	Nichols	4 4 4 4 4 4 4—28
Nichols	4 4 4 5 5 4 4—30	Fowler	3 4 4 4 4 4 5—28
Murphy	4 5 3 5 5 4 4—30	O'Brien	3 4 4 4 4 5 4—28
Nichols	4 4 4 4 4 4 5—29	Phillips	3 4 4 5 4 4 4—28
Sweeney	5 4 4 4 4 4 4—29	Sweeney	4 4 4 4 4 5 3—28
Nichols	4 5 4 4 4 4 4—29	Tinkey	4 4 3 3 4 5 5—28

All-Comers' Match—200 yards.

Stetson	4 4 4 5 5 4 5—31	Layne, Jr.	5 4 4 4 4 4 4—29
Ross	4 5 4 4 5 5 4—31	Kennedy	4 4 4 4 4 3 5—28
Sweeney	4 5 4 4 4 5 4—30	Sweeney	3 4 4 5 4 4 4—28
Nichols	4 4 4 5 4 4 4—29	Whitlock	4 4 4 4 4 3 4—27
King	4 4 5 4 4 4 4—29	King	4 5 5 4 4 0 3—25

Military Match—500 yards.

Johnson	5 5 5 4 3 4 5—31	Whitlock	4 3 5 4 4 5 4—29
Colvin	3 5 5 4 4 4 5—30	Stetson	4 5 4 5 3 3 4—28
Allen	5 4 4 4 5 3 5—30	Kennedy	4 4 3 3 4 4 4—26
Stetson	3 5 2 5 5 5 5—30	Smith	3 5 3 3 3 4 5—26

All-Comers Match—500 yards.

Layne, Jr.	5 5 5 5 5 5 5—35	Layne, Jr.	4 5 4 4 4 4 5—30
Stetson	4 5 4 4 5 5 5—32	Layne, Jr.	5 3 5 4 3 2 4—28

BURLINGTON VS. OSWEGATCHIE—*Malone, N. Y., July* 4.—Match between the Burlington, Vt., Rifle Club and the Oswegatchie Rifle Club, of Ogdensburg, N. Y.

Burlington Rifle Club.

	800 yards.	900 yards.	1000 yards.	Tl
Boardman	64	61	64	188
Witherell	73	70	66	210
Montgomery	63	68	64	195
Kelsey	65	65	63	193
McCaffrey	62	66	57	185
Horner	69	74	70	213
Total				1,185

Oswegatchie Rifle Club.

Ives	71	70	63	204
Lee	69	70	67	206
Lovel	67	59	57	183
Hastings	68	72	62	202
Peckup	60	66	62	188
Warner	61	60	50	171
Total				1,154

Burlington wins by 31.

CREEDMOOR.—On the third the Eighth Regiment went into camp. On the same day marksmen's badges were shot for. 63 men qualifying. On the third the Empire Rifle Club shot for the *Spirit of the Times* Badge. Conditions—200 and 500 yards, 10 shots at each distance. The leading scores were F. H. Holton, 79; N. D. Ward, 77; Dr. M. M. Malthy, 77; J. W. Todd, 71.

AMATEUR RIFLE CLUB.—On Saturday, July 13, the first competition for the "Long Range Match" will take place. Prize, a Remington long range rifle, or a double-barreled Remington shot-gun; worth $150. Distance, 1,100 or 1,200 yards; 15 shots at each distance. Only open to members of the club.

NEWBURG.—At a match shot on the 3d of July, the following are the winning scores: W. E. Smith, at 200 yards, 29; at 500, 31; 60 in a possible 70. A. Wilcox, 29, 22.

— The Travelers' Command celebrated the Fourth with their second match of the season, for the club badge, at their Staten Island range. The honors were carried off by F. P. Hoeneman, who made 40 out of a possible 50. F. P. H.

SEASIDE RANGE.—Emmet Club team vs. Co. B Fourth Regiment. Ten shots.

Emmet Club.		Co. B Fourth Regiment.	
Cashman	37	King	25
Gormely	36	Burke	27
Lyons	31	Stevens	33
Cuddy	29	Felbel	32
McKenna	32	Stern	41
Donnelly	36	Blakeman	41
Curran	33	Van York	34
Leonard	27—261	Beers	34—267

Richard O'Donnell was captain of Emmets, and Sergeant-Major Geo. Derrick captain of Co. B team.

MOHAWK VALLEY RIFLE RANGE—*Utica, N. Y., July* 4.—Sweepstakes match; 200 yards, off-hand. We give the leading scores in the various matches:

W I Martin	4 5 4 3 3—19	Brand	0 5 4 4 4—17
J J Smith	3 5 3 3 4—18	Parties	4 3 4 4 4—19
Dr Fraser	2 2 3 4—13	Brayton	3 5 4 3 3—19
G A Trowbridge	4 4 4 4 2—18		

Second match for a Remington rifle, given by the association; 200 yards, off-hand, any rifle; competitors allowed to enter five times if desired. Several withdrew, after firing sighting shots, on account of rain.

T Foster	2 4 4 4 5—19	R Omands	4 3 3 4 5—19
D E Pomeroy	3 w	W I Martin	4 5 3 4 4—21
G A Trowbridge	4 3 5 4 3—19	M J Brayton	4 4 4 3 4—19
M J Brayton	3 4 4 4 4—19	W I Martin	4 5 3 4 4—20
F W Parties	4 4 4 4 5—21	Chas Judson	w
W I Martin	4 3 3 4 4—19	F W Parties	4 4 4 4 4—20
M J Brayton	4 4 3 4 4—19	T J Griffiths	4 2 4 4 4—18
M J Brayton	4 4 4 4 3—19		

Third match, 500 yards:

G A Trowbridge	5 3 4 5 4—21	R Omands	5 5 5 3 5—23
Jas Thistlewaite	5 5 5 4 4—23		B. A. G.

THE CHICAGO RANGE.—As the American Team proposed at one time to shoot a match over the Chicago Range, we wrote to a gentleman in Chicago, prominent in rifle matters, who sends us the following description of the Dearborn Club Range. We regret to announce that from some causes unknown the interest in rifle shooting in Chicago has very much diminished of late:

"The Dearborn Club Range is located at Stony Island, near South Chicago, and about thirty-five or forty minutes ride by rail from the city. It is reached by the P. and F. Wagon Road and the Michigan Central. We have four wooden, plunging targets, for 800, 900 and 1,000 yards, one 500 yard target, and one third-class target. We shoot a trifle north of west. The range is well flagged, and large mounds have been made to shoot from. It is a very difficult range to make a large score on. I made upon one occasion 203 points at the three long ranges. Colonel Shaffer also made the same; but that score has never been beaten. Mr. Frank Hyde, of last year's team, can tell you about the range, as he has fired over it on several occasions. Personally, I should very much like to have the American Team shoot in Chicago; but I very much fear the meeting would not be a successful one, and consequently I would offer no encouragement. The President of our Club is abroad. The Secretary is here, I believe, but I have not seen him since last October. S."

GLEN ALGER RIFLE ASSOCIATION—*Harrisville, Mich., June 29th, 1878.—Editor Forest and Stream:* The Glen Alger Rifle Association held their second annual meeting May 20th, and elected the following officers, viz.: D. McGregor, President; George W. Colwell, Vice-President: Dr. D. N. Mitchell, Secretary, and Llen A. Colwell, Treasurer. The reports of officers for the past year showed the association to be in a prosperous condition, with a light balance of cash on hand, after paying all expenses. The roll of membership shows 11 life and 37 regular members in good standing. We did not send a delegate to the National Convention; our members thought best to use our funds in getting our range in good order. When our association was formed the range was covered with woods. To get it cleared and in shape will be our first consideration. We could scarcely send a delegate for less than seventy-five to one hundred dollars which would materially assist us on the range. We presume the same difficulties (a shortage of funds) prevented many country organizations from being represented. However, we expect to be in shape to attend when the next call is made by the National Association. The range, when completed, will be 1,100 yards long. D. MCGREGOR.

[Michigan is to be congratulated on having such an excellent club in its midst, and we trust to be able to record some fine scores shot by members of the Glen Alger Association].

HONOR TO WHOM HONOR IS DUE.—In your last issue you reported some names to whom the unexcelled success of the Third National Shooting Festival of the Sharpshooters' Union of the United States of North America was mainly due. You admire the method and the ways and means employed in the shooting house to keep order, and to publish the result immediately after shooting. This is due, in a high degree, to two men, whom you do not mention—Mr. Herman Raschen and Mr. Jacob Heintz, the former the president, the latter the secretary of the shooting committee. Mr. Jacob Heintz may be called the author of the shooting programme. He presented to a special committee a plan, which was adopted, with a few alterations, by the executive committee. Mr. Raschen superintended the sale of shooting tickets, and Mr. Heintz supported him in keeping good order in the most effective manner. A REPORTER.

THE REMINOTON WINS IN ENGLAND.—*Messrs. E. Remington & Sons, 283 Broadway, N. Y.:* Enclosed first of Exchange on Brown Bros., of New York, in payment for a rifle, ammunition, etc., I received a few days since. By the time you receive this you will no doubt have heard of the splendid score with which Mr. Humphreys won the Cambridge Cup, fifty pounds, shooting with one of your rifles; two-days' shooting, 45 shots each day, at 900, 1,000, and 1,100 yards.

Yours truly, COL. JAMES FENTON.

Hazlehurst, Bamford, Rochdale, June 25, 1878.

FIVE THOUSAND FIVE HUNDRED BALLS IN FIVE HUNDRED MINUTES.—On Saturday next, the 13th of July, Dr. Carver will break 5,500 glass balls with his Winchester rifle in 500 minutes. The shooting will begin at 11 o'clock A. M. and will be carried on until 7 o'clock. Carver will have to break eleven balls a minute for eight hours and twenty minutes. We trust that this most expert rifleman will guard against all accidents of a mechanical nature. As a trial of endurance it is a most remarkable one. The skill of the doctor, after what we have seen of his exhibitions, requires no further comment on our part. The shooting will take place at the Brooklyn Driving Park.

DOCTOR W. F. CARVER.

THE MOST WONDERFUL OF RIFLEMEN.

Some six or eight months ago the FOREST AND STREAM AND ROD AND GUN received a curious letter. Now we are the recipients of a great many strange epistles; but this was so peculiar of its kind, and the writer offered to accomplish so many strange feats, apparently impossible ones, with a rifle or shot-gun, that with a smile of credulity we absolutely tossed the California letter aside. Our readers, we thought, would laugh at us if we gave publicity to such a farago of nonsense. Here was a man unknown to us who proposed to break glass balls with a rifle—a thousand, five thousand of them in some impossible time—and to do any kind of shooting on foot or on horseback. The communication was signed Dr. W. F. Carver. That letter remained on our desk for a day or so unanswered, unheeded, when by chance a California friend entered our office. Chancing to find the letter open, we showed it to our friend, a thorough sportsman and a capital shot, remarking, "Do you know anything about this? It is all nonsense and bounce, is it not?" Our friend shook his head and said, "Not a bit of it. Publish every line of it. A year ago I saw that man shoot, and there is not a human being in this world, as far as I know, who can equal him. There is no false boasting about it. If he comes East you will see a phenomenal shot. Reputation for skill with firearms in the West, where so many shoot well, is hard to acquire; but on the plains Dr. Carver is known far and wide. It seems miraculous to you, but it can be done by the man who writes you that letter." We must confess that with some slight compunction we did publish the letter in the FOREST AND STREAM AND ROD AND GUN. Our readers may remember, too, that about that time some of our correspondents, quite as skeptical as ourselves, wrote amusing letters, travesticing the pretentions of Dr. Carver. Now that we have seen with our own eyes Dr. Carver's skill, we are prepared to state that his performances both with the rifle and shot-gun are indeed phenomenal.

Dr. Carver stands some six feet two inches tall, and is a singularly handsome man, with a pair of brown hazel eyes. The physiological fact which seems to have been borne out so far, that men with gray eyes are the best riflemen, finds an exception then in the present case. Elegantly formed, with no extra weight to carry, in shooting his position is quite classic. Standing well poised on his legs, he holds his Winchester rifle with his extended left arm almost as far as his hand will reach. The mechanical movement of the right hand to work the lever of the rifle so as to throw out the exploded cartridge and to bring another one from the magazine is instantaneous. The left arm holds the piece rigid, while his right hand in a second of time goes through the manipulation of the piece. Shots are made always with both eyes in shooting. Questions have been asked us in regard to the Doctor's method of sighting. It would be impossible, we should think, to bring the rear and fore sights of the piece in line with the object to be hit. In using the shot-gun no rear sights are ever thought of. Even in the very rapid shots it is possible that the fore sight may not be absolutely necessary. Some expert Creedmoor men, who have witnessed Carver's performances, think it is only the end of the rifle on which he sights, irrespective of the fixed sight.

Dr. Carver uses the Winchester repeating rifle, calibre 44, loaded with 40 grains of powder, with a bullet of 200 grains, weighing about ten pounds. The piece will hold some fifteen to seventeen cartridges. Of course nothing but a repeating arm would serve the Doctor for his rapid shots. In shooting the hands of the marksman are covered with buckskin gloves. His grip is immense. This was evident when he used the Parker gun, as with one movement of his hand he is enabled to push up the catch of the gun and depress the barrels.

Commencing on the 4th of July, at the Brooklyn Driving Park, the exhibition was continued during the afternoons of the 5th and 6th. The performances were varied, comprising many of the most wonderful feats of skill. To show the rapidity of the fire, one surprising shot, a ball being thrown in the air, is to fire twice or thrice at it, and to break the ball at the third or fourth fire. For breaking glass balls, with the fewest misses, or shooting on time, an assistant stands some twenty-five feet from the rifleman, and throws the balls about twenty feet in the air. We think it is rather more difficult to break a glass ball pitched in the air by hand than when it is sprung from a trap. There is a methodical curve a ball takes when mechanically thrown, which is quite constant. This is the method employed by all the leading shots, when breaking the most balls, or in

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National Pastimes.

CARRIER PIGEONS.—Pigeon flying matches, so popular in some countries abroad, are receiving some attention from a few fanciers in this country, particularly in New York and Pennsylvania. In the immediate vicinity of New York, Mr. J. Von Opstal, of No. 408 Madison street, and Mr. J. Waefelaer, of Garden street, Hoboken, have given most attention to the sport:

At a quarter to eight last Sunday morning two of Mr. Von Opstal's pigeons and three of Mr. Waefelaer's were started from Steubenville, Ohio. One of the former's birds arrived at No. 4 Lewis street, this city, at six o'clock Sunday evening, and one of the latter's arrived at Hoboken about the same time, making the distance—352 miles—in 10h. 15m. The other birds arrived about eight o'clock yesterday morning. About the 24th of this month a great flight will take place from Columbus, Ohio, which is distant on a straight line about five hundred miles. Prizes of $100, $50 and $25 in gold are to be given, and the distance must be made within three days to secure a prize.

JACK GOULDING'S BENEFIT.—The testimonial benefit to Jack Goulding, the efficient trainer and track master of the New York Athletic Club took place at the Manhattan Grounds last Monday:

Seventy-five Yards Run—Won by W. O. France in 8¼s.; R. Thompson second.

Quarter-mile Hurdle—Won by W. J. Duffy in 1m. 40s.

One Hundred Yards Dash—W. O. Francis, handicapped 25 yds., won in 10⅛s.

One-Mile Run—Won by D. Dampy in 5m. 46⅛s.

One-Mile Handicap—Won by F. J. Mott in 7m. 32s.

One-Mile Walk for those who had never won a prize—Won by J. O. Willisman, Glenwood A. C., in 8m.

One-Half Mile Handicap—Won by F. Banham in 2m. 2s.

SHORT HILLS ATHLETIC CLUB.—The contests in the games of this club, at Milburn, N. J., last Saturday, were for handsome medals. The programme was as follows:

One Hundred Yards, handicap—Thirteen contestants; won by H. Inman, handicapped 6 yards; time, 10 3-5s.

Half-Mile handicap—Six contestants; won by G. De Rongé, handicapped 45 yards; time, 2m. 6s.

One-Mile Walk—Six competed; won by W. E. Barnes, handicapped 35s.; time, 7m. 43 3-5s.

One Hundred Yards, special—Three competitors; won by W. C. Wilmer in 10s.

Two Hundred and Twenty Yards—Four starters; won by A. Nael, handicapped 4 yards.

Four Hundred and Forty Yards Run—Four entries; won by E. C. La Montague in 532-5s.

Tug of war between Manhattan A. C. and New York A. C. teams resulted in favor of the latter.

VALENTIA BOAT CLUB GAMES.—In the athletic sports last Saturday, on the St. George's Cricket Grounds, Hoboken, the results were:

The 100-yards dash, two entries, won by W. F. Suydam in 12⅕s. In the standing high jump, three entries, A. Schults cleared 3ft. 8in., and was also the winner in the running high jump, clearing 4ft. 2in. Suydam won the 440-yards run, two entries, in 62s. Shults was the winner in the running broad jump; distance, 14ft. 7in. F. Frummel was victorious in the one-mile walk, two entries; time, 9m. 10s. The 100-yard hurdle race, two entries, was won by Suydam in 16⅕s. A tug of war between teams from the American Athletic Club and the Valentia Boat Club was won by the Valentias in 3m.

TEN BROECK VS. MOLLIE M'CARTHY.—The long-talked-of race, which has excited so much interest from the Atlantic to the Pacific, came off on the magnificent track of the Louisville Jockey Club, at Louisville, Ky., July 4. The result was disappointing, the California mare being distanced by the Kentuckian champion, who won the four-mile race in 8m. 19¾s.

HARLEM ATHLETICS.—The list of over one hundred entries for the Harlem Athletic Club Games, which are to be held on the Manhattan Grounds next Saturday, promises a fine display of muscle upon that occasion.

SUBMARINE PEDESTRIANISM.—Captain John T. Quire, of Cincinnati, O., proposes to walk from that city to Cairo, a distance of 25 miles, on the bottom of the Ohio river, in 25 days. He is to be accompanied with a float filled up with an air pump and other necessary apparatus, and the Captain claims the privilege of coming up to the surface whenever he shall deem it expedient.

—In describing the very fine archery goods for sale by Messrs. Holberton & Co., of Fulton st., an error was made as to the number of this house. It is No. 117 Fulton st. The bows are very excellent. Dr. Carver tried some of them, breaking a great deal of valuable property about FOREST AND STREAM office with the arrows, and ending by planting one shaft almost up to the feathers in the ceiling. Fortunately Mr. Beard, the well-known caricaturist, who dwells in the story above us, was not impaled.

FOOT BALL.—The Minturn Foot Ball Club, of Jersey City, defeated the Alert Foot Ball Club, of New York, last Saturday.

CRICKET.—The Onondagas, of Syracuse, N. Y., last Thurday defeated the Bellville, Can., club by a score of 44 to 32 on first innings, the second being unfinished. What other result could have been looked for on the Fourth?

ST. GEORGES VS. PATERSON UNITED ELEVEN.—The St. Georges Cricket Club, of this city, Saturday, defeated the Paterson United Eleven at Haledon, N. J.

ZOOLOGICAL BILLS OF FARE.—The Philadelphia Zoological Garden caterers have a company of guests whose tastes are somewhat peculiar as well as expensive. There is the rhinocerous, for instance, who always takes the medal when the boarders eat for a wager. His rations of hay are two hundred and fifty pounds per day, and then he calls for a half bushel of potatoes for dessert. Within the last four years about ten tons of peanuts have disappeared down his cavernous and capacious maw. The hoarding house keeper who took him to board at $11 per week would just about clear expenses. He eats ten times more—pecuniarilly—than the leopard and the jaguar. The seals betray the least regard for market bills. Their daily allowance is eighty pounds of fresh fish. The Chimpanzee brothers "Jack and Gill Livingstone" are perhaps the most interesting, as they are the most human in their way of eating. The Philadelphia *Times* thus describes their meals:

Their bill of fare is as follows: Breakfast, weak tea, with abundance of sugar and plenty of milk, and bread thickly spread with honey. The honey, these strange people, whom the head keeper persists in regarding as only a little less than man and much more than beast, carefully remove, and when there is no more honey they dispatch the bread. At 10:30 in the forenoon they lunch. This refection consists of fruit exclusively, chiefly bananas and oranges. About 3 o'clock they want their dinner, which consists of rice, tapioca or some such farinaceous food, served with sugar and sherry wine. For supper they have the same bill of fare as for dinner, with the addition of tea, prepared as for breakfast. Their method of feeding indicates not only the possession of a wonderful degree of adaptability to civilized customs, but of a desire to make progress in the way of table observances. They feed themselves with a spoon, and drink their tea from a cup with a degree of decorum that it would be a pleasure to witness in many children. Their board approximates in cost to twenty cents each per diem.

WHERE THE JACK RABBIT IS A BURDEN.—Take a grasshopper, magnify him, give him a stump tail and a coat of fur, and you have a jackass rabbit. If the farmer of the far West beholds with dismay the incursion of the hopping insects, the farmer of the farther West has equal detestation of the jumping hare. The Idahoans are devising all sorts of ingenious tricks for their capture. One man has a brush fence, three miles long, with traps so arranged that when a rabbit jumps over he goes down into a pit, whence there is no escape save at the hands of one of the seven men who do nothing but pull out the captives. The average catch per day is four hundred; the ears are cut off, and the carcases then devoured, skin and all, by some three hundred hogs, who are rapidly fattening for the market. The revenue derived from four hundred pairs of ears per day, at a bounty of two cents each, will help pay expenses.

THE BRAYTON MOTOR.—This engine is adapted for use in small yachts. It is a hydro-carbon engine, and is started upon the application of a match. The fuel used is crude petroleum, burned with atmospheric air under high pressure, power being produced by a series of rapid explosions resulting. It has been generally approved, and awarded a premium at the Centennial. A 5 H. P. engine has a cylinder 8in. diameter, weighs 1,800lbs., and costs about $500. An 8 H. P. engine has a cylinder 9in. diameter, weighs 2,500lbs., and costs about $600. These engines are manufactured in Providence by the Brayton Motor Co., and builders of small launches and yachts can get further details from them, so that they may compare weight, space and cost as well as running expenses, with the ordinary type of steam engine. Having had no experience with the Brayton Motor ourselves, we cannot vouch for them, but their performances will probably soon be placed before the public.

Tiffany & Co., Silversmiths, Jewellers, and Importers, have always a large stock of silver articles for prizes for shooting, yachting, racing and other sports, and on request they prepare special designs for similar purposes. Their TIMING WATCHES are guaranteed for accuracy, and are now very generally used for sporting and scientific requirements. TIFFANY & CO. are also the agents in America for Messrs. PATEK, PHILIPPE & CO., of Geneva, of whose celebrated watches they have a full line. Their stock of Diamonds and other Precious Stones, General Jewelry, Artistic Bronzes and Pottery, Electro-Plate and Sterling Silverware for Household use, fine Stationery and Bric-a-brac, is the largest in the world, and the public are invited to visit their establishment without feeling the slightest obligation to purchase.

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Brush's Patent *Float* Trolling Spoons entirely overcome the defects heretofore found in all other spoons—viz., running so deep as to catch weeds and logs, *and below* where the fish see them. Made of the *best* material. Bass size, 75 cents; pickerel, $1; muskalonge, $1.25. Each by mail—25 cents extra for gold-plated. Address,
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The Brooklyn Driving Park can be reached by the Fulton and Atlantic street cars in Brooklyn, or by the Prospect Park and Coney Island and Manhattan Beach Railroads.

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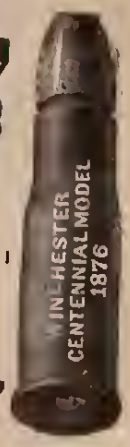

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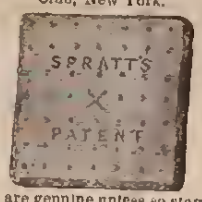

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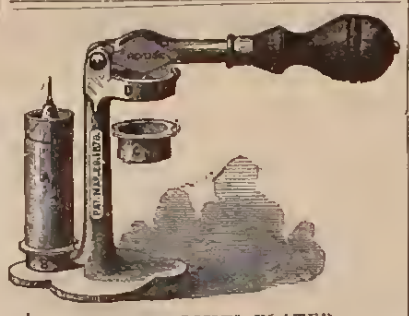

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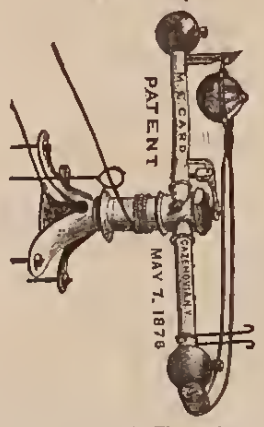

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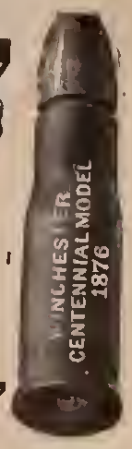

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Imported Pointer Bow, Bang, Luna—Winner of several prizes before importation, beating Wagg. Also first at New York, special for best pointer in the show, and best brace with Sleaford.

Champion Sleaford, MacGregor (594), Nina (1,253)—Winner of first at Birmingham, 1876; first at St. Louis, 1878, and Champion at New York, 1878.

Clytie, Champion Sensation, Bal imore K. C. Lily—Winner of first at St. Louis, 1878, when one year old.

Fee—Berkley, $40; Bow, $10; Sting II., $25; Sleaford, $25. Address

ST. LOUIS KENNEL CLUB, 706 Pine St.,
ST. LOUIS, MO.
je13 4t

Fleas! Fleas! Worms! Worms!

STEADMAN'S FLEA POWDER for DOGS.

A Bane to Fleas—A Boon to Dogs.

This Powder is guaranteed to kill fleas on dogs or any other animals, or money returned. It is put up in patent boxes with sliding pepper box top, which greatly facilitates its use. Simple and efficacious.

Price 50 cents by mail, Postpaid

ARECA NUT FOR WORMS IN DOGS

A CERTAIN REMEDY

Put up in boxes containing a dozen powders, with full directions for use.

Price 50 cents per Box by mail.

Both the above are recommended by ROD AND GUN and FOREST AND STREAM.

W. HOLBERTON.
oct 12 117 FULTON STREET.

FOR SALE, when eight weeks old, twelve fine setter whelps, seven dogs and five bitches, out of my blue belton Moll by Borges' Druid; whelped May 17. Five are black, tan and white, balance black and white. Address L. F. WHITMAN, No. 5 City Hall, Detroit, Mich.
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PUGS.—Pure bred old English pugs for sale; grand specimens. Pedigree and particulars from H. ROBINSON, Chemist, 41 Canning street, Liverpool, England.
jy11 1

The Kennel.

MARYLAND POINTERS IN THE STUD.

"PONTO."

Liver color, weighs about 57 lbs.; is a first-class field dog both on coveys and single birds; has great speed and endurance, and is not afraid of briars. Was shown at Baltimore in the same class as Sensation, and was highly commended.

"BRAGG."

Lemon and white, weighs about 60 lbs.; litter brother to Till, who took first premium for Native Pointers at New York, May, 1877.

Fee for Either Dog, $20.

As regards performances of dogs in the field, would refer to Messrs. Clark & Sneider, Baltimore; Hon. J. E. Reyburn, 1,822 Spring Garden street, Philadelphia.

FOR SALE, one liver-colored pup, by Ponto, out of Ginger, whelped in August, 1877. Price for pup, $15. Also, five dog and four bitch pups, whelped April 1, 1878, by Ponto, out of Ginger. Price, $15, at eight weeks old, or $20 per pair. Address MUIRKIRK KENNEL, Muirkirk, Prince George's County, Md. apr25 3m

St. Paul Bench Show,

To be given under the auspices of the

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AT

STATE FAIR GROUNDS

ST. PAUL, MINN.

SEPTEMBER 2, 3, 4, 5, 6, 7, 1878.

ENTRIES CLOSE AUG. 15.

CHAS. LINCOLN, Supt.

my9 tf

FOR SALE—One black-and-tan setter, two years and a half old, well broken and superior retriever, handsome and good in all respects, and cannot well be beaten for prairie work; also, one dog and one bitch pup, four months old, black and white, sired by Demitte's Dash—Pride of the Border; Dora out of my Nellie. The above stock will be sold for one-half actual value if taken soon. G. H. GOODRICH, Toledo, Tama Co., Iowa. jy4 tf

FOR SALE—Black-and-tan bitch Dresm, two years old, out of Tilley's Dream by Munn's Duke. Thoroughly broken, wonderfully quick, fast and stylish, staunch on her point, steady to heel and gun; uncommonly clean retriever. Also lemon and white pointer dog Sefton, of Lillie by Sensation, high-headed, fast, stylish ranger, very staunch on game. Also four puppies by Flake out of Lillie, very handsome.

This stock is about as good and reliable as any offered in the United States. Address, J. A. S. FOREST AND STREAM Office.

BLOODED watch dog pup wanted; large breed. Address TRAMPS, N. Y. Herald office. july4 tf

WANTED—Pointer bitch pup, five to six months old. AUG. FRANKE, Wapakoneta, O. jy11 1t

FOR SALE—Six red Irish setter pups, two dogs and four bitches, whelped May 23, out of Belle II. (Belle Meade—Robinson's Jack), by Mack, be out of Carrie by Plunket; price, when eight weeks old, $15. Address P. DUNHAM, Leeds, Mass. jy11 3t

FOR SALE—English setter dog, 4 years old, thoroughly broken. Can be seen on game—woodcock, quail or partridge. Address, P. O. Box 2,776, Brockton Mass. jy11 1f

FOR SALE—A well broken liver and white setter dog, three years old—splendid retriever; or will exchange for a well broken cocker spaniel. Address, Drawer 22, Gouverneur, N. Y. jy11 1t

FOR SALE—Red Irish setter dog pup, 8 mos. old; pedigree guaranteed; price very low. FISHER & BICKERTON, 179 Flatbush avenue, Brooklyn. jy11 2t

FOR SALE—Setter puppies out of Killarney (imported Frisk—Grouse), by imported Milo (Dan—Venus); pedigree guaranteed. Gyps, $5; dogs, $10. Address, BARTON, New Dorp, Staten Island, N. Y. jy11 4t

FOR SALE—Gordon setter pup, gyp, black and tan, 15 mos. old. Send for particulars to R. ANSON CRIE, Rockland, Maine. jy11 2t

WANTED—An Irish or Gordon pup (dog or bitch) from six to ten months old. Must be correct color and good pedigree. Address "F," office FOREST AND STREAM jy11 1t

For Sale.

FIELD, COVER AND TRAP SHOOTING.

BY CAPT. BOGARDUS.

New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Miles Johnson. For sale at this office. Price $2.

FOR SALE—5,000 live wild pigeons, still fed, for for trap shooting. Address O. B. FITCH, Wilcox, Pa. je17 4t

FOR SALE, CHEAP—A long-range Sharps Rifle, all complete and in fine order. Address box 120, Taunton, Mass. je20 4t

FOR SALE—Crystal Spring Fish Farm and Picnic Grounds, Oakland, Bergen County, N. J. Buildings cost over $1,200; five years old; gothic frame villa; all modern improvements; tenant's house, stables, etc.—in one, four horses; twenty-three acres, four acres grove, with from twenty to thirty ponds; fine garden; 100 young fruit trees; apple orchards. Address B. B. P., care this office. je13 tf

CITY AND COUNTRY PROPERTY bought, sold and exchanged. C. S. PECK, 8 West Twenty-fifth street, New York. Sept27 1y

Auxiliary Rifle.

SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot-Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot-gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44, as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

AUXILIARY RIFLE BARREL COMPANY,

P.O. box 1,176. NEW HAVEN, CONN.

W. W. Greener's Champion Treble Wedge Fast, Breech-Loader.

THE WINNING GUN.

At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £705, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1875, beating 102 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,323. BEWARE OF INFRINGEMENTS OR IMITATIONS.

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IMPORTANT TO FARMERS, COW-KEEPERS AND DAIRYMEN.

The Wonderful Self-Acting Cow-Milker,

PATENTED MAY 28, 1878.

THE MOST USEFUL INVENTION OF THE AGE.

Tested and approved by many of the leading **Agriculturists, Dairymen and Farmers** throughout the United States, and highly recommended by all who have used it.

WILL MILK A COW IN FROM THREE TO FOUR MINUTES and can be adjusted and used by A CHILD. Usefulness, simplicity, cleanliness, durability and cheapness combined.

PRICE, TWO DOLLARS.

A pamphlet containing description of the milker and sectional views and treatise of the cow's teats and bag, sent prepaid to any address on receipt of price, $2.

READ THE FOLLOWING TESTIMONIAL:

25 LEXINGTON AVENUE, N. Y., June 5, 1878.

I hereby certify that, in company with the Superintendent of the American Society for the Prevention of Cruelty to Animals, and other officers of that society, I have witnessed the operation of the Self-Acting Cow-Milker, and that it fulfills all that is claimed for it. (Signed) JOSEPH B. COLEMAN, Veterinary Surgeon.

Member Royal College of Veterinary Surgeons of England and Veterinary Surgeon to the American Society for the Prevention of Cruelty to Animals.

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Hart's Sportsman's Favorite Metallic Shells, FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside. Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

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MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

TATHAM'S IMPROVED CHILLED SHOT.

American Standard Diameters.

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Gives greater penetration and better pattern than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found free from shrinkage, more spherical, more uniform in size, harder, heavier and of brighter and cleaner finish than any other. SEND FOR CIRCULAR.

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Also, manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

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FOR SALE—English breech-loaders, central fire, twist barrels, freed locks, snap action, fine finish. Price $35. FRANK PERCEY & CO., Oshkosh, Wis. jy11 3t

FOR SALE CHEAP—A. W. & C. Scott & Sons d'ble B. L. shotgun, 10 bore, with case, 40 shells and implements complete. Address, with stamp, CHAS. BORNARTH, Shakopee, Scott Co., Minn. jy11 2t

Wanted.

WANTED—Additional capital of $7,000 to extend a business paying large profits, and to reduce the present cost of manufacture of an article in universal demand, secured by two strong patents. One-half interest to the right party with the above amount and the fullest investigation solicited to show a net profit of $10,000 the first year, with orders now on hand which cannot be filled for want of necessary capital. The best references given when required. None but principals address J. H., office of FOREST AND STREAM, 111 Fulton Street, N. Y. je27-tf.

WANTED TO EXCHANGE—A "Greener" highest quality B. L. shotgun, 10 gauge, 32 inch; weight, 8lbs. 14oz.; laminated steel barrels, full pistol grip; good as new; cost $250; for same quality any first class maker's gun, 12 or 10 gauge, 30 inch, weight, 6 to 7½lbs. Address, describing gun, H. W. AVERY, Byron, Minn. jy11 2t

A GENTLEMAN fond of sport and adventure, experienced in trapping and woodcraft generally, going hunting in northern Canada, desires a comrade of similar tastes. Those afraid of work or unable to share expenses need not apply. State experience; references exchanged. Address, WINDIGO, Claynor, Ont., Canada. jy11 2t

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address TRUE & Co., Augusta, Maine.

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The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

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The Only Route via White Sulphur Springs.

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THE ONLY DIRECT RAILROAD from Chicago to St. Louis, and Chicago to Kansas City, WITHOUT CHANGE OF CARS.

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SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

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CONEY ISLAND—BRIGHTON BEACH.

Opening of the BROOKLYN, FLATBUSH & CONEY ISLAND R. R.

SUMMER ARRANGEMENT,
Commencing July 2, 1878.

Trains for Coney Island—Leave depot on Flatbush avenue, Willink Entrance, Prospect Park, at 6:20, 7:30, 8:30, 9:30, 10, 10:30, 11, 11:20, 11:40 A. M., 12 M., 12:40, 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:15, 7:30, 7:45, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Beach—7, 8, 9, 10, 10:30, 11, 11:20, 11:40 A. M., 12 M., 12:40, 1, 1:20, 1:40, 2, 2,20, 2:40, 3, 3,20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, 11 P. M.

Sunday Trains to Island—8:50, 9, 9:30, 10, 10:20, 10,40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5,20, 5:40, 6, 6:20, 6:40, 7, 7:15, 7:30, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Island—9, 9:30, 10, 10:20, 10:40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, 11 P. M.

Time to Coney Island, ten minutes. Excursion tickets, 40 cents; single fare, 20 cents. Grand concerts every afternoon and evening by Conterno's Twenty-third Regiment Band.

MR. LEVY, the celebrated cornet soloist, has been engaged for the season.

The following horse-car lines run directly to depot: Flatbush avenue from Fulton Ferry; Bergen street, S. S.; Franklin avenue, from South Seventh street Ferry, E. D., and Nostrand avenue, from foot of Broadway. W. E. DORWIN, Supt.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 3, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 11:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:50, 8:13, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 4:00, P. M. trains from New York and to the 7:45, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 6:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept13 1y H. P. BALDWIN, Gen. Pass. Agent

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday, Wednesday and Friday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep 28 1y

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TO SPORTSMEN:

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Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing, Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent,
FRANK THOMSON, Gen'l Manager. feb11-tf

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FOR BOSTON AND ALL POINTS EAST.
REDUCED FARE:

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Tickets for sale at all principal ticket offices. State rooms secured at offices of Westcott Express Company, and at 363 Broadway, New York, and 333 Washington St., Brooklyn.

PROVIDENCE LINE.

Freight only, steamers leave Pier 37, North River, foot Park Place, at 4:30 P. M. Freights via either line taken at lowest rates.

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Philadelphia and Southern Mail S. S. Co.,
Pier 22 South Delaware Avenue, Phila.

Dec14-1y

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.
Send for Guide Book.

HENRY PRATT, G. T. A.
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Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and Black Bass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound.

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

A. B. LEET, G. P. A.,
Grand Rapids, Mich.

A. HOPPE,
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FROM PIER 41, N. R., foot of Canal st., daily, including Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only night line of steamers selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the Office on the pier, at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

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St. Louis, Minneapolis
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ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids.

E. F. WINSLOW, General Manager.
C. J. IVES, Gen. Passenger Agent.
tf

LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M. Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Snp't.
J. CRITTENDEN, Gen'l Pass. Agent. je6 tf

FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

NIGHT LINE.—The Elm City leaves New York at 11 P. M., connecting with passenger train in waiting on wharf at New Haven, leaving 5:15 A. M. Tickets sold and baggage checked at 944 Broadway, New York, and 4 Court street, Brooklyn. Excursion to New Haven and return, $1.50. Apply at General Office, on the pier, or to RICHARD PECK, General Agent.

Sportsmen's Routes.

Cromwell Steamship Line.

NEW YORK, HALIFAX, N. S. AND ST. JOHNS, N. F.

THE FIRST-CLASS STEAMSHIPS

CORTES, Capt. Bennett, and
ALHAMBRA, Capt. Mellhinney,

form a regular line between above ports, leaving Pier 10, North River, New York, three times a month. Persons visiting Nova Scotia, Newfoundland or the Lower St. Lawrence will find this the cheapest and most direct route, avoiding changes and detention. Time between New York and Halifax about sixty hours, one half of trip through Long Island and Vineyard Sounds, in smooth water.

Cabin passage, including stateroom and meals, New York and Halifax, $15 gold; New York and St. Johns, $30, gold. Excursion tickets at reduced rates. For schedule of sailings and further particulars apply to

CLARK & SEAMAN,
80 West street, N. Y.

AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. je26m

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THE SPORTSMAN'S ROUTE.

Chicago & Northwestern RR.

Embraces under one management the Great Trunk Railway Lines of the West and Northwest, and, with its numerous branches and connections, forms the shortest and quickest route between Chicago and all points in Illinois, Wisconsin, Northern Michigan, Minnesota, Iowa, Nebraska, California, and the Western Territories. Its

OMAHA AND CALIFORNIA LINE

is the shortest and best route for all points in Northern Illinois, Iowa, Dakota, Nebraska, Wyoming, Colorado, Utah, Nevada, California, Oregon, China, Japan and Australia. Its

CHICAGO, ST. PAUL AND MINNEAPOLIS LINE

is the short line for Northern Wisconsin and Minnesota, and for Madison, St. Paul, Minneapolis, Duluth and all points in the Great Northwest. Its

WINONA AND ST. PETER LINE

is the only route for Winona, Rochester, Owatonna, Mankato, St. Peter, New Ulm and all points in Southern and Central Minnesota. Its

GREEN BAY AND MARQUETTE LINE

is the only line for Janesville, Watertown, Fond du Lac, Oshkosh, Appleton, Green Bay, Escanaba, Negaunee, Marquette, Houghton, Hancock and the Lake Superior country. Its

FREEPORT AND DUBUQUE LINE

is the only route for Elgin, Rockford, Freeport and all points via Freeport. Its

CHICAGO AND MILWAUKEE LINE;

is the old Lake Shore route, and is the only one passing through Evanston, Lake Forest, Highland Park, Waukegan, Racine, Kenosha to Milwaukee.

PULLMAN HOTEL CARS

are now running regularly between Chicago and Council Bluffs, on the California Express Train of the

CHICAGO & NORTHWESTERN RAILWAY.

Westbound, they leave Chicago daily, except Sunday (and on every third Sunday), from the Wells Street Depot, at 10:30 A. M., and arrive at Council Bluffs next morning.

Eastbound they leave Council Bluffs at 5:30 P. M., daily, except Saturday (and on every third Saturday), and reach Chicago next afternoon.

☞ No other roads west of Chicago runs Pullman or any other form of Hotel cars.

TO SPORTSMEN.

This line presents peculiar advantages. For Prairie Chickens, Ducks, Geese and Brant shooting, our Iowa line to-day offers more favorable points than any other road in the country, while for Deer and Bear hunting, and for Brook Trout, Lake Salmon, Pike, Pickerel and Bass fishing, a hundred points on the Northern and Northwestern lines of this company will be found unsurpassed by anything in the West.

New York office, No. 415 Broadway; Boston office, No. 5 State street.

For rates or information not attainable from your home ticket agents, apply to

MARVIN HUGHITT,
Gen. Manager, Chicago.

W. H. STENNETT,
Gen. Pass. Agent, Chicago. je20 tf

Hotels and Resorts for Sportsmen.

Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. je6 tf

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Grand Fishing.

ROBERTS' SUMMER RESORT,

DOTY ISLAND,

NEENAH, WIS.

FISHING AND ANGLING.—To the sportsman and angler no place in Wisconsin offers greater inducements, the catch of fish during the season being at all times good, and the varieties such as to make it first-class sport. Black and silver bass, muscalonge, pike, pickerel, catfish, sturgeon, rock bass and perch, are the common varieties caught, and as the best fishing grounds are within a few rods of the house, no time is lost in going or coming. je20 3m

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Sportsmen's Headquarters.

Bromfield House,
AND
LADIES' AND GENTS' DINING ROOMS,
55 Bromfield street, 15 Montgomery place,
BOSTON.

E. M. MESSENGER, Proprietor.
apr4 tf

Hotels and Resorts for Sportsmen.

Sherman House,

(CLARK AND RANDOLPH),

CHICAGO.

Rates reduced to $3 per day for all rooms above the parlor floor, without baths.
Rooms with baths, $3.50, $4, and $4.50 per day.

ALVIN HULBERT, Prop'r.

We challenge any Hotel in the World to show as large and as elegantly furnished rooms as those of the SHERMAN. je20 tf

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NEW SUMMER BOARDING HOUSE.

Situated three miles from Bethel Station, in the vicinity of good brook trout fishing. Healthy location and pleasant drives. Address H. R. GODWIN, North Bethel, Maine. je13 7t

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Mt. Kineo House,

MOOSEHEAD LAKE, ME.

A delightful resort for the sportsman, summer tourist or invalid. Good trout fishing. For circulars address O. A. DENNEN, Superintendent, as above, or W. L. CHENERY, 296 State street, Boston, Mass. je10 6t

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CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters, with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

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THE BARNEGAT HOUSE,

Forked River, Ocean County, N. J.

The nearest house to the finest fishing and gunning of Barnegat Bay. Superior accommodations for families or transient guests at reasonable rates. Access via N. J. S. R. R. Address S. L. ATKINSON, Manager. Refer to C. SMITH, 44 West Broadway. Je20 4t

Greenwood Lake.

MONTCLAIR & GREENWOOD LAKE RAILWAY.

THE ONLY THROUGH ROUTE TO GREENWOOD LAKE.

Splendid Bass and Pickerel Fishing—Beauties of Lake and Mountain Scenery.

Trains leave New York, foot of Courtlandt and Deshrosses streets, daily (Sundays excepted) at 8:20 A. M. and 4:30 P. M.

Leave Brooklyn, via Annex boats foot of Fulton street, at 8 A. M. and 4 P. M.

Pullman Parlor Car on 4:30 P. M. train.

Through coach daily between Hackensack, Paterson and Greenwood Lake.

Excursion fare from Brooklyn, New York or Jersey City, $2.15. Parties of fifteen or more persons, $2 20 each.

J. F. MACKIE, Gen. Pass. Agent.

Notice to Anglers.

THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle.

Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may9 3m

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THE SUBSCRIBER desires a capitalist or association of gentlemen to join him in the erection of a select family hotel or club house on the most beautiful and eligible situation at Greenwood Lake, N. Y., with from twenty to fifty acres of land, as may be desired, and will take one-third of the purchase price of the property in stock or shares in the enterprise. Choice building sites, with water fronts, also for sale, in plots to suit, on favorable terms. Circulars can be had at office of FOREST AND STREAM. Apply to or address S. CALDWELL, Greenwood Lake, Orange County, N. Y. may16 tf

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BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y. Splendid bass fishing good boating and bathing. Telegraph office in house. Take Montclair and Greenwood Lake Railway.

TRAPHAGEN HOUSE, GREENWOOD LAKE, Orange County, N. Y., L. Y. JENNESS. An excellent family hotel. Also good accommodations for the sportsman. Good boats and guides for fishing. m

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BRADNER HOUSE, GREENWOOD LAKE, ORANGE COUNTY, N. Y., May 15, 1878. Terms—$2 per day. $8 to $10 per week. Free stages for guests to and from the steamboat dock at ARINGTON to the house. G. S. BRADNER, Proprietor. jy4 3m

Sportsmen's Goods.

GOOD'S OIL TANNED MOCCASINS.

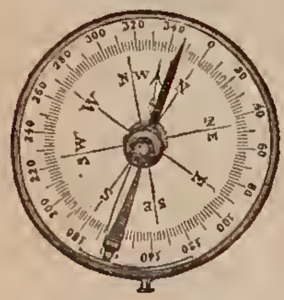
The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article.* Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)

PRINCIPAL AGENTS—W. Holberton & Co., 117 Fulton street, New York; Jos. C. Grubb & Co., 712 Market street, Philadelphia, Pa.; Bradford & Anthony, 374 Washington street, Boston, Mass.

LOST

BECAUSE HE HAD NO

COMPASS.



THIS IS AN EXACT FAC-SIMILE.

Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, agents for the London and New York Compass Co.

FERGUSON'S

Sportsman's Lantern.

WITH HEAD AND STAFF ATTACHMENTS.

(Patent Applied For.)

" Light, Strong, Compact and very Effective. It is the BEST lantern for sportsmen and Camping Parties yet offered. UNEQUALLED either as a CAMP lantern, HAND lantern, "HEAD JACK" or "STAFF JACK." Can be worn over any size or style of hat, and can easily be carried in the knap-sack or pack-basket. No chimney, no smoke; cannot be extinguished by wind, rain or jolting. Send for descriptive circular to A. FERGUSON, 137 Wilson street, Brooklyn, E. D., N. Y., or W. HOLBERTON & CO., Sole Agents, 117 Fulton street, N. Y. may16 2m

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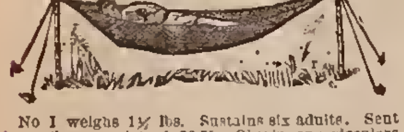
ASHANTEE

Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.



No I weighs 1½ lbs. Sustains six adults. Sent by mail on receipt of $3.75. Obtain our circulars describing other sizes.

McCOY & SANDERS, SOLE AGENTS,
134 Duane St., New York.

FLYING TARGET.

(Patented August 7, 1877, No. 193,879.)

The way it came to pass was this: I to a sporting club belong; I love to shoot; I love to see the long-bill toppling to the copse from whence 'twas flushed, or in its whirring flight the goodly grouse come fluttering to the ground, and hence to make myself proficient in the manly sport, I joined the club, and practiced at the gyro, glass ball, and the living bird, and as a substitute therefor the CHEAPEST and the BEST, the Flying Target, I've contrived. For information, if you wish, or for a trap, address

E. M. LEAVITT, Auburn, Me.

apr25 3m

THOMAS ALDRED'S

Superior Archery.

W. HOLBERTON & CO.,
SOLE AGENTS,
117 FULTON STREET, N. Y.

A very fine stock of the above first-class makers goods just arriving. Liberal discount to the trade.

Fine Trout, Bass and Salmon Flies, tied after McBride, Thad. Norris, or other patterns, in a superior manner, constantly in stock.

Trout Flies, per dozen, $1.

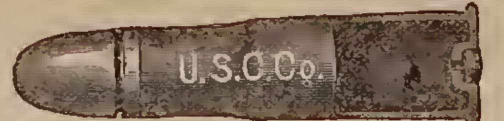
Maine and Black Bass Flies, with double guards, per dozen, $2.

Large Black Bass Flies, with double guards, per dozen, $3.

Salmon Flies, per dozen, $5.

See other advertisement.

United States Cartridge Company,



LOWELL, MASS.,

MANUFACTURERS OF THE

BRASS, SOLID HEAD, CENTRAL FIRE, RELOADING SHELLS, AND CARTRIDGES.

Adapted to all military and sporting rifles and pistols, and in use by the ARMY AND NAVY OF THE UNITED STATES and several Foreign Governments. Rim-fire ammunition of all kinds. Special attention given to the manufacture of

Cartridges for Target Practice.

Send for Illustrated Catalogue.

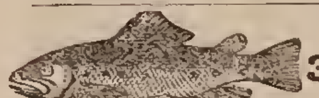
FOWLER & FULTON, General Agents, 300 Broadway, N. Y.

Fisher's Muzzle-Loading Long-Range Match Rifle.

Interchangeable Grip and Heel Vernier Scale, and Wind-Gauge Front Sight, with Spirit Level. Fine English Walnut Pistol-Grip Stock.

This Rifle requires no patent muzzle to load it. Uses the same bullet as the Sharps and Remington rifles. Loads the same as breech-loaders, where they do their best work, viz., from the muzzle. As Perry's Score-book says: "No shells to cart around and pay for. Can be used at one-half the expense of the breech-loader. With powder and balls always ready for a day's sport." Every rifle guaranteed. Breech-loading rifles at manufacturers' prices. All long-range rifles sighted and tested at Creedmoor without extra charge. Agent for P. WEBLEY & SON'S BREECH-LOADING SHOT-GUNS. Send for Circulars. H. FISHER'S Illustrated Catalogue and Score-book for Rifle Practice, price 25 cents.

HOMER FISHER, 260 Broadway, Cor. Warren St., New York.



BARTON & CO.,

337 Broadway, New York.

IMPORTERS AND MANUFACTURERS OF

GUNS, PISTOLS, POCKET CUTLERY, FISHING TACKLE, Etc., WHOLESALE AND RETAIL.

REDUCED PRICE LIST OF SPLIT BAMBOO RODS, WARRANTED THE BEST IN THE MARKET FOR THE PRICE.

Six-strip hexagonal fly rod, German silver mountings, three-joint, extra tip and tip case	$18 00
Six-strip hexagonal fly rod, German silver mountings, three-joint, extra tip and tip case, solid reel plate	25 00
Six-strip hexagonal, black bass rod, German silver mountings, three-joint, extra tip and tip case, solid reel plate	27 00
H. L. LEONARD'S six-strip hexagonal light fly rod, two-joint, German silver mounting, extra tip and tip case	17 00
H. L. LEONARD'S Six-strip hexagonal fly rod, German silver mounting, three-joint, extra tip and tip case, waterproof ferrules	30 00
Black bass rod, ash and lancewood, brass full mounted, two middle joints and three tips, 10¼ft	7 50
Black bass rod, ash and lancewood, German silver, full mounted, whipped butt, two middle joints and three tips	15 00
Russia-leather fly-book, with the "Hyde" clip, large size	5 00
Russia-leather fly-book, with the "Hyde" clip, small size	3 50
Best enameled waterproof taper fly lines, from	6c. to 10c. per yard
Helgramites or Dobson bait for black bass, each	60
A large assortment of trout and black bass flies from	$1 to $2.50 per dozen

All kinds of Snelled Hooks tied to order. Also Flies dressed to any desired pattern.

United States Arms Revolver, 7 shot, .22 cal., nickel, each	$2 50
United States Arms Revolver, 5 shot, .32 cal., nickel, each	4 50

THESE PISTOLS WARRANTED.

EVERY REQUISITE FOR SPORTSMAN'S OUTFITS.

Agents for Huber's Champion Glass Ball Trap	each $9 00
" Amateur " " "	" 5.50

Bogardus' Patent Rough Glass Balls and Glass Ball Traps.

These Traps are the only ones that give satisfaction, as they are simple of construction, easily set, and not liable to get out of order, and they throw the ball in a manner that more closely resembles the flight of a bird than any other trap in the market. The Patent Rough Glass Balls are made of uniform weight and thickness, and have a corrugated surface that strengthens the ball for shipment to any part of the country, prevents the glancing of shot, and thereby insures the breaking of the ball when hit.

CAPTAIN BOGARDUS was the first to introduce the ROUGH BALL, and at a price far below the smooth ball at that time.

Balls and Trap can be ordered through all Gun Dealers. Liberal discount to the Trade.

MY IMPROVED TRAP (warranted), which will throw a ball in any direction from the shooter at the option of the puller, is now ready for the market. **Price $8. Old Style, $6.**

Parties buying glass balls will receive, in each barrel containing 300 balls, score book and rules for glass ball shooting, containing 40 pages.

HEADQUARTERS FOR BALLS, **HAGGERTY BROS. & CO., 10 Platt Street, N. Y. City.**
FOR TRAPS, **HART & SLOAN, Newark, N. J.**

Second and enlarged edition of "Field, Cover and Trap Shooting," by A. H. BOGARDUS, containing instructions for Glass Ball Shooting, and chapter on breeding and breaking of dogs by Miles Johnson. Price $2, by mail, postage paid. Address, **Capt. A. H. BOGARDUS, Elkhart, Logan Co., Ill.** Dec6 tf

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IRA A. PAINE'S

FEATHER FILLED GLASS BALL.

PATENTED OCTOBER 23, 1877.

The "Standard" Ball.

The Bohemian Glass Works would respectfully call the attention of all dealers in Glass Balls to the fact that the Paine Patent Filled Ball is the STANDARD AND ONLY BALL MADE TO A SCALE, therefore we would respectfully caution the dealers against laying in a stock of unsaleable articles for the Spring Trade, when you can purchase the Best Ball ever made at prices less than is charged for other inferior balls.

No other ball affords the PLEASURE of the Feather Filled Ball, and no other Ball is as beautifully made. It will break in every instance when hit by shot, and is sufficiently strong to prevent breakage either by transportation or falling on the grass.

Every ball is weighed and examined, then packed with the greatest care, in barrels of 300.

Send for price list. Special inducements to the trade

HEADQUARTERS BOHEMIAN GLASS WORKS, 214 Pearl Street, N. Y.

Sportsmen's Goods.

INDIA RUBBER

Fishing Pants, Coats, Leggins and Boots,

RUBBER CAMP BLANKETS,

COMPLETE

SPORTING AND CAMPING OUTFITS,
AND
India Rubber Goods of Every Description.

HODGMAN & CO.,

SEND FOR PRICE LIST. 27 MAIDEN LANE, N. Y.

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76 Shooting Coat. Yachting Shirt. Gaiter Pantaloons.

The largest assortment of SHOOTING GARMENTS in the World.

Illustrated price list will be sent to any address on letter of request.

GEO. C. HENNING,
WASHINGTON CITY.

PERFECTION BALL.

(Patented May 28, 1878.)

No Glass to ruin Cattle, Horses and Dogs. An excellent fertilizer for the land.

ECONOMY.

It is sold for less money than any ball upon the market. Liberal discounts to the trade.

Send for circular. Address

GORDON & KEYSER,
78 BARCLAY STREET,
New York.

Proprietors and Sole Manufacturers.

PHOTOS of Actresses, comic, etc., 10 for 25 cts. List of books, &c. S. R. LUDDEN, E. Lincoln, Me. je13 1yr

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Fishing Tackle.

Craige's Full-Length Fly Book

with the "Hyde Clip," bound in fine Russia Leather and sewed.

No. 1 book, stiff cover,	holding	1 gross	flies,	$7 00
No. 2 " flexible "	"	8 dozen	"	5 00
No. 4 " " "	"	6 "	"	3 75

Sent C. O. D. or upon receipt of price. Steadman's Flea Powder and Areca Nut, each 50 cents per package, postpaid. TEMPLE F. CRAIGE (formerly at W. Holberton's Sportsmen's Emporium), Sportsmen's Purchasing Agent. Office, 95 Maiden Lane, N. Y.

THE STRONG BLACK BASS ROD--IN TWO PIECES.

The undersigned is making a rod for Black Bass fishing, to which the attention of anglers is called. It is made from drawings and suggestions furnished by the well-known expert, Dr. J. A. Henshall, of Ky., who says of it: "It is the finest rod made, and just 'the thing' for the best black bass anglers." The two-joint principle, applied to rods of this style and class, Dr. Henshall considers **by far the best.** The butt of the STRONG ROD is of the choicest second-growth ash, and the top-joint of Cuba selected lancewood. The rod is finished with solid German silver mountings; reel bands above the hand, and standing guides throughout. Length, 8ft., to 8ft. 6in.; weight, 8 ozs. to 9 ozs. The finish of the STRONG ROD is equal to any rod made. It is warranted in every respect. Price complete, as above, $10; price with extra top joint, $13 Address

F. A. STRONG, Honesdale, Pa.

Rods of all kinds made to order. Send for price list. je27 tf

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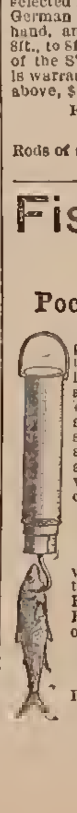
Fish & Simpson's

NEW

Pocket Scale for Sportsmen.



A very handsome article, entirely rust proof, being made of the best hard brass, heavily nickel-plated, only measures 3in. in length by ⅝in. in diameter, and of which the annexed cut is a true illustration. This balance scale has been designed especially as a useful and convenient pocket companion for sportsmen, for the purpose of weighing fish and game. Registers as high as 15 pounds, and graduated to 2 ounces by standard weights. Sent by mail, postpaid, on receipt of 75 cents.

TRADE SUPPLIED.

On receipt of two three-cent stamps we will send our new sixty-four-page catalogue, the most complete list ever published on Fishing Tackle, Camping Goods, Guns, Pistols, Base Ball, and everything in the line of Sportsmen's Goods.

Fish & Simpson,

P O box 4,958. 132 Nassau street, N. Y. my6

FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, JULY 18, 1878.

Volume 10.—No. 24. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

Aragon Wolf Dogs

ABOUT forty miles west of San Luis Potosi the road to the Pacific coast crosses a double mountain-range, whose central valley, the *tierra templada* of Zacatecas, is studded with stock farms and sheep ranchos, while the upper ridges are still as wild and woody as the summit regions of the Californian Sierras.

In the summer of 1874 I crossed these highlands with a mounted guide and an old Mexican farmer who had joined us at Potosi with two of his *Peons* or Indian muleteers. Rains are rare in Central Mexico between June and October, and on the afternoon of the second day we had to pass a long series of rocky hills and dry, bramblebushy ravines, before a sudden turn of the bridle path brought us to a main valley, whose grassy slopes and sedgy bottom announced a creek or a still more welcome spring. Our guide dismounted and managed to pull his pony through a hedge of aloe-shrubs into the bed of the supposed creek, where, to our dismay, we found only streaks of moist sand and a slimy puddle here and there, but not a drop of drinkable water.

"Never mind," said the guide, "three miles up on this same creek there is a spring that has never disappointed me yet. Better dismount again; we have to get back through that confounded hedge somehow."

"Can't we keep up this creek?" I asked, "it looks dry enough, more level than our old road, and less dusty."

The guide grinned. "Up this road? I'll risk it if the caballeros agree to do all the fighting. I suppose you heard that tinkling and bleating in the bottom up there? that's old Carillo's sheepwalk; he keeps a wicked set, six full grown hounds; a full pack I should call them, if it wasn't for their empty bellies. But starving doesn't make them more amiable, you know. You may try it, though."

"Let's risk them, Don Pancho; what do you say!"

"With my gouty old mare? No, thank you," laughed the ranchero, "she isn't saddled for a steeplechase."

"How do you mean? the dogs would not stampede her, would they?"

"Stampede her? God bless you, they would unhorse me in five seconds! If you had as much experience in sheep stealing as old Gruyo, here" (one of his *peons*, who was indulging in a sly chuckle), "you would not ask such questions. Ride straight into a pack of Aragon hounds in broad daylight! The idea!"

We regained our bridle-path and kept along the brink of a cliff that became higher and steeper, and overhung, or at least overshadowed, the valley where we passed Mr. Carillo's well guarded sheep. Out of this shade at the foot of the cliff emerged the dogs, if that name could be applied to such uncanny brutes, one of them so exactly like a gaunt black wolf that his red collar seemed an indispensable distinction, the rest taller and less shaggy, but too wolf-headed and a great deal too big to be mistaken for greyhounds. They walked silently along the foot of the precipice, but eyed us in a way that reminded me of the upward leers of a shoal of hammer-headed sharks that accompanied our boat along the Yucatan coast.

"Don't you think we are on the right side of this cliff?" asked the ranchero.

"Well, to say the truth, if they are as bad as they look, I should think that Mr. Gruyo's game must be a dangerous pastime in these parts. Are they quite alone? Where is the shepherd?"

"Cooking his dinner in that willow grove, I suppose; I saw a smoke going up there a while ago. He has to give his friends a wide berth while he has any meat in the pot; they come in for the bones and a little milk in the evening. Wouldn't do to make them too carnivorous, you know."

"Are they really dangerous, then? Do you suppose they would tear a stranger?"

"Do I *suppose* it! Hold my mare a moment." Then to his *Peon*: "Say, Coco, I am going to have some fun out of that valuable pet of yours, if you have no serious objections." Without waiting for a reply he dismounted and approached a mangy young mastiff that had followed us from our last camp, where Coco had treated him to a chunk of sour cornbread. It was a *perro chinaco*—a tramp dog—one of those masterless curs that infest the villages and prairies of Western Mexico. Coco's friend snarled, but also wagged his stump to obviate a possible misunderstanding, till Don Pancho confirmed his gloomier presentiments by grabbing his neck and tail at the same time. Coco, with the ultra-canine subservience of his tribe, volunteered his assistance, and between them they slung the pet over the precipice.

When Daniel interviewed the lions in that provoking fashion, the well-bred forbearance of the noble quadrupeds could not have excelled the behavior of the Aragon pack during the first ten seconds after the arrival of their visitor. He had tumbled into a cactus-coppice, and before he could disentangle himself they had managed to surround him, but not a growl was heard nor a funeral note. They had slowly advanced within leaping distance and now stood still, restraining even the vibratory motion of their exalted tails. One lank, panther-like bitch, standing a little to the rear and rather too low to be visible from the centre of the ring, stepped back, walked to the very foot of the cliff, and tried to squeeze herself, unobserved, through a withered bramblebush at the edge of the cactus coppice. She got through, but not quite inaudible, for the mastiff started and half turned his head in the direction of the cliff.

"*Es el senyal de matanza*—that's the kill signal," said my guide, who had served an enlistment in a frontier regiment. (If the Mexicans shoot a deserter they bandage his eyes, and the provost-marshal gives the *senyal* by waving a handkerchief.)

He was right. Six bullets fired from ponderous old Spanish musketoons could hardly have done the work swifter, and certainly not more effectually. In the moment when the mastiff gave that start, the pack leaped upon him with a coughing roar, and though a maze of porcupine-cactus with rigid, lancet-like prickles was in their way, and though the mastiff rolled himself into the very centre of that maze, I am sure that, with the exception of his skull and his upper ribs, every bone in his body was crushed within twelve seconds. The shepherd issued from his willow grove and whistled with might and main, sore perplexed at the sudden uproar, and for a moment the hounds lifted their gory snouts to listen to what might be a dinner-call, for all they knew; but a slight movement in the bush, caused probably by a recoil of the down-trodden branches, rekindled their fury; they flew at the mangled *chinaco* and lessened the possibility of a revival by dismembering and disembowveling the carcass.

"Let's go," said the ranchero, who had eyed me askant under his broad hat, and seemed aware that I could not face the scene much longer without commenting upon his brutal experiment. "Would you like to have a pup of that breed?" he asked, as if to intercept my remarks, "we can reach Don Negrete's place before night; his bitch littered last week, I think, and he has a splendid old dog that he would sell you very cheap. He used to keep them for cow-dogs, but he isn't in the butcher business this year."

"Nor am I; so I don't think I shall invest in butcher dogs. What else are the brutes good for?"

"Oh, they make first rate watch dogs, and nothing can beat them in a fair fight. I have often advised Negrete to take his big one to the Rio Grande, where they brag about their bloodhounds and American mastiffs. And splendid deerhounds they make, especially in a wild country where there is no danger of their getting into scrapes. It isn't quite safe to trust them near the settlements."

Mr. Negrete was out when we reached his farm, but his hospitable reputation was justified by his son, a cadet of the Zacatecas Military School, who was spending his summer vacation on the paternal estate. We made ourselves at home, and after supper Mr. Negrete, Jr., invited us to inspect the pups and their awful dad, the deer- and blood-hound Sentinela, who was kept in the back room of a log-built granary. "My father sold him last week," he said, "but we have to board him till his new boss comes back from Potosi. We sold him to an American stock farmer who bought horses and jennies here and wants to take them and the dog to California next month."

He stopped us when we were about to enter the granary. "Let me go ahead," he said; "I've got to tie him up, I guess, if he's as mean as he used to be."

Twilight had far advanced, but we saw enough to convince us that the young man's precaution had not been quite superfluous. A head that would have done credit to a werewolf glared upon us from behind a pile of old gunny-bags; a chain rattled, the dog rose to his feet, retreated a step or two, and then leaped forward with a violence that jerked him off his fore-feet and made the timbers of the building creak. Hanging by the chain in a semi-erect posture and swaying from side to side, he uttered sounds which I might describe as abrupt howls or hoarse yells, but which differed from the bark of a common watch dog as the bellowing of a sea lion differs from the yelp of a seal. He was certainly a representative dog of a breed that "could not quite be trusted in the neighborhood of human settlements," and when Mr. Negrete informed us that the brute had once succeeded in breaking the collar which now prevented him to collar its visitors, we became anxious to see the pups before night.

"How did she get rid of her collar?" I asked at the threshold of a little tool-house that had been allotted to the nursing bitch.

"Oh, she is all right; wouldn't hurt old friends or introduced strangers if she can help it. We raised her from a pup and tamed her before she left this yard, and that makes a wonderful difference. If a young Aragon hound has been in the bush for a year or two, it's no use trying to break him afterward. That's what spoiled Sentinela. He is a splendid hunter, but—"

"Too fond of two-legged game?"

"That's it. Since we sold him—I might as well say the truth—the old man is afraid of him, the brute treed him once."

"Treed his own master?"

"Yes; my father caught him taking a square meal out of a young buck that he had crippled that morning, and all whistling was of no use; so he picked up a stone—hit him in the jaw, I believe, and the brute flew at him like a panther. Father made for a tree, but came near being too late, for the dog jumped and got at his foot. Nabbed him in the heel and tore one of his moccasins off."

"I should have been tempted to make his hide into moccasins!"

"No, no; he has his good points, too. He would starve to death rather than kill sheep, and we saw him overtake a *cimaron* (*Ovis montana*) on its own ground, up in the rocks of the Sierra Toluca. My father could not find it in his heart to shoot him."

The Aragon wolf-dog is the tallest and strongest, and, next to the Siberian mastiff, the heaviest variety of the genus *canis*. A full grown *galgo de Aragon* stands forty-six inches, measures five feet from nose to stern, and about thirty-four inches around the body back of the shoulders; length of head, sixteen to eighteen inches; around the head, back of the eyes, eighteen to twenty-five inches (the latter measure attained by old—especially old male dogs), and weighs 220 to 235 pounds. He has a deep-mouthed wolfish head, short, semi-pendent ears, remarkably muscular neck, stout legs, open claws, a strong but not very bushy tail, and in the upper Sierra acquires a heavy coat of hair, varying in color from a glossy black (often with white breast and feet) to that peculiar dark brindle called *color de lobo*—"wolf color"—by the Spanish Americans. He is a native of the Sierra Morena and its foothills in the Spanish province of Aragon, and, as some intelligent Creoles assured me, a cross between the *galgo*, or Spanish greyhound, and the large black wolf of the Southern Pyrenees, or more probably between the *galgo* and those monstrous bloodhounds that helped the Spaniards to drive the Moors from Andalusia and the helpless aborigines from the West Indian Islands. In his native country he is known as the *perro pastor*, or wolf-dog *par excellence*; in Spanish America as the *galgo de Aragon*, the word *galgo*, which the Spaniards apply only to the genuine greyhound, being here used for hounds in general, and even for any long-legged animal, since I heard a Mexican farmer describe a coyote as a *lobito galgo*, "a lank little wolf."

Of all wild or domestic quadrupeds, the Aragon wolf-dog is the most aggressive; of all *animals* I should say, if the gad-fly did not distance all vertebrate competitors. The English bulldog is his superior in tenacity and perhaps in cruel vindictiveness, but in reckless disregard of danger and in irascibility, the *galgo* surpasses all known species of carnivora, and even the *Pavio cynocephalus*, the choleric dog baboon of the Abyssinian Mountains. His fits of rage are wholly incalculable; an animated gesture, the accidental dropping of a stick or of a handkerchief, may constitute a *casus belli* and provoke him to a murderous attack. In out-of-the-way corners of the farmstead he lies in wait—not like a guardian of his master's property, but rather like a wild beast with private interests at stake; and burglars must come prepared for desperate possibilities, for the *galgo* is a silent watchdog that never betrays his presence till his foe is within leap. He does not bark, for he means to bite.

General Louis Artega, the Mexican patriot, who was shot by order of Marshal Bazaine in 1865, would have escaped on the eve of his execution if it had not been for one of those Aragon sentries. Artega's friends had ascertained that the French commander of Fort Perote was so short of men that he could keep but one post at night, the one in front of the guard-house prison. This post was manned by three soldiers, who relieved each other at regular intervals. The 12 P. M. to 2 A. M. man had been bribed, and after walking his beat till his comrades were fast asleep, he entered the guard-house, blew out the light and unlocked the door of the prison cell. They had a short ladder, but the night was so moonlight and calm that the soldier thought it safer to slip through the sallyport, if they could unfasten the gate.

At about 1 A. M. the sergeant of the French guard was roused from his illicit slumbers by a booming sound that rolled through the fort like the echo of a musket shot.

"Get up!" he cried, punching his men right and left; "did you hear that? That wasn't our sentry, was it? Listen!" Loud screams, mixed with the battle-voice of a furious dog, sounded through the night air. "That's the old colonel's (the commander's) galgo bitch; he posted her at the main gate last evening! Let me see. Oho! the cell door open and—I thought so—the sentry gone! Never mind the lamp—get your muskets! To the sallyport, double quick!" On the parade-ground they were joined by the commander, who came running from his quarters in his stocking feet; but before they reached the gate they met a tall man in a Spanish mantle walking quietly toward the guard-house. He stopped and doffed his hat when he recognized the commander. "Sorry to have troubled you at this untimely hour, caballero," said he, with arch nonchalance, "but the nights are so short, you know, and I had promised to be in Puebla before sunrise."

"You were chained like a dog when they brought you here, Mr. Artega," said the incensed officer, "and I took your irons off, because I mistook you for a gentleman. This is my reward, it seems."

"Very sorry indeed to have disturbed the peaceful slumber of my keepers. Well, messieurs, let the result of my experiment compensate you for your trouble. In the first place, I have found out that a musket isn't as handy as a knife in a dog fight; and secondly, you see that a Mexican dog is more reliable than a French soldier."

They locked him up, and the sergeant sent two men to the sallyport; but when they attempted to remove the corpse of their comrade an ominous growl in the dark gateway warned them to desist. They returned with lanterns and reinforce-

ment, but had finally to send for the owner of the dog. The faithless sentry was found "torn into shreds," as the commander's report expressed it, and stretched across his body lay the bitch, badly wounded, but undaunted, and resolved, as it seemed, to hold the fort against all comers till relieved by proper authority.

The Aragon wolf-dog exceeds the mastiff in strength and the greyhound in swiftness and intelligence, and faces the thorniest brake with the resolution of a Russian boar; but all his promising points as a hunting dog are outweighed by one fatal disqualification—he cannot hunt by scent.

Apropos of the like deficiency in greyhounds, colleys and poodle dogs, Dr. J. E. Van Ende, formerly Superintendent of the Munich Zoological Garden, gave me the following ingenious explanation, based on his experience with different "menagerie" dogs, representative canines of sundry species, that lost their olfactory acuteness in the atmosphere of the Zoo: "According to a by-law of merciful nature, everything that affects our senses with painful violence tends to blunt their sensibility. The sufferings of a canal mule are mitigated by the increasing callosity of its hide; a two years' residence in Spain will enable a foreigner to chew red pepper with impunity; millers and gunners become dunny, and the eye-aches of arctic travelers are palliated by snow blindness. Now, the effluvia of a menagerie or sheepfold, which offends even our blunted organs, must be downright torture to those of a sharp-scented animal. The sensitive nose of a dog must be affected by such odors as the human ear is by a cannonade, or the human palate by a dose of asafœtida; he suffers more than the misery of a tanner's apprentice, till nature comes to his relief by blunting the sense of smell. A young pointer bitch that had been confined for a year and a half with a hyena, a jackall and two foxes, as a member of a so-called happy family, was afterward unable to scent a cat across a corridor, and the "lion's favorite," a poor spaniel that had served a three years' term in a carnivora cage, would have failed to distinguish a hasswood ham from the orthodox article. In breeds that have been employed as shepherd's dogs for many generations this deficiency becomes hereditary, and cannot be cured by a change of occupation, and there is no doubt that the greyhound and the poodle, as well as the Spanish wolf-dog, acquired their characteristics on the mountain pastures of the Mediterranean peninsulas."

But on the open prairies of Texas and California, where large game can be hunted by sight, the swift greyhound has become very popular, and the only obstacle to the introduction of the swifter *galgo* is his preposterous, but by no means incurable, ferocity. Early and judicious training would, no doubt, improve his temper, though I must admit that experiments with imported specimens are a little discouraging. Mr. Negrete's black champion has become the *bete noir* of San Bernardino County, Cal., and his purchaser, Captain St. ——, who used to congratulate himself upon his bargain, has found out that a weekly suit for damages can make a wolf-dog a rather expensive pet. Last fall the captain heard that one of the northern tributaries of the Mohave River was swarming with mallards and moorhens, and engaged an experienced sculler and his duck-boat for a trip to Canyas Lake, at the head of that tributary. The oarsman, a poor "greaser" with a large family, seemed very anxious to earn a couple of dollars, but when he ascertained that Cerberus was on his passenger list, he "backed out," and offered to loan his boat *gratis*, or even to part with it altogether, rather than convey the *galgo* for all the wealth of Upper and Lower California. The captain then relinquished his purpose, but complained to a neighboring clergyman about the perfidy of the Catholic Mexicans. "You ought to make allowance for the circumstance that the man is a 'Mission Indian,'" said the deacon. "He has been taught to believe in the efficacy of the extreme unction, and therefore *prefers to die on terra firma.*"

F. L. Oswald.

Fish Culture.

MORE ABOUT THE MOVEMENT OF EELS.

Troutbeck, June, 1878.

Editor Forest and Stream:

I have just read in a late number a very interesting communication on the migration of eels, and notice that the writer claims it as a settled fact that very young eels always descend to the salt water.

Now, while entirely crediting the gentleman's statement that his little eels go down stream, I would like to tell him, and all interested in these things, what the wee wrigglers do in my pond and brook. My trout pond, of cold spring water, also contains eels. It is connected with Roslyn Harbor by a rapid brook some three hundred feet in length.

Last spring I had occasion to repair the tumbling dam over which the water flows from the pond, and noticed that the pool just below this dam was literally dense with eels about three inches in length:

I watched them closely day after day, and found they were making great effort to get up that dam. The current was too swift and heavy for them, so they were actually climbing by thousands over the wet stones and logs. To settle the matter conclusively, I lowered the pond until there was only sufficient water flowing over the tumbling dam to keep the stones wet. Then the eels began to remind me of the youth who "bore the banner," for their motto was unmistakably "Excelsior," many of them actually wriggling up the perpendicular face of an eight inch flush-board, and thus getting into the pond.

May it not be that young eels desire water of a certain temperature, and will proceed either up or down stream to find it? I think that in summer they seek the cooler water, whether it be salt or fresh. Yours truly, Thomas Clapham.

Having submitted Mr. Clapham's letter to the State Commissioner of Fishery, Mr. Roosevelt sends us the following:

Your correspondent's mistake in the above letter is that he does not know how the eels got into the pool below his dam, whether they came from below or above. He saw some—possibly a considerable number—climbing up over the wet stones, and concluded they were all doing so. Here is where he was deceived. All fish when pursuing a certain course in schools return upon themselves in numerous individual cases. When salmon enter a salmon river they do not ascend at once, but remain at its mouth and run forward and back, and play about for days and sometimes weeks before they make their final movement. So the eels go down and come back, and stop, and advance, and recede a little until they are ready to migrate. I mentioned in my previous letter that some of the eels in my preserves, after having wormed or squirmed their way down stream through two screens with meshes so small as to endanger their lives, climbed laboriously back into the trough, and would have gone through the screens up again if they could. Very possibly they have to attain a certain age, size, or development, as with salmon smolts, before they can venture into the salt water. Let your correspondent ascertain whether his eel fry do not come from his pond in vastly greater numbers than they go back into it before he makes up his mind as to their mode of life.

Robert B. Roosevelt.

Our correspondent of Pittsfield, Mass., Mr. Thomas Chalmers, writes:

"Mr. Roosevelt asks your correspondent, B. T. B., 'How did he know whether the eels he saw in the Susquehanna were going up or down the river?' It is true, fish, when traveling, do not always follow the direction their heads are pointing. If B. T. B's eels were going up the Susquehanna, they were in their natural course. Mr. Roosevelt's eels had undoubtedly got lost. In the rivers of Great Britain with which I was familiar (and they were many), the young eels went up stream in the spring. In the rivers of this continent (and I know a great many of them), the young eels go up stream in the spring. How do I know they were going up? Well, as the Irishman said, 'To see was to believe, but feeling was the naked truth.' I have seen eels go over dams and other obstructions by climbing them; I have taken eels off the face of a dam (stone masonry) half-way up; I have seen them when a strong freshet was in the river leave the water, flank the dam, and take the water above the dam. I have caught and used eels many years for bait, for there is nothing better for any of the bass family, black or striped."

Herring, Shad and Eels in the Potomac.—The Virginia Fish and Game Protective Association furnishes to the Richmond *Dispatch* a statement showing the decrease in the food fishes of the Potomac. In the spring of 1840 the total catch of herring in that river may be estimated at 86,000,000. The catch last spring was less than 5,000,000, a difference in thirty-eight years of 81,000,000, between the highest and lowest catches ever recorded, except those during the war when the industry was impeded by military restrictions. In the spring of 1840 the shad catch was estimated at 4,700,000 in round numbers. During the last season there were taken only 210,000, a number 20,000 less than the single White House Landing on the Potomac, a short distance below Mount Vernon, has been known to catch season after season for years in succession.

The investigations of the association have induced the belief that the eel is responsible for this enormous decrease in the edible fish of the river. The eels have been almost undisturbed and have been allowed to increase and multiply until now they are so formidable in numbers and voracity as to devour all deposits of spawn and so destroy all natural and artificial propagation. In this opinion, which is also entertained by experienced fishermen, we think the association are correct. The eel is a recognized destroyer of these fish. The United States Fish Commissioners, in their work on the Chesapeake, find it exceedingly difficult to secure spawning fish which have not been attacked by the eel. When caught in the net the spawning fish is found with the eel attached devouring the spawn. A crusade against these reptiles in the Potomac must be attended with excellent results. The Virginia Commissioners cannot expect to have their once rich river restocked so long as all their efforts result only in fostering the destructive agent.

United States Fish Commission.—Professor Spencer F. Baird has gone to his summer headquarters at Gloucester, Mass., where he will make a specialty of hatching young codfish for the New England coast. We may yet see the fishing banks restocked and the fishermen of the United States devoting all their time profitably to the domestic industry. Prof Baird also proposes to experiment with the Norwegian gill net for deep sea fishing, and thinks that he can demonstrate that with its use much larger catches of cod can be made near the bottom than are now taken with hook and line fishing.

Origin of Salmon in the Delaware.—*Editor Forest and Stream:* As I have obtained all the *data* as to the introduction of salmon in the Delaware, I trust you will deem it worthy of being noted in your paper. One of the gentlemen who took a deep interest and a very active part in the efforts has passed away, and whatever credit is due ought certainly to be recognized. The first plant of Atlantic salmon was made on the 30th of May, 1871, in a stream emptying into the Delaware River, called Bushkill, not far from Easton, and consisted of about 2,000 young fish having been hatched out by Messrs. Christie, of Dutchess County, N. Y. In the spring of 1872 Mr. Wilmot, of Newcastle, Ontario, Canada, sent to the late Mr. Thaddeus Norris, of Philadelphia, and Mr. Geo. W. Stout, of Easton, 12,000 eggs of the Atlantic salmon, which were hatched in a spring near the Bushkill. About 10,000 fish were secured and placed in the stream on the 6th of April, 1872. On the 22d of March, 1873, 40,000 eggs were obtained from Mr. G. O. Atkins, Bucksport, Me., and placed in hatching boxes in a large spring near the Delaware River, about two miles above Easton on the New Jersey side. Of these about 20,000 hatched, and the fish placed in a stream called Spring Run in May, 1873. The foregoing was entirely a private enterprise, and was first proposed by J. Dickinson Sergeant, of Philadelphia, at the house of the late Thaddeus Norris, Esq., he heading the subscription list to defray expenses with a subscription of twenty dollars. After the spring of 1873 the Fish Commissioners of Pennsylvania and New Jersey directed their attention to the matter, and these gentlemen discontinued their efforts. The first salmon caught in the Delaware River was taken at Riverton, N. J., about the 1st of May, 1877, and weighed about ten pounds. Shortly after that another was taken there, but it escaped, and was supposed to weigh twenty pounds. On the 16th of November, 1877, one was shot in the Bushkill, a female, lank and lean, thirty-two inches in length and weighing nine pounds. In connection with the foregoing permit me to add that the first plant of black bass in the Delaware was made at Easton, October 26, 1870. Yours truly,

Philadelphia, June 18. Benj. W. Richards.

Salmon in the Connecticut River.—James A. Bill, Esq., State Commissioner of Fisheries, writes us as follows from Lynn, Conn., under date of July 13:

There are no salmon being taken in the Connecticut at this time. The Commissioners are going to take steps to find out the catch of salmon on the river in seines and gill-nets, and in the pounds outside in the Sound. James Selden's fishery, two hauling seines, at Brockway's Island, has taken fifteen salmon. This is the greatest number taken at any one fish place.

Fish Culture in France.—*La Nature* informs us that M. Dabry has succeeded in introducing into France one of the cypronoides, the *Hipophthalmycthy's Dubryi* or *H. Molitrix*. The fish comes from China, and is called the Kia-yu. It is easily fed on aquatic plants and grows to weigh forty pounds. The fish introduced into Paris four years ago have already acquired a good size. The French *Societe d'acclimatation* propose importing more of these fish, so that they can be propagated. The flavor of the *Kia-yu* is said to be excellent, resembling turbot, and to be without bones.

Natural History.

THE WHITE-HEADED EAGLE IN THE HUDSON HIGHLANDS.

BY EDGAR A. MEARNS.

[Read before the Linnean Society of New York, April 6, 1878.]

(*Concluded from Page* 421.)

We have reached the lower brook. How splendid the falls to-day! What a vast volume of water is pouring down. This is the effect of the recent heavy rains. But how are we to cross the swollen stream, do you say? Oh! this is easy. I have often crossed before on this old birch-trunk. How strange that it should have grown horizontally out over the stream, and then shot up to such a height as if for no other purpose than to furnish you and me, reader, with a bridge on which to cross the brook on this particular morning. We now press up the steep bank to the top, and then follow a beautiful path that winds about through an oak forest, giving one occasional pretty glimpses of the river and opposite shore. And now, by an unexpected turn of the path, we find ourselves standing upon a rocky point above the jagged cliff, with the whole scene before us, and nothing to obstruct the view. On the opposite shore is West Point, the site of the United States Military Academy, with some of its elegant buildings fronting on the cliff. That large building with the arched roof is the Riding Academy. Farther to the north is Battery Knox, bristling with its grim array of heavy cannon, mounted on splendid iron carriages; still farther northward are seen the frowning walls of Fort Clinton, while on the extreme point is Gee's Point, with its lighthouse. Winding along the river's bank among the cedars is "Flirtation Walk." There is the long, crooked line of officers' quarters and the barracks, with their background of dark cedars, and in front the broad, snow-covered plain. On the height behind are seen the massive walls of old Fort Putnam, built during revolutionary times. This eminence commands the finest view in the Highlands, and one of the finest in the world. Looking to the north, the bold outlines of Cro' Nest and Storm King are presented to our view, with their sunlighted cliffs and perpendicular ledges, descending hundreds of feet to the river.

We now follow the path, which winds obliquely down to the edge of the cove through a thick grove of hemlocks. See! the eagles have seen us, and both of them leave their perches as we approach with a leap and a powerful wing-stroke, that shakes the whole tree-top. They are a pair, male and female, each with snowy white head and tail and a handsome yellow bill. They are coming directly toward us. But do not shoot; they are farther off than they seem. Being so large they look near, when seen against a background of clear sky. It would spoil all to frighten them by a miss. How splendid their flight! See them wheel and turn, ascend against the wind, and float with wings motionless! Sorry you had not fired? No need for that. They will return to these same trees before long. This is my plan: We will build here, midway between the two hemlocks at the side of this rock, a bower of hemlock boughs, and lie concealed within until the birds return to their perches. We will break off some of these dead maple saplings for the framework of our arbor. The hemlock boughs are soon collected by the aid of our strong knives. And now we are quietly ensconced within our pretty little shelter, each seated on the soft evergreen boughs anxiously watching through loopholes, at opposite corners of our domicile, the movements of the many eagles that are in sight.

Some are sitting upon the edge of the ice, watching, ready to seize the first unfortunate carp that approaches in the grasp of their strong talons. This manner of fishing is shared in common with the crows and several species of owls. But this easy means of procuring a livelihood can only be indulged in at this particular season. At other times they plunge from on high, often entirely disappearing beneath the water, and seldom rising without bearing the fish in their claws. Some of them are soaring in wide circles in the higher regions of air; no doubt for exercise, or to aid their digestion. Still others are frolicking together overhead, chasing each other with laughing, cackling and screaming cries as they pursue each other; sometimes throwing themselves backward in air, striking fiercely with their talons when the pursuers come too close; arching their necks, erecting their crests, and uttering loud, cackling screams and hisses. They are constantly passing over our verdant screen, unconscious of the danger that lurks beneath, making a great din with their cries. But see! One of them comes flying toward us, bearing a great carp, struggling in its talons. He comes straight toward us; but now he veers a little to the north, and now stretching upward, and then closing those great wings, he fairly alights on a side limb of a large pine tree, just out of gunshot, giving an exultant scream of triumph, or else a call to his mate; for soon

the female, which singularly enough is the larger and stronger of the two, comes and alights upon a higher branch of the same tree. They are so near us that we can easily distinguish every movement. The male bird, holding the fish within the grasp of his powerful claws, strikes it a blow with his strong hooked bill that severs the head from the vertebrae, and then begins to feast on its quivering flesh; beginning by tearing out the entrails and swallowing them, smearing the beautiful white feathers of his head with blood and filth; he then tears into shreds and swallows the remainder, till all is disposed of; the female all the while leaning low down on her perch toward her lord, and uttering that loud, laughing cry.

See in the far distance, a pair of eagles soaring and wheeling high over the Hudson. Have they just descended from their night's resting-place in that deep, heavily-wooded ravine under the summit of Cro' Nest? No. They are the same that we scared from their perches on these trees. See their graceful aerial evolutions as they rise against the wind and soar in wide circles, their snowy heads and tails alternately glistening in the sunlight with dazzling brilliancy. Now they are flying toward the cove with powerful wing-strokes. See! the female poises in the air, then, closing her wings, she plunges headlong with fearful velocity toward the river, where a crow is struggling with a fish that it has succeeded in capturing through a fissure in the ice. She will be dashed in pieces upon the ice—but no! spreading her broad wings just as she nears the ice, she protrudes her robust feet, and, grasping her prey, bears it upward, rising as light as a balloon. It was all done so suddenly that we could scarcely realize the splendid spectacle we have witnessed did we not see the fish struggling in the cruel talons of the bird. Now she bears her booty straight toward our ambush. A moment more and she settles upon the top of the highest hemlock. A moment elapses. Then the loud, ringing report of the heavily-loaded shot-gun awakens the echoes. It is followed by the crashing of branches and the sound of a heavy body striking the ground on the hillside below us. A minute after a shrill scream announces the presence of the other bird; and, looking upward, he is seen suspended in air with tail depressed and vibrating, neck arched and looking down, trembling all over with fierce rage. Another loud report—a shriek—a crash—and we attempt to rush out from our cover, but find ourselves so benumbed by the cold wind that we can scarcely stir; for, indeed, it was only with the greatest difficulty that our numb fingers could press the triggers of our pieces. Stumbling and rolling down the frozen banks, we reach the path, where a good run again sets the blood into circulation. We return, warm, to the scene of our triumph, and find one of the birds quite lifeless, but the other one is only winged. What shall we do with it? We have decided not to kill it, but keep it alive—a glorious trophy. How can we capture the fierce creature without doing ourselves injury? Leave this matter with me, if you please. I have cut a long stick with a fork at the end of it; have taken the strap from my basket, and, holding it with my teeth, take off my pea-jacket and spread it open on the ground. As we approach the fierce bird it comes jumping toward us, making great leaps. When I oppose its progress with the crotched stick it throws itself upon its back with its white tail beneath it, arches its neck, with the feathers of its head alternately erected and depressed, as if with the breathing of intense rage. Drawing up its powerful claws, it prepares to defend itself to the end. And when shall I ever forget the sinister expression of those eyes, rendered stern even when in repose by the overarching brows. I now hold its head securely with the forked stick, then, seizing both of its enormously developed, muscular legs simultaneously, I strap them securely together and then place it on the coat, buttoning it tight across its broad, heaving chest, thus effectually preventing the possibility of being struck by its wings. Being thus securely fettered, we can carry our living prize quite nicely in our arms, excepting an occasional nip, when we carelessly allow the hand to come too near the creature's bill, when grasping a sapling to aid in climbing the steep bank.

During all this time many eagles are seen flying overhead, screaming, but we heed them not, for we are already quite satisfied with the result of our expedition. Besides, it has not been without some feelings of regret that we viewed the destruction of those two splendid birds. Then came the reflection that, perhaps, for scores of years this pair has made this locality a stopping-place on their migratory journeys from the balmy South to the bleak and desolate region of the far North; that for many years, perhaps a long life-time, they have annually reared their young in their bulky nests on some giant cypress tree in the Southern States—perhaps in Texas or Florida—where they deposit their eggs as early as the second week in January, so that they have already discharged their parental duties, and reached us by the early part of March.

That the eagles are migratory is shown by the fact that they are comparatively rare during the winter, but suddenly appear in large numbers during the latter part of February or early in March—generally at the time the river opens, affording to them the means of subsistence—at the season when those of the species that breed in this latitude would be occupied by the duties of incubation, or rearing their young, hence it is inferable that the eagles that are with us at this season have reared their young earlier in the season in the far South.

The white-headed, or "American eagles," called by various names (frequently "bald eagles"), inhabit the whole length and breadth of North America, and are sometimes taken in Greenland, while stragglers are said to have been captured in Europe. They breed nearly throughout their whole range.

Let us now examine our prizes more closely. The head, neck, upper and under-tail coverts and tail are white, immaculate; the rest of the plumage brownish black, lightest on the edges of the feathers, with purplish golden gloss; the primaries are black, the bill cere, legs and feet deep yellow; iris Naples yellow. The male and female are precisely alike in color. The female has an expanse of wings of nearly eight feet. Its weight is about twelve pounds. The male measures and weighs considerably less.

These eagles pass through several successive stages of plumage, and several years are required before they assume their full dress, with white head and tail. This fact has led unscientific persons to imagine that there is more than one species of sea eagle in the United States, which, however, is not the fact, though the difference in color during the first three years might easily deceive persons not ornithological. During the first year they are nearly black all over, except below, where the basal white of the feathers is somewhat exposed, producing a spotted appearance. After this, in the second year, they become light gray. Unscientific persons distinguish the three plumages as the "bald," "big gray," and "black eagles."

There are but two species of eagles found within the United States—the white-headed sea eagle (*Haliaetus leucocephalus*) and the golden eagle (*Aquila chrysaetus*).* Both of these occur here in the Highlands†. They may be easily separated by their generic characters. "In any plumage they may be instantly distinguished by the legs, feathered to the toes in *Aquila chrysaetus*, naked on the whole shank in *Haliaetus leucocephalus*."‡

We reach our boat after a pretty hard climb. Finishing our lunch, we once more launch out among the ice-cakes; but rowing is pleasant after sitting cramped and cold for many hours. We are passing West Point; there, between the Riding Academy and Battery Knox is "Kosciuszko's Garden," a favorite spot with the eagles. There, in defiance of guards with loaded rifles, I have hunted the eagles that frequent the place during winter, and have learned many curious and interesting things about their habits. If at night-fall I had been unsuccessful, I had only to remove one of the white wooden stoppers which gag the mouths of the cannon in Battery Knox, and upon which is inscribed the legend, "10-inch gun," the size of calibre, and thrust in my trusty "double," then replacing the stopper, it was safe and dry until again wanted, accidents excepted. But once it barely missed destruction, on the occasion of a salute being fired from the battery on the 22d February in honor of the "Father of his Country."

When we have reached home we will sit long at table and recount the pleasant occurrences of the day, and of other days likewise pleasantly employed, and then, as our eyelids grow heavy, as eyelids invariably do after a long day of exertion in the wind, we will wish each other a kind good night, and retire to rest, mutually agreeing that it has been a very pleasant day, and planning others similarly happy for the future.

Highland Falls, N. Y.

* As no specimens of Audubon's *Haliaetus Washingtonii* have been taken by other naturalists, and as his type specimens do not seem to have been preserved, the species has been abandoned by most ornithologists. However, it may yet be brought to light.

† For an account of "The Golden Eagle in the Hudson Highlands" see Bulletin of the Nuttall Ornithological Club, Vol. III., No. 2, p. 100, April, 1878.

‡ Dr. Elliot Coues' "Birds of the Northwest," p. 370, 1874.

¶ Baird, Brewer and Ridgeway, Vol. I, p. 482, 1874.

BREEDING OF THE PINE LINNET IN NORTHERN NEW YORK.

BY C. HART MERRIAM.

Chrysomitris pinus—Pine Linnet, Pine Finch.—Few birds are more erratic in their habits than the siskin or pine linnet. Occurring to-day, perhaps, in such numbers that one soon tires of shooting them, they are gone on the morrow, and years may elapse before one is seen again. There is, in their melancholy *che-a*, uttered at intervals as small flocks pass in short, waving swoops, far overhead, something sadly suggestive of the cold bleak winds that sweep their northern homes. Yet they are warmly clad, and seem rather to enjoy the wintry blasts that compel most birds to seek a milder clime; and their roaming movements are apparently governed more by some idiosyncracy in their roving dispositions, and abundance or scarcity of food, than by the severity of the season in the region from which they came.

During the past winter and spring they literally swarmed in Lewis County, N. Y., and thousands of them bred throughout the heavy evergreen forests east of Black River, while many scattered pairs nested in suitable hemlock and balsam swamps in the middle district. They breed remarkably early, and construct large, compact nests, which are usually placed high up on some hemlock or spruce, and well concealed from view. I know of no nest, of equal size, so hard to find. After days of patient search in the evergreen swamps of this vicinity (Locust Grove), Mr. Bagg and myself discovered but a single nest. On the 13th of April we were hunting in a low swamp, near White River, when a solitary pine linnet attracted our attention by hopping about on some fallen logs. In a few moments she flew into a large hemlock, which stood apart from the rest, and immediately disappeared. After carefully looking over the entire tree, a limb at a time, Mr. Bagg noticed a bunch of something almost completely concealed by a cluster of small branches. We were not sure that it was a nest at all till a well-aimed stick drove off the parent bird, which was shot and proved to be the female. With great difficulty the nest was secured, and it contained, at that early date (April 13), two nearly fledged young. It was tightly saddled on a large limb, about thirty feet from the ground and nearly fifteen feet from the trunk of the tree, and was so nicely hidden that, from a limb directly above, I could not see it at all. One of the young was skinned, while the other now constitutes a contented member of my sister's "happy family," which previously consisted of an oriole (*Icterus baltimore*), three thistle birds (*Chrysomitris tristis*) and a nonpareil (*Cyanospiza ciris*). He attained his full growth shortly after his capture, and has since thrived on a mixed diet, though, like his cousins the goldfinches, showing a decided preference for the thickly-seeded spikes of the common plantain (*Plantago major*). Also, like his brighter-plumaged companions, he constantly raises and lowers the occipital feathers when at all alarmed.

In plumage he differs from the adult bird, in having the belly marked with yellow, the wing-bars ochraceous instead of whitish, and the upper parts decidedly tinged with rufus. This rufus cast is due to the fact that the dark-centred feathers of the back are, in the young, margined with fulvous-brown, which is not the case with the old bird. The nest is a very bulky structure for so small a bird, and its rough exterior, loosely built of hemlock twigs, with a few sprigs of pigeon moss (*Polytrichum*) interspersed, is irregular in outline, and measures about six inches in diameter. The interior, on the contrary, is compactly woven into a sort of felt, the chief ingredients of which are thistledown and the fur and hair of various mammals. One cavity is lined with horsehair, and measures two inches and a quarter in diameter by an inch and a quarter in depth. This nest is much more flat than that described by Dr. Brewer¶ from Cambridge, Mass., for it measures but two inches in height at its highest point. A considerable mass of dung adheres to the small twigs at one point in its exterior, showing that the bird always "headed" the same way, and was not particularly cleanly in her habits. From the size of the young it is clear that this nest could not have been completed much later than the middle of March.

Not content to let the season pass without making a greater effort to secure their eggs, I accepted, on the 15th of April, an invitation from my brother, C. Collins Merriam, to accompany him on an excursion through the densely timbered region about Otter Creek (near the eastern border of Lewis County) and Big Otter Lake (Herkimer County), from which it takes its origin. This entire district lies within the area commonly known as "Brown's Tract," and is Canadian in fauna. Never before at any locality have I seen a species of bird represented by such immense numbers of individuals as here attested the abundance of the pine finch. In every part of the forest, from early morning till after the sun had disappeared in the west, there was not a moment that their voices were not heard among the pines and spruce trees overhead. And yet, though among them several days, we were not able to discover a single nest. Never have I searched more faithfully for the eggs of any species, and never has my diligence been rewarded with less success. I at first made a systematic survey of a large number of trees, taking a limb at a time, and then climbed so many that I was barely able to get back to camp, but with no better results.

Their nests are placed so high and amidst such thick evergreen foliage that it is almost impossible to find them. As illustrating the number of this species as well as of the red and white-winged cross-bills (*Loxia curvirostra* var. *Americana* and *L. leucoptera*), it may be worth recording that after firing twenty-two small charges of fine dust shot at the cross-bills as they settled into the top of a single dead hemlock, I picked up fifty-one birds, of which twenty-eight were red cross-bills, eight white-winged, and fifteen pine linnets. I aimed at cross-bills only, killing the linnets by chance. Mr. A. J. Dayan was so fortunate as to secure two sets of their eggs from among the pines near Lyon's Falls (in the Black River Valley). The first nest was completed March 11, and contained but three eggs on the 18th. The second contained two fresh eggs April 20 and was left till the 25th, but no more were deposited.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDENS FOR WEEK ENDING TUESDAY, JULY 9.—One pied-billed grebe, *Podilymbus podiceps*, presented; one jelly fish, presented; one woodcock, *Philohela minor*, presented; five garter snakes, *E. sirtalis*, presented; one mink *Putorius vison*, presented.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, urine, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

WILL THE FEMALE OF THE DOG WORRY SHEEP?—In our issue of June 6 we published an abstract of a paper on the dog, read by Dr. Alexander Hadden before the American Institute. Perhaps, of the many papers taken from us, none was more universally copied. The question of whether the female of the dog was given to worrying sheep has been quite disputed. We addressed Dr. Hadden, and have been favored by the following reply:

Editor Forest and Stream: In reply to your note of June, asking for the statistics which fortified the assertion in my article on the dog, that *the female canine* was not given to raiding on flocks of sheep unless in her wild state, I can only say that I have not been able to find any well-authenticated instance or charge of the kind against her, notwithstanding I have made diligent search for the same during the last four years. I am, very truly yours,

New York, July 10, 1878. ALEXANDER HADDEN, M. D.

GUN-SHY DOGS.—I give some of my experience with gun-shy animals and the way I cured them. I wish to state that if a dog be healthy and not too far advanced in age, he can almost invariably be cured. But before we cure him we must proceed to find out what first caused him to become gun-shy, and remove it. The cause being once removed, the effect will, in time and by judicious treatment, gradually cease. The first gun shy dog I had was made so by his sitting down, one glorious Fourth, on a firecracker just before it went off. I was present at the time and was puzzled to tell which went off first, Carlo or the firecracker. His, however was not a very bad case; he wouldn't run at the discharge of a gun, but would get sulky and heel up, and you couldn't get him to "hie on" again for an hour unless some Mollie Cottontail would challenge him to a foot race. I first undertook to show him that it wasn't a necessary conclusion that he should be blown up every time he heard an explosion, which I did by means of a box of caps exploded in a room with him just as fast as I could put them on the nipples. He was terribly frightened at first, but soon quieted down and seemed to get used to it, finally yawning and looking at me as much as to say that it was becoming monotonous. That done, I took him out, and the first thing I saw was Carlo scooting over the field back of me after a young hare. I shot it in front of his nose, so that when Mollie tumbled Carlo dittoed, rolling over and over. Recovering his feet and the hare, he proceeded to mouth it to his great satisfaction, which I let him do to his heart's content. He was never gun-shy again; in fact, when he heard the gun go off he invariably went off too—to find the bird which, from that day to the day of his death, he considered his solemn duty to pulverize to the greatest extent of his capabilities in spite of the sole-leather admonition he was continually receiving. This I consider an almost infallible cure for a gun-shy animal; but the trouble is that, although it betters him in one respect, it is very apt to spoil him in another, as evinced above. Carlo now fills the grave of a martyr. He died in terrible agony, a victim to strychnine and malice. Lately I've had another dog get gun-shy on my hands. I was teaching him to drop to shot by cracking caps and crying Charge, "in a deep, tragical voice." Of course, when I took him out he put his helm hard down and started for home at the first sound of the gun. First I removed the cause of his fright as much as I could by cracking caps as before and leaving out the "deep, tragical voice." He didn't get over it very fast, so I resolved on extreme measures. I let him alone for a week or so and then took him to a pigeon shooting match. In the excitement of seeing the birds flying

and falling he forgot to get scared, and when this flurry wora off he was used to the guns and is now all right. I think the main thing is to get the dog's attention drawn from the gun by something more interesting, then keep up the firing till he ceases to uotice it. AHRIMAN.

WORMS IN PUPPIES.—*Editor Forest and Stream:* The prevailing belief among such sportsmen as I have conversed witb as to the age when puppies are first infested with worms and the cause producing them, is that the whelps must be from a month to six weeks old, and that by reason of early weaning, say at four weeks, the change of food (milk, either boiled or raw) produces the parasitea. I have claimed that the parasite gains entrance in the whelps, in embryo form, during the suckling period, and is received directly from the dam. Veterinary surgeons and physicians do not agree with me, and Dr. W. S. Webb, Secretary of the Westminster Kennel Club, holds to the common opinion as first given. Now for facts coming under my observation, after giving which I trust to see the whole case intelligently investigated and discussed in your paper: May 28, 1878, my bitch Nellie whelped eleven; five of them I destroyed, leaving six with tbe dam They were strong, large, healthy pups, and grew remarkably fast, and all were well up to Saturday, the 15th inst. On that day I noticed tbey were ailing; they lay most of the time on their hacks; respiration difficult, at times quick, again labored, and two of tbem moaned painfully; beating of the heart exceedingly rapid, and bellies cold and swollen. Two of tbem, evidently, were much worse than the others. I concluded they had worms, as indicated by the swelling before mentioned, and either pneumonia or congestion of the lungs; gave each one a small quantity of pepper in milk. In addition thereto to the two worst cases I gave to one a teaspoonful of champsgne, the other a one-quarter teaspoonful of castor oil. On Sunday four of them seemed easier, tbe other two sinking fast. This Monday A. M., 17th inst., the four are seemingly greatly improved, and the other two are dead. I opened one of them and found tbe lungs congested, which caused the death. Proceeding farther, by opening the entire intestines, I found by count twenty-nine white worms, one inch long, and two large white do., three inches in length. These whelps bad been kept in a nice, clean, dry place, and bad a flannel blanket folded in four thicknesses to lie on. Their age was twenty days, including days of hirtb and death. No sustenance given them except that furnished by their dam, and yet here we find thirty-one parasites in active operation inhabiting the whole of the alimentary canal. Tbe question I ask is, how came they there? E. S. WANMAKER.

Centreville, N. J.

We publish Mr. Wanmaker's ideas with pleasure. But worms exist in the puppies when they are born, even before birth. Parasites are discoverable in innumerable creatures when in *utero*.

THE PRIZES AT THE PARIS DOG SHOW.—The London *Times* gives the following *resume* of the awards at the Paris Dog Show:

Paris, Sunday, June 30—9:30 P. M.—The International Dog Show on the esplanade of the Invalids was open to the public to-day, after two days' private view, while the judges were considering their awards. Tbere are about 600 exhibits, of which one is Swiss, three Belgian, and the rest French and English. Some of the classes are not well filled, but their is quality even where numbers are lacking.

Two English exhibitors take the lead in Mont St. Bernards, lesving only the third prize for a Grindelwald competitor, while three Frenchmen win nothing. There are sixteen fine packs of bounds. M. Baudry d' Asson, a Bonapartist Deputy, showing two, of which one earns a gold and the other a siver medal. Madame Gilly of Asnieres showa two elegant Chinese edible dogs, and M. Ravry of Paris a Pomeranian and a Mexician specimen; hut these are the only exotiea. Although, however, the exhibition might have been more cosmopolitan, it is doubtless more comprehensive than any show on record. Many of the animals are really splendid, and will prohably provoke a warm competition st the sale to-morrow week.

Gold medals are awarded to Mr. Macdona of West Kirkby for Mont St. Bernard, to Mr. Alston of Sale for a sbepherd's dog, to Mr. Parkinson of Ashton for a mastiff, to Mr. Brooke of Bath for a bulldog, to Mr. Hure of Ilminster for a Gordon, to Mr. McSwiney of Paris for a foxhound, to Mr. Spurgin of Northampton for ditto, to Mr. How of Whitwick for a retriever, to Mr. Bensted of Sittinghourne, for a greyhound, to Mr. Martin of Henfield for a small spaniel. Mr. Fletcher of Stoneclough, Manchester, carries off no less than seven gold medals, namely: For a leveret, terrier, fox terrier, setter, greyhound, water spaniel, and retriever. Silver medals are accorded to Mr. Sidney of Leeds for a Mont St. Bernard, to Mr. Raper of Stockton for a bulldog, to Mr. Richardson of Chartres for a fox terrier, to Mr. Macdona for a pointer, ditto for a setter, to Mr. Kauffman of London for a Gordon, to Mr. Parsons of Taunton for ditto, to Mr. Curry of Stratford-on-Avon for a retriever, to Mr. Large of Doncaster for ditto, to Mr. T. Morris of London for a pug.

The Prince of Walea takes a adver medal for a black and tan Thibet mastiff, ditto for a blood-hound, a gold medal for a black and white setter, a hronze medal for a small spaniel, ditto for a leveret—all of them fine apecimens of their class.

Bronze medals are won by Mr. Petrie of Rochdale for a shepherd's dog; hy Mr. G. J. Hart of London for a mastiff; by Col. Talbot of Brighton for a bloodhound; by Mr. Fletcher for a pointer; by Mr. W. J. Bayly of London for a setter; hy Mr. Dudonit of Sunhury for a setter; by M. Costh of Wallsall for a Gordon; by Mr. Brookes for a retriever; hy Mr. Coope of Coalville, for ditto; and hy Mr. collingwood of Castlemere for a pug. English fanciers carry off twenty gold medals out of fifty-eight, and a full quarter of the aggregate prizes, not to apeak of dogs of English birth or ancestry shown by French owners.

PUPPIES FOR CALIFORNIA.—At our recommendation Mr. W. F. Johnson, of Folsom, Cal., had sent to him two likely pointer puppiea from the Neversink Kennel. Mr. Grainger is just in receipt of a letter from Mr. Johnson, in which he expressea himself quite delighted with the puppies: "The doga arrived yesterday (July 1) in splendid condition, having evidently received the best of care on the journey hitber. I am very much pleased with their appearance. I could not have pleased myself better had I selected them. Probahly I would not have done as well."

NAMES CLAIMED.—Dr. Henshall, of Cynthiana, Ky., claims the name of Gypsy Queen for his black, white and tan bitch pup by Magraw's (formerly Clason's) Royal Duke, and out of Clason's Queen. Whelped March 12, 1878.

WHELPS.—*Philadelphia, May* 8.—J. C. Steel's orange and white setter bitch Gill whelped six bitches and five doga, orange and white. They are by Major Brown's Grouse, winner of first prize at Philadelphia Dog Show, November last.—Whelped at Morris Plains, July 10, Mr. Robert Sewell's red setter hitch, Irish Fairy, twelve pups—four dogs and eight bitches—to Mr. Barnes' Snipe.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
July 19	2	39	11	55	10	42
July 20	3	18	0	20	11	19
July 21	3	58	0	59	11	59
July 22	4	41	1	38	0	22
July 23	5	30	2	20	1	11
July 24	6	24	3	10	2	08
July 25	7	22	4	24	3	11

SUMMER CRUISING.

CRUISE OF THE SEAWANHAKA YACHT CLUB.

At gun-fire from the Rear Commodore's schooner *Eddie*, the fleet of tbe Seawanhaka Yacht Club, which assemhled in Oyster Bay, got under way at 9:15 A. M., Wednesday, July 10. The command included, hesides the flagships, the following craft: *Regina*, Mr. W. A. W. Stewart; *Caprice*, Mr. Hamilton, about to join the club; *Midge*, Mr. W. Iselin; *Blanche*, Mr. C. H. Grundy, and *Petrel*, Mr. J. Hyslop. With a light southerly breeze and ligbt sails set, the fleet, after clearing Lloyd's Neck, shaped a course for Black Rock harbor on the Connecticut shore. Wind fell light and vsriable all day. *Regina*, with her boom to port and balloon jib rigged out to starboard, soon took the lead of the rest, and keeping her sail in the same position made Black Rock a long distance ahead of the rest. On the way across the sloop *Dudley* fell in with the fleet, and at the Rock, *Recreation*, Mr. Henry C. Sturges, hoisted the Seawanhaka colors and joined the cruise. When nearing the harhor a squall came up, but proved to contain nothing more serious than rain. Up to this time the fleet had kept together remarkably close, and there was only little difference in their times of anchoring. *Regina* first, *Caprice* second, *Petrel* third, *Dudley*, *Eddie*, *Midge* and *Blanche* in the order named. Next day, at five bells in the morning watch, the gun went from the flagship, and the fleet got under way for a long run of sixty miles to New London. Hardly bad they cleared the off-shore light when the wind fell light and left the yachts drifting slowly along, with the Middle Ground Light-house to the S. W. and Bridgeport to the N. *Caprice* and *Dudley* displayed a fine piece of seamanship st tbis point. With the southerly wind at an end and a rapidly rising barometer, the skippers of these two yachts boldly stood, or rather drifted, over to the Long Island shore in anticipation of the coming easterly breeze. Nor were they disappointed, for in a couple of hours they led everything, though to leeward of the whole fleet. Putting up their helms and easing sheets, they came down again to their proper course miles ahead of the ruck. So much for cutting adrift from your leader and having an opinion of your own. Witb a steady hreeze from the S. and E., the fleet bowled along nicely during tbe afternoon, *Eddie* making a show of some speed, and *Regina*, as a matter of course, almost hull down ahead. *Blanche* did not seem to he doing well, and was easdy outsaded by *Petrel*, a yacbt only balf her size. *Midge* could just hold her own with *Petrel*, owing to the excellent management of Mr. Iselin's skipper, who would always manage to plant his craft on the weather of opponents and so hold them under his lee, and who upon several occasions gained nearly a mile by watchfulness in running out a hit for a coming breeze, which he scemed to detect sooner than others. All lights and buoys were given a wide herth, the smaller craft going altogether too much upon the principle of "follow my leader," when they might have gained much by taking advantage of their lesser draft by going inside of Faulkner's Island snd the Cornfield Ligh -ship. Only two, *Recreation* and *Blanche*, avaded themselves of the latter short cut, and so cheated the incoming flood as to crawl up on the leading half of the fleet. They gained a full mile or more by this little piece of close navigation, and their skippers should receive credit for it. *Regina* managed to carry the wind with her clear into New London. and dropped anchor at 5 P. M. *Dudley* and *Caprice*, owing to good seamanship, fetched in about 9 P. M., but the rest of the fleet, which tenscionaly hung to straight line navigation, had to drift about in the neighborhood of Bartlett's Reef Ligbt the latter part of the night, until, disgusted and tired out, they dropped anchor outside. Early in the morning (Friday) they hove up again and made New London at various hours, coming to off the Pequot House. *Petrel* and *Caprice* went up the inner harbor to proviaion, but rejoined the squadron in the afternoon, as did also the schooner *Osprey*, Mr. Lord, who had been in to Fisher'a Island and other ports in aearcb of the fleet. A hop was given to the yachtsmen in the evening at the Pequot House. Saturday morning the fleet hove up, bound for Newport, witb a light wind from N. E. After passing Watch Hill at 8h. 55m., witb the wind freshening, Beaver Tail Light was passed at 3h. 45m., and under tbe lead of the Rear-Commodore Newport harbor was made during the night. From this point the fleet will probably go further to tbe eastward. The seamansbip displayed on the cruise left little to be desired; this applies more particularly to *Regina* and *Midge*. Among some of the others thero was rather too much tendency to "jeehawking," guessing the wind from all four quarters in as many minutes, when it was, as a matter of fsct, up and down, and uselessly shifting and trimming sail accordingly, hut to no purpose. Concerning navigation, however, much has yet to be acquired, as deficiency in this respect is noticeable aboard many of the yacbts, arising partly from the lack of proper implements snd partly from want of experience. For those that can afford tbo necessary charts and tools, tbere can be no excuse, and the meagreness of experience could he supplemented hy a little study to advantage. This being the first regular cruise of the club, some allowanco is to be made for shortcomings, and we have no doubt the experience of tbis year will bo borne in mind when again making prepsrations for a sail away from home.

YACHTING NEWS

SEAWANHAKA YACHT CLUB REGATTA.—Put down for postponed regatta and annual cruise of this club was sailed by the fleet July 9. According to this programme the yachts of the club began to rendezvous at Oyster Bay, Long Island, the club's headquarters, on Sunday and Monday. Rear-Commodore, O. E. Cromwell, who, in the absence of other flag-officers, had command of the squadron, hoisted his pennant at the main of his trim schooner *Eddie*. *Midge*, *Petrel* and *Caprice* made the harbor on Monday and Tuesday morning. The day set apart for the annual regatta found only these and two open jib snd mainsails in port. Though tbe entries were meagre the sailing was interesting as the boats were well matched in size. Nothing is so unsatisfactory and disappointing as a race among craft of widely differing sizes, in which that clumsy makeshift "time-allowance" is called into play. This one was to be an exception, and it is to be regretted that owing to the parting of gear and somewhat baggy canvas, the smart little cutter *Petrel* could not do herself justice. This yacht had put into Manhasset Bay on her way up, and was beached with the incoming tide near Willis's Boatshop, on the eastern shore. Here she had her bottom cleaned and oiled. The next tide, early ou Monday morning, did not run as full, however, as expected, and she remained aground till five P. M., when, with the evening flood, she again got afloat. A little lesson of experience was here acquired. When about to beach your craft, inquire of some native how the floods run, and do not heach at the highest water, but make full allowance for a lesser tide if necessary. Of course, *Petrel's* pretty bottom, steep dead-rise and sharp nose gave the local wiseacres much to talk about, and the usual amount of head-shaking and shoulder-shrugging was gone through with. What mattered it to them if *Petrel* was built on the wave-line theory, or that she waa an exemplification of science and intentional design. No, she couldn't sail, didn't bave "floor enough," wasn't "stiff enough, "Keels, you know, can't best centre-boarders, anyway," and many more of the same sort of cant phrases, continually indulged in hy tbose brought up among the flat-bottomed saucers, and to whom deviation from the standard shape is sacrilege, and bound to be visited hy the severest condemnation of fate. Had these well-meaning, but unlearned critics been aboard the *Petrel*, and seen her sail, their opinions might have received a rude shaking, and would have undergone a radical change, for *Petrel* with flat canvas is more than a match for any cabin yacht of her length, either in light winds or in heavy. This was amply proven to our satisfaction during repeated trials throughout the race and cruises, for as soon as sheets were started the least bit *Petrel* not only walked away from everything of her size, but gave craft twice her tonnage all they could do to hold their own. When trimmed in flat, however, she could not hold the wind the centre-boarders did, but this was owing entirely to her poorly setting mainsail and not to the hull. We learn that next season she is to be supplied with a new suit of muslin to sit as flat as the proverbial board, in which event she will play havoc among her sisters. The morning of Tuesday broke clear with a light breeze from the S. S. W. Shortly before 11 A. M. the steamer *Blackbird* hove in sight from New York with the regatta committee on board, consisting of Mr. James H. Elliott and Mr. Chas. Wyllys Betts. It was agreed upon among the cabin yachts to sail over course No. 2 along with tbe open boats. Tbis was from a line drawn between tbe sloop *Addie Voorhies* and the club steamer, around the Middle Grand Buoy, thence around Hog Island Buoy and Lloyd's Neck spar buoy and return to Middle Ground Buoy, this triangular course to be sailed over twice, returning to the start in Oyster Bay Harbor after tbe final round. With the last of the club the first whistle was blown at 11:49 A. M. and the second, ten minutes later, sent the yachts across the line. *Waif* led with boom to starboard, and *Clara* followed close astern. The cabin sloops received a handicap by not promptly crossing, and in an endeavor to outmanœuvre each other, did not get away until after the ten minutes were up. The entries and times as below:

THIRD CLASS CABIN YACHTS.

Name.	Owner.	Area.	Allowance. M. S.	Start. H. M. S.
Midge	William E. Iselin	297.88	——	12 09 00
Petrel	J. Hyslop	241.12	4 40	12 09 04

SECOND CLASS OPEN SLOOPS.

		Length.		
Waif	Thos. S. Young, Jr.	22 6	——	12 00 36
Clara	Jas. R. Wood, Jr.	20 6	4 00	12 01 08

It was a free run to the red buoy No. 2, *Clara* getting slightly the best of it and *Petrel* losing the wind for awhile. *Waif's* balloon jib did some good work for her, and both the little fellows jibed round together, and, trimming aft, were off for the Hog Island. *Petrel*, as soon as the breeze struck again, showed the value of fine lines, and rapidly drew up on *Midge*. At the second turn all were pretty well bunched, but the above order was maintained. On the run to Lloyd's Neck sheets were eased once more, and again *Petrel* cut out some tough work for *Midge*, and run through her lee before the spar buoy was fetched. Considering the difference in size of the two yachts, *Petrel's* performance does her model and her designer, Mr. Hyslop, much credit. *Waif* had increased her lead, snd tbe time at the round was as follows:

	H.	M.	S.		H.	M.	S.
Waif	1	30	36	Midge	1	31	48
Petrel	1	31	29	Clara	1	32	12

It was now a beat back to Buoy No. 2 inside, and all hands trimmed in flat. Here it was that *Petrel* began to lose ground, unable to point as high as *Midge* on account of her baggy mainsail. The wind freshened somewhat, and at a critical moment away went the cutter's topsail sheet—parted at the sheave in the gaff. It not being deemed advisable or of any use to send a man aloft to reve off new ones, as *Midge* so evidently had the race in her hands, *Petrel* bore up for home as soon as she weathered Lloyd'a Neck, leaving the sloop a walk-over for the rest of the course. On the second round the wind freshened to a stiff breeze, giving the open boats more than they liked. Just here the superiority of catamarans would have been very apparent, for it was their weather exactly. *Clara* received a "knock-down," one of those undesirable peculiarities from which all our yachts suffer danger, from *Clara* up to *Mohawk*, and *Waif* having a long lead, the little sloop wisely bore up for a harbor as the weather looked threatening to windward. The race was now virtually ended, as only one boat was left in each class. *Midge* and *Waif* took down a reef and made the best of tbe weather by slacking away and frequent begging. Finally Mr. Iselin's sloop arrived home at 4h. 49m. 20s., landing the Seawanhaka Cup for her owner in 4h. 40m., after a race in which she exhibited excellent weatherly qualities and was handled with marked ability. *Waif* takes the prize in the second class open sloops.

NAHASSET YACHT CLUB.—The second annual regatta of this spirited club will be held off Nahant, Mass., Saturday, July 20. Entries open to all organized yacht clubs. The classification includes, in the first race, boats from 20 to 26ft. long; in the second race, boats from 17 to 20ft.; in the third, boats from 14 to 17ft.; and in the fourth, boats from 14ft. and under on water line. Entries close July 19 Second prize where more than two yachts start. We observe with pleasure that shifting ballast is prohibited and the crews limited to one man for every five feet and fractional part thereof. Yachts to start from an anchor, a method which does well enough among small craft, and has the advantage of making a race which can be followed from the start without continually having reference to the differences in time of crossing the line. Course for first, second and third class 10½ miles; for fourth class, 7 miles. Time allowance based on length of water line plus *one-third* the overhang. This is much more equitable than the one enforced by the Seawanhaka and Atlantic clubs, which make a heavier charge upon rake of stem and overhang aft than required. The regatta committee consists of Messrs. T. Deland, W. C. Haskell, C. G. Weld, J. P. Hawes, Jr., and P. Grant, Jr. Rules of the Nahasset Y. C. will govern the races.

THE BRITISH SCHOONER ONEAGH.—*Dear Sir:* I observe in your issue of 27th June a short paragraph about the R. St. G. Y. C. schooner yacht *Oneagh*, in which her owner's unwillingness to race on this side of the Atlantic is characterized as more discreet than plucky. Will you permit me to remind you of one or two facts which must have escaped the memory of the writer of that paragraph?

The first is, that in England we divide yachtsmen practically into two classes—racing men and non-racing men—the former naturally forming the smaller though best-known class. The owner of the *Oneagh* happens to be a non-racing man, who cares far more about cruising and covering a large extent of sea than about taking part in a race. His vessel also was built and is fitted, not for racing, but cruising, a very important point. But even were she a racer, and had she competed at home—which she never has—it does not follow that when fitted out for an extended cruise her owner should hold himself ready to race American clippers, prepared for the fight, in their own waters. This should suffice to explain the fact that the *Oneagh* did not race your yachts, apart from the fact that the dimensions of cruising and racing spars vary considerably, that the *Oneagh* is in cruising rig, and, as far as I am aware from conversation with her owner, has not, naturally enough, any racing sails on board. Would it then have been a fair match had one of your clippers raced and beaten her? By the ignorant the result would no doubt have been accepted as a great American victory over England, but all *yachtsmen* must have seen through it and laughed at the triumph. Enough that in former contests, where the competitors were equally matched, your beautiful and speedy yachts snatched the palm from ours. Let *Cetonia, Miranda, Sea Belle, Egeria, Neva, Sultana* or *Corisande* cross the sea to measure themselves with the vessels of the New York or Seawanhaka fleet, and then if they refuse to start talk of discretion being the better part of their owners' valor; but pray allow a cruising yachtsman, who has carried away such pleasant memories of American hospitality, to sail away without taunting him, in the recognized organ of American and Canadian yachting, with being afraid to match his craft against well-known racers. Yours, F. C. SUMICHRAST.

Halifax, July 11, 1878.

Our esteemed correspondent takes a more serious view of the paragraph he refers to than we intended to imply. Though *Oneagh* is in British eyes but a cruising yacht—not having been built with a view to cheating a faulty rule of measurement—it was hoped that her owner would get her under-way and sail in company with some of the American schooners on some regatta day, so that the yachting public might have a view of the craft under canvas, note her weatherliness and handiness, as well as the set of a Lapthorn suit of muslin. As for her speed, we and other yachtsmen fully understand the difference between racing and cruising yachts in Great Britain, and no one expected *Oneagh*, or for that matter any English racing schooner, to hold her own alongside of the American craft; but that the owner of a foreign yacht should fail to grant the public here the slight favor of viewing his craft under sail, when so many opportunities offered, was a disappointment to us and many others, and the paragraph in question was simply an expression of that feeling which could not reconcile the visit of a yacht from 3,000 miles away without the least display of interest in the sport in America, not so much even as to attend the principal event of the season. Besides, Mr. Francis Cope had the privilege of the use of our columns, which we went to the trouble of offering him, and if his refusal to explain his position to the public has resulted in misunderstanding, the responsibility rests with him, not with us.

BROOKLYN YACHT CLUB.—The club has amended its by-laws so as to admit yachts of 17ft. and over in the fourth class. Mr. W. T. Lee, who has been the club's very efficient secretary for many years, handed in his resignation, which was not accepted, the club showing a judicious preference for Mr. Lee's services that does him no more honor than he deserves. Commodore Wallack sent in a letter announcing that the New York Yacht Club preferred following its usual programme, and declined a union cruise with the Brooklyn Club.

BEVERLY YACHT CLUB.—This club held its first regular regatta this season off Nahant, July 6. Champion pennants to first yachts in, without regard to time allowance, were offered besides the regular prizes, to become the property of the yacht winning it the greatest number of times this season. Start flying. *Aerial*, Mr. W. D. Sawyer, won regular prize in first class—time, 2h. 17m. 18s.; *Fanny* won in second class, 1h. 17m. 57s.; and *Psyche* in third class in 1h. 16m. 12s. The pennants go to *Fanchon* in first class, *Fanny* in second and *Psyche* in third class.

NEWBERG BAY REGATTA.—The regular annual regatta, open to all yachts, took place on Newburg Bay as appointed, July 10, and brought together a large gathering of racing craft and others. The famous *W. R. Brown*, which must be recognized as the best of her class; Mr. Livingston's pretty *Flyaway*, the *Geo. B. Dean*, and young McGiehan's first attempt, the *Excelsior*, were among the cracks on this occasion. Promptly at 11 A. M. the preparatory gun was fired from the committee steamer, and the yachts made for the northward of the starting line. Twenty out of the thirty-two entries appeared ready to race, with numbers on their mainsails as follows:

FIRST CLASS—26 FEET AND OVER.

Name.	Owner.	Length. Ft. in.	Port.
Breeze	Mr. Manee	28 00	Tottenville, S. I.
Flyaway	Van B. Livingston	31 00	Ulster Park.
W R Brown	C F Brown	27 03	Newburg.
Corni	A L Riley	32 06	Newburg.

SECOND CLASS—23 TO 26 FEET.

Name.	Owner.	Length. Ft. in.	Port.
Bertha	E Molyneux	25 00	Tarrytown.
Clara S	Joseph Stiger	21 01	New York.
Mayotta	K Dillon	23 11	New York.

THIRD CLASS—20 TO 23 FEET.

Name.	Owner.	Length. Ft. in.	Port.
Lily	H C Baxter	22 06	Cold Spring.
Vixen	G D Scriba	20 06	Montrose.
Geo B Dean	Chas Schwank	21 10	New York.
Excelsior	C McGlehan	22 00	N Brighton, S. I.
Gracie	A C Gould	20 08	Yonkers.

FOURTH CLASS—UNDER 20 FEET.

Name.	Owner.	Length. Ft. in.	Port.
Gracie	H E Belcher	18 07	Garrison's.
Peter O'Brien	Theo. Wersebe	19 08	New York.
Hi Pi	J H Dilks	16 05	N Brighton, S. I.
Jane A	James J Reid	16 03	Jersey City.
Clara W	H H Westervelt	18 04	New York.
Brothers	Wm Murphy	18 07	Jersey City.
A S Ring	George Shaw	17 06	Newburg.
Nellie C	A C Gould	20 00	Yonkers.

Course, from South street around boat off Fishkill, thence to a boat two and a-half miles south, thence to a boat five miles north, thence to a boat off the foundry at Fishkill and back to start, twice over. For the fourth class, the same course once and a-half times around. Wind moderate from S. E., and tide about half ebb. *Gracie* led across at the second gun, followed by *Nellie C. A. S. Ring, Corni, Gracie, Lilly, Peter O'Brien, Vixen, Hi Pi, George B. Dean, William R. Brown, Mayotta, Excelsior, Breeze, Clara S., Flyaway, Bertha, Brothers, Clara W., and Jane A.*

The yachts had their booms off on the run to the first mark, around which they hauled in a bunch and stood off for a long leg on the port tack. The *Brown*, in charge of the veteran Ira Smith, who knows the craft and all her foibles by heart, rapidly worked out with a fine lead of the *Geo. B. Dean*, who in turn led the rest down to the second mark. This was rounded by the leader at 12h. 04m., *Dean* at 12h. 05m. 50s., *Excelsior* 3m. later, and *Flyaway* 12h. 09m., *Clara S*, *P. O'Brien* and *Bertha* following at short intervals, and the rest astern. The fleet then squared away on the run up, and was overtaken by a thunder-squall. The rear craft were struck first, and doused sail, at the same time bearing up; others lowered mainsail only, and scudded under jib; while a few kept everything aloft and suffered the consequences. *Corni* turned turtle without any ado, was followed by *Clara W., Bertha*, and then *Vixen*. The squall lasted but fifteen minutes, but played havoc with the spars and gear of those that were not capsized, and many yachts were obliged to withdraw, *Breeze* being the only one that carried sail straight through. After the squall the wind dropped to a steady breeze for the remainder of the race. The upper stake was reached by the *Brown, Breeze, Dean, Flyaway, Excelsior, Lily, Brothers, Brien, Clara G., Ring* and others. At the close of the race a second squall put some more craft *hors de combat*, and the finish was made as under:

FIRST CLASS.

Name.	Start. H. M. S.	Finish. H. M. S.	Elapsed time. H. M. S.	Corrected Time. H. M. S.
Breeze	11 27 20	3 46 23	4 19 03	4 13 03
Flyaway	11 27 40	3 49 15	4 21 35	4 21 35
W. R. Brown	11 26 50	3 44 00	4 14 10	4 06 40
Corni	11 20 10	Capsized.		
SECOND CLASS.				
Bertha	11 27 43	Capsized.		
Clara S	11 27 35	3 59 15	4 31 40	4 31 40
Mayotta	11 27 05	Withdrawn.		
THIRD CLASS.				
Lily	11 21 00	Withdrawn.		
Vixen	11 21 45	Capsized.		
Geo. B. Dean	11 26 26	3 49 25	4 22 59	4 22 39
Excelsior	11 27 17	3 32 00	4 24 43	4 24 43
Gracie	11 19 00	Withdrawn.		
FOURTH CLASS.				
Gracie	11 20 45	Withdrawn.		
Peter O'Brien	11 21 23	Withdrawn.		
Hi Pi	11 23 05	3 19 00	3 55 55	3 52 40
Jane S	11 35 00	Withdrawn.		
Clara W	11 29 10	Capsized.		
Brothers	11 28 25	3 11 16	3 42 51	3 42 51
A. S. Ring	11 19 35	Passed wrong side of stake boat.		
Nellie C	11 19 00	Withdrawn.		

Thus the *William R. Brown* wins in the first-class, the *Clara S.* wins in the second, the *George B. Dean* wins in the third class, and the *Brothers* in the fourth class.

BOSTON REGATTA.—The undetermined race in the first class of yachts, sailed July 4 in Boston Harbor, was re-sailed July 12. The start was off City Point, and the race in charge of Alderman John P. Spaulding and Councilman Com. Coolidge Barnard. The judges were Messrs. Plimpton, Woodward and Wright. Course, twenty miles. Among the sloops *Thistle* made the best start, followed by *Lillie*, the famous wind-jammer, *Undine* next and *Nautilus* bringing up the rear. *Thistle*, considered the smartest sloop in Boston waters, had at last found a tough nut to crack. Wind was east, and fresh. *Thistle*, sailed by Mr. Crosbie, carried gaff topsail and balloon jib, while Mr. Bryant's sloop was content with a jib topsail. When it came to beating, *Undine* worked out to windward of the lot, for where is the boat that can hold her own with this wonderful craft on a wind? *Lillie* and *Nautilus* withdrew. The finish was made as under:

SCHOONERS.

Name.	Owner.	Length. FT. IN.	Actual Time. H. M. S.	Corrected Time. H. M. S.
Breeze	H. F. Whittier	41 05	5 30 04	4 41 22
Belle	C. Francis	51 05	5 58 12	5 29 08
SLOOPS.				
Undine	H. Bryant	50 08½	4 27 17	3 57 30
Thistle	R. Crosbie	47 10	4 36 11	4 03 59

NEW BEDFORD YACHT CLUB.—In the second of a series of races for cat-boats, best three out of five, *Eucie* won in 1h. 16m. 44s., beating *Cito, Turk, Sylph, Alice* and *Pester*.

SOUTH SALEM REGATTA.—Saturday, July 13, a regatta was sailed off Salem, Mass., to compensate for the drift match on July 4. Wind from the northward with drizzling rain. Prizes were awarded to first-class boats as follows: Keels—*Lottie*, silver nut-cracker; centreboards—silver ice-pitcher and goblet. Second-class keels—first prize *Aurora*; second prize, *Annie G.*; second class centreboards undecided, but lies between *Fancy* and *Croquette*, on a claim that the *Fancy* did not sail the prescribed course. Third-class cat-boats—*Mirage, Whitehall, Zephyr*.

NAUTASKET BEACH REGATTA.—Com. M. J. Kilcy has arranged for a grand union regatta to be sailed July 20 off Nautasket Beach. Entries close the day before. There will be three classes for keels and three for cantreboards.

WARWICK YACHT CLUB.—The first annual regatta of this club was sailed July 11, in Narragansett Bay. There were only four entries; *Hildegarde*, H. L. Clark, 26ft. 10in. long, and *Sadie*, W. R. Tillinghast, 23ft. 2in. long, in the sloop class, and the *Warwick* and *Venona* in the class for cat-boats. The meagre entries were attributed to the fact that the race was not sailed at Newport, and to the absence of many craft on cruises. Course, 13 miles. Regatta Committee, Messrs. ff. L. Clark and Chas. V. Chapin. Challenge pennant for each class. *Hildegarde* was away first, followed by *Sadie, Warwick* and *Venona*. The wind was light, but came out a little stronger from the S. off Hope Island. *Hildegarde* and *Warwick* rounded the buoy first in their classes, and *Venona* retired. On the run home the wind freshened a little and the race terminated in favor of the two leaders. The Warwick Club will hold their Union regatta on the 24th inst.

STONY CREEK REGATTA.—The proprietor of the Flying Point House at Stony Creek, Mr. J. B Northrop, arranged a successful regatta among the small boats in the vicinity, and Mr. Beach, formerly of the *Sun*, acted as time-keeper. There were five entries. *Carrie V.* got away first and *Fleetwing* second. Course 12 miles. *Carrie V.* won in 1h. 35m. She carried 218 yards of duck. In the race for cat-boats the course was from the Hotel round Thimble Islands and return. *Libbie* won in 43m. 25s. A tub race of 500ft. distance was won by Mr. Henry Frisbie in 5m.

WISCONSIN YACHTING.—The Oshkosh (Wis.) Yacht Club held their first regatta of the season on Lake Winnebago, Thursday, July 4, and boats were present from Chicago, Racine, Green Bay, Neenah and Fondulac, making a fleet of nearly thirty. The boats were started at about 4 o'clock P. M., and as the wind was very light they did not make the race in the required time, so it was sailed over again Friday, July 5, with but very little better success, as there was not wind enough to keep the sails full more than half the time; but they managed to get around in time to call it a race. The winning boats were as follows: *Ntoba*, of Oshkosh, first prize in second class; *Penequa*, of Oshkosh, second prize in second class; *S. M. Hay*, of Oshkosh, first prize in third class; *Athena*, of Oshkosh, second prize in third class; *Vulcan*, of Oshkosh, third prize in third class. The first class has not been decided yet. The boats came in so late that the judges had left, and it is thought they did not make the race in the required time. The course was about six miles, twice around, to be made in four hours. LEO.

OAR AND PADDLE.

BLUFF CITY ROWING ASSOCIATION.—The clubs belonging to this association held their regatta Sunday, June 30, at Mound City, six miles above Memphis. Entries comprised four six-oared gigs from the De Soto Club, Excelsior Club, Bluff City Club and Aldine Club. Course, a mile and a-half and return. Aldine had the inside, Excelsior second, Bluff City next, and De Soto on the outside. Boats were sent away at 5 P. M., the Excelsiors being apparently the favorites and De Sotos second choice. These two took the lead, the Bluff City Club a good third, and the Aldines bringing up the rear. The leader was pulling 40 and the second boat 37. The Excelsiors made a bad turn, and De Soto and Bluff City fouled while rounding, thereby killing their chances. Excelsior came in an easy winner, Bluff City second, and Aldine third. Time, 13m. 08s. Skiff races ended the day's sport, Tate winning in 4½m.

NORFOLK DEFEATS WASHINGTON.—The Analostan Club of Washington arrived at Norfolk July 9, and made preparations to pull their race against the Elizabeth Club of Norfolk. A fresh breeze somewhat interfered with the event. The start was finally made, with the Analostan crew slightly ahead. Norfolk, however, soon gained, closed the gap, and the boats fouled, their oars locking. This foul was decided against the Washingtonians. From this point Elizabeth went rapidly to the front and turned about a hundred yards in advance. They had the race in hand and won easily in 14m. 20s. Analostans fouled a tug, though by that time the race was virtually lost by them. The Mayor of Norfolk presented the prizes at the Opera House in the evening.

BOATING CRUISE.—Members of the Meteor Boat Club of Hoboken, N. J., are pulling their eight-oared barge Comet up the Hudson on an extended visiting tour. They left their quarters Saturday, July 13, at 5 P. M., for Rockland. Next morning they made the run to Caldwell's Landing. Thence to West Point, which place they left again Sunday evening for South Marlborough. Monday they left for Catskill via Roundout. There they remain for several days, when they will return to New York, making the distance rowed about 222 miles. Tents and camp equipage were taken along.

KEOKUK REGATTA.—This event was successfully carried out July 4, on the Government canal, near Keokuk, Ill. The judges were Fred Haskell of the Farraguts, and T. M. Garrett, of Burlington; S. C. Bartlett, of Peoria, referee; Mr. Wiley, of Burlington, and C. Hornaday, Keokuk, timers. At 3:30 the first race, for single sculls, was called. Three entries, Denslow, Darlington and L. H. Jones. Denslow led off, and continued to increase his lead the whole way, winning in 17m. 18s. The second race was for model boats, one mile straight away. Entries, E. C. Redman and Eugene Woillard, of the Quincy Club, and C. Maxwell and F. Williams of the Keokuk Club. The former won easily in 10m. 30s. The third race was for gigs, two miles straight away. Two entries, Peorias and Chicagos. The former led at the start; on the last mile Chicago closed on her, but Peoria having a light paper shell against the heavy wooden boat of the Chicagos, managed to win in 17m. 23s.; Farraguts, 17m. 29½s. Next race was between six-oared barge of the Peorias and four-oared boat of the Keokuks, one mile straight away; won by Peoria in 8m. 2s. Tub and swimming races closed the day's sport. The Keokuks propose joining the Mississippi Valley R. A. Burlington failed to send a crew, as they had nothing in training for the event.

NARRAGANSETT-DAUNTLESS CHALLENGE.—The Dauntless Boat Club refuses to accept the challenge from Providence as worded, but say that a race for six-oared gigs with coxswains will be entertained. Probably nothing will come of the challenge, as Narragansett has no suitable boat for such a race.

COURTNEY-HANLON.—All attempts to arrange definitely for a race between these two have failed, as we expected. It seems to be to the interest of both scullers to keep apart as long as they possibly can.

WINONA BOAT CLUB.—July 5th, this club held a formal opening of their new boat-house, at the foot of Henderson street, Jersey City. A series of races was instituted, the single scull race being won by W. Van Nuyse in 6m. 15s.; course, one mile and a quarter, with turn. In the pair-oared gig race

W. Wild and J. McMahon won in 6m. 15s. The last race was between a six-oared barge and four-oared gig, won by the latter in 6m. 8s. Mr. C. B. Green, Argonauta R. A., acted as referee.

HARVARD-CORNELL FRESHMEN.—It will be remembered that after having failed to make a match with Yale, the Harvard freshmen sent a challenge to Cornell, which was, after some hesitation, accepted. Cornell naturally enough preferred forming a six, as it seemed doubtful enough if she could get an eight together. Harvard seems to have acted rather hastily, and may find out that she has harder work cut out for her than she expected. They have been in training for a long time, but so far as one can judge the tables seem to be turned this time, and the same advantages which Harvard had over Yale at New London now seems to be on the side of Cornell, and the Cambridge crew suffers from too light material. Moreover, the crew from Massachusetts lacks an efficient coach and the regularity and vigor which one might infuse. The average weight of the Harvard crew is 154½ lbs., and average age 20. Against them Cornell has pitted a crew weighing on an average 158½ lbs., and their age nearly 21. Goddard, the single sculler, coached them for awhile, and Crocker, '79, gave them attention at odd times, but there has been so far little system in their operations. Their stroke is a copy of Captain Cook's famous Yale stroke; in other matters they follow the customs of the regular 'Varsity eight, which showed to such advantage on the Thames recently. The general impression is, however, that Cornell's lot is still a good bit ahead of their opponents in nearly all essentials, and that the crimson will probably have the best of it at the finish. The race comes off July 17, and in our next issue we will have a full account from our special correspondent.

STADACONA ROWING CLUB.—J. N. Gregory, Esq., of Quebec, Canada, has been appointed Commodore of this club.

ROWING RIPPLES.

Shoe-wae-cae-mettes may enter for the national regatta at Newark. They will be the guests of the Eurekas.....It is simply outrageous to say that Mr. Geo. Lee "threw" the race at Henley. Scurrilous letters about him were sent to England and only too gladly published there.....Eurekas are putting in regular work for the coming national regatta at Newark.....The chamber of the Common Council of that city has been tendered the N. A. of A. O., and special police arrangements will be devised to secure a successful regatta..... A rowing regatta for professionals will probably be held in Dorchester Bay, Boston. Evan Morris, John Biglin and others are expected to enter .....A six-oared race for amateurs is also talked of.....Hanlon-Ross race at St. John, N. B., takes place July 25. Easy work for Hanlon.....Plaisted has challenged Reagan of Boston; no answer yet.....Glass, of Philadelphia, built the pair-oared boat rowed by the Ward Brothers.....Freeby Johnson is looking out for fresh laurels since his victory at Boston, July 4.....Hanlon damaged his Elliott shell recently while practicing at St. John, but not beyond repair.....Reagan now states that he will row Plaisted a five-mile race at Springfield. Step up, Fred.....Ridgefield Association has been reorganized under the presidency of General Shaler.

Sea and River Fishing.

FISH IN SEASON IN JULY.

FRESH WATER.	SALT WATER.
Trout, *Salmo fontinalis.*	Sea Bass, *Centropristris atrarius.*
Salmon, *Salmo salar.*	Sheepshead, *Archosargus probatocephalus.*
Salmon Trout, *Salmo confinis.*	Striped Bass, *Roccus lineatus.*
Land-locked Salmon, *Salmo gloveri.*	White Perch, *Morone americana.*
Black Bass, *Micropterus salmoides*; *M. nigricans.*	Weakfish, *Cynoscion regalis.*
Muskalonge, *Esox nobilior.*	Bluefish, *Pomatomus saltatrix.*
Pike or Pickerel, *Esox lucius.*	Spanish Mackerel, *Cybium maculatum*
Yellow Perch, *Perca flavescens.*	Cero, *Cybium regale.*
	Bonito, *Sarda pelamys.*
	Kingfish, *Menticirrus nebulosus.*

TROUT FLIES IN SEASON FOR JULY.

Little Egg, No. 12.—Body and feet of orange and yellow, mohair and hare's ear mixed; wings, bright hyaline, slightly mottled; setæ, same as wings.

Lightning Bug, No. 10.—Body of equal parts, of dark brown, and black mixed, tipped with yellow; feet, of feathers from the English grouse; wings, double, the inner wing black, the outer wing a yellow brown.

General Hooker, No. 9.—Body made of bright yellow and green, ringed alternately; feet; red hackle; wings, of the tail feathers of the ruffed grouse.

Little Claret, No. 11.—Body and feet, dark claret mohair, slightly tinged with blue; wings, of the bittern, or brown hen; setæ, dark brown.

Claret Fly, No. 9.—Body, dark claret; feet, black; wings, of the brown hen.

Fetid Green, No. 10.—Body, feet and wings, a pale green.

FISH IN MARKET—RETAIL PRICES.—Bass, 20 cents; blue fish, 6; salmon, 25; mackerel, 20; weak fish, 10; Spanish mackerel, 15; green turtle, 15; halibut, 15; king fish, 20; black fish, 10; flounders, 8; porgies, 6; sea bass, 18; eels, 18; lobsters, 10; sheepshead, 20; Canada brook trout, 50; pompano, 25 cents; hard crabs, per 100, $2.50; soft crabs, per dozen, $1.50.

Salmon ceased coming from the Provinces. Bluefish in great plenty from all along the coast. Sheepshead are scarce, a few from Barnegat. Striped bass scarce, a few coming in east from Martha's Vineyard. Mackerel very scarce. Spanish mackerel coming in slowly from the neighborhood, but in good quantity from the Chesapeake. No whitehait to be had. Consumption of fish in the neighborhood of New York notably increased by the opening of new places of summer resort, three houses—Manhattan Beach, Cable's and the Brighton—using 3,000 pounds of fish daily. Saratoga demand increasing.

MASSACHUSETTS.—*New Bedford, July* 15.—Bass fishing has been extremely successful at Cuttyhunk the past week. To-day a large "trunk" or leather-back sea turtle, captured by the smack *Transit*, was brought in, weighing 950 lbs. Recently I took a hand at the black bass, with which some of the large ponds near here are stocked, catching 43, the largest weighing 4½ and 5 lbs. each. CONCHA.

MOVEMENTS OF THE FISHING FLEET.—The number of fishing arrivals reported the past week has been 74, viz., 14 from the Banks, 47 from Georges, and 13 from mackerling trips. There is no encouraging news from the fleet either off-shore or in the Bay St. Lawrence. The receipt of codfish for the week have been 160,000 lbs. from the Banks and 650,000 lbs. from Georges. Halibut receipt, 280,000 lbs. Bank and 18,000 lbs. Georges.—*Cape Ann Advertiser, July* 12.

RHODE ISLAND—*Rock Island, July* 13.—Mr. Joseph O. B. Webster, of New York city, made two large catches of bass on Thursday and Friday of last week (July 11 and 12), off the grounds of the Ocean View Hotel, at Block Island. There were five in all, and weighed 7, 23, 49, 5 and 50 pounds respectively. They were all caught from the private fishing stand of Mr. Henry Steers, of New York, erected near the hotel. Messrs. N. G. Guild, Dr. E. Y. Bogman, C. H. Guild and Senator Dyer, of Providence, went bluefishing this morning (July 13) from the Ocean View Hotel, Block Island, and caught in one hour thirty bluefish, weighing from five to seven pounds each. Tautog are also biting well. N. B.

CONNECTICUT—*New London, July* 15.—To-day closes the trouting season, the law coming in operation on this date. On Saturday I caught a fine string, sixteen in all, in two hours' fishing, and was somewhat surprised to find some of the females in spawn. Is this not very early for trout to spawn? Black bass do not bite well now, and no luck is reported. Have been once this month; used all kinds of baits, artificial flies, frogs, worms, crickets, grasshoppers and minnows, and only caught four in ten hours' fishing. Striped bass are plenty at Rope Ferry bridge, but can't be induced to take the bait. What shall I use; have used crabs and eels? MISAL.

NEW YORK—*Meacham Lake, July* 13.—Mr. W. E. Webb, of New York, caught at Char Pond to-day three speckled trout, weighing in the aggregate eleven pounds, the largest weighing five pounds. This is the best string taken this month. A. R. FULLER.

Clayton, July 14.—Never was fly fishing for black bass better than at the present, and only for the discomforts of casting while sitting in a boat, I should declare the sport almost equal to that of taking the tattooed beauties of the Adirondacks. Flies tied on Nos. 1 or 2 Limerick hooks are large enough, and those found killing for trout will take the dusky sports of the St. Lawrence River. A ten-feet rod, weighing nine to twelve ounces, is the thing when you are provided with the right sort of a landing net. Those who troll with spoons or fish with minnows are having what they call capital sport, but none of this sort of fishing for those of us who know how to "fling the fly." We are now on shore, and are catching eels; on every side they are squirming. Never before was I inside a ring quite so crooked. But enough of eels or any other sort of fish that know not how to appreciate the beauties of the charming flies we offer them. J. B. McH.

CUM GRANO SALIS.—Merely the force of association. We do not abate a jot or tittle of that byperbolic license which is everywhere and always recognized as the inalienable right of the narrator piscatorial; and, without insinuating aught in malice, we write that heading for "Old Salt's" fish report, simply because his own name suggested it. Otherwise it is salt which has lost its savor, and cannot be salted. Having read in the *Syracuse Standard* the statement of "XX.," that fifty bass in one day was the largest of the season in the vicinity of the Thousand Islands, "Old Salt," Mr. T. G. Alford, sees the gentleman's fifty and goes "XX." one "X."—yes, a half a dozen of them, better. Herein as follows:

"I desire to state that I have been here—'Clayton,' not 'Alexandria Bay'—twenty-four fishing days. My catch of black bass up to this P. M. for the time is 1,320, or a daily average of 55. My best days' fishing are 52, 59, 66, 71, 79, 79, 80, 100, 103, 105, 114—all black bass. My entire catch of all kinds of fish to date, in number, is 2,001. I have always fished nearer Clayton by from five to eighteen miles than to Alexandria Bay. Whatever may be the great attractions at Alexandria Bay, Clayton is the place for fish, good hotels and competent oarsmen. Quite a number of gentlemen here at Clayton have more than one day each caught their 50, 60 and 75 black bass, notably Mr. Crane, of Brooklyn; Messrs. Lawrence and Brandreth, of New York; Mr. Barbour, of Utica; and young Messrs. Andrews and Ruger, of Syracuse, etc. Good fishing, cool nights and good health all assured.

NEW JERSEY—*Barnegat House, July* 12.—Weakfish are beginning to bite well, and our boats came in to-day as follows: "Vapor," Capt. Parker, with Messrs. Ridgway & Co., of Philadelphia, seventeen weakfish. The "Sarah," Capt. Potter, with Mr. J. Wan, of Troy, N. J., nineteen weakfish, two king-fish. The "Carric," Capt. J. Falkinburg, twenty-two weakfish. ARTHUR.

Atlantic City, July 14.—Fishing good past week. Sheepshead, kingfish and flounders are biting freely. ROB.

PENNSYLVANIA—SCHUYLKILL ANGLING.—Mr. Vandevere, whose experience with the fish in the Schuylkill should entitle him to speak with authority, contributes to the Philadelphia *Sunday Post* these directions for fellow craftsmen:

"Lafayette Station, on the Norristown branch of the Reading road, is a favorite spot for bait fishing. Take a boat and cross over to the west side of the river, and fish from the soap-stone quarries. A few hundred yards below the ferry the water is deep. Angle with float in about six feet of water, using for bait crawfish and minnows. A more favored spot with anglers may be found a quarter of a mile north of the ferry, on the west bank of the river, opposite a small island, which may be easily found. Fish from a point of rocks, which form a deep pool on either side. The ground is well shaded. Angle with float, allowing it to drift close to the rocks. A fair basket may be taken from this point at any time. The deep water from that point down to Flat Rock dam furnishes good trolling grounds. In the deep pools at the foot of Flat Rock dam bait fishermen are often successful in making fine catches. A quarter of a mile below the dam fair bait fishing may be found in the deep hole at the head of the railroad tunnel. The fish that have been taken here run above the average size of those caught in the river, the favorite bait being crawfish. Good fishing may be had one mile down from that point to the Falls of the Schuylkill, and trolling is also fair. There is good still fishing for bass at the Falls of the Schuylkill and Wissahickon, and it has been unusually good this season. I have heard of several good messes of bass being taken at Belmont Landing, but cannot vouch for the same."

—Philadelphians may find fair trout fishing at Trout Run, a little stream near Kirkwood. Take the 8 A. M. train from Vine street wharf, Camden and Amboy Railroad, to Kirkwood. Mr. Sharp there will give needed directions. A short rod is the one to take.

MICHIGAN—*Crystal, July* 8.—*Friend A.:* Fishing has been and is good. Silver rock bass and pickerel have been taken in large numbers and good size. Black bass commenced biting freely, taking live minnow or shiners, still-fishing. I fish with a light bass rod, with multiplying reel, float and small sinker, single gut leader with hook, snell on small piece of gimp, and cast off from boat. We caught some splendid fellows, weighing from two to six pounds. The great trouble is to keep your bait away from perch, for they take it as soon as it strikes the water, some weighing two pounds. There are thousands of small black bass, always accompanied and guarded by the old ones. O. L.

THEOLOGY AND FISHING.—A party of Pan-Anglican clergyman are now pan-angling in the wilds of Wisconsin.

POTATO BUGS, FARMERS AND FISH.—Did any ardent angler ever try a potato bug as a lure? It's sure to kill—that is if the fish eats it. The farmers near Saratoga Lake, N. Y., were glad at heart the other day when they saw the potato bugs, which had started out to fly across the lake, fall into the water and into the jaws of the fish therein, which leaped up to receive them. But it was not so funny when the fish died from indigestion and were cast up in great numbers upon the land.

This is a hint for that man who is always hooking and then losing the "biggest bass in the lake." Just try a potato bug fly, and when the big bass escapes next time you may enjoy the grim satisfaction of knowing that he's done for, anyway. When he comes up for the inquest he may prove not to be such a wonderfully huge fellow after all.

CURIOSITY OR JEALOUSY OF BLACK BASS.—I notice a communication on this subject in your issue of June 20. In Wakefield, some years since, in trolling with flies I was foolish enough to have five flies on my gut leader, all of them brilliant, and two of them the scarlet ibis. I was rowed over a noted spot, rocky bottom, several times without success, when finally the said fly was taken by a very small bass, not over six inches in length, who was so small that I concluded to allow him to trail; but to my surprise the flies had not passed over ten feet of water when, if you can credit it, all of them were taken, and by fish of good size. The result was that, although I gave them the butt, the strain in different directions was too great, and after a moment or two the leader parted and I lost them all. These four fish had evidently become jealous of the small bass already hooked, and thought that he was having "a good thing all to himself." On another occasion on the same day in the same pond I was casting with two scarlet ibis, when I struck one fine fish, and while I was playing him near the boat another smaller fish struck the other fly, in my plain sight under water, and both were captured. The latter fish was unduly excited by the actions of the one already hooked, and ran after the fish exactly as a brood of young hens run after one who has gotten some choice morsel in its beak. That these fish, who do not intend to bite, are excited by the action of those who are hooked is in my experience certainly a fact. Whether they are moved by curiosity, jealousy, or some other emotion, is not for me to say; but it is certain that a second fish will invariably take the second fly, if allowed to, after one is hooked. D. F.

TO PRESERVE SHRIMP FOR BAIT.—We salt them down here, first taking off the head or shell and washing them clean. They will keep nicely for some time this way. The salting seems to make no appreciable difference to the fish. I have tried trolling for trout or weak fish with a revolving spoon, as you once advised a Corpus Christi correspondent to do, without any success. The same must be said of that formidable looking trap—the eagle-claw. I don't think a gamefish can be induced to go near it. P.

Galveston, July 6.

TROUT EATING MUSKRATS—*Yarmouth, N. S., July* 9.—While fishing in the Carlton River, in this county, a few weeks ago, I caught a trout weighing 1½ pounds. Opening the fish, I found two young muskrats about the size of full-grown mice. May not your correspondent of July 4th have found the same? I do not see how trout can go into the woods and catch mice, but have no doubt they will take almost anything in the water, from a fly or worm up to a young duck or a frog. Yours truly, S. K., Jr.

It is quite possible for trout to catch mice swimming in the water. The old guides, who accompanied the party in the North Woods, would not have mistaken mice for young muskrats.

BASS FISHING IN NORTH ALABAMA.

The attention of lovers of the rod generally is called to the excellent fishing grounds found on the Tennessee River and its tributaries. The greatest inland fishing centre and the most noted may be found on the "Muscle Shoals," a section of the Tennessee River lying in North Alabama, covering a distance of thirty miles, and extending from the mouth of the Elk River to the town of Florence, Ala. By reference to "Hallock's Sportsman's Gazetteer" any one may find plain and accurate instructions for reaching these waters. Look under heading of Alabama for Lauderdale County in the directory, and every word with reference to the game and sports of these magnificent grounds, as given by Mr. Hallock, may be verified by a visit to them. What has been done in the way of angling along these shoals would fill volumes, exhibiting some of the rarest and finest sport in North America.

The geological formation of the river's bed is such that the mighty stream has, with apparent difficulty, worked out its present channel, and it is a notable fact that no change or alteration of sufficient importance to be noticed has occurred in the past century. Great pools, eddies and expanded areas in the river are to be found all along the shoals, produced by projecting ledges of rock, in which countless numbers of the finest bass sport and frolic undisturbed, except by an occasional buffalo hunter in his dug-out with gig and torch, producing at times a scene both picturesque and lurid. But these gig men rarely ever get more for their trouble than a blunted prong in throwing at the bass; for while the bass may become very much interested at this invasion of his territory, he adopts practically the sentiment that "distance lends enchantment to the view," and keeps a safe space between himself and his would-be captor. That he is curious upon all new demonstrations is a fact well known to those who

have entered the field against him; but then he is equally conservative, and I imagine I can almost hear him saying to himself with a knowing wink of his eye, "No gig in *my* back, if I know myself."

"In passing through these shoals with lumber rafts, I have known as many as seven fine fellows to jump on the raft in one day's travel by being hemmed suddenly between the raft and drift-lined towheads. Seeing no other means of escape and being frightened, the fish would leap a distance of ten feet in the vain hope of clearing the raft.

The government is having a canal constructed along this shoal so as to connect the navagable waters above and below, and it is said that the concussion produced by blasting along the shore has driven the fish away. I doubt this, and propose to go in among them in October with a full outfit to remain a week or ten days Those persons who fish for bass along the river confine themselves to the mouths of creeks, and at favorable seasons catch immense numbers of them to the extent that one actually grows tired of lashing the banks with them. This kind of work generally comes in the month of April when the river is swollen and muddy and the creeks clear—a class of sport I could never relish because of the unfair advantage taken of these "game cocks of the deep"—to wait until they are massed in the narrow mouths of the creeks and then fire upon them. But, thanks to nature, this season is uncertain and does not last long. Imagine to yourself a good solid table rock with the water roaring and rushing by on either side, and stretched out below you a long eddy sufficiently calm for your float to be seen one hundred yards, your boat safely lashed alongside the rock; then cast your minnow in the edge of the curl and let it float away twenty, thirty, forty, fifty yards, when down it goes with a pop. Let me feel of him, then I will decide upon the mode of warfare. Now I'll hook him and see what kind of a fight he proposes. Heavens alive! Look at that! Fifteen yards of line like a streak of lightning, which makes our reel spin like a buzz saw. Now we'll give him some up hill work. Bear upon him just enough to let him understand that two are playing at this game. There he goes three feet into the air. See that mouth with distended gills, and how like a lion aroused from his lair he shakes himself in open defiance and throws our shiner sky-high. His weight will go full five pounds. Again he's in the air, with every bristle a spear, and I could get both fists in his mammoth mouth. Now he goes across the eddy to try the virtue of the stiff water there—he takes line again. Now comes the death struggle. He grows weak and turns back. Now we are reeling in with a line just taught enough to prevent a sudden snap should he charge again. I can see him distinctly; he's within ten feet of my boat, and one of his worst tricks to be tried; sure enough, there he goes under the boat like an arrow, vainly searching for a projecting point of rock or an arm of a lodged snag around which to foul our line, and then "fare thee well." But, old fellow, you can just come out again. I fetch him a pull and stubbornly he comes; he yields up the ghost and is bammocked into the boat. "Five pounds," I exclaim, and he answered back by spattering mud and water and sand in my face and shirt-front. I caress him, but he only gets his dander up the higher; but that's all right, Captain Jenks, you shall be taken care of.

This is what any lover of the sport may have in these magnificent shoals of the Tennessee, and a continuous repetition of it by moving from point to point. There is room here for all and the supply of bass inexhaustible, and I desire this to be known from "Maiden Kirk to Johnny Groats'." The Tennessee has been stocked with shad, but I fear that they may not do very well, as the river contains great numbers of fish of prey, though time enough to settle this doubt has not yet elapsed. TRAMP.

Inca, Miss.

Game Bag and Gun.

GAME IN SEASON FOR JULY.

July is a close month for game, except as to woodcock, in certain States.

☞ NEW YORK LAW.—The open season for woodcock in New York State begins August 1; for quail, Nov. 1; and for ruffed grouse or partridge, Sept. 1.

GAME IN MARKET—RETAIL PRICES, POULTRY AND GAME—Philadelphia spring chickens, 22 to 28 cents; do. fowls, 18 cents; do. ducks, 20 to 22; do. squabs, per doz., $2 to $2.25; Western spring chickens, per pound, 22 to 25 cents; do. fowls, 15 to 16 cents; do. ducks, 15 cents; do. turkeys, 16 cents; Boston geese, per pound, 22 to 25 cents; Vermont frozen turkeys, 25 cents; Eng. snipe, per doz, $4; yellow leg do., $2; wild pigeons, per dozen, $1.25; stall fed do, $1.75; frogs, per pound, 25 cents.

MASSACHUSETTS—*Pittsfield, July* 15.—Woodcock more numerous in this section than I have seen in some years. Partridge (ruffed grouse) also plenty and well grown. Some of the birds are in with their second crop. T. C.

Salem, July 13.—Marsh bird-shooting is in order, and some fair sport has been had; among the birds along are robin snipe, winters, summers, grass birds, beetle-heads, one golden plover, one stilt S. piper; also Jack Curlews and peeps by the thousand. The season opens early and finely. I had some fine sport on Wednesday and Thursday last. I think Newburyport will afford better shooting this month than either Ipswich or Essex, as the "black grass" is cut earlier. Uplands are reported. In fact the ball has opened. R. L. N.

NEW YORK.—Dr. A. Ferber and Mr. Otto Frank left Tuesday for Colorado on a hunting and fishing trip. They will be absent for two months. We expect short reports of the trip. These gentlemen take with them a full armament, and no doubt will have fine sport. Mr. John Omohundro accompanies them as guide.

PENNSYLVANIA.—Game in the interior of the State is reported to be more abundant than for several seasons past.

WEST VIRGINIA.—A gentleman desirous of hunting in West Virginia writes to find some one similarly disposed. Address F. W. M. Summit, at this office.

ARKANSAS—*Van Buren, June* 30.—Our last winter and spring were noted failures as game seasons. Ducks were remarkably scarce all winter, and the snipe season was likewise very far behind. Even Vine Prairie, generally a very good snipe ground, did not afford anything like former sport. But after falling a all other more convenient points, with a couple of friends I went out for Vine Prairie, some twenty miles down the L. R. & F. S. Railway. On arriving near a certain mound in the great marsh, where wood and dry ground were combined, our tent being stretched and all matters arranged—gum boots, guns and bags adjusted—all three advanced into the dead grass cover, which stretches out for miles. Underneath this there is soft mud slush, and in places water half-leg deep. Numerous clumps, as large as sugar hogsheads, dot the surface here and there, resembling muskrat houses. The evening was still and sultry, which rendered the necessary exercise exceedingly irksome. But soon the guns began pulling pretty lively as we scattered over the prairies. While there were a good many birds, yet they were so scattered that an immense amount of trudging in mud half-leg deep soon wore us out. Making count after an hour's sport, three of us had sixty-two birds, all long-bills but two or three rail and two woodcocks. All were up at early dawn; coffee served and all things ready, and out into mud and slush trudged the party, C. G., S. T. and your humble servant. A round of about one mile each brought us back to the mound for breakfast of snipe, woodcock and rail. On emptying bags and counting, we found the score was 68 snipe, some rail and six or seven quail. At 10 o'clock we started for the grand score. I, being on the wrong side of a good many summers, returned at three o'clock pretty well fagged out, with only seventeen birds; but the two youngsters, C. D. and S. T., did not arrive until sundown, with, respectively, C. D., 76, and S. T., 54, making in all 147 jack snipe, as we often call them, and four or five rabbits, which we do not call game. About one o'clock at night the rain came in torrents, which continued until the snipe grounds were so completely submerged as to render any further effort nugatory, and we returned regretting the necessity of closing an intended three or four days' shoot. OLD SPORT.

TEXAS—*San Antonia, July* 6.—The prospects for September are all we could desire. Bob White has raised a large brood among our mesquite bush, which gives the very best cover. The woods are alive with deer and turkey. We can rely upon getting plenty of sport with our new choke-bores. We have just got the choke-bore fever in this far-off State. B. R. B.

ILLINOIS—*Warsaw, July* 6.—Quail are very abundant hereabouts, and fine shooting is anticipated when the law allows. Woodcock have become scarce of late. The interest in shooting in this region is rapidly on the increase.

MICHIGAN—*Detroit, July* 14.—On the 6th inst. James McAdam and William Holland made a bag of 23 woodcock. On the same day John Duhuen bagged 7 woodcock. William Jardine, of Rockwood, was after woodcock on the 6th, the first day of the season, making a bag of 25. Woodcock are very plenty this season, but very few have been shot so far.

St. Joseph, July 9.—Our protective law was out on woodcock July 5. Parties made bags from six to fifteen. Your orator with his dim eyes bagged eighteen. Is that fair for an almost septuagenarian? W. B. R.

Crystal, July 8.—There is every prospect for good hunting here this fall. Deer have been seen most every day. Rabbits by the hundred, quail and partridges in great plenty. O. L.

WILD OATS.—A correspondent most kindly informs us that he will supply our friends with wild oats. He writes as follows:

"*Editor Forest and Stream:* You are at liberty to send my address to any of your friends or readers who want to plant their ponds with an attractive food for wild fowl, and say that I will take great pleasure in sending them seed wherehy they may 'sow their wild oats,' without any danger of an attack of quickened conscience in the future. I had meant to have offered them the wild rice from our lakes or marshes in this county, but upon inquiry I find that the grain is hard to gather, and the chances are largely against its successful propagation where it has to be transported any distance. In the opinion of old professional hunters, the wild oats is in every respect a superior grain for artificial planting; it is much sought after by the ducks, is good food for such fish as bass, sunfish and pike, and where once planted in a congenial mud bottom will spread rapidly. The grain will ripen the latter part of this month, and I shall have a quantity gathered for distribution to such as want to try the experiment.

"*Grand Tower, Ill., July* 10. T. M. WILLIAMSON."

WOODCOCK—We have to thank Mr. D. W. Arnold for a brace of fine birds, killed near Farmingdale. The birds were fat and in full plumage.

A PONDEROUS FOWLING PIECE.—In the window of one of our gun stores here is a heavy punt-gun for wild-fowl, built and grooved in Birmingham, 1854, by Wm. Greener, the father of the present excellent maker. This curious gun, probably the largest gun for killing game ever seen in Ohio, was picked up by Captain Heath, of this city, lately while on a trip to California. It is a fine piece of workmanship—not for sale—some sixty inches long, and of a weight that would bother a Bogardus—about fifty-three pounds. It is of a very large gauge—larger than any of the shot-gun gauge—and if a cannon, as it appears to be, would be about a "one pounder." It is valued merely as a curiosity, as there are no game in this part of the country at which it could be fired, even if one were so murderously disposed. R. E. D.

THE DITTMAR POWDER.—*Editor Forest and Stream:* Dear Sir—In your last issue, where the trial of Sparks' chilled shot is published, I notice that the B. Dittmar powder was used. I beg to state that much better penetration could have been made with the C. Dittmar. The B. is a slower grade of powder. Yours very truly, HENRY C. SQUIRES.

No. 1 Courtland Street, N. Y. City.

DITTMAR POWDER—*Editor Forest and Stream:* I prepared some target pads of 30 sheets of hardware paper, 12 inches square; loaded four shells with three drachms Dittmar powder, 1⅛ oz. No. 7 shot in two of the shells; put two pink edge wads over the powder; in the other two one wad over powder. Then loaded four shells in the same way with Orange Lightning No. 6 powder. I shot at the target at 35 yards, with the following results: Dittmar with two wads, average pattern 100 pellets, penetration the whole pad; with one wad, average pattern 98, penetration 25 sheets. Black powder with two wads, average pattern 93, penetration whole pad; with one wad, average pattern 69, penetration whole pad. The above results go to show that with two wads over the powder the Dittmar gives as good pattern and penetration as the best black powder, while it has the following advantages: It makes little report, very little smoke, about half the recoil, and last and best of all, it leaves your gun clean. One hundred shots with it will not soil a gun as much as five shots with black powder. To a man who does not fancy using a wire brush and benzine after an all-day's hunt, this is important. I have used all the best brands of powder, and I have as yet failed to find any which would not at times "coke" or dry on in the gun. After using Dittmar powder, a cloth pushed through each barrel will clean the gun. In testing the powder I used but three drachms to a charge, which I think is sufficient for a 12 gauge gun for any ordinary shooting; in fact, three drachms good powder and 1⅛ oz. No. 7 or 8 shot is the best load I can find for glass-ball shooting. I have seen parties at glass-ball matches shoot five drachms of strong powder. They would find on careful trial that three drachms will do as well, and not leave their arm black and blue. For wild fowl and such shooting heavier loads are of course required.

Painesville, O., June 24. "DICK."

CAPTAIN BOGARDUS IN ENGLAND.—We are in receipt of a letter from Captain Bogardus, dated London, July 2. He says, referring to the Pennel match: "I had a close match, but I got away with it. Mr. Pennel was in his best form. I am more than pleased with the courtesy which has been shown me. I prize the handsome cup which I have won more than the stakes. I expect to be in New York by the first week in August, and desire to be particularly remembered to all my friends. Eugene is very much petted, and has quite astonished my many English friends."

The accounts of the glass ball performances of Bogardus and Eugene seem to have excited a great deal of interest in England. The *Illustrated Sporting and Dramatic News* gives an excellent account of an exhibition held at Agricultural Hall. One paper states that some doubts existed among the audience as to whether the glass balls were not some self-explosive contrivances which burst at the report of the gun. No doubt England will adopt our glass ball system, and the sacrifice of pigeons will be lessened. In England Bogardus kept to his Scott gun, and in his glass-ball shooting used entirely the Dittmar powder. Just now we are on the winning cards in England. When we beat our cousins at the Derby some of these fine days, our measure of triumph will be quite complete.

PIGEON MATCHES.

MAINE—*Kennebunk, July* 13.—Weekly shoot at glass balls, R. F. and G. P. A.; two traps; Bogardus rules; ten single balls each.

Clifford	1 0 0 0 0 1 0 0 1—3	Dutch	0 0 0 1 0 0 0 1 0—2
Stevens	0 0 0 1 0 0 0 0 1—3	Larrabee	0 1 1 0 0 0 0 1 0—3
Cushman	1 0 1 0 1 0 0 1 0—5	Downs	0 0 1 1 0 0 0 0 1—3
Lord	0 0 0 1 1 1 0 0 1—5	Drown	0 1 0 1 1 0 0 1 0—5
Stanley	0 0 0 0 0 1 1 0 0—2		

Second match, same conditions, July 6.

Saunders	0 0 0 0 0 0 0 0 1—1	Stevens	0 0 0 0 0 1 0 1 0—2
Cushman	0 0 0 0 1 1 1 1 1—6	Lord	0 1 0 0 1 1 0 0 0—3
Stanley	0 1 0 1 1 1 1 0 0—5	Littlefield	1 1 1 1 1 0 0 0 1—7
F Pitts	0 0 0 0 1 1 0 1 1—5	Gilman	0 0 1 0 0 0 0 0 0—1
Downs	1 1 0 0 1 1 0 1 0—6	Pitts	0 0 0 1 0 0 1 0 0—2

Third match.

Cushman	1 1 1 1 1 1 1 1 1—10	Stanley	1 1 0 0 0 1 0 0 0—3
Pitts	0 0 1 0 1 1 0 0 1—4	Larrabee	0 0 1 1 1 1 0 1 1—7
Stevens	0 1 0 0 0 1 1 1 1—5	Lord	0 0 0 1 0 1 0 0 1—4
Drown	0 0 0 0 1 0 1 1 1—5		

Fourth match. Double rises.

Cushman	1 1 1 0 1 1—5	Stevens	1 0 0 0 0 0—1
Lord	0 0 1 0 1 1—4	Larrbee	1 0 0 0 1 1—3

Fifth match. Double rises.

Cushman	1 1 1 1 1 1 1 1—8

CONNECTICUT—*Stamford, July* 4.—The tournament was well attended the scores being as follows:

First competition for the "Weed Bowl," 25 balls each. Screen in front of trap; balls thrown in all directions. H. M. Valentine, referee.

Wm Scofield	0 0 1 1 1 0 1 0 0 1 0 1 1 0 1 1 0 1 0 0 1 1 0 1 1—14
H Oothout, Jr	1 0 0 1 1 0 1 0 0 0 1 1 0 1 0 1 0 0 1 0 0 0 1 1 1—12
J H Teackle	0 1 0 0 0 1 0 0 0 1 0 0 1 1 1 1 0 0 0 0 0 1 1 1 0—10
F K Grain	0 0 1 1 0 0 0 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 0 1 0—8
A G Weed, Jr	0 1 1 1 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0—7
R H Gillespie	0 1 0 0 0 0 0 1 0 0 1 0 0 0 1 0 1 0 0 1 0 0 0 0 0—6
G S Foote	0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 1 0 0—3

Class II.—Prize, pitcher vase.

Scofield	1 1 1 1 1 0 0 1 0—7	Weed, Jr	0 0 1 0 1 0 0 1 0 0—3
V'de werken	1 0 1 1 1 0 1 0 1—6	Grain	0 1 1 0 0 0 0 0 0 0—2
Valentine	1 0 1 1 0 1 0 0 1—5	Gillespie	0 1 0 0 0 0 0 0 0—1
Oothout, Jr	0 1 0 1 0 0 0 1—4	Teackle	0 0 0 1 0 0 0 0 0—1
Jones	0 0 0 1 0 0 1 1 0—3	Fox	0 0 0 0 0 0 0 0 0—0

Class III.—First competition for the Bishop revolvor. Same conditions as for Weed Bowl.

Scofield	0 1 0 1 1 1 1 1 1 0 1 0 0 0 1 1 1 0 0 0 1 0 1 1—15		
Grain	1 1 1 0 0 1 0 1 0 1 1 1 0 1 0 1 0 1 0 1 1 0 0 0—11		
Hendrie	1 0 1 0 1 0 1 0 1 1 0 1 0 1 1 1 1 1 0 0 0 0 0 1—14		
Vanderwerken	1 1 1 1 0 0 1 0 1 1 0 1 0 0 0 1 1 0 0 0 1 1 0 0—14		
Oothout, Jr	0 0 1 1 1 0 0 0 0 0 0 1 1 1 0 0 1 1 0 1 0 1 1 0—14		
Weed, Jr	1 0 0 0 1 0 0 1 0 0 0 1 0 1 0 1 0 0 1 0 0 1 1 1—10		
Gillespie	1 1 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 0—6		
Studwell	0 0 0 0 1 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0—1		

Class IV.—Prize, silver cake basket.

Gillespie	1 0 1 1 0 1 1 1 1—8	Hendrie	0 0 1 0 1 1 1 0 1—6
V'derwerken	1 1 1 0 1 1 0 1 0—7	Jones	0 1 0 0 0 0 0 1 0—2
Grain	1 1 1 0 1 1 0 0 1—7	Studwell	0 1 0 0 0 0 0 1 0—2
Oothout, Jr	1 0 1 0 1 0 1 0 1—6		

Class V.—Prize, silver ash receiver.

Oothout, Jr	0 1 1 1 1 0 1 1 1—7	Weed, Jr	1 0 1 1 0 1 0 1 0—5
V'derwerken	1 1 1 0 1 1 0 0 1—6	Gillespie	1 0 1 0 0 1 0 0 0—3
Scofield	1 1 1 1 0 0 1 0 0—5	Kirk	0 0 0 0 0 0 0 0 0—0

Practice shooting, July 6:

V'derwerken	1 1 1 1 0 1 0 0 1—6	Gillespie	0 1 1 1 0 1 0 1 1—7
Scofield	0 1 0 0 1 0 1 1 1—6	V'derwerken	0 0 1 0 0 0 1 0 1—4
D Gillespie	0 0 1 1 0 1 1 1 0—5	Scofield	0 1 0 1 1 1 0 0 0—4

July 8:

Gillespie	0 1 1 0 1 0 1 1 0—6	Gillespie	0 0 1 1 0 1 1 1 1—7
V'derwerken	0 1 0 1 1 1 0 0 1—5	V'derwerken	0 0 0 1 1 0 0 0 1—4
Scofield	0 0 0 1 0 0 0 0 0—1	Scofield	0 0 0 1 1 1 0 0 0—4

ROSSMOOR VS. JAMAICA.—A match last week between teams from the Rossmoor Shooting Club, of Staten Island, and the Jamaica Rod and Rifle Club (off-hand, 200 yards), resulted as follows:

Rod and Rifle Team.		Rossmoor Team.	
W S Elmendorf	41	B B owu	41
J Fleming	40	H C Metcalf	39
T Rogers	39	S Ellis	38
H Creed	38	W Robinson	37
A M Crane	36	G W Ellis	37
T Lloyd	35	W W Wright	34
Team total	229	Team total	226

LONG BRANCH GUN CLUB—*July* 15.—Pigeon sweep for Governor Warmoth's prize, twenty-five yards rise, five traps and eighty yards boundary:

E Murphy	1 1 1 1 1 1 1 1 1—10	Murphy	0 1 1 1 1 1 1 1 0—9
W Murphy	1 1 1 0 1 1 1 1 1—9	L Hopper	1 1 0 1 1 0

A. Sewell, F. Levy, J. S. Hoey, E. Fox, W. Stone, Bouctcault, and J. M. Durand withdrew.

Sweepstakes at pigeons, 25 yards rise, five traps and 80 yards boundary. Bird and bird.

Sewell	1 1 1 1 1 1 1—7	Maud	1 1 1 1 1 1 0—6
W Murphy	1 1 1 1 1 1 1—7	Green	1 1 1 1
Zelonouski	1 1 1 1 1 1 1—7		

E. Murphy, W. Henderson, W. Oreen, G. Bright, I. Hopper, E. Fox, O. J. Voorhis and J. S. Hoey withdrew. Messrs. G. Butler, F. A. Dugro, W. Stone, L. Bright, D. Bouclesult and B. West missed in the first round and retired.

In shoot off Murphy took first with seven out of ten; Sewell second, with six out of ten; Zolononske third.

Third Match—Eighteen yards rise, ten balls and three traps, Bogardus' rules.

Bright	1 1 1 1 1 1 1 1 1 1—10	Stone	1 1 0 1 0 1 1 0 1 — 6
W Murphy	1 1 1 0 1 1 1 1 1 1— 9	Butler	0 1 0 1 1 1 0 1 1 — 5
West	1 0 1 1 1 1 1 1 1 1— 9	Maun	0 1 0 1 1 0 1 0 — 5
Dugro	1 1 0 1 1 1 1 1 1 1— 9	E Murphy	0 1 0 1 0 1 1 1 — 5
Zolononski	1 1 0 0 1 0 1 1 1 — 6		

A. Sewell, J. S. Hoey, T. Hopper, E. Fox, G. Bright withdrew.

Sweepstakes at ten glass balls, 18 yards, three traps, Bogarous rules.

W Murphy	1 1 1 1 1 1 1 1 1 1—9	Zolononski	1 1 1 1 0 1 0 0 1 1—7
E Murphy	1 1 1 1 0 1 0 1 0 1—8	Dugro	1 1 1 1 1 0 0 1 1 1—7
West	0 1 1 1 1 1 0 1 1 1—8	Butler	1 1 1 1 0 0 1 1 0 1—6

L. Bright, F. S. Hoey, W. Stone withdrew.

Ties for second money won by West.

PENNSYLVANIA.—A pigeon tournament will be held at Clyde, Pa., July 18 and 19.

LOUISVILLE GUN CLUB.—Match, July 11, for the club prizes, being the third of the series; 10 single birds; 10 guns 23 yds; 12 guns 21 yds.:

Barbour	1 1 1 1 0 1 1 1 1 0— 7	P Green	1 0 1 1 0 1 1 1 0 1— 7
Campbell	1 1 1 0 1 1 1 0 1 1— 8	Thompson	1 1 1 1 1 1 1 1 1 1—10
Moore	1 0 0 1 1 0 1 1 1 1— 7	Green	1 1 0 1 1 1 1 1 1 1— 9
Walkins	0 0 1 0 0 1 1 0 1 0— 4	Harding	1 1 0 1 0 1 1 0 1 1— 7
Bedford	1 1 1 0 1 1 1 0 1— 8	Peske	0 1 1 0 0 1 1 1 0 1— 6
J D Barbour	1 1 1 1 1 0 1 1 0— 8	Fox	1 1 1 0 0 1 1 1 0 1— 7
Watson	1 1 1 1 1 0 1 1 1— 9	Gauthert	0 0 1 0 1 1 1 0 1 1— 6
Griffith	1 1 1 1 1 1 1 1 1—10	Cowling, Jr	0 1 0 1 1 1 1 1 1— 8
Noel	1 0 1 1 1 1 1 1 1— 9	Thompson	1 1 1 0 0 1 0 1 0 0— 5
Tyler	0 1 1 1 1 0 1 1 1— 8	Tucker	1 1 1 1 1 0 1 1 1— 9
Kearney	0 1 1 0 1 1 0 0 0 1— 5	Gilmore	1 1 1 1 0 1 1 0 0 1— 7
Fishback	0 0 1 0 1 1 0 1 1 1— 6		

Sweepstakes, 5 single birds, class shooting, 21 and 23 yards rise:

Jno E Green	1 1 1 0 0—3	E Y Peake	0 1 1 1 1—4
J V Cowling, Jr	1 1 1 1 1—5	S B Duff	1 1 1 1 1—5
H S Gilmore	1 0 1 1 1—4	J H Tyler	1 1 1 1 1—5
J H Bedford	1 1 1 1 1—5	P S Campbell	1 1 1 1 1—5
R E Hill	1 1 1 1 1—5	W W Thompson	1 0 1 1 0—3
L G Tucker	1 1 1 1 1—5	C W Moore	1 1 1 1 1—5
J W Kearney	0 0 w	W W Thompson	1 1 1 1 1—5
P E Green	1 0 1 1 1—4	W W Watson	1 1 1 1 1—5
Jos Griffith	1 1 1 1 0—4	F W Fox	0 1 1 1 0—3
J W Gauthert	1 1 1 1 1—5		

On ties for first money Duff and Hill divided; on ties for second money, Gilmore and Griffith divided; on ties for third money John Green and W W Thompson divided.

TENNESSEE.—*Murfreesboro Tournament, July* 12; Paine's rules; 1¼ oz shot.

Murfreesboro Team.		Nashville Team.	
Mat Nelson	26	O J Olibert	27
W Childress	28	T Maskey	23
D Miller	28	A Meadore	27
H Childress	15	H Brackman	28
Jno H Nelson (Capt.)	23	J Turner	20
A Harding	27	F K Mitchell	27
Joe Arnold	28	Jack Oates	27
A Peyton	25	J L Valentine	28
F Avent	25	J T Nicholson	24
S Hager	23	R McKinney	16
H Smith	21	J M Carter	21
J B Kimbro	25—294	W R Polston	17—290

GULF CITY GUN CLUB—*Mobile, Ala., July* 10.—Monthly contest for club medal; 18 yards rise.

Felder	1 1 0 1 1 0 1 1 0 1 1 0 1 1 1 1 1 0 1 1—15
Holt, W B	1 0 0 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1—16
Tunstal	1 0 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1—17
Scales	0 1 1 1 1 0 1 1 0 0 1 1 1 0 1 1 1 1 1 1—15
Harwell	1 1 1 0 1 0 1 1 1 1 0 0 1 0 1 0 1 1 0 0—12
Ma·on	1 1 1 0 1 0 0 1 0 1 0 1 0 0 0 1 1 1 0 0—10
Sheffield	0 1 0 0 1 1 0 0 1 0 0 1 0 1 0 0 0 1 1 1— 9
Davis	0 0 0 1 0 0 1 0 0 0 1 0 0 1 0 0 0 0 1 1— 6
Alexander	1 0 1 1 1 0 0 1 1 0 0 1 1 1 0 0 1 1 1 1—13
Marston	1 0 0 0 0 1 1 1 1 1 0 0 1 1 0 0 0 1 0 0— 9
Goodall	0 0 1 1 0 1 1 1 1 1 1 1 1 1 1 0 0 1 0 1—14
Ladd	1 0 0 1 0 1 1 0 0 1 1 0 0 0 0 1 1 1 1 0—10
Carre	1 1 0 1 1 1 1 1 1 1 1 1 1 0 0 1 0 1 0—16
Guimon	0 0 1 0 0 0 0 1 1 1 0 0 0 1 1 1 1 1 1 1—11
Bizzell	1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1—17
Alston	0 0 0 0 0 1 0 1 0 0 0 1 0 1 1 0 1 0 1 1— 7
Sheffield, W	4 0 0 0 1 1 0 0 0 1 0 1 1 1 0 0 0 1 1 0— 8
Hollinger	0 0 1 1 0 1 1 1 1 0 1 0 1 1 1 1 1 0 1 0—13
Webster	0 0 1 1 0 1 0 1 0 0 0 0 0 0 0 1 0 1 1 0— 7
Vass	1 1 0 0 0 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1—15

MISSISSIPPI—*Natchez, July* 8.—Glass ball match between teams of the Gaillard Sporting Club and the R E Lee Sporting Club. Bogardus traps and rules; 21 balls asch:

Gaillard Club.

R H Colhoun	1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1 1 0 0—16
J F Jenkins	1 0 1 1 1 0 0 1 0 1 1 0 1 1 1 0 1 1 1 1 0—14
W D Jenkins	1 0 1 0 1 1 1 1 0 0 0 1 0 1 1 0 1 1 0 0—12
J A Dicks	0 1 0 1 1 1 0 0 0 1 0 1 0 1 1 1 0 1 0 1 1—12
J S Shields	1 1 0 1 0 0 0 1 1 0 1 1 1 1 0 1 1 0 0 1 1—13
W A Coulson	1 0 0 1 1 1 1 1 1 1 1 0 0 0 1 0 1 1 1 1 1—15
Total	82

H E Lee Club.

A Boger	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—20
Jas Welsh	0 1 0 1 0 0 1 0 1 1 1 0 1 1 0 1 1 0 1 1 1—13
Wm Griffin	0 1 1 1 1 0 1 1 0 0 1 1 0 0 0 0 1 0 1 0 0—10
S W Griffin	1 0 0 1 1 0 1 0 1 1 1 1 0 0 0 1 1 1 1 0 0—12
A G Hootaell	0 1 1 1 0 1 1 1 1 1 0 1 1 1 0 1 0 1 1 1 1—16
F W Boger	1 1 1 1 1 0 0 1 1 1 0 1 1 0 1 1 1 1 1 0 1—10
Total	87

TEXAS—*San Antonio, July* 4.—Paine's glass balls and Bogardus traps, 10 single balls:

Bingham	1 1 1 1 0 1 1 1 1 1—9	Bartlett	0 0 1 1 0 1 1 1 0 0—5
Buffham	1 0 1 0 0 1 1 1 1 1—7		

Five single balls:

Buffham	1 1 1 1 1—5	Bingham	1 0 0 1 1—3
Bartlett	1 1 0 0 1—3		

Fifteen single balls:

Buffham	1 1 1 1 1 1 1 1 1 1 0 0 1 1 1—13		
Bingham	1 1 1 1 1 1 1 1 1 0 0 1 0 0 1—11		

ILLINOIS—*Warsaw, July* 6.—A gun club was organized here July 4, with Gen. O. E. Edwards, Pres., and A. H. Worthen, Jr., Sec. A scrub match resulted in this score:

A Worthen	0 1 1 1 1 1 1 1 1—9	T Worthen	1 1 1 1 1 1 1 1 1—10
Edwards	1 1 1 0 1 1 1 1 0 1—8	Moore	1 0 1 1 1 1 1 1 1 1—9
C Worthen	1 1 1 1 1 1 1 1 1 1—10		

ILLINOIS—*Keokuk, July* 4.—Tournament of the Gate City and Centennial Shooting clubs. Boundary, single birds, 80 yards; double birds, 100 yards.

Match No. 1—21 yards:

Tucker	11 11 11 01 11— 9	Griffey	00 10 01 11 10— 5
Thompson	11 11 11 10 11— 9	Brown	11 11 11 11 10— 9
Hniskamp	10 10 10 11 01— 6	Bassett	10 11 10 11 01— 7
Hunter	11 11 01 11 11— 9	Welch	11 11 11 11 11—10
Kinnamah	01 11 10 11 11— 8	Worthen	11 10 10 11 01— 7
Shnler	01 11 01 11 10— 7	Henry	11 11 10 10 11— 8
Johnson	11 01 11 11 11— 9	Parker	00 11 00 10 11— 5
Lee	11 11 11 11 01— 9	Beamen	10 11 10 11 10— 7
Cherrill	11 10 10 11 10— 7	Bart	11 10 00 01 10— 5
Sanford	01 11 01 00 01— 5	Anderson	11 11 11 11 00— 8
E Cherrill	11 11 00 01 01— 6	Schultz	01 11 00 10 11— 6

Ties on nine—Tucker, Hunter and Johnson tied again on four, Tucker and Hunter a third time on two and divided money. G. C. Henry won ties on eight. Shuler and Beaman, in ties on seven, tied again on two and Shnler won.

Match No. 2—21 yards:

Hniskamp	0 1 1 0 0 0 1 0 0 1—4	Johnson	1 1 1 1 1 0 1 1 1 1—9
E Lang	0 0 0 1 1 1 1 1 1 1—7	Kinnaman	1 1 1 1 0 1 1 1 1 1—9
R Lang	0 1 1 0 1 1 0 0 1 1—6	Brown	1 1 1 0 0 1 1 0 1 0—6
Sanford	0 1 1 1 0 0 1 1 1 1—7	Boyle	1 0 1 0 1 1 0 0 0 1—5
Lucas	0 0 0 1 0 1 1 0 0 0—3	Bassett	1 1 1 0 1 1 1 1 1 1—9
Lee	1 1 0 1 0 1 1 1 0 1—7	Worthen	1 1 1 1 0 1 1 0 1 1—8
A N Cherrill	1 1 1 1 0 1 1 1 1 1—9	Henry	1 1 1 1 1 1 1 0 1 1—9
Welch	1 0 1 1 1 1 1 1 1 1—9	Leisy	0 1 0 1 0 0 0 0 0 1—3
Shuler	0 1 1 1 1 1 0 1 1 1—8	Besmen	0 0 1 1 1 1 0 1 1 0—6
Griffey	1 0 1 1 1 0 1 1 1 0—7	McQuilken	0 1 1 0 0 0 0 1 1 0—4
Buskirk	1 1 0 1 0 0 1 1 1 1—7	Olven	1 1 1 1 0 1 1 1 0 0—7
E Cherrill	1 1 0 1 1 1 1 0 1 1—8	Hunter	1 1 0 1 1 1 0 1 1 1—8
Anderson	1 1 0 1 1 0 1 1 1 1—8	Froud	1 0 0 1 0 1 1 1 1 1—7
Tucker	1 1 1 1 1 1 1 1 1 0—9	Parker	1 0 1 1 0 0 1 0 1 1—6

In ties on nine, Welch and S. H. Tucker, of Parker Gun Works, Meriden, Conn., tied again on four, Tucker winning finally. In ties on 8, Worthen and Hunter tied again on five, Worthen winning next shoot off. Ties on seven won, after a second tie of four with Sanford, by Griffey. Ties on six won by Parker.

Match No. 3—Glass balls, 18 yards:

A N Cherrill	1 1 1 0 1 1 1 1 0— 8	Sanford	1 1 1 1 1 1 1 1 1—10
E Cherrill	1 1 1 1 1 1 1 1 1—10	Brown	0 0 0 1 1 1 1 1 0— 6
Shuler	1 0 1 1 1 0 1 1 1— 8	Beaman	1 1 1 1 1 1 1 1 0— 9
Worthen	1 1 1 1 1 1 1 1 1—10	Lucas	0 1 0 1 1 1 1 1 0— 7
Bassett	1 0 0 1 1 1 0 1 0— 6	E Lang	1 1 1 1 1 1 1 0 1— 9
Kinnaman	0 1 1 1 1 1 1 1 1— 9	R Lang	1 1 1 1 0 1 1 0 0— 7
Griffey	1 1 1 1 1 1 1 1 1—10	Anderson	1 0 1 1 1 0 0 1 0— 6
Welch	1 1 1 1 1 1 0 1 1— 9	Hunter	1 1 1 0 0 1 1 1 1— 8
Leisy	1 0 1 0 1 1 0 0 1— 6	Parker	0 1 1 1 1 1 1 1 1— 9

Ties on ten—Cherrill and Worthen tied again on five, Worthen winning second shoot off. Ties on nine—Kinnaman, Welch, Beaman and Lang tied again on four, Welch winning final shoot off. Ties on eight won by Shuler; ties on seven by Lucas.

Match No. 4—Double birds, 18 yards:

Welch	00 10 10 00 10—3	Johnson	10 11 00 11 11—7
Griffey	10 01 10 11 00—5	Henry	11 10 01 10 11—7
A N Cherrill	11 11 10 01 00—6	Worthen	10 10 11 11 10—7
Tucker	11 10 01 10 11—7	Arnold	10 11 11 11 10—8
Lucas	10 10 10 01 01—5	Shnler	11 11 00 11 10—7
Bassett	10 11 11 00 11—7	Brown	10 10 01 00—4
Hunter	10 11 10 11 00—6	E Cherrill	01 11 10 10 11—7

Ties on seven—Bassett, Worthen and Henry tied again on five; Henry and Worthen again on three, again on four, and divided. Ties on six and five divided.

Match No. 4—Single birds, 21 yards:

A N Cherrill	0 1 1 0 0 1 1 1 1 1— 7	Bassett	1 1 1 1 0 1 0 1 1 1— 8
Tucker	1 1 1 0 1 1 1 0 1 1— 8	Berg	0 1 0 0 1 0 1 0 1 0— 4
Thompson	0 1 1 1 1 1 1 1 1 1— 9	Henry	1 0 0 1 1 1 1 1 1 1— 8
Brown	1 0 1 0 0 0 1 1 1 1— 5	Shnler	1 1 1 1 1 1 1 1 1 1—10
Griffey	1 0 0 1 1 1 1 1 0 0— 6	Holt	0 1 1 0 1 1 0 0 1 1— 6
Welch	0 0 1 1 1 1 1 1 1 0— 7	Stahl	0 1 1 1 1 1 0 1 0 1— 7
Hunter	0 1 1 1 0 1 0 1 1 1— 7	E Cherrill	0 1 1 1 1 1 1 0 1 1— 8
Worthen	0 1 1 0 0 1 1 1 0 1— 0	Kinnaman	1 1 1 1 0 1 1 1 1 1— 9

The second and third prizes were divided. Stahl won fourth in shoot off.

MICHIGAN.—Detroit State Medal shoot, Hurlingham Park, July 9. English rules; 11 birds each; 20 yards rise. S H Turrill, of Chicago, referee:

Long	1 0 1 0 0 1 1 1 1 1 0—7	Wheny	1 1 0 0 0 w
Gillman	1 0 1 1 1 0 1 1 1 1—9	Dubois	1 1 0 1 1 1 1 1 0 1 1—9
Eldridge	1 0 1 0 1 1 1 1 1 1—9	Mason	0 1 0 1 0 w
Jones	1 0 1 0 0 0 1 0 1 1—5	Stenton	0 1 1 0 1 1 1 1 1 0 w
Cook	0 0 0 1 1 1 0 0 0 w		

In shoot-off Gillman and Eldridge tied again on 4; Gillman won second shoot-off with 5 straight.

THE INTERNATIONAL MATCH.—The particulars of the great match between Captain A. B. Bogardus, of America, and H. Cholmondeley Pennell, of England, of which we announced the result last week, are given in the London *Field*, as follows:

At a quarter to three all was in readiness, and one of the most exciting contests ever witnessed commenced. A very strong breeze blew direct from the traps, and Offer's birds went away at a great pace, many that were killed being just carried over the palings by the force of the wind, and accordingly fell out of bounds. The gun used by Capt. Bogardus was his old 12-bore choke, built by Scott, of Birmingham. The charge of shot used in the first barrel was 1¼oz. of No. 8, with 4¼drs. of Laflin & Rand's Orange Lightning Powder. For the second barrel the American used 1¼oz. of No. 7 shot, and 5drs. of powder. Mr. Pennell handled a 12-bore choke, by Moore & Orey. For his first barrel he used 1 oz. of No. 6 shot, and 3½drs. of powder. Exactly at ten minutes to three Captain Bogardus led off with a kill, and the time occupied in shooting the first hundred birds was one hour and twenty-five minutes.

Match for £600, at 100 birds each, 30 yards rise.

Captain A H Bogardus.....1 1 1 0 1 1 1 * 1 0 0 1 1 1 1 * 0 1 0 0 * 0
1 1 1 * * 1 1 0 0 1 0 1 1 1 1 0 1 0 0 1 1 1 1 * * 0 1 1 0 0 1 0 1 1 1
1 1 1 1 0 0 1 1 * * 0 1 1 1 0 0 1 1 0 0 1 1 0 1 * 0 0 1 1 * 1 1 1 0 1 1 1
0 0 * *—70.

Mr. H Cholomondeley Pennell.....0 1 * 0 * 1 1 0 1 0 0 1 1 1 0 * 1
1 * 1 0 1 1 * 1 1 * 0 0 0 0 1 1 * 1 1 0 0 1 0 1 1 0 * 1 1 * 1 1 1 * 1 1 0
1 1 0 1 * 0 0 1 1 1 1 1 0 1 0 1 * 0 1 1 0 1 1 1 1 1 0 0 * 1 1 1 1 0 0 1 1
1 0 1 0 1 0 0 1—68.

* Denotes the bird was killed with the second barrel.

Captain Bogardus led off with a clean kill, and as Mr. Pennell only feathered a fast one, the American was at once a much better favorite. In shooting at the first fifty birds Mr. Pennell had bad luck with two, as they fell dead just over the fence. In the 8th round Capt. Bogardus was fortunate with a strong rock, which was gathered in the right-hand corner. At twenty fifth round they had each killed the same number of birds, viz, eighteen. Commencing the second fifty, Captain Bogardus led off with a rattling second, and Mr. Pennell killed well with a similar shot. Another fine second was then scored by Captain Bogardus, and Mr. Pennell followed suit. Mr. Pennell was under his twenty-eighth bird; he then had hard luck with his next, which fell dead just over the fence. The same fate attended the American. In the thirty-first round both missed rattling good birds. In the thirty-third round Captain Bogardus was under a low flyer, but Mr. Pennell scored, his pigeon flying dead against the fence. In the thirty-fourth round Mr. Pennell made a long second.

In the thirty-eighth Captain Bogardus was behind a fast rock, and he again lost his pigeon, which fell dead just outside. In the forty-fourth round Mr. Pennell made a fine long second. In the forty-seventh Captain Bogardus made a fine second, and the bird fell close to the fence. Mr. Pennell followed suit. The American's forty-ninth pigeon got away. At the fiftieth round Captain Bogardus was one bird ahead. The time occupied in shooting the first hundred birds was one hour and twenty-five minutes. Captain Bogardus killed his seventy-fifth pigeon in style, but Mr. Pennell let his away. At the eightieth round both had killed fifty-six each. A high-flying bird was now missed by Captain Bogardus, and Mr. Pennell was unlucky, the wind just carrying his pigeon out. Captain Bogardus's pigeon fell dead close to the fence, and Mr. Pennell scored a very fine second. A left-hand rock now escaped the American. At the eightieth bird both were again level. Mr. Pennell, thanks to a rattling second, was now one bird ahead. At the eighty-ninth round a fine second was made by Captain Bogardus, but Mr. Pennell was unfortunate—his bird, cut to pieces, falling out. Again Mr. Pennell's pigeon just cleared the fence and fell dead. At the ninty-second round Mr. Pennell made a wonderful long second. It was again a tie, with only seven pigeons more to shoot at. A rattling pigeon went right ahead from Mr. Pennell.

After an interval of ten minutes, Captain Bogardus commenced the second hundred with a good kill from No. 1 trap, but his next bird felt dead over the palling. At the fifty-third round Mr. Pennell, for the first time, was a bird ahead; but at the fifty-eigth both shooters were again equal. The sixtieth pigeon was beautifully killed by Mr. Pennell, with a long second. In the sixty-third round the American made a fine cross shot, making his eighth kill in succession. At the sixty-sixth round Mr. Pennell made a grand second. Captain Bogardus at the sixty-eighth round grassed his pigeon with a fine left-hand second; but Mr. Pennell's bird, cut to pieces, fell out. Captain Bogardus scored a fine long second. Mr. Pennell was again most unfortunate, the bird, with both legs broken, twisting out. At the end of the seventy-fifth round Captain Bogardus was still one bird ahead.

The ninty-fifth bird of Captain Borgardus' was well killed, but Mr. Pennell failed to score, the Englishman being two behind. A teazer now escaped Captain Bogardus; a slow-rising pigeon was easily killed by Mr. Pennell. At the ninety-eighth both failed to stop good rocks. Captain Bogardus now put in a fine second, and Mr. Pennell missing; the American had the match won. The result of this interesting contest was that Captain Bogardus beat his opponent by two birds; the match being over at five minutes to six.

The score was not so good as was generally expected; but it must be taken into account that the high wind carried the pigeons away at a great pace, and the sun also was in the eyes of the competitors all the afternoon. The style of shooting of the two is very different, Capt. Bogardus standing with his gun well below the elbow, and never moving until the bird was on the wing.

—Mr. Ira Paine is now on an exhibition trip through the East, introducing his feather-filled balls.

Rational Pastimes.

O'LEARY AND "THE MAN WITHOUT A SHADOW."—Yes, it must be he—Chamisso's famous hero, poor Peter Schlemihl, the "Man Without a Shadow," who had so many woes and tribulations in the dear old Faderland, and was thought to be dead years and years ago. He has really turned up in America, and, if we may credit the newspapers, is at his old task of trudging bravely on. He has just defeated O'Leary at Chicago, by walking 250 miles in less time by an hour than the Irish pedestrian took to walk 275 miles. To be sure, this Schemehl spells his name with only one "l," and writes an "e" for the "i," from which incredulous persons might reason that O'Leary's competitor is not, in truth, the resurrected being of fame and fiction. But the unfortunate fellow who so rashly bargained away his shadow could not be expected to remember such an unimportant thing as the orthography of his own name. Besides, in obedience simply to the inevitable law of change and the mutations of time, he has had time enough, since Chamisso knew and wrote about him, to spell his name in half a dozen different ways, and any one way is as bad as another; so that objection amounts to very little. We ourselves are inclined to be credulous. Some day there may be chronicled a championship walk between The Walking Skeleton, the Wandering Jew, Rip Van Winkle, and this same Man Without a Shadow. The prize shall be one of the Golden Apples of the Hesperides, sent with Atalanta's best compliments; and old Time himself shall hold the stakes. But, bless us, where will we be then?

PENINSULARS OF DETROIT VS. THE HAMILTONS, ONTARIO, CAN.—This long-talked-of match between these rival clubs took place on the 9th inst. upon the Woodard avenue grounds, Detroit, on a wicket prepared with special care under the superintendence of the Managing Committee, and a better or truer wicket it is hardly possible to make. Hamilton won the toss and took first innings, Dale and White doing the bowling, and rare bowling it was, that of Dale especially so, for he bowled 30 balls for 4 runs and 5 wickets, and White 25 balls for 12 runs and 5 wickets, and this, too, against men with tremendous hitting power, combined with a splendid defense, and the whole eleven were out for a total of 17 runs. For the Peninsulars, White and Irvine first appeared at the wickets, Kennedy and Ferrie trundling the ball. And if the innings of the Hamiltonians was short, that of the home team promised to be shorter, for the first five wickets, to wit, Irvine, White, Davies, Calvert and Armstrong were all down for 4 runs. This brought Dale and Francis together; and if Dale's bowling was superb, his batting was equally so, for he made 41 in his best style, Mr. Francis playing equally well for 19. The remainder of the team did very little, as F. Hinchman was badly run out when he had settled down to work and was batting well. A misunderstanding also occurred between Bamford and Heigho, and the last-named was run out, the total of the innings amounting to 78. The Hamilton gentlemen (most of them) showed much better form in their second innings, and ran up a total of 96, thus leaving the Detroiters 36 to win, and this they accomplished for the loss of three wickets. In this match there was some beautiful all-round cricket displayed, and the smallness of the scores is accounted for in the fact that most of the time the bowling was so true that it could not be hit. Better matched elevens than these it would be hard to find. Both sides have some very powerful hitters, while others have a defense so strong that they can stay as long as "a man in possession." The Peninsulars have, perhaps, the advantage in bowling, as nine of their eleven can take a turn with the ball.

PENINSULARS—FIRST INNING.		PENINSULARS—SECOND INNING.	
White, run out	2	Irvine l b w, b Kennedy	7
Calvert l b w, b Kennedy	0	Littlejohn c Hope, b Ferrie	0
Davies b Kennedy	0	White run out	16
Irvine b Ferrie	0	Dale not out	8
Dale b Ferrie	41	Davis not out	4
Armstrong b Ferrie	0	Armstrong to bat	0
Francis c Ferrie b Kennedy	19	Francis to bat	0
Hinchman run out	7	Hinchman to bat	0
Bamford b Ferrie	6	Bamford to bat	0
Heigho run out	2	Calvert to bat	0
Littlejohn not out	0	Heigho to bat	0
Byes	1	Wide	1
Total	78	Total	36

HAMILTON—FIRST INNING.		HAMILTON—SECOND INNING.	
Hope b Dale	0	Wolverton b Dale	0
Wolverton c Littlej'n b White	4	Powell b White	3
Powell b Dale	3	Hope b White	6
Simonds b Dale	1	Gillispie c Davis, b White	2
Kennedy b Dale	2	Simonds b Dale	1
Harvey b Dale	2	Ferrie c Heigho, b White	8
Hope c Davis b White	0	Kennedy b White	3
Gillispie b White	2	Hope not out	36
Mulligan b White	0	Mulligan b Francis	0
Ferrie b White	2	Harvey c Davis, b Armstrong	23
Buchanan not out	0	Buchanan b Dale	12
Leg byes	1	Byes	2
Total	17	Total	96

STATEN ISLAND VS. ST. GEORGE'S.—A game last Saturday between these two clubs resulted as follows:

STATEN ISLAND.

First Inning.		Second Inning.	
Harvey b Moeran	18	b Soutter	16
Vessler s Marsh b Giles	5	c Moeran b Soutter	11
Lee c and b Giles	2	Not out	6
Manning b Soutter	1	b Soutter	8
Ronaldson b Soutter	21	b Soutter	6
Roberts c Giles b Soutter	18	b Soutter	1
Moore b Soutter	0	b Soutter	0
Donald not out	16	b Soutter	0
Stevens c Hosford b Soutter	0	c Banco b Soutter	12
Jarvis run out	9	c Hosford	1
Sprague b Soutter	0	Not out	6
Bye 1, leg byes 2, wide 1	4	Byes 2, leg byes 1	3
Total	94	Total	70

Bowling Analysis.—Giles, 84 balls, 33 runs, 1 maiden, 2 wickets. Soutter, 98 balls, 24 runs, 7 maidens, 6 wickets. Moeran, 48 balls, 33 runs, no maidens, 1 wicket.

ST. GEORGE'S.

Giles b Harvey	15	Sleigh hit wicket, b Sprague	8
Banco c Ronaldson b Stevens	9	Talbot b Sprague	0
Soutter c Harvey b Sprague	8	Ropes c Manning b Sprague	3
Marsh b Harvey	1	Holman not out	1
Hosford l b w b Sprague	2	Ketobum absent	0
Moeran b Sprague	14	Byes 1 wides 2	3
Total			64

Bowling Analysis.—Harvey, 84 balls, 23 runs, 4 maidens, 2 wickets. Stevens, 36 balls, 18 runs, no maidens, 1 wicket. Spregue, 74 balls, 11 runs, 6 maidens, 6 wickets.

SIX DAYS WALK.—John Ennis and George Guyon, the Chicago pedestrians, are walking a six days' walk at Buffalo, N. Y. They started at midnight of the 14th.

HARLEM ATHLETIC CLUB.—The regular open handicap games of the Harlem Athletic Club took place on the grounds of the Manhattan Club, Eighth avenue, this city, last Saturday. Three events were decided, comprising a two-mile walk and two dashes of 220 and 440 yards respectively, and in the three there were the usual number of 129 athletes entered. Ninety contested the 220-yard dash, in trial heats, in which the winners were: First heat, C. E. Totter, Manhattan Club; second heat, E. H. Van Arsdale; third heat, M. H Burch, Harlem Club; fourth beat, W. R. Brown, Manhattan Club; fifth heat, George Reblet; sixth heat, George Brady, Harlem Club; seventh heat, L. A. Sylvester; eighth heat David E. Bradley; ninth heat, F. W. Muhein. The race was finally won by C. E. Totter in 23⅕s., W. R. Brown taking second place, and George Reblet third, displacing Burch, who was run off the track, thus disqualifying. The 440-yard dash, which was next contested, had fifty entries. The trial heats were won as follows: First heat, Ralph Voorhees; second heat, E. Arnold; third heat, F. Miller; fourth heat, T. K. Hastings; fifth heat, W. S. Pryor; and the final heat gave the race to Voorhees. E. C. Holske essayed to beat the fastest mile record of 6m. 30s., but although fighting gallantly, made the mile in 6m. 32⅘s. The two-mile walk, after an interesting struggle, was won by J. H. Croll, S. A. A. C.; time, 17m. 12⅕s.; P. McCaffery, second—time, 17m. 21⅕s.; W. H. Purdy, G. A. C., third—time, 17m. 51⅕s.

—Frenchmen are proverbially epicures. French dogs ought to recognize what's good to eat when they smell it. All the dogs in the Paris Dog Show ordered Spratt's Dog Biscuit.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

W. A. G., New Dorp.—Have no blanks for pedigrees.

L. D., Washington.—Pedigree first-rate. Enter the dog as native, or English setter.

C. S. M'K., Stamford.—No rules for pistol shooting published which are standard. We send you last report, N. R. A.

SUBSCRIBER, Pine Glen, Pa.—Send your name to this office, otherwise we can neither use nor return your manuscript.

M. Y. R. A., Utica.—Of these two scores, which wins: 5 5 5 4 4—23; 5 5 5 3 5—23? Ans. The first, because the second has one inner.

G. A. W., Dover, N. H.—You will find laws of boat racing in Engelhardt's "American Rowing Almanac." Will be glad to hear from you.

MONEY ORDER, Allegheny, Pa.—Your address was incomplete as given in your letter of July 11. Please send full address to this office.

D. D. M., East Rockaway.—Choking one barrel for long shots might be most advantageous. Choked guns are at their best with No. 4's and B. B's.

C. H. B., Philadelphia.—A pup should be spayed when he is five or six weeks old. This operation is fully described in our issue of June 28, 1877.

A. T. H., Troy.—The firm you write about we do not know. If you hear nothing from them write us again. As to spaying see answer to C. B. H.

W. C., East Saginaw.—Write to Herreshoff Manufacturing Co., Bristol, R. I. They will probably send you plans of a catamaran for a consideration.

SUBSCRIBER, Stamford, Conn.—The woodcock season on Long Island begins July 3. We presume you would have no difficulty in finding birds there next month.

E. N. M., Washington, N. J.—As it has just been introduced it would be difficult just yet to judge of its durability. See no reason why it should get out of repair.

A. K. F., Sing Sing, N. Y.—Our opinion as to the legality of the action of the Westchester county Supervisors in extending the close season for woodcock was given last week.

W. N. C.—See answer to "Bird Lime." If you wish a book on Taxidermy see Correspondents' Column, F. & S. of a recent date. If you wish for instructions for the care of birds, send to Chas. Reiche & Bro., Chatham st., New York.

MIGAL, New London.—Use clear shellac varnish for the deck coverings of your shell. Put on one coat, rub down smooth, then another, treating it similarly, and a light third coat, if the canvas is new, otherwise a single coat may suffice.

A. C. T. B., Lake Megantic, P. Q.—Wild rice would find a ready market if any one should gather it. Some enterprising man might dispose of a large harvest of rice by advertising it in this paper. See our game columns for notice of wild oats.

J. H. B., Boston.—With the best disposition in the world it is against our rules to discriminate between rifles. All we can say is that the ——rine offered you is good. You must have seen the high scores made by it quite recently, as published in this paper.

ALBANY, N. Y.—I have a white fox terrier about two years old. He sheds his hair so constantly and profusely as to be very annoying. What can I do for it? He is healthy and appetite and spirits good. Ans. Good grooming and plenty of exercise is the best remedy.

ENQUIRER, Belleville.—Susie S., formerly the Bella, and famous in New Orleans waters, was built by Pat. McGlehan, of Pamrapo, N. J. She was launched July 15, 1869, and is 27ft. 6in. long, 11ft. beam and 31in. deep. She has a splendid record, and she has few equals in speed.

H. F. F.—Bogardus' "Field, Cover and Trap Shooting" may give you what you want. There are no particular rules for the conduct of a glass ball club captain in the field. The referee is supposed to direct the shooting. The captain should preserve order, and serve as a figure-head.

W. J. S., Princeton.—I send you a snake, found by me in a black bass which weighed two pounds. Pray inform me what it is? Ans. The snake which you sent appears to be a young hog-nosed adder (*Heterodon platyrhinos*). It is very different in appearance from the adult of that species.

A. F. H., Coatesville, Pa.—What is best thing to kill fleas on dogs? My Laverack is full of them; put coal oil on, rubbing well all over. Heir comes out now, but not the fleas. Ans. Insect powder each day for three days and then wash with carbolic soap, but you must see that your kennel is free from them also.

J. R. D., Norfolk, Va.—Have muzzle-loading gun that is rusty inside near the breech. Can same be removed by oil? If so what kind and how used? Would fine emery and oil injure the barrels? Ans. Would not advise you to use emery. A scratch-brush would be better. Oil the rusty place well. It is better to send it to a gunsmith.

C. C. O.—You will find in the Catskills fair trout fishing. Go to some of the mountain streams in Greene County. If you go to the top of the mountains about Hunter, Windham, or any of the neighboring towns, you will find plenty of bear tracks, and with a little patience may readily strike a bear. There are partridges and grouse there.

W., Attica, N. Y.—See answer to "Bird Lime." An excellent aquarium cement is prepared as follows: Two oz. powdered litharge, one oz. dry white lead, three oz. boiled linseed oil and one oz. copal varnish; make into a thick paste. Or make a putty of litharge and glycerine. These cements require at least one week to set.

W. A. K., Johnstown, Pa.—In a piece of ice I found a common red angle worm, which on being released crawled off lively as a cricket, none the worse from his long cold imprisonment. How is this? Ans. Animals of low grade, like the one in question, can endure without serious inconvenience extremes of heat and cold that would be fatal to more highly organized beings.

C. W.—Will you kindly inform me as to the derivation of the terms six-penny, eight-penny and ten-penny nails? Ans. The origin of the six-penny nails, etc., is supposed to be derived from the fact that in early times, so many nails were sold or made for a penny. In the thirteenth and fourteenth centuries, in rural England, nails passed as currency, just as they might do to-day among the Indians.

S. M. L., Belleville.—Wm. Emerson, of 486 First st., Williamsburgh, builds canoes on the Shadow model. They cost in the neighborhood of $100, according to style of fittings. They weigh about 70lbs. complete. The double-bladed paddle is superior to the single on account of the readiness with which it can be used on either side of the canoe. For work in narrow rivers and under overhanging brush, the single blade is the better. Consult Stonehenge and Hallock's "Gazetteer" about dog breaking.

F. Newark, N. J.—Will you prescribe for my setter dog 2½ years old? His coat is rough, flanks drawn in slightly, breathing labored after short run with coughing, good appetite. I kept him in stable until late I have him out of doors. When coughing a frothy matter comes up. Ans. Probably has bronchitis. Keep him quiet on light diet. Open his bowels with castor oil, then give him 2 grs. of quinine twice a day

J. K., Half Day, Lake Co., Ill.—1. Will a fine shooting double-barrelled muzzle-loader lose any of its shooting qualities if I get it altered to a breech-loader? 2. What will it cost to get it altered? 3. What game can be found in Pawnee Co., Nebraska? 4. What bore of shot-gun do you recommend for general shooting? Ans. 1. Not in the least. 2. $75. Send it to Clark & Snyder, Baltimore. 3. Quail, grouse, ducks, geese, etc. 4. For general game, deer included, a 10 bore; for winged game only, a 12 bore.

C. E. L., St. Paul.—For cruising in water likely to be rough a Shadow canoe is the best type, but will hold only one person unless made longer than the usual fourteen feet. The only canoe that will hold two is of the Herald type, built at Peterborough, Canada, but we cannot recommend them as cruising craft, being more suitable for hunting and river service. Rushton builds good canoes of all kinds. See his card in this paper, and write to him. See answer to "S. M. L." Write to Peck & Snyder, 128 Nassau st., for the latest work on rowing and training. That by Brickwood is, in our opinion, the best.

C. T. S., Philadelphia.—Can you inform me who builds the guns sold by Messrs. Read & Sons, of Boston, marked on rib and lock-plate, "Geo. Bury, London?" I have one I gave $60 for, and it shoots as well as some guns made by prominent makers, and the finish is good. Ans. The guns you inquire about are made by Scott & Son, and no better medium-priced breech-loaders are in the market. They range from $50 to $65, and the Messrs. Read & Sons have struck a great demand for them. It is the custom with makers to stamp certain grades below their finest with different names to designate them, as is done with watches, etc.

J. B. B., Atlanta.—1. Have a gun marked Manton, a breech-loader. Is it a gun made by that maker? 2. What is the proper charge of powder (Orange Duckling) for a 12 bore No. 6 shot? 3. Is choke-boring a decided advantage? 4. What is the best preparation for cleaning brass shells? 5. Is Dittmar as strong as black powder? Ans. 1. Manton died years ago. Your gun never was made by him. Could not tell who made it. Might be a good gun all the same. 2. 3 drs. of powder, 1⅝ oz. shot. 3. Yes. 4. Oxalic acid, a weak solution, excellent. Wash well in water afterwards, with a little soda. 5. Quite as strong. (See this week's paper.)

W., Utica.—1. Is an aquarium with an iron bottom injurious to fish? 2. How should fish be cared for that are kept in an iron aquarium? 3. How should the bottom be packed, and what with? 4. What is the best food for fish kept in an aquarium? How often should they be fed? Ans. 1. An iron bottom is apt to make the water oily, and is injurious to fish. 2. A cement bottom may be put over the iron. 3. Use fine sand and gravel. 4. According to the kind of fish. For gold fish, a fly or two and small bits of worms. Feed rarely, not more than once a day. The best aquaria are those which have aquatic plants in them. Then the equilibrium is kept up.

M. A. B., Baltimore.—1. Please inform me what is the name of the inclosed insect, as I have never seen its like before? 2. My Winchester rifle goes off in throwing out the old shell and putting in the new. If it did not go off just as it reached hole in the barrel would make it dangerous to handle. What is the cause of it? Ans. 1. The insect belongs to a species fairly known. It drops its eggs in the larvæ of wood-boring insects, and thus hatches its young. 2. The firing-pin, or snapper, must be foul so as not to draw back even with the face of breech-pin base. Clean the breech-pin thoroughly. If reloaded shells are used, seat the primer well down, below head of shell.

C. P. B.—I have an extra heavy 40.70 barrel on my Maynard rifle, 28 inches long and a little top-heavy, for off-hand shooting, though very accurate when rested on a tree. Would you advise me to have two inches taken off the muzzle, or to have the same weight of metal taken off by tapering the barrel from breech to muzzle? Would the operation of tapering be likely to bend or spring the barrel, or in any manner injure its shooting qualities? Are pin, or aperture sights the best for off-hand shooting? Ans. Would rather advise you to have two inches cut off than to have the ride tapered. The pin side in the one most in use for off-hand work.

BIRD LIME.—Several inquirers are requested to cut out and paste in their hats this receipt for making bird lime: Boil down linseed oil of the best quality until it becomes thick and glutinous. Boil in earthen pot, in open air, for two or three hours, and be sure that the cover of the pot fits tightly, so that the oil will not catch fire. When boiled, set away in tin vessels with tight-fitting covers. To use it: Select small, dry sticks, as thick as a straw and eight inches long. Sharpen the edges, smear them with the lime, and fasten the sticks into grooves cut in a stake stuck into the ground. Place a "call bird" as a lure. When the birds alight upon the sticks they pull them out from the main stake, and when flying, the wings, coming in contact with the lime, are pinioned to the sides.

TWIST AND GROOVE, St. Louis.—1. What twist in figures would be best for a 40 calibre with 70 grains powder? 2. Do you know of a better combination? 3. Do you think 40 cal: with 50 grains, 300 grain ball, Remington, will give a flatter trajectory? 4. Also for a Maynard. 5. Do you know anything about the —— rifle? Ans. 1. One turn in every 18 inches. 2. If you do not wish to shoot beyond 300 yards 50 grains of powder is better than 70 in a 40 cal. 44 cal. for from 200 to 600 yards, 70 grains of powder should be used. 3. Yes, either will give satisfaction. See advertisements. 4. Could only be determined by experiment. With present rifling a 300 grain bullet would do well for hunting 5. Very good gun, but just in the market. Not fully tried yet. Intended for a strictly military arm, we believe.

W. E. V., Dayton, O.—What is the comparative value of the ——, —— and —— breech-loading guns—all laminated steel barrels? 2. What is "laminated steel Damascus?" Is it better than others for barrels? 3. Is the spring which moves the breech placed to the left of the barrels on finer guns? 4. Please state the best mode to adopt to be able to shoot without winding? Ans. 1. Respectfully declined. We make no distinction between guns. 2. Laminated steel is one thing, Damascus another. The former means a barrel made of a compound of iron and steel, carefully worked. Damascus means wires of metal plaited and twisted, then re-rolled and worked into a barrel. 3. No criterion as to position, whether fine gun or not. 4. An idiosyncracy hard to cure. A hammerless gun would prevent your quailing.

THE INSECT.—We have unfortunately mislaid the address of a correspondent who sent us a very curious insect. The insect appears to have no English name. It belongs to the genus *Rhyssa* and is perhaps the species *Rhyssa atrata*. It belongs to the family of the Ichneumon-flies which have the very ugly habit of boring into the bodies of caterpillars, in which they deposit their eggs and upon which the young flies feed in their larval state. You will find the whole story in Packard's "Guide to the Study of Insects" pp. 193-6. The one sent belongs to the largest of the family. These fellows amuse themselves by flying around the trees where wood-eating insects are roaring their families and punching their eggs down the holes into the bodies of the hapless grubs in their wooden cells. An English cousin of this insect is said to bore through solid wood with their ovipositus.

E. O. A., Pataskala, O.—To blue a barrel is very nice work, and requires great skill. We give the receipt as follows, though it is better to send the barrel to a gunsmith to be blued: Tinct. of muriate of iron, one oz.; nitric ether, one oz.; sulphate of copper, four scruples; rain water, one pint. After thoroughly cleansing gun with soap and water, and having securely plugged up each end, cover it with slaked lime. When this coating is dry remove it with an iron scratch wire brush. Then apply a coat of the above fluid with a rag, and let it remain 24 hours, when a rust will have appeared. Immerse barrels in boiling hot water, and scrub thoroughly with scratch brush. Repeat this immersion until the color suits, which will be after two or three applications. Let barrels remain in lime water a short time after operation is completed.

G. N. J., Beaufort, N. C.—Paper sent as requested. Your query as to measurement of yachts would require a whole volume to fully answer. The following rules, however, are customary. Some clubs measure boats "over all," others on the "water line," and others take the mean of measurement "over all," or "on top," as you put it, and of that on "water line." The Nahasset Y. C. follows the most equitable rule, and takes length on water line, plus one-third the overhang measurement "on top." Would advise you to adopt a similar rule. Water line measurement must be taken on the normal line of flotation. For the best time-table write to Com. Kiley, 7 Spring Lane, Boston, for a copy of Herreshoff's tables. Cannot give figures here, as they vary for different sizes and distances. Hard and fast rules, giving one constant figure, no matter how long the course, are deceptive.

J. H., Boston.—For an engine of 5 H. P. (effective or actual, not nominal) a launch of the following dimensions is suitable: Length, 23 ft.; beam, 5ft. 3in.; draft, 2ft.; will seat about 8 persons. For 7 H. P. (effective): Length, 30ft.; beam, 6ft.; draft 2ft. 5in.; will seat about 14 persons. Screws: diam., 26in. and 28in.; and pitch, 36in. and 38in., respectively. Cannot give more accurate information without knowing size of cylinder and number of revolutions, so as to obtain actual H. P., developed and to adapt the pitch and consequent number of turns to the supply of steam. Better consult with a builder in your neighborhood. For plans of launches write to N. Y. Safety Steam Power Co., 30 Courtland st., N. Y.; or to Baird, Huston & Co., Beach and Vienna sts., Philadelphia—and mention our name. Price will be nominal. For address of ice-machine builders write to Neafie & Levy, Penn Works, Beach and Palmer sts., Philadelphia.

W. R. K., Lebanon, O.—No.—8 iron will make a good boat for your purpose, but will not be so readily worked as wood, unless you are an adept in handling iron. Would recommend light bar and angle-iron framing, otherwise make the wooden frame a little heavier than mentioned in our paper. When painted, the iron will readily stand salt water, but will occasionally require a fresh coat. A liquid compass is one filled with a transparent liquid, to prevent the needle flying about and vibrating, as it would in a small boat, rendering it useless. The liquid causes the needle and card (of metal) to revolve slowly and steadily. They are universally used at sea nowadays. No American work on yacht sailing is in existence, and English yachts differ very much from our own. Vanderdecken's "Yacht Sailing" (his small book) is a good one, and will teach you the principles of sailing, though more in detail than you may need. Send to Van Nostrand, 27 Murray st., for it; price about $3. A more expensive, but more valuable and useful work is that of Dixon Kemp, just published, but not yet received in America; price about $8. Nothing like experience, however, in sailing a small boat. Send to Merrill's Sons, 179 Water st., N. Y., for list of charts, and select from them. A cat-boat is easier to handle by a single man than a sloop. Not much difference as to safety. Having cut off the bottom at water line, D, would prefer giving less dead rise by dropping the bilge a little lower. An 8ft. centreboard is ample. For sail, 440 sq. ft. is sufficient. Have two line of reef points in it. What ballast you carry to bring the boat down to her lines, should be well secured to the bottom to prevent shifting in a squall. Step the mast right in the "eyes" of the boat, and make the mast-step and deck frame strong; then she will need no shrouds or stays. Length of cabin (16ft.) is all right, but do not like a turtle back, on account of liability of slipping off when going forward. Leave ample gangway room on the sides. Subscription for six months to paper is $2, post paid. No charges, but if you build send full account.

COCA ELIXIR AND DR. CARVER.—The only stimulant used by Dr. Carver, during his hard work of breaking 5,500 glass balls, was to take an occasional draft of Coca Elixir, which a careful friend had insisted on furnishing him. This well-known specific, used by the Indians of Peru, is capable of keeping up human energy for an indefinite period without any bad effects.

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, JULY 18, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, July 19.—Quincy, Mass., Yacht Club Championship Regatta. Ennis-Guyon six days' walk, at Buffalo. Trotting: Plainville, Conn.; Toledo, O.

Saturday, July 20.—Nahasset, Mass., Yacht Club Open Regatta, at Nahant. Rutherford Park Open Amateur Regatta. Ennis-Guyon race completed. Running Meeting at Saratoga.

Monday, July 22.—Running Meeting as above.

Tuesday, July 23.—Trotting at Gettysburgh, Pa., and Cleveland, O., Running Meeting as above.

Wednesday, July 24.—Trotting as above. Running Meeting as above.

Thursday, July 25.—Hanlon-Ross rowing match on the Kenebecasis. Trotting as above. Running Meeting as above.

AQUATIC COBBLERISMS.—The "Shoes" toed the mark at Henley and buckled down well to their work. They might have walked over the course, but there was not enough bottom in awl of them to last. When Nadeau pegged out, their slipper-y chances, as a slangy alle-gaitor would aver, were sewed up, and the crew was waxed. An Oxford-tie would have necessitated a rubber to determine the sole winning k-heel. But what boots it?

DOCTOR CARVER.—Dr. Carver's eyes are much better. The right eye is the most inflamed. He is able to distinguish objects more clearly. Physically he is quite as well as ever, and but for his eyes says that the day after the match he could have repeated the feat. The oculist who is treating him thinks he will be all right in a few days.

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of or more, $3 per annum

GARDENING AS A RECREATION.

OF all occupations in the world gardening is the one which best combines reposo and activity. It is rest-in-work, or work-in-rest. It is not idleness; it is not stagnation, and yet it is perfect quietude. Like all things mortal, it has its failures and its disappointments, and there are some things hard to understand. But it is never without its rewards. And, perhaps, if there were nothing but successful cultivation, the aggregate enjoyment would be less. It is all the better for the occasional shadows that come over the scene, and the discipline is most salutary; it tries one's patience, and it tries one's faith. Even in the worst of seasons, there is far more to reward and encourage than to dishearten and disappoint; there is no day of the year without something to afford tranquil pleasure to the cultivator of flowers, something on which the mind may rest with profit and delight. If there is no new surprise, no fresh discovery, there is always something to be done. "The garden is a constant source of amusement to us both," wrote Dr. Arnold in one of his delightful letters—he was writing of himself and wife—" there are always some little alterations to be made, some spot where an additional shrub or two would be ornamental, some plant coming into blossom, so that I can always delight to go round and see how things are going on." In the spring and summer there is some pleasure—giving change visible every morning, something to excite or fulfill expectation. And even in the winter flower-culture has its delights. If you have a greenhouse or conservatory, no matter how small, you have an in-door garden, in which you may watch some changes, and enjoy the same delights. In parlor or in tenement, with rich or poor, there are few states of life in which floriculture is not an available enjoyment, and in many cases a positive blessing—it is equally accessible to all. "As gardening," it was observed by Sir William Temple, who has had a new lease of life in one of the best of Macauley's " Essays, " has been the inclination of kings and the choice of philosophers, so it has been the common favorite of public and private men, a pleasure of the greatest, and the care of the meanest, and, indeed, an employment and possession for which no man is too high or too low."

QUIBBLING TO SAVE THEMSELVES.

Upon learning of Mr. Lee's victory over Mr. Edwards Moss at Henley, and the manner in which the prize was taken by the latter gentleman upon a technicality, fair enough in its way, but not very conclusive as to his superiority, the Triton Club of Newark sent the American amateur the following by cable:

NEWARK, July 9, 1878.

GEORGE W. LEE, care *Bell's Life*, London, England:—
We wish you to row in the Metropolitan regatta. Will you enter?
TRITON BOAT CLUB.

To this an answer was received on the 15th inst.:

LONDON, July 15, 1878.

TRITON BOAT CLUB, Newark, N. J.:—
They will not let me enter. They are afraid of me. LEE.

The telegrams explain themselves. Mr. Lee evidently has made application to row and permit him a chance to retrieve his mistake at Henley as well as to test his ability to claim the amateur championship by pulling against the two best sculllers of Great Britain. This application has been denied. Evidently, for a time at least, our cousins' ardor to meet Americans has been cooled. Lee has been barred out; he is too much for them, and must return home with such satisfaction as he can win from a knowledge that British oarsmen must resort to quibbling to save themselves from defeat.

TO OUR CORRESPONDENTS.

The late William Cullen Bryant had a whole list of words which belonged to the *Codex Expurgatorius* of the *Evening Post*. We do not wish to be purists, but if there is a word we dispise, and which Richard Grant White gets into a fit over, it is that word *Donate*. Though you may find it in Webster it is not English. " Mr. Spriggins donated a barrel of dog biscuit to the Oshkosh dog show." How much easier it is to say, "Spriggins gave, or presented, a barrel of dog biscuit." One string of words, correspondents love to write, is to call a man " Whole-souled"—" The genial." Sometimes it is Noggins, who keeps the little grocery, who is " the whole-souled and genial Noggins." Now, Noggins may be really a very good and decent kind of a person and all that he is represented, but yet not be " whole-souled and genial." We invariably run our pen through " the whole-souled and genial fellows," believing that they will pass down to futurity in the columns of the FOREST AND STREAM AND ROD AND GUN without these high-sounding yet empty titles. Years ago we tried to kill "speckled beauties," meaning trout, but " speckled beauties" refused to be stamped out. The " genial and whole-souled Noggins who caught the speckled beauties." We can scotch as to the first part, but not as to the fish. Custom demands it now. Mr. Blackford, famous for his trout shows, once showed us forty-five newspaper reports of his May trout exhibition from all parts of the country, and forty-three of the papers had for a head line " Speckled Beauties!"

Another combination of words is the True Sportsman. " Noggins, that whole-souled and genial fellow, that *true* sportsman," makes us hate Noggins worse and worse. The less high-sounding words you use the better. Paschal once wrote a not very long article, and excused himself by saying, " I had no time to be shorter." We are the recipients of a vast amount of correspondence, which we are delighted to give space to in our columns. We are only too glad to acknowledge our indebtedness to our contributors. Still, sometimes it is hard to find the grain of wheat in the cart load of husk. A very intelligent person catches three trout, and sometimes a story is sent us about three fingerlings quite as long as if three elephants had been stalked through jungles and finally slaughtered. It may be very amusing to the author, but it is wearisome to the editor, and, if he prints it, boresome to the readers. We do exercise a good deal of judgment in making up this paper, and with regret are forced to exclude many really good articles, as far as the facts they contain go, because they are bundled up and smothered in verbiage. In this warm weather, then, tell your stories briefly, good friends, if you please.

THE LASSO IN FULTON STREET.—Seated in our chair, deeply absorbed in constructing an editorial (the office being quiet for the nonce), we heard a stealthy tread. We were too busy even to cast an eye on the intruder, and away ran the pen over the paper. Then we heard a little *swish* in the air, and something darted out like a long white snake and enveloped us. It was so quietly, so neatly done, that we were half unconscious of what it was. Perhaps, after all, we were dozing, for it was so warm. Presently we felt the chair move quietly, and we were forthwith yanked into the middle of the room. Somebody had lassoed us. Whether we were indebted for this favor to Dr. Carver or to Mr. John Omahondru we are not quite certain. Both of these gentlemen looked as innocent as lambs. The lasso was round the chair, but no one had the other end of the lasso in hand. We were assured by both these gentlemen that when a lasso has been long in service that it made loops of its own accord, and as that particular lasso—though it had caught in its wild career many a buffalo, broncho and steer—never yet had caught that strange hybrid a quill-driver; so accordingly the lasso, of its own volition, unassisted by human hands, had leaped out and entangled us. Just then the FOREST AND STREAM AND ROD AND GUN Errand Boy, a very important personage, indeed, and dignified withal, having incautiously crossed the floor, was caught up by the right leg as he lifted that member from the floor, and the pile of copy he had in his hand was scattered. Mr. Omahondro offered to throw that lasso at the pen which stuck in the editorial inkstand; but we declined to see this *tour de force*. "It's the neatest thing in the world," said Texas Jack; " you don't use force, only knack." Saying this, the publisher of the paper had in a trice the lasso thrown over his head. But the publisher of this journal knows a trick or two. So seizing the lasso where the iron ring is attached to it, he held that fast so that it couldn't be tightened on him. "You are up to the trick," cried Dr. Carver. "Some one must have shown you that. Just get a good grip on the ring end of the lasso, and it can't be made taut on you. This lasso is made of buffalo hide and is light and supple, but will hold all creation. On the plains we don't call it a lasso, only a rope; you never hear lasso. Now Jack and I will go on the landing of the stairs here, and as there are crowds of people coming up to the office all the time we will have lots of fun for the next half hour roping them. It's so hot that people might be obliged to us for helping them up." We positively declined this general offer of assistance. " Well," said Mr. Omahondru, "suppose you let us stand at the office window. There is that fat woman with a basket of bananas. I can hitch up her basket here in three seconds, and the old woman to boot, if you say so. It would be a mighty good help if I threw the rope round the neck of that poor old horse that is straining at those bob-tail cars that go round that street there." Again we had to decline this philanthropic offer. " We never saw such an unaccommodating set of people as you are," cried out both Dr. Carver and Texas Jack in a single breath, apparently quite disappointed; "are there not chaps that loaf round a newspaper office—fellows that bore you?" asked Dr. Carver; " there never was such a chance. Just you spot them for me, and we will give them the least bit of a choke in the world."

MIDSUMMER JAUNTS OUT WEST.

BY THE EDITOR.

JAUNT THE FIRST.

LOUISVILLE, Ky., July 3, 1878.

BROTHER EDITORS: Last year you know I made my vacation rambles during the waning summer and early autumn. The adventure was a sort of *reconnaisance* of the most desirable fish and game resorts of the three States of Michigan, Wisconsin and Minnesota. It proved so attractive in all respects, as set forth in my letters to FOREST AND STREAM, that I determined this year to revisit at least a portion of the territory then covered at a season when angling was at its best. I felt almost guilty to leave you in the heat of the first torrid term, to navigate our craft in stress of weather, while I threw off the burdens and the responsibilities; but I find that the same fervent sun which scorches you in New York, glows in duplicated fervor here. Therefore, I pray you take such comfort as may be evolved from the companionship of misery; make frequent visits to the ocean surf; and be as happy as you can. For myself, I shall go north at once and leave the chances of to-morrow to those who pin their faith and fortunes on horseflesh. I have staked no money on the great event [Molly McCarty *vs.* Ten Broeck, July 4th], and it is too hot to stay without pecuniary inducement. Even the remonstrances of many friends cannot detain me here. They

have been more than kind, albeit the warmth of their friendship is tempered by mint juleps. The only coldness between us rests on ice.

What a host of sportsmen are congregated here this week! There are more brethren of the angle and trigger than I ever saw before at one time,—more *Southern* sportsmen than one would suppose could have survived the distress of the past two decades. Among them the FOREST AND STREAM has a large and loving constituency; and I am convinced that a return of prosperous times is all that is necessary to quadruple the circulation of that paper in the South. The Louisville Gun Club, of which J. V. Cowling, Jr., is President, and W. J. Watkins Secretary, comprises a hundred good men and true who are always ready to book their record at the trap or elsewhere. I am indebted to many of its members for courtesies, and especially to Mr. Cowling and his big brother, the Doctor, (there are three brothers of them, who average six feet two inches in height,) who is editor of the Louisville *Medical News;* to Horace Scott, Esq., of the Louisville and Indianapolis Railroad; and to M. Lewis Clarke, Jr., President of the Louisville Jocky Club. The race course, a short distance from town, is one of the finest in the country and occupies a most picturesque location. It is easily reached by carriage and horse cars. The Club has a refectory on the grounds for the exclusive use of members, and all the appointments are of the best order. Outside of Jerome Park I have never seen gathered together at a race such a respectable company of gentlemen and ladies as here. So conspicuously absent are all the objectionable features of a course that Moody could pitch his tabernacle on the infield without misgivings, and the most pious circuit-rider of the Methodists measure paces with the jockeys, in the same delightful harmony which will prompt the millennial lamb to hobnob with the lion. I wonder now why I have not visited Kentucky before. Her beautiful "blue-grass" waves such a welcome that it has become a synonym for hospitality and social interchanges. Her deep-cut streams flow through rolling lands of bucolic beauty, penetrating to far-off Edenal retreats which that simple child of Nature, Daniel Boone, loved so much. On a thousand hills the choicest herds are gathered, and the blood of Berkshire, Southdown, Jersey and Mambrino fills their veins. Baronial demesnes, with grand old homesteads and huge modern granaries, diversify the landscape, while the clik of the harvester and the hum of the thresher make musical the ingathering of lulsome crops. Underlying this upper realm are innumerable subterranean lakes, and an independent fluvial system whose pulsations and circulating flow are sometimes felt in the land above, manifested by mysterious ebbs and unaccountable recessions of waters long deemed stable or immutable. Eyeless fish swim in their depths, and sable gondoliers glide like wraiths along arched corridors and covered channelways, whose echoes are more sensitive to whispers than the Venetian Bridge of Sighs. Great grottoes extend for miles and miles, from whose lofty roofs weeping stalactites hang, like the drapery of mausoleums; and the tears of pre-Adamite mourners which drop to the floor, congeal into pavements, to be trod by the present living. New mammoth caves are discovered before one half the labyrinths of the old have been investigated; and if we could only remove the tellurian crust we should find the revelations of our subterranean world not less startling than those we are taught to look for heaven-ward, in the coming days.

Hospitality spreads itself all over Kentucky like an unction. The dairies are wreathed with golden smiles, and the glory of shining tins surrounds each farm-house with a halo. The tide of milk and honey is always at the flood. The low of kine is moo-sic to the wayfarer, nor will the baa-carols of the sheep debar the visitor from wishing to come again.

Because this fair and teeming State was untrodden ground to me I made a wide detour to visit it at this unseasonable season. Besides, my usual routes to the West had become a familiar story. The passes of the Alleghanys by the Pennsylvania Central, as well as the highways by the seaboard and lake shore, were like the romances of the masters, not less void of interest by reason of frequent perusal, but to be enhanced by comparison with others. I do not like beaten paths of travel. Any place revisited is doubly attractive, but the senses will tire of repetitions in time, and I often wonder that summer saunterers who make no haste, do not more frequently vary their routes than they do, and thus dispel that *ennui* which accompanies stated rounds of aestivation and makes "pleasure" a misnomer. My choice this time was by the Old Dominion Steamship Line from New York to Richmond, and thence by the Chesapeake and Ohio Railroad, across the parallel ranges of the Blue Ridge and Alleghanys, to the pastoral banks of the Ohio River. What a shifting panorama of most varied beauty lies along this route! What comfort attends the passage by the sea, in comparison with the dusty tour by rail! I was surprised to hear that the heaviest travel by this steamship line was during the months of July and August, showing that the luxuries of pure air, an excellent table, and cool refreshing slumber, are appreciated at least by those who have learned to come this way. The journey is by no means tedious or monotonous. For instance, we cast off from the pier at three o'clock P. M. on Saturday. Our state rooms have been engaged two days previously, and with prompt attendants at the ship to secure baggage checks and care for small parcels, one goes aboard as little flustrated as need be, and quietly contemplates the wharf-tenders who cast off the hawsers and let the big craft glide into the stream. Then follows the panorama of the busy harbor, the guarded Narrows, the shifting lower harbor, Sandy Hook and the receding Highlands. By twilight we are fairly at sea and running close to shore, for the ocean is as placid as a lake and the voyage is like a yacht cruise all the way. Ten thousand lights gleam from the caravansaries and cottages at Long Branch, and we can hear faintly the sounds of music which the west wind wafts from the Ocean House. Evening and morning follow, and I can fairly make out with my glass familiar places along the Maryland and Virginia shore, which successively come in view. I have one of friend Waldstein's best marine glasses, and as I sweep the line of the Sinepuxent beach where Ocean City stands, I can fancy that I see the hotel and the little shooting-box on the point near by, where I have been quartered by invitation of its proprietor, the Hon. Stephen Taber, on my goose and duck shooting expeditions in the fall. Further on is the Chincoteague Light-house, which flanks Chincoteague Bay and the outlying island, twenty-five miles in length, famous for its snipe and woodcock shooting. Outside is the Five Fathom Light-ship, at which we toss a sealed packet of papers for the case-hardened sailors to pick up and peruse in the leisure hours of their lonely watch. Our course is parellel with that tongue of land cut off from the domain of Maryland, which comprises the Virginia counties of Accomac and Northampton. Its extremity is Cape Charles, which, with its *vis-a-vis* Cape Henry, are the flanking outposts of the Chesapeake Bay. We are passing some of the finest and least visited sporting grounds of the seaboard, and can distinctly distinguish Hog Island, Cobbs Island and Mockhorn Island, localities which initiated sportsmen have visited for years in a quiet way, bagging more snipe, woodcock and ducks in a week than their less fortunate or less venturesome friends can do elsewhere in a season. In summer there is the best kind of sheepshead, perch and rock (striped bass) fishing, and on the mainland are quail, plover and rabbits. Nowadays easy access is had by way of the Old Dominion steamers to Lewes, Del., and thence by rail, or by all rail via Wilmington, Saulsbury, etc. The country is vastly more picturesque and accessible than the Currituck region, and the promise of good returns is more positive. One of these days sportsmen will wake up to a realizing sense of the fact. If they do not, it will not be the fault of the writer, or of the FOREST AND STREAM—the telephone which repeats his utterances from far-off places. I make it my business to investigate for my constituency, and although the exploration is a pleasure to me, I am conscious that my efforts are saving them much time, money, and many hard knocks.

Crossing the mouth of the Bay, we reach Norfolk by three o'clock P. M. (twenty-four hours after leaving New York), and while the vessel is discharging and receiving freight have ample time to visit the ancient city and the Navy Yard at Portsmouth. Meanwhile we have passed Fortress Monroe, Old Point Comfort, the Rip Raps, and Craney Island, the scene of the first iron-clad combat. When the gaslights begin to gleam in the city, the vessel gets under way and heads for the mouth of the James River. Richmond is 160 miles distant. In the interval taken for sleep, the tourist misses little which is worth seeing, for the banks of the river are low and uninteresting, and its bed flows with a liquid of a coffee-like color, caused by the washings of the red clay soil. One should be on deck at daylight. For the next four hours, until the destination is reached, at nine o'clock, the scenery well rewards the sightseer. The tourist who is willing to devote three days or more to Richmond will be well repaid. It is the most beautiful of Southern cities.

If one wishes to travel the entire route of the Chesapeake and Ohio Railroad by daylight, he should take the morning train and proceed no farther than the White Sulphur Springs. Two nights and one day at the Springs will suffice. Between this place and Kanawha Falls, a distance of 105 miles, the mountain region is brimful of romance to the lover of scenery, and of every satisfaction to the angler. The best points for trout fishing are at Quinnmont, Hawk's Nest and Kanawha Falls. At the latter place are also large bass, wall-eyed-pike and white perch. The hotel accommodations are good, and the fishing places quite accessible.

If eastern tourists have not yet selected their route for summer travel, they will do well to take this one for a change.

I will defer a description of this mountain region for my second letter. The materials at hand would exhaust the space of three letters.

HALLOCK.

JAUNT THE SECOND.

ROBERT'S REST, Neenah, Wis., July 10.

DEAR BRETHREN: How we can overcome distance and space in these modern times! It was actually more of a task to reach the Wisconsin wilderness forty years ago than it now is to compass the globe. I dated my first letter at Louisville, July 3. In twenty-four hours afterward I was set down here, at a point 400 miles due north. I move faster than my pen can follow. The record of my trip is hardly begun; and to do justice to the attractions by the way I must pick up my back trail at Richmond, while I sit here at Neenah in the cool shade which rests on the banks of beautiful Winnebago Lake. The heated term is past and the air is cooled by repeated showers. Grass and foliage gleam with a vivid green.

It was hot in Richmond, but the summer sun had not yet sered the garniture of spring. The dark-leaved magnolias were magnificent in the full glory of their bloom. Roses filled the gardens and terraces with their perfume. Bright hues of parti-colored flowers contrasted with the fresh verdure of variegated shrubbery and closely-cropped lawn. Overarching trees embraced its aristocratic streets. Next to Washington, I am inclined to vote Richmond the most beautiful city of the Union. Its natural features make it so. Behold its seven hills; the extended sweep of their undulating lines; the majestic flow of the winding James, broken by wooded islets and foaming rapids; the far-reaching expanse of bottom-lands, and the lines of out-lying timber which trace the tributary streams! Art and the necessities of commerce have laid upon these an improving hand, adding new charms and utilizing the whole. Out of the welling bosom of the constant river they have led a canal which follows its sinuous bank in a deep and quiet flow for many miles; and having performed its offices of turning many mills and factories, and floating out freights from the interior mines and fields, is returned again to the river below, to swell the volume of water which bears large vessels to the sea. Long bridges cross the rapids in numerous dizzy spans; high bluffs make the river panorama picturesque; park, and open square, and race-course diversify the settled town; streets which were once laid in ashes are now flanked with solid ranges of substantial stores; imposing structures crown each separate hill; and from the rounded crest of Capitol Square, where the bronzed heroes of Virginia stretch forth their honored hands, the stately old legislative hall lifts up its Corinthian columns and overlooks the whole. Nothing can be more agreeable than a morning or evening drive through the streets and suburbs of Richmond after one has landed from the ocean steamer. The traveler by rail arrives from a long journey wearied and disinclined; but the contrast of enjoyment is enhanced by the rest of a sea voyage and the bracing whiffs from the salted sea. And this is why I have recommended the summer traveler toward the West to take the Old Dominion Steamers from New York to Richmond and the Chesapeake and Ohio railroad from thence to the Ohio River. This is why I chose this route myself.

Of course I saw the boys at Richmond. We sportsmen always speak of each other as "the boys." No masonry or secret order is bound by such golden links as the fraternity of sportsmen. We are social, ardent, considerate, liberal minded, sympathetic, benevolent. We bear each other's burdens, share each other's joys, respect each other's confidences, defend each other's good name, exchange photographs, and divide our last biscuit and ammunition. Sometimes we shoot over borrowed dogs; and herein, let me whisper, lies the only danger of breaking the *entente cordiale*. If the borrower is not prepared to concede at the outset that his friend's pointer is the staunchest dog he ever saw; that he will draw on game, drop to shot, retrieve better and work up the out field quicker and more thoroughly than any other dog; then let him not borrow. The only way to cement a link so broken is to pass the flask, acquit the dog, and declare that your own stupidity was the fault. I saw good dogs in Richmond and good guns It is gratifying to note the increase of the little luxuries and conveniences of a sportsman's outfit at the South since the war. At the close, only the negroes enjoyed the privilege of carrying guns; now clubs of genuine sportsmen are multiplying throughout the land. At first, Virginia was slow to move, but she has since organized a most efficient State Association, with an energetic president (Chas. A. Palmer, Esq., of Richmond,) and numerous subordinate and independent clubs, devoted to the protection and propagation of game and fish, and incidentally to the taking thereof at the proper seasons. The Old Dominion is rapidly assuming a front place, and will very soon be foremost as a conservator of the species. She is attending strictly to business, and tabooes all pigeon-popping at sessions and deliberative conventions as wholly irrelevant and out of place. I think we can all learn wisdom from the Mother of States. The result of her missionary work, especially among the mountains, is most gratifying, impelling from the lawless a fear of combined organization, if not a respect for the law itself. Common sense is taking the place of hereditary heresies, and fish and game are consequently increasing in quantity. The press is an earnest coadjutor and disseminator of information. The venerable editors of the Richmond *Whig* and Richmond *Dispatch*, Messrs. Cowardin and Mosely, are foremost in the good work. I was honored by marked courtesies from these gentlemen, and by Messrs. Ott, Palmer, and other prominent conservators of game. Mr. Macdonald, who has succeeded Col. Mosely as Fish Commissioner, is a most competent and well-informed officer, whose services are much valued. Socially, Richmond is whole-souled and unaffected. Her open hand is extended, and the worthy may consider themselves honored by its grasp. I passed one pleasant afternoon at the 200 yard range of the Rifle Club. It is located by the James River, below the city. A few of the members drove out to give me an opportunity to inspect the grounds. We fired a few rounds at the Creedmoor and Wimbledon targets, for practice, the best scores falling to Messrs. J. W. Jenkins, Chas. P. Stokes and Wm. Euker, the latter making 48 out of a possible 50 points. (He euchred us.) The Richmond Rifle Club has a goodly membership and a fair attendance at the range on practice days. Altogether, Richmond is a most desirable place to visit, and in the fall the sportsman will be sure to fill his bag from the neighboring marshes, fields and river bottoms. Should he wish larger game than quail, ducks and snipe, the Chesapeake and Ohio railroad is at hand to convey him to the Blue Ridge Mountains, where he will find deer, bears and turkeys in abundance, to say nothing of cats, opossums and raccoons.

If the summer tourist has time to examine the scenery along the entire line of this romantic thoroughfare, he will do well to take the morning train at Richmond, which will drop him at the White Sulphur Springs by supper time. The next day

will occupy the remainder of the route; but the whole journey may be accomplished, if need be, in twenty hours. By taking the 9:45 train at night, daylight will overtake him before he reaches the mountain region. But the intermediate section is interesting and diversified. From the time when he emerges from the great tunnel, 3,927 feet in length, almost at the very wharf where the steamer lands, until he reaches Staunton, his attention is fully occupied with historical associations, natural objects, and works of engineering art. At the threshold of his journey he crosses the Chickahominy, which was the boundary of the field of combat around Richmond in our civil war. All around are other battle fields of early Indian warfare, and later, of the Revolution. Near Hanover Court House, eighteen miles from Richmond, Patrick Henry and Henry Clay were born, and the intervening country is rich with bending orchards and fertile fields of tobacco and grain. At Hanover Junction, twenty-six miles, the C. and O. Railroad crosses the Richmond, Fredericksburg and Potomac Railroad, and follows the ridge which divides the watershed of the North and South Anna rivers, to within five miles of Gordonville; and then descends toward the Rivanna River on the slopes of Matchunk Creek, skirting the foothills of Southwest Mountain and traversing one of the richest agricultural belts of Virginia. Ninety-five miles from Richmond it passes through the water-gap of the Southwest Mountain. Here is Monticello, the home and resting place of Thomas Jefferson, and two miles farther is Charlottesville, the seat of the University of Virginia, founded by the "sage," and the centre of one of the most productive and locally attractive districts of the entire Southern country. The dome of the University overlooks a landscape diversified by vineyards, orchards, gardens and farms, while several woollen mills, a foundry, a manufactory of agricultural implements, and many other industries, are further suggestive of the wants and resources of the vicinity. This is the celebrated Piedmont country (foot-of-the-mountains,) and the knobs and domes of the Blue Ridge range surround it like an amphitheatre.

Ten miles from Charlottesville, the road crosses Mechum's river at an elevation of 550 feet above tide-level, and then commences the ascent of the Blue Ridge, passing this mountain barrier at an average gradient of seventy feet per mile. It was just at this point that daybreak overtook me, and drawing aside the curtains from the window of my sleeping berth, I watched with increasing interest passing objects as they were revealed by the opening morn. For the next fifteen miles we toiled gradually skyward. Occasionally the vision was eclipsed by passage through a tunnel, and in this way three mountain spurs were successively penetrated. The landscape was indistinct in the shadowy dawn, but we can believe the guide-book when it says that it is one of the most enchanting of panoramic views. "The upper valleys of the Rockfish River and its branches are spread out far below, enclosed on the left by the Southwest range of hills, and opposite by the more elevated Blue Ridge—with a very pleasing contrast of wild with cultivated ground; of farms, groves and vineyards opposed by rocks, ravines, and the roughest aspects of mountain scenery."

Over this Arcadian land the crescent moon was still shining brightly, throwing its effulgence upon the mountain peaks and mellowing the gloom of the valleys; and as I gazed intently at it, it was suddenly eclipsed by the passage of the train into a tunnel whose length seemed interminable. This was the main tunnel of this stupendous work of engineering, 4,260 feet in length. When we emerged we had traversed the highest peak of the range, 1,500 feet above tide-level; the "Pinnacle" was behind us, and the moon was shining over the notable Valley of Virginia. HALLOOK.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2. Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

DYNAMITE FISHERS.—The unusual abundance of black bass and other choice Lake Erie and Niagara River fish in the markets led the President of the Niagara Falls Shooting Club to inquire as to their capture. The result of his investigation is that the fishermen are using dynamite. In addition to the great quantities of large fish thus killed are thousands of small ones which are thrown away as unfit for food. Examples should be made of these men.

NEW JERSEY PROTECTION.—The Jersey City Heights Gun Club, a most enthusiastic and enterprising young club, has made a very commendable move for the better protection of game throughout the State of New Jersey, as will be learned from the following letter, issued by its Secretary to New Jersey game associations. The West Jersey Game Association is a model organization of its kind, vigorous in the enforcement of law, and active in fostering and increasing the game under its jurisdiction. If a State organization could be formed which should unite the zeal of these two clubs with the strength which comes from union, we may with reason anticipate the best of results:

JERSEY CITY, July 12, 1878.

SECRETARY —— CLUB:

Dear Sir—At a meeting of the Jersey City Heights Gun Club, held Wednesday, July 10, 1878, it was resolved that the Secretary of this Club be instructed to communicate with the Secretaries of the various clubs throughout the State, requesting them to unite with us in the endeavor to bring about the formation of a State Association, similar to those already existing in New York and in almost every other State excepting our own.

With this end in view we have determined to request each club to elect three (3) delegates to represent them in a convention to be held at the Clarendon Hotel, 495 and 497 Broad st., Newark, on Thursday, Aug. 8, at 1 P.M. The object of the association will be the securing of proper legislation for the protection of wild birds, fish and other game during the close season; for the vigorous enforcement of enacted laws; for the promotion of kindly intercourse and generous emulation among sportsmen, the elevation of this truly gentlemanly and healthful sport, and an annual competition or State Tournament, to be held at such a time and place as may be designated by the Association from year to year.

We will deem it an especial favor if you will bring this matter before your club, and urge them to unite with us in giving this worthy object their earliest consideration and hearty co-operation, and that you will communicate with me at as early a date as possible, forwarding the names of your delegates.

As my means for acquiring information as to existing clubs is, to a certain extent, limited, I would kindly ask you to bring this matter to the notice of any club in your vicinity or county, urging upon them immediate action in this important and excellent undertaking.

Yours very respectfully, P. W. LEVERING,
Sec. Jersey City Heights Gun Club, 688 Newark av.

CAUGHT IN THE ACT.—We notice with pleasure the catching and punishing of all who fish in the wrong way. A correspondent writes from Tomah, Wis., under date of July 6:

"Last spring I sent you notice of the fact that there had been effected an organization for the protection of trout in this county. Our streams are nearly all very small, and in out-of-the-way localities, consequently the "man with the scoop-net" very generally eludes detection. On the 13th of June, however, a brother sportsman and myself found one of the poachers, and on the 24th made due complaint, had him arrested, and the court fined him $15 and costs, in all amounting to nearly $30. It so happened that the fellow took about thirty trout at the time we caught him, and as they averaged only about four inches in length, I am of the opinion that the price was pretty steep." SOUD.

The Rifle.

THE BREAKING OF THE 5,500 GLASS BALLS—DR. CARVER.

SATURDAY, July 13, was in many respects a most unfavorable day for the performance Dr. Carver undertook of breaking 5,500 balls in 500 minutes. The weather was excessively close and muggy, and had followed a singularly-long heated spell. There was almost all the day very little air, and when the wind blew it was directly in the face of the rifleman, with hardly force enough to drive the smoke of the rifle away. There was one heavy shower during the day which may have slightly lowered the temperature, but then it made the effects of the sun, which shone for a long time during the afternoon full on Dr. Carver's face, difficult to bear. In rifle shooting of the character attempted by Dr. Carver it is impossible to shift the ground so as to have the sun on one's back when desirable. Some 6,000 rifle balls to be shot must be fired only in the one direction, where there was no possible danger. In front of the firing shed at the Brooklyn Driving Park there is a belt of woods, and in this direction fell the some 200 pounds of balls Dr. Carver shot during the exhibition.

Promptly on time at eleven o'clock Carver was in position. It being work and not play the rifleman was unadorned with his medals and stood conspicuous in his plain white shirt and blue trousers. His immaculate white Texas belt had been exchanged for one with a shorter brim, which had seen usage, and which was looped up on one side. On the table was the gun case, with the six Winchesters. This arsenal consisted of the Doctor's four rifles, with two new ones furnished by the Winchester Repeating Arms Co. Ten thousand cartridges in boxes (some 300 pounds dead weight) were all opened and ready, and a huge pile of barrels, full of the Ira Paine feather-filled balls, formed a barricade to the right of the rifleman. The assistants were Ira Paine, Texas Jack, Col. Fletcher, Amond John and J. P. Hill. There was a colored man with a big tub full of ice water ready to cool off the barrels of the Winchesters. The arrangements made by the FOREST AND STREAM AND ROD AND GUN and the New York *Herald* to report the match were very thorough. To keep such a long score some four persons, all experts, are absolutely necessary. One person records the shots on paper, another, chronometer in hand, keeps the time, a third calls out "Broke, or Miss," while a fourth makes up a continuous analysis of the shooting. Some four persons had the heavy task of throwing the glass balls in the air.

It is necessary to particularize the distance at which in this shooting the rifleman is away from the hall. The person throwing the ball was about twelve feet from the rifleman, and the ball was tossed from ten to fifteen feet up in the air. People ignorant of such matters must bear in mind that there is a great difference between hitting a flying mark with a single rifle ball and striking the same object with a load of shot. Of course comparisons were made between Captain Bogardus and Dr. Carver. It was believed that the champion of the shot gun had more endurance than the great rifleman. As is well known to our readers, Bogardus is of massive build, a big, lusty man, all brawn and muscle, while Dr. Carver, though elegantly proportioned, is by no means as well filled out, but is rather lithe and does not look at all what is called wiry. The result showed that when Dr. Carver's endurance was called upon it could respond to a most marked degree. The manipulation of the shot gun and Winchester repeating rifle are entirely different. It can never be exactly determined which of the two the greater effort to load is necessary. The charging of the shot gun in Captain Bogardus' match was certainly more complex, as was once fully described in this journal. In working the Winchester a moderate amount of force must be used in throwing out the old exploded shell and in bringing up a new cartridge from the magazine. Long practice has made Dr. Carver familiar with the use of his weapon, but let a man, not an expert, try and work the lever of this particular arm and he would soon tire. As to the shock from recoil, it is, we think, greater in the shot gun than in the rifle. Before the match it was chiefly on the recoil question that the chances of Dr. Carver's making time were agitated. As the results show, the Doctor did not suffer any great inconvenience about his body from the numerous discharges of the rifle, but it was from entirely another source that the chances of his losing the match arose. In cleaning the arms some slight amount of moisture remains in the rifles. In the haste of loading and discharging the piece, whether by the movement of the lever, which had to be done with a certain amount of force, or by the explosion, water was projected with considerable violence into the rifleman's eyes. This moisture was certainly impregnated with the products of the decomposition of the powder, which were terribly irritating to the eyes. What was worse was that the glass balls being shivered with great force, splinters of fine glass were often thrown directly in Carver's face. In fact, sharp spicules were projected for thirty feet around, the broken balls sometimes cutting the face and hands of the audience. If the match had been lost it would have arisen entirely because Dr. Carver could not see, and not from any effects on his chest or arms. All during the match, if there was an effort used to bring the Winchester *six thousand two hundred and eleven* times into the air by Dr. Carver, any over exertion was not visible to those present. Physically the Doctor was fairly fresh. It was the eyes which early in the match commenced to suffer. The pain at times must have been exquisite. What assistance could be had was given, such as of bathing the eyes; and so some slight relief was given. It is pretty certain that innumerable balls were shot at without being seen by him, which may account for the number of misses. Most gamely the Doctor struggled through, showing indomitable pluck and endurance. The trouble with the eyes was the last thing which Dr. Carver thought would happen to him. Such visual disturbance had never for once entered his mind. A great deal of credit, we may state, here is due to Mr. Ira Paine, who, acting as Carver's coach, gave his best services, and by word and action kept Dr. Carver fully informed as to how he should best manage when he was struggling against fearful odds. In the second thousand ball series the eye trouble commenced, which continued during the whole of the match. As eyes have no second wind it can be readily understood how difficult it was to accomplish the feat. The first hundred broken, taking only 5 minutes and 5 seconds, with but six misses, there were quite a number of 100s where as many as 20 and 30 were missed, with the time of 10, 12 and even 10 minutes. Rests had to be taken in order to bathe the Doctor's eyes. From about the three thousandth ball, Dr. Carver who was behind time, some 11 to 14 minutes, was called upon for his best efforts, and nerving himself he went to his task with a will, and, shortening the time, made up the gap. There was a great feeling of relief when the last shot was fired, and the Doctor's friends took him in charge. Like Captain Bogardus, Dr. Carver is disinclined to make another match of this character. After all, *cui bono.* Such performances are certainly not amusing; they are even dreadfully monotonous. Public taste decries the exhibition of an overdriven horse. The glory of an achievement which shows endurance may be sought for; but, when life or limb are endangered, such reputation as may be acquired is out of proportion with the risk. One of Dr. Carver's handsome eyes is certainly worth more to him than five millions of broken glass balls, shot in any incalculable short space of time. We trust such time matches, prolonged without reason, will no longer be in vogue. In a certain sense only such trials may be useful in proving the efficiency of the arm, rather than that of the human machine; but then we can get at the excellence of a weapon by a purely mechanical plan. From the great merit of Dr. Carver's performance or that achieved by Captain Bogardus, we do not intend in the least to decry. As a representative, however, of public opinion, we must think that little is to be gained by exhibitions such as we have described.

Immediately after the match Dr. Carver, quite exhausted after having shot his long fusillade, was put to bed and was carefully attended to. His eyes were terribly inflamed and painful, and the services of an oculist were called for.

Monday a representative of the FOREST AND STREAM AND ROD AND GUN, having called on Dr. Carver, found him in good spirits, and only suffering from his eyes. One of the eyes was closed and the other quite inflamed. A few days will possibly bring the Doctor quite round. The arms and chest of the rifleman show no signs of the terrible hard work he has gone through. Of course the head is a little dizzy, some old wounds about the skull Carver had received in his Indian fights paining him somewhat. The very abstemious life the Doctor has led will bring him to, we trust, in time.

OFFICIAL SCORE.

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100...1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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Total, 106; missed, 6. Time, 5m. 5s.

200...1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 — Total,
102; missed, 2. Time, 6m. 25s.

300...1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 —
Total, 105; missed, 5. Time, 7m. 50s.

400...1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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102; missed, 2. Time, 6m. 40s.

500...1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—Total, 104;
missed, 4. Time, 6m. 20s.

600...1 0 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 —
Total, 110; missed, 10. Time, 7m. 10s.

700...1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—
Total, 103; missed, 3. Time, 5m. 50s.

800...1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1
0 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1
—Total, 112; missed, 12. Time, 6m.

900...1 0 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 0 1 0 1
1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1
1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—Total,
109; missed, 9. Time, 7m. 10s.

1,000...1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 6 0
1 1 1 1—Total, 110; missed, 10. Time, 8m.

1,100. ..1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 0 0 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1
1 1—Total, 109; missed, 9. Time, 10m. 10s.

1,200....1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—Total,
106; missed, 6. Time, 5m. 50s.

1,300....1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1
1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1
1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1—
Total, 110; missed, 10. Time, 8m.
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1,400...1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 0 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1—Total, 109 ; missed, 9. Time, 10m. 10s.

1,500....1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
—Total, 106 ; missed, 6. Time, 7m. 50s.

1,600...1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 0 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1—Total, 118 ; missed, 13. Time, 7m. 50s.

1,700....1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 0 1 0 1 1 1 1 1 1 0 1 1 1
1 1 1 0 0 1 1 1 1 0 1 1 1 1 1—Total, 118 ; missed, 18. Time, 11m. 10s.

1,800....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1 0 1 1 1 1 1 1 1 0 0 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1
1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1
0 0 1 1 0 1 0 1 1 1—Total, 110 ; missed, 16. Time, 18m.

1,900...1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 • 1 1 1 0 0 1 0 1 1 1 1 0 1 0 0 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1
1 1 0 1 1 1 1 0 1 1 1 1 1 0 1 1 1—Total, 123 ; missed, 23. Time, 8m.

2,000....1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1
0 1 1 1 1 1 0 0 0 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 0 0 1
1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1—Total, 120 ; missed, 20. Time, 7m.

2,100....1 1 0 0 1 0 1 1 1 1 1 1 1 1 0 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0
1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1 1 1 1 0 1 0
1 1 1 1 1 1 1 0 1 1 1 1 0 1—Total, 120 ; missed, 20. Time, 9m.

2,200....1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1 0
1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 0
1 1 0 1 1 1 1 1 1—Total, 115 ; missed, 15. Time, 8m. 10s.

2,300...1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 0 1 0 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1
1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1—Total, 111 ; missed, 11. Time, 10m. 10s.

2,400...1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1
0 1 1 1 1 0 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 0 1
1 0 0 0 1 1 0 0 0 1 0 0 0 0 0 0 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 0 1 0 1 1 1 1 1 0 1 1 0 1 1 0 1 1 1 1—Total, 128 ; missed 28. Time, 16m.

2,500...1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 0 1 1 1 1 1 1 0
1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 0 0 1 0 0 1 1 1 1 1
1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 0 1 0 0 1 1 0 0 1 1 1 1 1
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—Total, 121 ; missed, 21. Time, 8m. 30s.

2,600....1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1
1 1 1 0 0 1 1 0 1 1 1 0 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1—Total, 110 ; missed, 10. Time, 10m. 20s.

2,700....1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total, 105 ; missed, 5. Time, 10m. 10s.

2,800....0 1 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0
1 1—Total, 108 ; missed, 8. Time, 12m. 30s.

2,900....1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 0—Total, 112 ; missed, 12. Time, 16m. 30s.

3,000....1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1
1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 0 1 0 1 1
1 1 0 0 1 1 1 1 1 1 1 1 0 1 1 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0
1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1—Total, 121 ; missed, 21. Time, 10m.

3,100....0 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 0 1 1 1 1 1 0 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 1 1
0 1 1 1 1 1 0 1 1 1 1—Total, 116 ; missed, 16. Time, 6m 30s.

3,200....1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 0 1 1 1 1 1 1 0 0 1 0 1 1
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1
1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1—Total, 116 ; missed, 16. Time, 6m. 30s.

3,300....1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1
1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 0 1 1
1 1 1 1—Total, 110 ; missed, 10. Time, 7m. 30s.

3,400 ...1 1 1 1 0 1 0 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1
1 1 1 1—Total, 110 ; missed, 10. Time, 6m. 30s.

3,500....0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 0 1—Total, 111 ; missed, 11. Time, 8m. 30s.

3,600....1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 1 1 1 1 1
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1
1 1 1 0 1 1 1 1 0 1 1 1 0 0 1 1 1 0 1 0 0 1 1 1 1 0 1 1 1 1 0 1 1 1 0 1 1 1
1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1—Total, 122 ; missed, 22. Time, 11m. 30s.

3,700....0 0 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 0 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1
1 1 1 1—Total, 110 ; missed, 10. Time, 7m. 20s.

3,800....0 1 0 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1
1 1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 0 1 0 0 0 1 1 1 1
1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1—Total, 122 ; missed, 22. Time, 9m. 10s.

3,900....1 0 1 0 1 0 1 1 1 1 1 0 1 1 0 0 1 1 1 1 0 1 1 0 1 1 1 1 0 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1
1 1 1 1 1 1 1 0 1 1—Total, 116 ; missed, 16. Time, 9m. 10s.

4,000....1 0 1 1 0 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 1
1 1 0 1 1 1 1 1 0 1 1 0 0 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 0 1 1 1
1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 0 0 1 0 1 1 1 1 1 1 1 1 0 1—Total, 124 ; missed 21. Time, 0m. 20s.

4,100....1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 1 1
1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 0 1 1 1—Total, 117 ; missed, 17. Time, 9m.

4,200....1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1
1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1
1 1 1 1—Total, 110 ; missed, 10. Time, 7m. 30s.

4,300....1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 0
1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1
0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1
1 1 1 1 1 1 1 1—Total, 114 ; missed, 14. Time, 8m. 10s.

4,400....1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1—
Total, 106 ; missed, 6. Time, 6m. 20s.

4,500....1 1 1 1 1 1 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 0
1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1
1 1 1 1 1 1 0 1 1 1 1 1—Total, 115 ; missed, 15. Time, 7m. 20s.

4,600....1 1 1 0 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1
1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1
1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 0 0 1 0 0 1 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1
1 1 1 1 1 1 1 1 1 1 0 1 1—Total, 119 ; missed, 19. Time, 8m. 20s.

4,700....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 0 1 0 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1
1 1 1—Total, 100 ; missed, 9. Time, 7m.

4,800....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 0 0
1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 0 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 1 0 1 1 1—Total, 113 ; missed, 13. Time, 7m.

4,900....1 0 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0
1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1
0 1 1 1 1 1 0 0 1—Total, 115 ; missed, 15. Time, 7m.

5,000....1 1 0 1 0 1 0 0 0 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1
1 0 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 1
0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1—Total, 116 ; missed, 16. Time, 7m. 50s.

5,100....0 0 1 1 1 1 0 1 0 0 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1—Total, 108 ; missed, 8. Time, 8m. 10s.

5,200....0 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 0 1 1 1 1 0 1 1 1 1 1 1
1 0 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0
0 1 0 0 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1—Total, 118 ; missed, 18. Time, 6m. 20s.

5,300....1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 0 1 0 1 0 0
1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0
0 0 1 1 1 1 0 1 1—Total, 116 ; missed, 16. Time, 8m. 20s.

5,400....0 1 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1
1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 0
1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 0 0 1 1 1 0 0 1 0 1 0
1 1 0 1 1 1 1 1 1 1 1 1 1 1—Total, 121 ; missed, 21. Time, 8m.

5,500....1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0
1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 0 0 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1—Total, 111 ; missed 11. Time, 7m. 30s.

SUMMARY BY THOUSANDS.

	Shooting Time.			Total.			Misses.
		M.	S.	H.	M.	S.	
First thousand	1st 500	32	20	1	06	30	62
	2d 500	31	10				
Second thousand	1st 500	42	00	1	24	00	130
	2d 500	42	00				
Third thousand	1st 500	50	50	1	50	20	151
	2d 500	59	30				
Fourth thousand	1st 500	35	30	1	22	00	157
	2d 500	46	30				
Fifth thousand	1st 500	38	20	1	16	30	137
	2d 500	38	10				
Last five hundred		38	20				74

Compared with this the following table gives the scores made by Capt. A. H. Bogardus at a similar trial with a shot-gun, at Gilmore's Garden, on January 3d inst., the full score of which is given in our issue of Jan. 10. He shot with a double barrel fowling piece at balls thrown from trap, 15 yards rise. His record was:

		M.	S.	H.	M.	S.	Misses.
First thousand	1st 500	31	40	1	04	40	23
	2d 500	33	00				
Second thousand	1st 500	34	30	1	11	30	32
	2d 500	37	00				
Third thousand	1st 500	31	30	1	07	15	21
	2d 500	35	45				
Fourth thousand	1st 500	39	20	1	25	20	32
	2d 500	46	00				
Fifth thousand	1st 500	38	40	1	25	20	48
	2d 500	46	40				
The shooting time				6	13	45	150

THE OFFICIAL TIME RECORD.

Hundred.	Time. M.	S.	Misses.	Hundred.	Time. M.	S.	Misses.
1st	5	5	0	29th	16	30	12
2d	6	25	2	30th	10	—	21
3d	7	50	5	31st	6	30	16
4th	0	40	2	32d	0	30	16
5th	0	20	4	33d	7	30	10
6th	7	10	10	34th	6	30	10
7th	5	50	3	35th	8	30	11
8th	6	—	12	36th	11	30	22
9th	7	10	9	37th	7	20	10
10th	8	—	10	38th	9	10	22
11th	10	10	9	39th	9	10	16
12th	5	50	6	40th	9	20	24
13th	8	—	10	41st	0	—	17
14th	10	10	9	42d	7	30	10
15th	7	50	0	43d	8	10	14
16th	7	50	13	44th	6	20	6
17th	11	10	18	45th	7	20	18
18th	8	—	10	46th	0	20	19
19th	8	—	30	47th	7	—	9
20th	7	—	20	48th	7	—	13
21st	9	—	20	49th	7	—	16
22d	8	10	15	50th	7	50	16
23d	10	10	11	51st	8	10	8
24th	15	—	28	52d	6	20	18
25th	8	30	21	53d	8	20	16
26th	10	20	10	54th	8	—	21
27th	10	10	5	55th	7	30	11
28th	12	30	8				
Total					7 38	30	712

THE VERY LATEST FROM DR. CARVER.—*Sir:* At 2 o'clock Dr. Carver stepped into the field. It was raining hard. He began firing at the drops, and in five minutes had shot a dry space of half an acre around him.—MUNCHAUSEN, JR., *in the Sun.*

MAINE—*Kennebunk, July* 4.—Rifle practice of K. F. and G. P. A.; off-hand; Creedmoor (Mass.) target; ten shots.

Cushman	42	24—66	J Goss	38	25—63
Larribee	30	20—56	John Goss	55	31—86
Lord	40	26—66	Bailey	57	33—90
C Stevens	48	29—77	Saunders	54	30—84
Stanley	55	28—88			

Second match.

Cushman	54	32—86	Lord	42	27—69
John Goss	42	27—69	Pitts	37	25—62
Isaac Goss	43	27—70	Drown	30	20—50
Stanley	48	26—74			

VERMONT—*Burlington, July* 4.—Team match; Burlington Rifle Club vs. Ogdensburgh. We give the leading scores:

Burlington Rifle Club.

A M Hornet.

800....4 5 5 5 5 4 5 5 3 4 5 4 5 5 5—69
900....5 5 5 5 5 5 5 5 5 4 5 5 5 5 5—74
1,000....5 4 5 3 5 5 4 5 5 5 5 5 4 5 5—70—213

A B Witherell.

800....5 4 5 5 5 5 5 5 5 4 5 5 5 5 5—73
900....3 5 4 5 5 5 4 5 5 5 5 5 4 5 5—70
1,000....5 5 4 5 5 5 5 4 4 5 5 3 5 3 4—67—210

M E Montgomery.

800....5 3 5 4 3 5 4 5 5 5 5 5 3 3 3—63
900....4 3 4 5 4 5 5 5 5 4 4 5 5 5 5—68
1,000....0 5 5 4 5 5 3 5 4 4 5 4 5 5 5—04—195

H G Boardman	64	61	64	169
M L Kelsey, Rem Creed	65	65	63	193
W J McCaffery	62	66	57	185
Burlington total				1,185

Ogdensburgh Club.

W S Lee.

800....5 3 5 4 4 5 5 3 5 5 5 5 5 5 5—69
900....5 4 5 3 5 5 4 5 5 5 4 5 5 5 5—70
1,000....4 3 5 5 5 5 5 5 4 5 5 5 4 3 4—67—206

James Ives.

800....4 5 4 4 5 5 5 5 5 5 5 5 5 5 4—71
900....5 4 5 5 4 4 5 5 5 4 5 4 5 5 5—70
1,000....5 5 4 4 5 4 5 4 5 0 5 5 5 4 3—63—204

W B Hastings.

800....3 5 3 5 5 4 5 4 5 5 5 5 4 5 5—68
900....5 5 5 5 3 5 5 5 5 5 5 5 4 5 5—72
1,000....4 3 3 3 5 5 4 4 3 5 5 4 5 4 4—62—202

R B Pickup	60	66	62	188
A V Lord	67	60	57	181
J S Warner	61	60	50	171
Ogdensburgh total				1,154

CONNECTICUT—*Stamford, July* 5.—Fourth of July match:

	100 yards.	200 yards.	300 yards.
Sanford	4 4 4 5 5	4 4 5 4 3	5 4 5 4 3—63
Hendrie	5 4 5 4 5	3 4 5 4 5	4 4 4 3 3—62
Wilson	5 3 4 4 5	4 3 4 3 4	3 5 4 4 4—60
Provost	5 4 4 4 4	4 5 1 4 4	4 4 3 4 3—59
Warren	4 4 4 4 4	4 5 4 3 4	3 4 4 4 4—59
Minor	4 5 4 4 5	4 4 3 5 4	3 3 4 3 3—58
Bennett	4 4 4 4 5	3 3 5 5 4	4 4 3 3 2—57
Swords	4 4 4 4 5	3 3 5 4 4	3 3 3 4 4—57
Gaylor	4 4 4 4 4	4 3 4 4 5	4 4 3 3 3—57
Swartwout	4 5 4 5 5	5 4 3 3 4	3 3 0 3 3—55
Taylor	4 5 4 4 5	4 4 3 3 3	0 4 3 3 4—53
Brown	3 3 4 3 4	3 4 4 4 4	3 0 3 0 3—45
Hurlbutt	4 4 4 4 4	0 3 4 3 0	3 3 3 4 0—43

Bull's-eye badge, eleventh competition:

Sanford	5 5 5 5 5 5 4 5 5 4—48	Minor	4 5 4 5 4 4 4 5 5 4—44
Swords	4 5 4 5 5 4 4 4 5 5—45	Hurlburt	4 4 5 4 4 4 4 5 4 4—42
Swartwout	5 4 5 4 4 5 5 4 5 4—45	Provost	4 5 4 4 4 4 4 4 4 4—41
Smith	4 4 4 4 4 5 5 5 4 5—44	Ferguson	5 1 4 4 5 2 4 4 4 4—40

NEW YORK—*Dunkirk*—Cuba vs. Dunkirk, at Cuba, N. Y., July 6; distance, 500 yards; N. R. A. rules:

Cuba Club.

Latta....5 4 3 5 4 5 5 5 5 5 5 5 5 5—71
Curtudall....4 5 2 2 5 4 4 5 4 5 4 3 2 4 4—57
Cole....5 4 2 4 3 3 5 4 3 4 4 5 4 2 0—52
Stebbins....4 0 2 0 4 0 0 3 0 2 4 3 2 2 2—28
Randolph....0 0 0 0 0 0 0 0 0 0 0 0 0 0 0— 0—208

Dunkirk Club.

Miner....4 3 5 5 5 5 5 4 5 5 4 4 5 4 5—68
Miller....5 3 3 5 5 4 4 3 4 5 5 4 4 5 5—64
Slater....3 5 5 4 4 4 4 5 5 2 5 5 5 3 4—63
Monroe....4 5 4 4 4 3 5 5 3 5 3 5 5 3 4—62
Gross....4 0 5 3 3 2 4 4 3 4 5 4 3 3 3—50—307

Newburg.—The winner of the 2d of July match was Mr. A. Smart.

CREEDMOOR—*Saturday, July* 13.—A new departure was made at Creedmoor, shooting having been tried at 1,100 and 1,200 yards. Common long-range targets were used, with the three-feet bull's-eyes, which at the extreme distances looked like dots. The match was under the auspices of the Amateur Rifle Club. We give the best scores in full:

L Geiger.

1,100....5 2 5 4 3 5 3 2 4 4 5 3 5 5 3—63
1,200....4 0 0 2 5 R 4 4 4 4 4 5 2 3 5—40—103

I L Allen.

1,100....3 2 3 3 3 5 5 5 4 4 3 5 3 5 4—57
1,200....4 3 0 4 0 5 0 2 0 4 5 5 5 3 3—43—100

C E Blydenburgh.

1,100....5 0 2 3 0 0 5 3 3 4 0 5 5 4 5—44
1,200....0 3 4 4 4 2 5 3 5 3 5 5 4 5 0—52— 96

H Fisher.

1,100....3 4 R 2 3 3 3 3 5 3 2 5 2 4 3—45
1,200....0 0 4 2 5 3 4 4 3 4 3 4 4 4 0—44— 89

N D Ward.

1,100....4 3 2 3 3 2 0 5 0 3 3 4 5 0 2—39
1,200....0 3 0 3 4 4 3 4 3 3 4 4 0 2 4—41— 80

Mr. H. L. Clark made 71 points, Mr. J. P. Waters 70, and Mr. L. L. Hepburn 59. With one exception, the scores at 1,200 yards were hardly lower than those at 1,100 yards. The match for the National Guardsman's prize was postponed. The Skirmishers' Badge match resulted as follows:

	Advance.	Retreat.	Totals.
W C Reddy	18	13	36
J Ross	16	17	38
F C McLewee	13	19	32
M Maltby	13	18	31
W A Bryant	14	14	28
J R B Bayley	14	13	27
A G Decker	12	14	26
J F Baltman	13	13	26
C H Eagle	10	12	22
A B Van Heusen	0	13	22
J W Gardner	2	20	22
H C Aspinwall	7	4	11
J L Paulding	4	7	11

CONLIN'S SHOOTING GALLERY.—The "man" target is another novelty lately introduced in the gallery by Mr. Conlin. It is evident by the large proportion of practice at these targets that this new pattern takes among the short-range marksmen, affording as it does a new and difficult mark. It is just the thing for popularity. A marksman is always trying to find a mark a little more difficult than the last one. The target is entirely black, having the shape of the head and body of a man (so Mr. Conlin states, but it really recalls the form of a demijohn), being similar to the German "man" target which was such a favorite among all grades of marksmen during the late Schuetzenfest at Union Hill. The gallery "man" target is divided by very fine white lines, running perpendicularly, dividing the form in strips one-eighth of an inch wide, which are numbered from 1 to 20, the first strip on each side of the "man" counting 1, and the strip running through the centre counting 20. In the centre of the body there is an inch bull's-eye divided in rings, numbering from 21 to 25. To make a 25, it is necessary to cut the centre of bull's-eye out. The highest possible total in a score of ten shots would be 250. It can be easily understood how difficult it is for the shooter to find the centre of the dead black target. Notwithstanding this, some remarkable shooting has been already done. The following are some of the best scores of ten shots with rifle, 100 feet:

S W Sibley	231	E T Davis	184
C E Blydenburgh	227	Fred Conlin	183
J B Blydenburgh	196	J W Drummond	177
J S Conlin	194	I F Duckworth	171
A J Howlett	194	Thos Loyd	169
C E Overbaugh	190	Hon Sherman Smith	166
W H Dunlap	184	A E Lewis	164

NATIONAL RIFLE ASSOCIATION.—The National Rifle Association held a special meeting on Thursday. A letter was read from the widow of the late Gen. Dakin expressing her thanks to the association, and to the several organizations which have reported to that body, for their sympathy in her late bereavement. On motion of Major Fulton, the chairman was authorized to appoint a committee of three, having Gen. J. B. Woodward as chairman, to complete the necessary arrangements for compiling the programme of the autumn meeting at Creedmoor. The committee was instructed to confer with the Prize Committee and to report to the Executive Committee. A resolution was adopted requiring competitors for places on the American team of 1878 to shoot in their two concluding competitions at Creedmoor. The other conditions were similar to those governing the selection of teams in former years. Col. Sanford was instructed to confer with the Prize Committee and Executive Officer with the view of determining the feasibility of having an individual long-range military match at Creedmoor next fall. The board next took up the case of Gen. F. F. Millen, and on motion he was restored to the privileges of membership in the association. An adjournment was then taken.

UTAH—*Salt Lake City, July* 4.—Ladies' match, 50 yards, reduced targets:

Miss E Clawson	4 4 4 5 4—21	Miss J A Spencer	4 2 5 3 3—17
Mrs Linsley	4 4 5 4 4—21	Mrs L S Hills	2 4 3 4 3—16
Mrs G A Meears	3 4 4 5 5—21	Miss Plume	5 0 3 4 4—16
Miss Stulfouth	4 4 4 4 4—20	Miss Keat	4 3 3 2 3—15
Miss S Jones	4 4 4 4 4—20	Miss Wright	2 2 3 4 4—15
Miss Lockley	4 4 4 4 4—20	Mrs Chas Carter	3 0 4 4 4—15
Mrs Broadbent	3 4 4 4 5—20	Mrs C E Pomeroy	2 4 4 2 2—14
Mrs J Sharp, Jr	3 4 4 4 4—19	Mrs H Kimball	4 0 3 4 3—14
Miss M Luke	3 4 4 4 4—19	Mrs Hardman	4 0 2 5 2—13
Miss A E Taysum	4 4 4 3 4—19	Mrs Pratt	3 3 0 4 3—13
Mrs Thos Stone	4 3 3 4 4—18	Miss E Spencer	4 0 2 2 5—13
Miss Moritz	3 4 4 4 3—18	Mrs Hepworth	4 3 0 0 3—10
Miss E Burkinshaw	4 3 4 4 3—18	Miss A Carter	3 0 0 3 2— 8
Mrs H Roberts	4 3 5 3 3—18	Miss C Harmon	0 0 3 3 5— 8
Miss Musser	0 5 4 5 4—18	Miss A Williams	4 4 0 0 0— 8
Mrs Davis	3 4 4 3 3—17	Mrs R Toronto	0 0 0 0 2— 2

Match open to members of the Utah R. A., 200 yards:

Sharkey	4 5 5 4 5 4 3 4 4 4—42	Sharp	5 4 3 4 3 4 3 4 4 4—39
McLaughlin	3 4 4 4 5 4 4 4 4 4—40	Stone	4 4 4 3 4 5 3 4 4 4—39
Meears	4 4 4 4 5 4 3 4 4 4—40	Huesser	4 3 4 3 4 4 4 4 4 4—38

BISMARK'S DOG.—It is given to some dogs, especially if they mix much in politics, to acquire a world-wide notoriety. This lean black dog which follows Prince Bismark around, and among other peculiar traits manifests a deadly antipathy to French poodles, and always howls when he sees an English newspaper, has again come into public notice by this escapade:

Since the attempt upon the emperor's life by Nobiling, the nervousness under which Bismark has long been suffering has violently increased. The prince, when thus suffering, controls his temper with difficulty. He stamps his foot and gesticulates excitedly when in discussion. Something of this kind occurred during the interview with Prince Gortschakoff, and the dog, mistaking the eagerness of his master for anger, sprang suddenly at the throat of the Russian diplomatist. Happily Bismarck was as quick as the dog, and had seized and thrown him aside before he had fastened his teeth in the person of Gortschakoff. Among certain classes in Berlin this unpleasant incident is spoken of as an omen. The dog's instinct did not deceive him, they say. Prince Gortschakoff is plotting mischief against the chancellor, and the dog saw it in his eyes.

FROG BUTTER.—A Middletown (Conn.) man put a pail of milk into a spring of water near the house to cool. Two hours thereafter, upon going to the spring for his milk, he was surprised to find, instead of milk, a large roll of butter, surmounted by an enormous bullfrog. His frogship had jumped from the water in the pail, and in endeavoring to extricate himself from the milk by the action of his legs, had turned this rich and creamy milk into butter.

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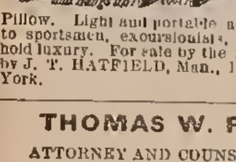

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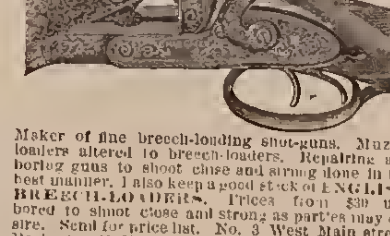

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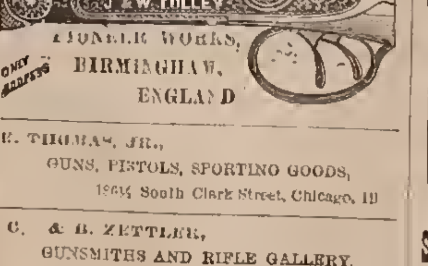

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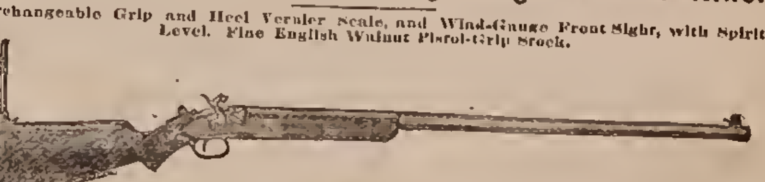

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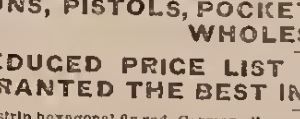

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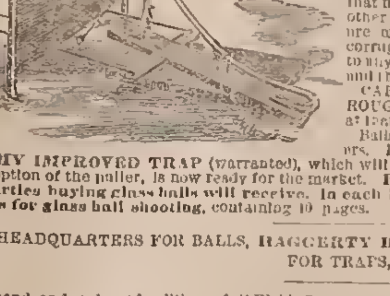

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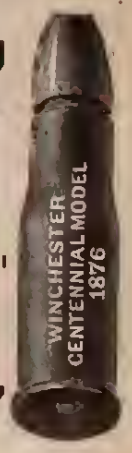

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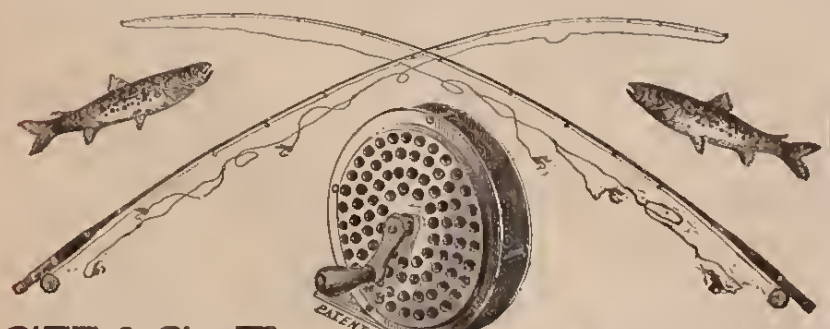

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FOR SALE—English setter dog, 4 years old, thoroughly broken. Can be seen on game—woodcock, quail or partridge. Address, P. O Box 2,778, Brockton Mass. jy11 1t

FOR SALE—Red Irish setter dog pup, 8 mos. old; pedigree guaranteed; price very low. FISHER & BICKERTON, 139 Flatbush avenue, Brooklyn. jy11 2t

FOR SALE—Setter puppies out of Killarney (imported Frisk—Grouse), by imported Milo (Dan—Venus); pedigree guaranteed. Gyps, $5; dogs, $10. Address, BARTON, New Dorp, Staten Island, N. Y. jy11 4t

FOR SALE—Gordon setter pup, gyp, black and tan, 15 mos. old. Send for particulars to R. ANSON CRIE, Rockland, Maine. jy11 2t

For Sale.

FIELD, COVER AND TRAP SHOOTING.

BY CAPT. BOGARDUS.

New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Miles Johnson. For sale at this office. Price $2.

FOR SALE—One horizontal 1½ H. P. steam engine; one upright tubular 2 H. P. boiler (new), gauges, pumps, etc. Will exchange for a first class breech-loading gun. Address P. O. Box 503, Millbury, Mass. jy18 2t

BARGAIN.—FOR EXCHANGE—One Scott's (Eng.) best No. 10-calibre, extra fine laminated steel shot-gun; cost $250; will exchange for 16-calibre Greener new close-bore. Address P. O. box 385, Atlanta, Ga. jy18 2t

FOR SALE—5,000 live wild pigeons, well fed, fit for trap shooting. Address O. B. FITCH, Wilcox, Pa. je17 4t

FOR SALE—A very fine London (Adams & Co. made, 10 gauge breech-loader, choke-bored, rebounding locks, with magnificent walnut case and outer leather covering. Superb pattern and penetration. Address CHOKE, box 654, Halifax, N. S. je20 2t

FOR SALE—Crystal Spring Fish Farm and Picnic Grounds, Oakland, Bergen County, N. J. Buildings cost over $1,200; five years old; gothic frame villa; all modern improvements; tenant's house, stables, etc.—in one, four horses; twenty-three acres, four acres grove, with from twenty to thirty ponds; fine garden; 100 young fruit trees; apple orchards. Address B. B. P., care this office. je13 4t

CITY AND COUNTRY PROPERTY bought, sold and exchanged. C. S. PECK, 8 West Twenty-fifth street, New York. Sept27 1y

FOR SALE—English breech-loaders, central fire, twist barrels, fixed locks, snap action, fine finish. Price $35. FRANK PERKEY & CO., Oshkosh, Wis. jy11 2t

FOR SALE CHEAP—A W. & C. Scott & Sons d'ble B. L. shotgun, 10 bore, with case, 40 shells and implements complete. Address, with stamp, CHAS BORNARTH, Shakopee, Scott Co., Minn. jy11 2t

Wanted.

WANTED TO EXCHANGE—A "Greener" highest quality B. L. shotgun, 10 gauge, 32 inch; weight, 8lbs. 14oz.; laminated steel barrels, full pistol grip; good as new; cost $250; for same quality any first class maker's gun, 12 or 16 gauge, 30 inch, weight, 6 to 7½lbs. Address, describing gun, H. W. AVERY, Byron, Minn. jy11 2t

WANTED—Cheap for cash, a single-barreled breech-loading duck gun, 4, 6 8 or 10 bore. Address DUCK, 1009 Locust street, St. Louis, Mo. jy18 2t

GOLD Any worker can make $12 a day at home. Costly Outfit free. Address TRUE & Co., Augusta, Maine.

Auxiliary Rifle.

SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44 as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

AUXILIARY RIFLE BARREL COMPANY,

P.O. box 1,178. NEW HAVEN, CONN.

W. W. Greener's Champion Treble Wedge Fast, Breech-Loader.

THE WINNING GUN.

At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £705, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29½ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1875, beating 102 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,323. BEWARE OF INFRINGEMENTS OR IMITATIONS.

W. W. GREENER, St. Mary's Works, Birmingham, England.

H. C. SQUIRES, Agent, No. 1 Cortlandt Street, New York City.

IMPORTANT TO FARMERS, COW-KEEPERS AND DAIRYMEN.

The Wonderful Self-Acting Cow-Milker,

PATENTED MAY 28, 1878.

THE MOST USEFUL INVENTION OF THE AGE.

Tested and approved by many of the leading Agriculturists, Dairymen and Farmers throughout the United States, and highly recommended by all who have used it.

WILL MILK A COW IN FROM THREE TO FOUR MINUTES and can be adjusted and used by A CHILD. Usefulness, simplicity, cleanliness, durability and cheapness combined. PRICE, TWO DOLLARS.

Apparatus, with full instructions and pamphlet containing description of the milker and sectional views and treatise of the cow's teats and bag, sent prepaid to any address on receipt price, $2.

READ THE FOLLOWING TESTIMONIAL:

25 LEXINGTON AVENUE, N. Y., June 5, 1878.

I hereby certify that, in company with the Superintendent of the American Society for the Prevention of Cruelty to Animals, and other officers of that society, I have witnessed the operation of the Self-Acting Cow-Milker, and that it fulfills all that is claimed for it. (Signed) JOSEPH B. COLEMAN, Veterinary Surgeon.

Member Royal College of Veterinary Surgeons of England and Veterinary Surgeon to the American Society for the Prevention of Cruelty to Animals.

STENT & CO., Manufacturers' Agents, P. O. Box 2,997. 132 Nassau Street, New York.

Hart's Sportsman's Favorite Metallic Shells.

FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside. Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

TATHAM'S

IMPROVED CHILLED SHOT.

American Standard Diameters.

(RED LABEL.)

Gives greater penetration and better pattern than ordinary shot. Equally well adapted to choke-bores, modified chokes and cylinders.

Our chilled shot will be found free from shrinkage, more spherical, more uniform in size, harder, heavier and of brighter and cleaner finish than any other. SEND FOR CIRCULAR.

TATHAM & BROS., 82 Beekman St., NEW YORK.

Also, manufacturers of PATENT FINISH, AMERICAN STANDARD DROP SHOT, and COMPRESSED BUCK SHOT, more uniform than the ordinary moulded shot.

Wanted.

A GENTLEMAN fond of sport and adventure, experienced in trapping and woodcraft generally, going hunting in northern Canada, desires a comrade of similar tastes. Those afraid of work or unable to share expenses need not apply. State experience; references exchanged. Address, WINDIGO, Stayner, Ont., Canada. jy11 2t

25 Fashionable Cards, no 2 alike, with name 10c, post paid. GEO. I. REED & CO., Nassau, N. Y. Oct4 1y

Musical Instruments.

WATERS' MIRROR TOP SOUVENIR ORGANS.

These beautiful organs are remarkable alike for purity of tone and perfect mechanism. Their cases are all richly finished in Solid Black Walnut. We sell a better instrument at a lower price than any other house in the United States.

Waters' Pianos

Grand, Square and Upright, are the BEST MADE, the Tone, Touch, Workmanship and Durability unsurpassed. Warranted for SIX YEARS. Extremely Low for Cash or on Installments. A liberal discount to Teachers, Ministers, Churches, etc. AGENTS WANTED. Catalogues Mailed. Second-hand Pianos and Organs at GREAT BARGAINS. HORACE WATERS & SONS, manufacturers and dealers, 40 East Fourteenth Street, New York.

GEO. A. PRINCE & CO.'S

ORGANS.

The oldest, largest, and most perfect manufactory in the U. S.

OVER **58,000** NOW IN USE.

Two New Styles Just Out.

Send for Price-Lists.

Address BUFFALO, N. Y.

Sportsmen's Routes.

Chesapeake & Ohio RR

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
ap Richmond, Va.

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday. Delaware, Monday, Wednesday and Friday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

CONEY ISLAND—BRIGHTON BEACH.

Opening of the BROOKLYN, FLATBUSH & CONEY ISLAND R. R.

SUMMER ARRANGEMENT,
Commencing July 2, 1878.

Trains for Coney Island—Leave depot on Flatbush avenue, Willink Entrance, Prospect Park, at 6:30, 7:30, 8:30, 9:30, 10, 10:30, 11, 11:20, 11:40 A. M., 12 M., 12:40, 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:15, 7:30, 7:45, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Beach—7, 8, 9, 10, 10:30, 11, 11:20, 11:40 A. M., 12 M., 12:40, 1, 1:20, 1:40, 2, 2,20, 2:40, 3, 3,20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, 11 P. M.

Sunday Trains to Island—8:50, 9, 9:30, 10, 10:20, 10,40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:15, 7:30, 8, 8:20, 8:40, 9, [illegible]

Returning from Island—9, 9:30, 10, 10:20, 10:40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2:20, 2:40, [illegible] 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, 11 P. M.

Time to Coney Island, ten minutes. Excursion tickets, 40 cents; single fare, 20 cents. Grand concerts every afternoon and evening by Couterno's Twenty-third Regiment Band.

MR. LEVY, the celebrated cornet soloist, has been engaged for the season.

The following horse-car lines run directly to depot: Flatbush avenue from Fulton Ferry; Bergen street, S. B.; Franklin avenue, from South Seventh street Ferry, E. D., and Nostrand avenue, from foot of Broadway. W. E. DORWIN, Sup't.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE.
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 3, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 12:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:50, 8:13, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 4:00, P. M. trains from New York and to the 7:45, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sept13 1y H. P. BALDWIN, Gen. Pass. Agent

TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing, Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
FRANK THOMSON, Gen'l Manager. feb17-tf

CHICAGO & ALTON RAILROAD.

THE ONLY DIRECT RAILROAD from Chicago to St. Louis, and Chicago to Kansas City,

WITHOUT CHANGE OF CARS.

FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

JAMES CHARLTON,
General Passenger Agent,
Chicago, Ill.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 22 South Delaware Avenue, Phila.

Dec14-1y

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.
Send for Guide Book.

HENRY PRATT, G. T. A.
my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound.

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

A. B. LEET, G. P. A.,
Grand Rapids, Mich.

A. ROPPE,
Eastern Agent, 116 Market St., Phila., Pa.
mar28 4mos

TAKE THE

People's Line Steamer.

FROM PIER 41, N. R., foot of Canal st., daily, including Sunday, at 5 P. M., connecting at Albany with Express Trains

FOR

Saratoga, Lake Champlain, Lake George, the Adirondacks, Montreal, and all points North and West.

☞ This is the only night line of steamers selling tickets and checking baggage to places on the N. Y. C. R. R.

FIRST CLASS FARE $1. DECK, 25c.

EXCURSION TICKETS TO ALBANY AND RETURN, $1 50.

THROUGH TICKETS can be had at the **Office on the pier,** at all Westcott Express offices, at all the hotels and ticket offices in New York, or of connecting Railroad and Steamboat Lines.

S. E. MAYO, Gen'l Passenger Agent.

St. Louis, Minneapolis AND ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids.

C. J. IVES, Gen. Passenger Agent.
E. F. WINSLOW, General Manager. tf

LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M., Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M. and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.
J. CHITTENDEN, Gen'l Pass. Agent. Je6 tf

FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

NIGHT LINE.—The Elm City leaves New York at 11 P. M., connecting with passenger train in waiting on wharf at New Haven, leaving 5:15 A. M. Tickets sold and baggage checked at 944 Broadway, New York, and 4 Court street, Brooklyn. Excursion to New Haven and return, $1.50. Apply at General Office, on the pier, or to RICHARD PECK, General Agent.

Sportsmen's Routes.

Cromwell Steamship Line.

NEW YORK, HALIFAX, N. S. AND ST. JOHNS, N. F.

THE FIRST-CLASS STEAMSHIPS

CORTES, Capt. Bennett, and
ALHAMBRA, Capt. McIlhinney,

form a regular line between above ports, leaving Pier 10, North River, New York, three times a month. Persons visiting Nova Scotia, Newfoundland or the Lower St. Lawrence will find this the cheapest and most direct route, avoiding changes and detention. Time between New York and Halifax about sixty hours, one half of trip through Long Island and Vineyard Sounds, in smooth water.

Cabin passage, including stateroom and meals, New York and Halifax, $15 gold; New York and St. Johns, $30, gold. Excursion tickets at reduced rates. For schedule of sailings and further particulars apply to

CLARK & SEAMAN,
86 West street, N. Y.

AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. Je20 6m

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THE SPORTSMAN'S ROUTE.

Chicago & Northwestern RR.

Embraces under one management the Great Trunk Railway Lines of the West and Northwest, and, with its numerous branches and connections, form the shortest and quickest route between Chicago and all points in Illinois, Wisconsin, Northern Michigan, Minnesota, Iowa, Nebraska, California, and the Western Territories. Its OMAHA AND CALIFORNIA LINE is the shortest and best route for all points in Northern Illinois, Iowa, Dakota, Nebraska, Wyoming, Colorado, Utah, Nevada, California, Oregon, China, Japan and Australia. Its CHICAGO, ST. PAUL AND MINNEAPOLIS LINE is the short line for Northern Wisconsin and Minnesota, and for Madison, St. Paul, Minneapolis, Duluth and all points in the Great Northwest. Its WINONA AND ST. PETER LINE is the only route for Winona, Rochester, Owatonna, Mankato, St. Peter, New Ulm and all points in Southern and Central Minnesota. Its GREEN BAY AND MARQUETTE LINE is the only line for Janesville, Watertown, Fond du Lac, Oshkosh, Appleton, Green Bay, Escanaba, Negannee, Marquette, Houghton, Hancock and the Lake Superior country. Its FREEPORT AND DUBUQUE LINE is the only route for Elgin, Rockford, Freeport and all points via Freeport. Its CHICAGO AND MILWAUKEE LINE is the old Lake Shore route, and is the only one passing through Evanston, Lake Forest, Highland Park, Waukegan Racine, Kenosha to Milwaukee. PULLMAN HOTEL CARS are now running regularly between Chicago and Council Bluffs, on the California Express Train of the CHICAGO & NORTHWESTERN RAILWAY. Westbound, they leave Chicago daily, except Sunday (and on every third Sunday), from the Wells Street Depot, at 10:30 A. M., and arrive at Council Bluffs next morning.

Eastbound they leave Council Bluffs at 5:30 P. M., daily, except Saturday (and on every third Saturday), and reach Chicago next afternoon.

☞ No other roads west of Chicago runs Pullman or any other form of Hotel cars.

TO SPORTSMEN.

This line presents peculiar advantages. For Prairie Chickens, Ducks, Geese and Brant shooting, our Iowa line to-day offers more favorable points than any other road in the country, while for Deer and Bear hunting, and for Brook Trout, Lake Salmon, Pike, Pickerel and Bass fishing, a hundred points on the Northern and Northwestern lines of this company will be found unsurpassed by anything in the West.

New York office, No. 415 Broadway; Boston office, No. 5 State street.

For rates or information not attainable from your home ticket agents, apply to

MARVIN HUGHITT,
Gen. Manager, Chicago.

W. H. STENNETT,
Gen. Pass. Agent, Chicago. Je20 tf

Hotels and Resorts for Sportsmen.

Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. Je6 tf

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Grand Fishing.

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PRAIRIE FIRES NEVER SPREAD FASTER

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SPORTING AND CAMPING OUTFITS,
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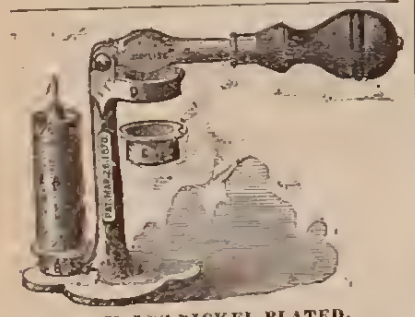

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Dealers in Guns, Pistols, Etc.,
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New York.
Proprietors and Sole Manufacturers.

Sportsmen's Goods.

LOST
BECAUSE HE HAD NO
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apr25 3m

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Superior Archery.
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Blue Flannel Suits,
FOR GENTLEMEN.
WARRANTED FAST COLORS,
From $12.50 to $16,
The price depending on Size and Style.
Sample of Goods, Price List and Measurement Blank furnished on request by post.
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No. 1 book, stiff cover, holding 1 gross flies, $7 00
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NEW BAIT.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, JULY 25, 1878.

Volume 10.—No. 25. No. 111 Fulton St., N. Y.

FORTY, LESS ONE.

A POEM FOR THE YOUNGEST READERS.

OVER by the tangled thicket,
Where the level meets the hill,
Where the mealy alder-bushes
Crowd around the ruined mill,
Where the thrushes whistle early,
Where the midges love to play,
Where the nettles, tall and stinging,
Guard the vine obstructed way,
Where the tired brooklet lingers
In a quiet little pool,
Mistress Salmo Fontinalis
Keeps a very private school.

Forty little speckled beauties
Come to learn of her, each day,
How to climb the foaming rapids,
Where the flashing sunbeams play,—
How to navigate the eddies,
How to sink and how to rise,
How to watch for passing perils,
How to leap for passing flies,—
When to play upon the surface,
When beneath the stones to hide,—
All the secrets of the water,
All brook learning, true and tried;—

"That's a good-for-nothing skipper;"
"That's a harmless yellow-bird;"
"That's a flicker of the sunshine,
When the alder-leaves are stirred;"
"That's the shadow of a cloudlet;"
"That's a squirrel come to drink;"
"That—look out for him, my darlings!—
He's a fierce and hungry mink;"
"That's the ripple on the water,
When the winds the wavelets stir;"
"That—snap quick, my little heartlea!—
That's a luscious grasshopper."

So the clever Mistress Salmo
Gives her counsel, day by day,—
Teaching all the trouty virtues,
All life's lessons, grave and gay.
Well she knows the flashing terror
Of King Fisher's sudden fall!
Well she knows the lurking danger
Of the barb'd hook, keen and small!
Well she tries to warn her pupils
Of all evils, low and high!
But, alas! the vain young triflers
Sometimes disobey—and die!

What was that which passed so quickly,
With a slender shade behind?
What is that which stirs the alders
When no ripple tells of wind?
What sends Mistress Salmo darting
Underneath the stones in fear?—
Crying, "Hide yourselves, my darlings!
Our worst enemy is near!"
"I am bound to understand it,"
Says one self-proud speckle-side;
"When I see the danger's real,
Then, if need be, I can hide."

So he waits alone and watches,
Sees the shadow pass again,
Sees a fly drop on the water,—
Dashes at it, might and main.
"Missed it! Well," he says, "I never!
That's the worst jump made to-day!
Here another comes—now for it!"
Splash! He's in the air—to stay!

When the alders cease to tremble,
Silence comes and sun-gilints shine,
Mistress Salmo Fontinalis
Calls the roll, just thirty-nine!

—JAMES RICHARDSON, *St. Nicholas for July.*

CANOEING.—The graphic account of a canoeing trip down the Housatonic, written by Mr. W. L. Alden, well-known as one of the founders of the *Shadow* type, will be read with interest by the canoeing fraternity throughout the country, and will prove equally acceptable to yachtsmen and sportsmen in general. We hope that this and similar descriptions of the pleasures of canoeing may attract general attention to the pastime. There are scores of rivers in this country offering rare attractions for those who are able and willing to paddle their own canoe. The Golden Age of the paddle in America has long ago passed away with the dusky *voyageurs* of the wilderness. For the sake of the great army of land-workers, who are annually seeking rest and recreation, let us have faith to believe that there may some day come a Silver Age.

For Forest and Stream and Rod and Gun.

The Sneak of the Plains.

THE prairie wolf, or coyote of the plains, is a genius in his way, and as a strategist is worthy of mention. It is well known that he is a sneak-thief, and that he and his fellows hunt in packs and pursue to the death wounded buffaloes, deer, antelopes and other animals that get left in the race for life. It is a curious sight, if you can obtain it by stealthily "rising" a divide, to see a pack at the carcass of a buffalo or deer, pulling at the hide and flesh, snapping at each other, hunting among the remains for choice bits, licking their chops when sated, finally leaving the well-picked bones to the ravens and scattering for a lazy siesta in the nooks of some *arroyo*. It often occurs that wounded animals, aged or otherwise disabled, are not to be found, and then the coyote has to resort to strategy to capture a dinner.

The great hare of the West, *Lepus callotis*, called the jack rabbit, is, perhaps, as odd a specimen of the rodents as there is to be found. He is twice the size of his congeners in other parts of the country, has ears like a donkey, and speed in running that is simply immense. Going at his best he looks somewhat like a yacht tacking against a high wind, his long ears waving with a jerky lateral motion, which seems to affect the body even to the extent of nearly capsizing the craft. And yet under ordinary circumstances he will always keep ahead of his pursuer, dog or wolf, and at last fade out like a shadow on the ground. The jack rabbit spends a good deal of his leisure time under the shady side of a yucca or soapweed, sleeping with one eye open and ever on the alert for his enemies. But the coyote gets out of meat, and then plans are made that generally insure success. To facilitate matters and secure a fair return, two coyotes will start out together in a slouchy, sneaking way, and ere long get up a rabbit. One then goes for the game and keeps it moving pretty lively on a line that forms a circle, coming back near the place of starting. Here the first squats on his haunches while the other continues the pursuit, though a sharp eye is kept on the periphery of the circle by the hunter at rest, lest a capture is made to his disadvantage. In a few rounds the rabbit turns over his personal effects, and the subsequent proceedings frequently terminate in a row between the parties engaged. The undulating slopes of the plains furnish excellent opportunities for seeing a long distance, and the practiced eye readily determines the number of yards or rods away an object may be.

Once while hunting grouse I caught sight of a coyote ranging somewhat like a pointer on a piece of level land nearly a half mile distant. The movements were not as regular as a trained dog's would be, but he would travel back and forth, apparently across the line of scent (if he was so guided) his general course being toward some low bushes on the bank of a dry creek. At the point of turning in these cross movements he would crouch in the grass and lie quiet for a few moments, then rise stealthily and travel briskly with his nose to the ground. Being on the windward side of him, in the midst of a cluster of small choke-cherry trees, and on higher ground, I could, unobserved, see all that was going on. The sight was novel and peculiarly interesting, and my great hope was that nothing would occur to interrupt the proceeding or change the wild hunter in his enterprise.

Suddenly, when near the first of the little bushes, the wolf dropped low in the grass and crawled slowly, stopping at times, and then going on with a cat-like movement and the greatest caution. This continued until the prowler was within a few feet of the bush, when there was a spring, a gray flash that was hardly distinguishable, and a half dozen grouse rose panic-stricken, in the air, cackling wildly, giving the general alarm, and flying, it seemed, with more than the usual unsteadiness and grotesque wabbling motion. But one of their number was left a sacrifice, in testimony of the prowess and sagacity of the champion sneak of his species.

While completing an outfit preparatory to a trip into the mountains beyond Platte Canyon, in Colorado, it became necessary one day to go and find a Texas mare I had purchased, a famous antelope chaser, and capture her either with a lariat tied like a lasso, or by running her down, first "cutting her out" of a band of ponies, the stock of a neighbor ranchman, with which she was staying.

The *vaqueros* employed at the ranches are thoroughly posted in this cutting out business, and capture a pony in a very few minutes, and with little trouble. The lasso is generally thrown around the pony's neck, and then he is quickly choked into submission.

I was accompanied on this expedition by George ———, the ranchman himself, lariat in hand, mounted on a large horse, while I rode a favorite broncho. After an hour's search, travelling together, and failing to find the band we were after, we determined to separate, taking a wider range, but keeping within sight. George was followed by Bruno, the rancho dog, of well-known prowess and courage, and Ponto, the pointer, was attached, as usual, to me. When we were perhaps a mile apart, I noticed George on the summit of a divide making sundry and frantic signs and gesticulations, which meant that I should come over there, and I concluded that he had found the horses in the little valley beyond. Getting near enough to hear his voice, I could distinguish the words—

"A wolf! let's go for him."

And away he went pell-mell at a break-neck speed down the gentle slope of the hill. When I reached the top of the divide I could see the coyote a mile away, and the ranchero after him, going like the wind.

The chase had begun in earnest, and Ponto and his master at once joined in, eager for the fray. The coyote was at first apparently not certain whether he was the object of this strange proceeding or not; but dogs and horses were gaining on him, and there was soon no alternative but to go, and to get in his work as rapidly as possible. The tables, for once, were turned. Heretofore he had been the pursuer, the sly observer of opportunities to waylay unoffending jack rabbits and unsuspecting birds. Now he had a chance to know how it was himself, to realize what it is to be pursued by an avenging Nemesis, by those who regarded him as a criminal, and and would exult in his capture and death. Away he went, like a hound unleashed, knowing at last it was a struggle for life.

In ten minutes the dogs were up with him, and we struck the spurs in deep, cheering them on by our shouting, wheeling, charging and driving, trying to get the wolf at bay and give the dogs a chance to "snatch him bald-headed," as George vigorously described it. To our astonishment, however, the ranche dog stopped when the wolf did; refused to tackle him, and turned away in apparent disgust. Ponto wanted to attack, but was afraid of the ugly teeth snapping at him, and the coyote, taking advantage of the singular turn affairs had taken, struck out again, and boldly, for freedom.

We were too near a capture to give it up so, and again urged the dogs to a renewal of the contest. In the meantime the coyote rose a little divide near by, and disappeared into one of his dens, and we thought the fellow had outwitted us at last. An examination of the premises, however, revealed the fact that he was not far in, and Bruno, as if to reinstate himself in our good graces, offered to go in and pull him out. And in he went. Then there was a fight inside, a horrible medley of snarling and growling and snapping, when suddenly the dog came out dragging the wolf after him. In the meantime I had alighted and obtained a board, as a weapon, from a claim shanty near by, and was determined to help the dogs some way. In the light again, Bruno let go his hold and would have nothing more to do with his distant relative. But the unsophisticated parties present, Ponto and his owner, pitched in—first, one giving him a "belt" with the board and the other a bite, until, finally, George got the lariat over the wolf's head and reduced him to perfect quietude, a condition from which he would never more rise to organize a partnership and gather rabbits on shares.

Hunting ducks one day I found myself after two hours' sport in the vicinity of Bear Creek canyon, a locality rich in attractive scenery, and, though a comparatively wild place, indented here and there by the hand-prints of brave and energetic men. Just as the pony was struggling out of a deep ravine, I saw a coyote start up a short distance off, and strike out at a lively pace for the rolling prairie that stretched away to the south. He was a full-grown individual of the genus *canis*, an artful dodger, no doubt, and I determined to give him a chase. Six ducks on the horn of the saddle, and gun in one hand, were bothersome *impedimenta*; but the pony was agreeable, and a touch of the spur started him off beautifully.

After going three or four hundred yards, the coyote, still a good distance ahead, stopped to reconnoitre, pointing his nose rearward over his back, and seemed to ask himself the question—"Is it a matter admitting of no doubt that that party is after me?" And he doubtless came to the conclusion he was, as the flight was renewed and he skipped away with surprising energy. The pony was equal to the emergency, however, and knew excellently well how to thread his way among cactuses, and leap over intervening breaks and dog-holes. The distance between pursued and pursuer was gradually lessening, and I was pretty confident of getting a shot at seventy or eighty yards, when a deep, steep-sided ravine appeared in view, reaching a long way out at right angles with a creek near, for which the wolf was making with all possible speed. Suggesting with the spur a more reckless expenditure of muscle, the pony leaned to the task with redoubled effort. The ducks loosening from the string, scattered promiscuously along in the grass, a broad-brimmed hat broke from its mooring and went sailing, and the saddle, on account of a yielding cinch, threatened to turn and throw the rider over the pony's head. Ere the coyote reached the ravine, however, the contents of both barrels were sent after him, and the last I saw of *Canis latrans* he had crossed to the opposite side, and was going at a limping pace down in the direction of Santa Fe.

These chases and skirmishes, my indulgent observer, were principally to get accustomed to hard riding, and indulged in with a relish, because it is delightful now and then to be doing your level best.

J. C. BURNETT.

For Forest and Stream and Rod and Gun.

CAMP BLISS.

A TWO-WEEKS TRIP TO NOVA SCOTIA.

THERE seems to be a large class of people whose ideas in regard to Nova Scotia are extremely vague. It is classed in their minds with a number of green, red and yellow blotches on the maps of their school geographies, where nobody in particular lives, and, at the most, as only a semi-civilized region, with a coast useful to wreck vessels upon, and an interior populated largely by Indians and Esquimaux, and a few white people who stay there because they have to. Greenland, Labrador, Alaska and Nova Scotia, to these people, are all very similar in their physical and social aspects. They know that when people "go to Halifax" they go to Nova Scotia.

An opportunity occurred a few years ago for me to spend several weeks in different parts of Nova Scotia, which little experience expanded my ideas of the region in a most agreeable manner, and I should like now to awaken others to the fact that a pleasant, interesting, invigorating and economical trip can be taken there by any one who can get a two-weeks' vacation, whether he goes as an angler, sportsman, or mere pleasure tourist.

During the summer of 1876, the year following my first experience in Nova Scotia, having formed a congenial "Fishing Club," consisting of one friend and myself (in most cases a sufficient membership for such a club), we left Philadelphia about noon, one day early in July, and took one of the Sound steamers the same night in New York for Boston. Starting during intensely hot weather, as soon as we were on board the magnificent Providence we were cool and comfortable, and the pleasure of our trip began. Many persons object to going long distances in search of sport, because so much time is consumed in getting to the ground. But with such ideas much of the pleasure of life is wasted or unrecognized. The "good time coming" may generally begin the moment one gets on the cars to leave care and worry behind, and to "go somewhere." I never see a train of cars move out of a depot but I wish I were on board "going somewhere," especially *somewhere that a trout lives.* Having breakfasted on the boat, at Boston we were soon transferred to one of the fine boats of the International Steamship Co. (sailing tri-weekly), which was to carry us along the coast to St. John, N. B. The boat touches at Portland in the evening, and at Eastport the following morning, reaching St. John in the afternoon. If the boat is missed at Boston, owing to detention on the Sound, by going by rail to Portland it can be taken there in the evening.

Sailing out of Portland's rock-bound harbor that evening, we had a combination of thunder storm and sunset, with most magnificent sky and cloud effects, with Maine's rugged coast for a background. Mount Desert was passed during the night, and Grand Manan the next morning. During the summer months good weather can be counted on, and a thirty-six hours' sail along the coast of Maine is almost certain to be thoroughly enjoyable.

After a night spent at the Victoria Hotel in St. John (unfortunately burned last summer in the great fire), we pushed on by the Intercolonial Railway to our destination, which was the little place known as Westchester, in Cumberland County, N. S. [See Hallock's "Fishing Tourist."] Mr. E. J. Purdy, who keeps the pleasant little inn at Westchester, met us at Thompson Station by previous appointment, and after a fifteen-miles' drive we reached his home on the summit of the Cobequid Mountains, about six in the evening. Situated as Westchester is, on the top of a low range of hills about in the middle of the neck of land connecting Nova Scotia with the mainland, one gets a most deliciously cool and invigorating combination of the sea air blowing up from the Bay of Fundy, and the bracing mountain air of this, the highest point in Nova Scotia. An invalid could not breathe a more healthy compound. As for Mr. Purdy and his family, one could not have hosts more anxious to please, or more filled with the spirit of true hospitality. Mr. Purdy had carefully attended to every detail of the preparations necessary for our comfort while in camp, and early the following morning, with Mr. Henry Bliss engaged as our guide, philosopher, friend, woodchopper, etc., we drove with our traps to Fountain Lake, six miles from Purdy's, over a rough wood road. Here we lived under canvas for about a week, christening our quarters "Camp Bliss." At any time of day we could row out on the pretty little lake and catch a good supply, often two at a time, of gamy trout, running from eight to fourteen inches in length. Two pounders are sometimes taken there. We never caught more than we needed for use, fishing an hour or so morning and evening, and between times lying off and enjoying delicious rest from the office labors of our city life. Mr. Purdy drove over frequently, and kept us well supplied with fresh eggs, milk and bread. A little previous cook-book study had made fair camp cooks of us, so that we lived far better than we had done on previous occasions when we depended entirely on the doubtful abilities of Maine guides.

Fountain Lake is small, say half a mile long, with water clear as crystal. Large spring-holes can be seen at various places, with great schools of trout lying at the bottom, and no prettier sight can an angler see than when a trout darts up from the bottom in plain view and seizes the fly, as a terrier grabs a rat, retreating again with it as far as your pliant greenheart lets him. Of course in such clear water the largest fish will not rise unless the surface is ruffled. Sometimes, toward evening, after a warm, still day, a cool wind will spring up, cooling as well as ruffling the surface, and then good sport with good-sized fish is sure to follow until even your "whits miller" cannot be seen for the darkness.

The interest in this little lake will, perhaps, be increased to some when they learn that a real hermit lives on its borders, or rather in the woods back of it. I fear, though, that he does not count his beads or indulge in pious meditations very often. Apparently he is not that kind of a hermit. But he lives all alone in a little cabin, with only his miserable "yaller dorg," Ranger, for company, subsisting mostly on trout from the lake, and working occasionally as a farm-hand to earn a little bread or salt pork. Occasionally Ranger will *range* a little more widely than is desirable, in search of scraps from our camp or from other cause, when presently the air will be rent with Tommy's yells, interspersed with very unhermit-like "cuss words," as he beseeches the purp to return to his home and master. Westchester Lake is another pretty sheet of water, but trout are getting scarce in it, owing to its accessibility to the workmen from the Arcadia Iron Mines, not far off. The "Jim Sutherland Pond" is a small pond containing a plenty of very gamy, dark-colored trout. I filled my creel there once just about as fast as I could cast and land the fish. Back of this pond, in the woods, is a meadow brook, very rarely visited, and swarming with trout of small to medium size. A man named McClellan can guide one to it and to the pond.

Of the hospitality of the people of Nova Scotia I cannot speak too highly. Everywhere one is treated as a visiting friend rather than a mere stranger and traveler. The country is wild and well stocked with game and fish, from bears and moose to salmon and trout. It is easy of access, and fairly supplied with rail and stage communication between different points. Two weeks from Philadelphia or New York will give ample time for a very pleasant trip. If one can take a couple of days more, or will deduct them from the time allowed for fishing, Halifax, a very quaint and interesting town, can be visited, and the return to St. John be made by way of Windsor and Annapolis through the beautiful country made famous by the story of Evangeline, and the charming Annapolis valley, and then by steamer across the Bay of Fundy. Hotel and other charges in Nova Scotia are very moderate, but of course one cannot go to such a great distance without some expense. But the total cost need not be more than $60 to $90 for one person, according to whether any time is spent at first-class hotels in Boston and St. John, or whether Halifax is included in the trip. Our club decided unanimously that our trip was the pleasantest from beginning to end that we had ever taken, and Nova Scotia now means much more to us than when we only knew it on the school maps. R. S. R.

Philadelphia, April 6, 1878.

Fish Culture.

NEW ENGLAND FISH COMMISSIONERS.—The Fish Commissioners of Massachusetts, New Hampshire and Connecticut, and other gentlemen interested in the subject, visited Plymouth, N. H., Tuesday. The party consisted of Col. Theodore Lyman, Hon. Asa French, and E. A. Brackett, Esq., Commissioners for Massachusetts; Dr. William M. Hudson, of the Connecticut Commission; Samuel Webber, Luther Hayes and A. H. Powers, Commissioners for New Hampshire; Governor Prescott, ex-Governor Talbot, of Massachusetts, who was for many years a member of the Board; Hon. Charles R. Train, Attorney General of Massachusetts; Hon. Charles Endicott, State Treasurer; Hon. Edward Spaulding, of Nashua; Colonel Carter, State Treasurer of New Hampshire; Dr. Fletcher, ex-Fish Commissioner of New Hampshire; Hon. H. W. Blair, Representative to Congress from the Third District; Councilors Smith and Tuttle, of New Hampshire; James E. Kame, of St. Louis, and other gentlemen. The party inspected the new hatching house, which has a capacity for more than 600,000 salmon spawn, and possesses an excellent supply of the purest spring water. In their conference the Commissioners discussed the securing of uniform legislation in the States of New Hampshire and Massachusetts in regard to the protection of salmon.

CALIFORNIA SALMON IN LAKE ONTARIO.—The following communication will be read with interest by all those engaged in fish culture. There seems to be no doubt but that the *Salmo quinnat* exists in Lake Ontario. In corroboration of the same we publish the following from John Robson of New Castle, Ont., under date of July 15:

You will be pleased to receive information which will satisfactorily prove the success of Mr. Wilmot's experiment of introducing California salmon, *Salmo quinnat*, into Lake Ontario. On Saturday last, 13th inst., I caught at this place twenty-three salmon, two of which were *Salmo quinnats*, one a grilse weighing four pounds, the other a well-grown, well-fed male fish of fourteen and one-half pounds. I compared the latter with your description given in FOREST AND STREAM, June 27, 1878, and found the engraving corresponded exactly. The dimensions were: extreme length, two feet eight and three-quarter inches; girth at pectoral fin, fifteen and a half inches; girth at dorsal fin, eighteen inches; at anal fin, fourteen and a half inches. The whole shape is different to the native salmon, *Salmo salar* being deeper and thicker according to the length. I compared it with a well-fed *Salmo salar* of the same length and which only weighed nine pounds. I at first intended to forward the fish to Professor Baird, but on reconsideration, it being Saturday, and with a probability of delay on Sunday and the thermometer at 90 deg., I was afraid to risk so valuable a specimen to the danger of spoiling before arriving in Washington, so I had my nephew, Mr. A. Farncomb, who is a good amateur taxidermist, put it up. I shall probably catch others in a few days, and if so, on any other day of the week but Saturday, will forward one to Mr. Baird at once. Mr. Wilmot is now on his annual visiting tour through the fish breeding establishments in the lower provinces; on his return I shall present the fish to him, and he can make such disposition of it as he thinks proper.

JOHN J. ROBSON.

A HALF DAY AT WALTONMERE.—Waltonmere is but a brief hour's ride from Hartford, and on the line of the Hartford, Providence and Fishkill Railroad. On invitation from the proprietor, Mr. C. R. Belden, we gathered our lines, rod and creel one sunny afternoon not long since, and purchasing a ticket to Bolton Notch, found on our arrival there a comfortable vehicle to carry us over the mountain three miles to the above locality. We finally drew up at the hatching-house, the first of a series of buildings connected with this establishment for the propagation of brook trout. By the success which has crowned Mr. Belden's efforts during the past year, we think the patron saint of the place—Sir Izaak Walton—might well be pleased could be for one instant look down upon this enterprise, just now in its infancy. The natural beauty of the place, under the shadows of Bolton Mountains, makes it more than usually attractive to the angler, as it takes him back in memory to many of his favorite haunts in other wilds, and entirely erases from his mind the thought that a city of 45,000 inhabitants lies within an hour's ride. A series of five ponds, supplied by the clearest of mountain brooks, produces all the necessary conditions for the successful raising of trout, while Dame Nature is further assisted by the careful attentions of the proprietor, and every hindrance speedily removed. We passed through the various departments of this enterprise, and examined the trout from half an inch in length to those of half a pound in weight, and were constantly surprised at the healthy state in which we found each growth. Although these ponds have been stocked only a year, their success seems a certainty, as over 100,000 of these fish were hatched last March and are now in their ponds, while those of last year have attained ¾ of a pound in weight, and can be enticed by the seductive attractions of the angler. We were allowed the pleasure of casting our lines into the largest of these ponds, and soon transferred a number of the fine fish to our creel. We found a small black fly and white miller very taking, also the ever favorite brown hackle, but we failed to allure them with the gaudy yellow and red flies which we used with such killing effect down in Maine. It is the hope of Mr. Belden that by another season the trout will have increased to a sufficient size and number to permit, to a limited extent, fishing in these waters on a reasonable royalty, but to-day it is hardly practicable. T. S. S.

DESTRUCTION OF FISH BY SEA BIRDS.—From the *Fishing Gazette* we take the following. We have already alluded to the subject. California fish-culturists particularly complain of the depredations of sea fowls in the waters of that State:

"It is estimated," says the report, "that on Ailsa Craig alone there are 10,000 gannets. Assuming that each bird only take six herrings a day, the gannets on Ailsa Craig alone must consume 60,000 herrings a day, or 1,800,000 herrings a month, or 21,600,000 herrings a year. On the assumption that there are fifty gannets in the rest of Scotland for every one on Ailsa Craig, the Scotch gannets must consume more than 1,110,000,000 herrings a year, or 37 per cent. more herrings than all the Scotch fishermen catch in their nets.' The total annual catch of herrings by Scotch fishermen is estimated at 800,000,000. But besides the gannets there are gulls, cormorants, auks guillemots, puffins and many other birds which prey on the herring. In a letter to the Earl of Caithness, printed in the report of the commissioners, the following is found: "I have often reared young gannets, and found that they required, when about two months old, six or seven herrings per day to keep them in condition, and they would eat twelve or fourteen if given to them. I have often slit the old birds for information, and taken six or seven large herrings quite fresh from their stomachs. I have rarely found any other fish than herrings in them, and I know that they can get herrings in abundance every day in the year on the coast of Scotland; allowing, therefore, six herrings per day and 1,000 to the cran, this gives annually 709,560 crans, which is considerably over the annual catch in Scotland for the past ten years. To prevent this great loss of fish it is thought wise to check the increase of the gannets. Another calculation, made by Mr. Connell, a fisherman of Girvan, gives the number of gannets off the Ayrshire coast at 20,000. 'All these birds,' he says, 'must live, and it is well known that their principal food is herrings. Allow that number of birds five herrings each per day to keep them alive, and, at the same calculation, as before stated, you will find they consume in one year the enormous quantity of 1,800,030 barrels, or one half more than all the fishermen in Scotland kill in the same time. I am only speaking,' he says, 'of the birds that frequent this one rock, Ailsa Craig, although it is well known there are many other rocks around the coasts of Scotland on which the sea fowl are quite as numerous; and I can also state with confidence that these birds are increasing very fast in number since the Act for their preservation came into force. The 324,000 gannets, therefore, estimated to breed in Scotland twenty years ago, may be fairly computed to have increased to a considerably larger number during the nine years that the Act protecting them during the breeding season has been in operation; and it would seem, therefore, that the estimate of the commissioners that there are 510,000 gannets, breeding or not, in Scotland, is little, if at all, over the mark. Under these circumstances the commissioners recommend that the Sea Birds' Protection Act, as far as it applies to Scotland, should be repealed, in order to check the increase of sea birds and the consequent destruction of valuable food.

Natural History.

Notes on the Illustrations in Don Juan Lembeye's "Birds of the Island of Cuba."

Don Juan Lembeye, a Catalonian schoolmaster, while following his avocation in the City of Havana, Island of Cuba, published, about the year 1850, his "Aves de la Isla de Cuba." This was twelve years after the ambitious work of Ramon de la Sagra had been printed in the city of Paris at the expense of the Spanish Government.

Several large volumes made up the work of De la Sagra, which treated of the general natural history of the Island of Cuba. The orinthological department of this Government enterprise was edited by the distinguished Frenchman, Mons. Alcides D'Orbigny. His volume, which I have before me, appears to be a sort of compilation made from poor authorities, and at the best is but a rehash of old matter. One of our young American field naturalists of to-day—an Allen, a Ridgeway or a Purdie—could contribute, from a single season's observations, more original matter than is found within the covers of Mons. D'Orbigny's large volume, which contains all of what was then supposed to be known about Cuban ornithology.

The ambitious De la Sagra attempted too gigantic an enterprise for the time given him for its completion by the Spanish Government, and the work is strangely incomplete, and abounds in many errors. As this great Natural History of Cuba was too costly for any but people of wealth, but few ornithological students could possess it. Therefore, Juan Lembeye's single octavo volume, which was sold in the Havana book stores for ten dollars, was welcomed by the young Cuban naturalists, when it first made its appearance among them, and to this day it is the only hand-book on ornithology in the market. Dr. Gundlach's "lists," etc., of the birds of Cuba have not yet been published in a convenient form, but appeared as "articles" in Don Felipi Poey's natural history *Repertorio*, which is printed in the Spanish language.

Lembeye's "Birds of the Island of Cuba," therefore, may be called the only popular Cuban ornithology in existence, and as it is thus to be considered, I think it important that a proper estimate of the value of its teachings (at least as far as its illustrations are concerned) should be submitted to persons who intend to take up tropical Cuba as a field of scientific investigation. Lembeye acknowledges his adoption of the figures of birds taken from "Audubon's North American

Ornithology" to adorn his little volume; but as he does not explain to his readers the peculiar manner in which he uses, or misuses, some of them, I cannot admire his ingenuity in the construction of one Cuban bird from two North American species, nor his apparent frankness, which allows but half the truth to be told.

I will now proceed to give a critical review of the illustrations of the above popular ornithology, comparing Lembeye's figures with those in Audubon's small edition, published by George R. Lockwood:

On page 11 is plate 1, with figures 1 and 2.

Fig. 1. *Falco peregrinus*, Linn. Vulg. Spanish. Halcon is the male *Buteo borealis*, Gmel., taken from "Audubon's Birds of America," vol. 1, plate 7—the red-tailed buzzard. Fig. 2. *Buteo borealis*, Gmel. (Vulg. Sp., Gavilancoli—rojo.) Lembeye gives no description of this bird in his text. He constructed this figure from the two figures of the Peregrine falcon, *F. peregrinus*, plate 20, vol. 1. "Audubon's Birds of America," by placing the female falcon's head upon the male falcon's body. In doing this he probably studied the picturesque. In Audubon's plate the male falcon had pounced upon a green-winged teal, while the female was devouring a gadwal duck. Having made his one new *Buteo borealis* out of two sexes, Lembeye allows this interesting bird to rest upon the gadwal duck. The whole may be called not a copy of, but a composition from, Audubon.

Plate No. 2.—Fig. 1. *Pandion haliætus*. Sav. Vulg. Sp. Guincho. Evidently intended to be an imitation of figure in plate 15, vol. 1, "Audubon's Birds of America," but the colors are not those of the fish-hawk.

Plate No. 3.—Fig. 1. *Astur fuscus* Gmel. Vulg. Sp. Cenaicalo morado. The attitude, coloring, etc., are tolerably good. Fig. 2. *Buteo latissimus*. Wils. Vulg. Sp. Halcon de Monte. This figure is taken from Audubon—vol. 1, plate 10—the broad-winged buzzard. Lembeye gives this figure without alteration from the original of Audubon, but the coloring is very far from the truth. Fig. 3. *Morphnus urubitinga* (?), Cuv. Vulg. Sp, Batista. Not finding this bird in Audubon's work, the Catalonian ornithologist, not having anything better to copy, evidently took the male *Buteo lineatus* from the American ornithology to experiment upon, but failed in colors.

Plate No. 4.—Fig. 1. *Otus brachyotus*, Linn. Vulg. Sp. Caraho. This bird, as figured in Audubon, is upon a bank watching a turtle, or tortoise on a log. Lembeye puts the bird upon a leafless branch of a tree, and omits some of the "markings" on the feathers, which the original artist believed necessary for a true representation of the subject. Fig. 2. *Noctua nudipes*, Daud. Vulg. Sp. Cotunto. I cannot find in this bird any particular resemblance to Audubon's *Cunicularia* or other owls. Let us hope that Lembeye copied some of his illustrations from nature—at least give him the benefit of the doubt, since the source from whence came the original of this figure cannot be ascertained. Fig. 3. *Chordeiles virginianus*, Briss. Vulg. Sp. Berequetec. From plate 43, vol. 1 "Audubon's Birds of America." A better imitation of the original than any previous imitations.

Plate No. 5.—Fig. 1. *Vireo gundlachii*. Lemb. Vulg. Sp. Peti-Bobo. This bird was first described by Lembeye, and was named in honor of Dr. Gundlach, a German naturalist, who has spent most of his life in Cuba. This figure was probably copied from the true *Vireo gundlachii*. Fig. 2. *Anabates fernandinæ*. Lemb. Vulg. Sp. Chillina. This species, like the preceding one, was described by Lembeye, and may represent the original bird. Fig. 3. *Muscicapa elizabeth*, Lemb. Vulg. Sp. Ruisenor. Like the two preceding birds, this was described by Lembeye, and may have been figured from nature.

Plate 6—Fig. 1. *Helinaia bachmanii*. Vulg. Sp. Gorgingera. The position and markings of Bachman's Warbler are similar to the figure in Audubon's, vol. 2, page 48, but the colors are very unlike those in the original. Fig. 2. *Sylvia discolor*. Vulg. Sp. Mariposa Galana. Copied from "Audubon's Birds of Am." Vol. 2, page 68. Position and markings of the bird approach the original in Audubon, but the colors are not similar. Fig. 3. *S. æstiva*. Vulg. Sp. Canario de mangler. A tolerable counterfeit of the yellow-poll wood warbler in "Audubon's Birds of Am." Vol. 2, page 50. Fig. 4. *Helinaia vermivora*. Vulg. Sp. Gusanero. Copied from "Audubon's Birds of Am." Vol. 2, page 86. A fair imitation in all but colors, which are much lighter than in the original.

Plate 7.—Fig. 1. *Hirundo americana*. Wils. Vulg. Sp. Golondrina Bifercada. The swallows in Audubon, vol. 1, page 180, are both upon the nest, but Lembeye gives his figure of the same bird soaring in the air. Fig. 2. *H. bicolor*, Vieill. Vulg. Sp. Golondrina verdosa. The author copies Audubon's figure of this species, but does not give the violet or bluish back, but substitutes a decided green not natural to the bird. Fig. 3. *H. ripara*. Linn. Vulg. Sp. Golondrina Ribariega. This sand martin is copied from Audubon, vol. 1, page 187. The coloring is but a poor imitation. Fig. 4. *Cypselus gradii*, Lemb. Vulg. Sp. Vencejo Cubano. Probably copied from the original bird described by Lembeye.

Plate 8.—Fig. 1. *C. ludovicianus*, Linn. Vulg. Sp, Degollado. The best imitation of any bird the author has copied from Audubon. Taken from "Audubon's Birds of Am." Vol. 3, page 209. Fig. 2. *C. cæruleus*. Vulg. Sp, Azulejo real. Nearly so good as the last; also copied from Audubon.

Plate 9.—Fig. 1 and 2. *Icterus Baltimore*, Linn. Vulg. Sp. Trupial. A good copy from "Audubon's Birds of Am." Vol. 4, page 37. Fig 3. *Agelaius assimilis*, Gund. Vulg. Sp. Chirriador. Here Lembeye commits a sin by giving the figure of the *Agelaius phœniceus*, Linn., an old and well-known North American bird for the Cuban species discovered by Dr. Gundlach. The figure he selects to represent the Cuban bird is taken from "Audubon's Birds of Am." Vol. 4, page 31.

Plate 10.—Fig. 1. *M. varia*, Linn. Vulg. Sp. Bijirita Trepadora. The position of the bird is altered from the one given by Audubon. Fig. 2. *O. Helenæ*. Gund. Vulg. Sp. Zunzuncito. This was, probably, figured from the original bird.

Plate 11.—*Ardea lentiginosa*, Swains. Vulg. Sp. Alcaraban. The two bitterns are bad imitations of the American bittern, and were copied from "Audubon's Birds of Am." Vol. 6, page 94.

Plate 12.—*Ardea brunnescens*, Gund. Vulg. Sp. Aquaita-caiman oscuro. The water scene and a house with a chimney is not a Cuban landscape. It was probably taken somewhere from Audubon. The figure of the bird may or may not have been copied from nature.

Plate 13.—Outlines of the heads of two birds. Fig. 1. *Ardea cubensis*, Gund. Vulg. Sp. Garza cubana. Fig. 2. *Hemipalama minor*, Gund. Vulg. Sp. Sarapiquito.

Plate 14.—Fig. 1. *Hæmatopus palliatus*, Temm. Vulg. Sp. Ostrero Americano. The author copies Audubon, Vol. 5, page 236, with the exception of the outline figure of the head and bill, which is not represented in Lembeye's plate.

Plate 15.—Figs. 1 and 2. *Strepsilas interpres*, Linn. Vulg. Sp. Sarapico. From "Audubon's Birds of Am." Vol. 5, page 231. Audubon represents the two Turnstones as "No. 1. Summer plumage; No. 2. Winter plumage." Lembeye copies the two birds and represents one as the male and the other as the female.

Plate 16.—*Anser hyperboreus*, Gmel. Vulg. Sp. Guanana. See "Audubon's Birds of Am." Vol. 6, page 212. Snow goose. To fully appreciate the constructive genius of Lembeye one must examine Audubon's plate of the snow goose, and also that of the American swan, (Vol. 6, page 226,) for from these two birds has the artist made up the curious nondescript which the Catalonian ornithologist gives to the public as the true *Anser hyperboreus*. In Lembeye's plate the snow goose the reader will recognize Audubon's Am[illegible] water scene with a North American water lily upo[illegible] face of the pool. The feet of the swan, mo[illegible] coverts and its neck are given, while the dar[illegible] of its wing of the adult snow goose, are put upon il[illegible] wing, primaries this new bird is original in character [illegible]dy. The head of

Plate 17.—*Anas acuta*, Linn [illegible] silargo. A fair copy from "[illegible] Vulg. Sp. Pato Pescuezo," Vol. 6, page 266. Two duc[illegible] Audubon's Birds of Am." Vol.

Plate 18.—*P.* [illegible] represented. Copied from "[illegible]*linus*, Aud, Vulg. Sp. Corna. The colorin[illegible] Audubon's Birds of Am." Vol. 7, page 141. the gre[illegible] Lembeye's figure is badly done. He omits P[illegible] on the neck of the bird.

Plate 19.—*P. Ankinga*, Linn. Vulg. Sp. Marbella. Copied from "Audubon's Birds of Am." Vol. 7, page 154. The male and female snake bird is a fair copy of the figures given by Audubon.

Plate 20.—*Larus marinus*, Linn. Vulg. Sp. Gaviota de manto negro. A fair copy from "Audubon's Birds of Am." Vol. 8, page 55.

In closing this criticism of the "Birds of the Island of Cuba," its author would remark that it is impossible to support Don Juan Lembeye in his observation that "the larger part of the illustrations have been faithfully copied from the work of Audubon," neither will he believe that the misuse to which many of them have been put does credit to the great American bird painter, Audubon, or his untruthful imitator, the Catalonian ornithologist. NATHANIEL H. BISHOP.

Lake George, Warren Co., N. Y.

NEW BIRDS FROM THE WEST INDIES.—In a recent number of FOREST AND STREAM was published an account of some of the adventures of Fred Beverly, the special correspondent of this journal, who has been exploring the Island of Dominica for the Smithsonian Institution. The sufferings which Mr. Ober has undergone while engaged in the arduous task which has occupied him for two years, have been extreme, and he has proved himself a veritable martyr to science—one of that large and noble company who patiently endure all the evils which stand so thickly in the way of the explorer, and of whom the world so seldom hears. Although Mr. Ober has been shipwrecked and several times prostrated by fever he has gallantly persevered, and we are now enabled to announce some further results of his investigations.

The good work which Mr. Ober has done in collecting is appreciated by our naturalists, and in the department of ornithology his labors have been especially successful. We have before referred to a paper by Mr. Geo. N. Lawrence, describing a number of new birds sent from Santo Domingo, and we have now to call attention to another article taken from the annals of the New York Academy of Sciences, in which the same writer announces seven additional species from the Island of St. Vincent.

After completing his explorations in Dominica Mr. Ober proceeded to St. Vincent; but while there he was attacked by a fever, from which he did not entirely recover for nearly four months. Even after his restoration to health his collecting was very seriously interfered with by the almost constant rains. The collection made in St. Vincent comprises ninety specimens, representing thirty-five species, of which seven, as already remarked, are new to science. Besides the specimens forwarded to Mr. Lawrence, Mr. Ober enumerates twenty-four others which he either saw or had reported to him as undoubtedly inhabiting the island. Mr. Lawrence announces that he hopes before long to be able to give a complete catalogue of the birds of the island, together with some notes on their habits, derived from the collectors' field notes.

The new specimens here described are as follows: *Turdus nigrirostris*, *Myiadestes sibilans*, *Thryothorus musicus*, *Certhiola atrata*, *Certhiola saccharina*, *Leucopeza bishopi*, dedicated to our friend and frequent correspondent, Mr. N. H. Bishop, of Lake George, and *Calliste versicolor*.

RAPACITY OF THE BOAT-FLY—*Editor Forest and Stream:*—I venture to ask you for information in regard to a strange water insect caught near our town. It was found by some boys in an old quarry filled with water and presented to my neighbor, Mr. J. S. Baker, who placed it in his aquarium to observe its habits and study its character. In a few days it showed habits of such extreme voracity and a disposition so ferocious as to attract numerous visitors. No one, however, had ever seen anything like it. The insect—for insect, fully developed and perfect, it is—is 2⅜ inches long by ⅞ wide across the back; of a dark brown or dirty black color. It has six legs, all armed with powerful claws at the extremities. The front set appear to be used to seize its prey; the second set it employs in clinging to objects (under water) when at rest, and the hind legs it uses to propel itself through the water. These are flattened and shaped much like the flippers of a crab (I send drawing). Its head is armed with a powerful, lancelike beak, which is folded back when not in use. After being in the aquarium several days, it attacked a small turtle, about the size of a silver half dollar. Springing on the back of the turtle, it seized and held it with its middle and hind legs, then grasping the turtle's head with one of its fore claws, it drew it out of the shell and forced it to one side, then inserted its beak into the carotid, sucking its blood. The turtle died in a short time. The insect, however, held on to it for several hours, evidently feeding on its juice[illegible] few days later a small water snake, eleven inches l[illegible] A ing been put into the aquarium, it immediately [illegible] seizing it in the same manner as the turtle—[illegible] long, having the neck. A desperate struggle ensued, [illegible] attacked it, for his life, but in a few moments hi[illegible] by the back of around as to dislocate the vertebr[illegible] snakey fighting hard In this case we could not fi[illegible] head was forced so far though Mr. Baker exam[illegible] and he ceased to wriggle. would seem that the w[illegible] the wound of the beak, al- clung to the snake [illegible] the snake carefully; yet it being forced [illegible] and must have existed, as the insect rage, scud[illegible] all day and appeared to be feeding. On at a stic[illegible] its dead prey it gave evidence of great sur[illegible] around the aquarium and clutching savagely [illegible] poked at it. We have several close observers of [illegible] objects in our midst, but none of them ever saw anything like this fellow. Mr. H. C. Hill has dragged every stream and pond for miles round, and furnished the late Prof. Agassiz with thousands of specimens, but never saw this.

Norristown, Pa., June 26, 1878. D. M. YOST.

The insect referred to is easily identified from the admirable sketches which accompany our correspondent's note. It is a species of *Belostoma*, one of the *Nepidæ*, which belong to the Hemipters, a group containing the harvest-flies, cicadas, etc. We hope that our correspondent will continue his observations and will keep us informed as to the daily life of this strange pet.

SOME REMARKS ON ALBINISM.—*Bedford, O., June 16, 1878.*—Albinism is not always congenital. Many years since I purchased a pair of pure black Spanish fowls, and bred from them several years. The hen, nor any of her progeny, ever showed any indications of sitting. The old hen, when about five years old, began to have white feathers, and at each moulting the white feathers were more numerous, and eventually she became entirely white—every feather and quill, legs and bill, and even her toe-nails, turned white, and her eyes a beautiful pink. At ten years of age she died on her nest. I have noticed this tendency in the black Spanish fowls in several instances.

Very truly yours, T. GARLICK.

It should be remembered that observations of this class on domesticated animals are by no means always reliable, since, as is well known, the tendency to variation is much greater than in animals in a state of nature. Therefore, let us go slowly in this matter.

Our correspondent, "Bobolink," who writes us from Williamsport, Pa., sends a note which bears somewhat on thi question. He says:

"Apropos of 'Mac's' albino chicken, described in FOREST AND STREAM AND ROD AND GUN of June 13, I know an analogous case. A neighbor raised a robin which proved at maturity to be a fine male and a good singer, colored like any ordinary cock robin. After moulting one season, when he was probably three or four years old, all his long wing and tail-feathers turned perfectly white. He lived to eat and sing several years after, and retained these partial albino characteristics. His stuffed remains are in my brother's collection."

A somewhat similar case was reported in FOREST AND STREAM not long ago, but in this instance the robin turned black instead of white.

WERE WOLF.—A startling paragraph is going the rounds of the press. Wolves, it is said a pack of them, have escaped from the Philadelphia Zoological Garden, and are ravaging the whole of Pennsylvania. Notwithstanding the heat of the season, the Russian sledge story has been repeated, and how the woman threw out her twins and her best bonnet to be devoured by the wolves. When last heard of, the wolves had attacked a train on the Stony Creek Railroad, after having stopped a farmer on the Germantown turnpike and devoured his horses and all his 75 cents-a-pound butter. Seriously alarmed, we addressed one of the directors of the Philadelphia Zoo., who has calmed down our fears, as follows:

It is the regular *canard* which always turns up this time of year, in place of the *ci-devant* big gooseberry which fed the reporters during the summer. We have no wolves, nor has anything escaped from the Zoo. There may be a Custer Station and also a Stony Creek Railroad, but I know them not. Last summer it was the wild-cat, and so on.

AN ALBINO DEER.—We know of a white male deer, quite tame, which can be had at a reasonable price in New Brunswick. This albino ought to be put in some of our zoological gardens.

HABITS OF THE RATTLESNAKE.

CAMP BOWIE, Arizona, June 7, 1878.

EDITOR FOREST AND STREAM:

I was much interested by an article on the *Crotalidæ*, which appeared in your paper of May 9, though I consider the question, "Of what use is the rattle to its possessor," as far from being answered as ever.

If the rattle is a call by which the sexes are brought together, why do we never hear it unless we have alarmed the snake? When stationed in Western North Carolina I often, when in the mountains trout fishing, saw and killed rattlesnakes, but never heard one unless I was so close as to be in danger of stepping on it—once within four feet of one lying directly in my path, and on which I should have trod in two seconds. It rattled without putting itself in coil, and when I stopped (which I did promptly, and with a peculiar feeling running up my back) it crawled slowly and silently away with the rattles curved up so as not to touch the ground, and not making the slightest noise. I suppose I should have let it go for having spared me, but I did not.

With regard to the rattle attracting birds, from its resemblance to the sound made by certain grasshoppers, I think it improbable. I never saw birds hunting grasshoppers by ear, and though I have often watched and listened to grasshoppers making their peculiar sound, I never yet saw a bird attracted by it.

Two years ago this summer, I kept two large rattlesnakes in a well lighted box, and was interested by observing their habits. I was most surprised by their fondness for water. I gave them a large panful every second day, into which they would put their entire bodies, going to the bottom and seeming to enjoy it extremely. Of course, they remained under but a short time. In drinking, they drew the water between their lips as a horse does. I never could induce one of them (the largest) to eat, but the other, a fine fellow with eleven rattles began at the end of two months by devouring a king snake (*Ophibo*

doliatus), about eighteen inches long, which had been in the same box for several weeks. The "*O. d.*" seemed to act as an appetizer, for after that rats and mice, when put in the box, were disposed of in short order. But before striking his prey he always rattled, and seemed to work himself into a rage. His fangs were removed when I got him, but were renewed and in perfect condition six weeks afterward, how much earlier I don't know.

I quite agree with you in thinking the number of rattles no indication of the age of the snake. I saw a splendid specimen last June, which measured just six feet in length and nine inches in circumference, which had but seven rattles. But if this development is governed by the vigor of the individual, should not this one have been better provided for in this respect?

Very truly yours, GEO. H. MORAN.

Our correspondent's observations on the *Crotalidæ* are extremely interesting, and we should be glad to hear from him again on this subject. Arizona is a pretty good country for snakes, and we have no doubt that one so observant as Mr. Moran will accumulate many noteworthy facts.—ED.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR WEEK ENDING JULY 20.—One sun bear, *Ursus malayanus*, presented by Commander George W. Sumner, U. S. N.; one black-handed spider monkey, *Ateles melanochir*, presented by Mr. Bernard A. Collins, N. Y. city; one flying squirrel, *Sciuropterus volucella*, presented by Dr. James S. Bailey, Albany; three ring doves, *Turtur risoria*, presented by Mr. Reed Fitch, N. Y. city; one green monkey, *Chlorocebus sabæus*, presented by Mr. W. H. Francis, Newark; one white-backed piping crow, *Gymnorhina leuconota*, presented by Captain Austin Jayne, Rockville, L. I.; one red-throated Amazon, *Chrysotis collaria*, one fallow deer, *Cervus dama*, bred in the menagerie. W. A. CONELIN, Director.

ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN FOR WEEK ENDING TUESDAY, JULY 16.—One little white egret, *Ardea candidissima*, presented; one beaver, *Castor fiber* var. *canadensis*, presented; three common pea fowls, *Pavo cristatus*, born in garden; one white-throated capucin, *Cebus hypoleucus*, presented; two land tortoises, *Testuda tabulata*, presented.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

MULCHING FRUIT TREES.

So much has been said and written about the practical advantages to be gained by mulching the surface of the orchard and fruit garden, and the subject being so seasonable, that we feel impelled to give a short synopsis of Mr. P. T. Quinn's remarks on the subject, from his address before the Horticultural Society in June last. He said "that mulching should be more generally practiced in fruit producing districts, for it is the least expensive and most effective method of protecting the fruit trees against the bad results often following the frequent and sudden changes of temperature during the summer and fall months, when the surface of the ground is left exposed to the direct rays of the sun. Again," he said, "when the mulch is put two or three inches in thickness, the surface soil is constantly moist and loose even when no rain falls for a term of several weeks, and the trees or fruit receive no check for want of moisture and food under such circumstances." His method is in the early part of the season to cultivate the spaces between the rows of trees in the orchard, using a small one-horse plow and cultivator, running not more than two inches deep. From the 1st to the 20th of July, according to the season, he puts on a heavy coating of salt hay, covering the surface as far as the branches extend. After this the few weeds that make their appearance are easily destroyed, and as every fruit grower knows but too well that for two or three weeks before the time of gathering the main crop of fruit, many fine specimens are being constantly knocked off by high winds. When the ground is thus mulched the majority of them are not bruised or injured for sale. This saving alone he considered paid him for the trouble of mulching the orchard. The only serious drawback he saw was the danger of hay or straw getting on fire in a continued hot, dry spell.

PLENTY OF HONEY.—"More honey on them griddle cakes, waiter," we heard a man in a restaurant say. Evidently he was from foreign parts where bees are plenty from the way he floated his cakes in a puddle of honey. The restaurant man did not seem to like it. He did not appreciate the overlavish saccharine tendencies of his guest. "Oh, you see, mister," said the honey eater, I'm from San Bernadino in South California. I come from a place where honey fresheta is known. In my ranch—it's a two-story adobe—the bees have kind of took possession of the whole upper story. Family obliged to vacate, so we live down below. Bees has got the whole shebang, from the first story landing to the caves. All I have to do when I want honey is to bore a hole in the ceiling with a quarter-inch augur, jam in a ramrod, work her up and down two or three times, and out streams the honey. It's mighty pretty and handy to put a plate of hot cakes under the hole and see the honey spurt. Then we corks up the hole for future use. It's always on tap. Mebbe there is fifty ton of wax in them rooms. Jess a little more honey on them cakes, waiter." "I wish," said the restaurant keeper, "that those bees had stung that man to death before he reached New York."

This is a fitting introduction to a story, a perfectly true one, of the floating apiary devised by Mr. C. O. Perrine. There was once a gourmand who existed only for strawberries. He would strike them in New Orleans about January and follow up the strawberries until he culled the last fragrant wild one in the pine woods of British America about the close of August. Well, Mr. Perrine has found out that bees can be kept at work, say ten months in the year, providing they can find the proper food. There is a spring bloom on a willow which bursts out early in the season in the Mississippi, which can be followed away up the river to its source. Mr. Perrine's plan was to take a small steamer with two or more barges in tow, to haul them to a convenient place where flowers were in abundance, to put his hives on shore, and when the stock of saccharine matter was exhausted to follow up the river to new bee pastures. The *St. Louis Globe Democrat* devotes a whole column to Captain Perrine and his floating colony. When last interviewed the bee boss was at St. Louis. The trip he has made may be consider only as a tentative one. year Captain Perrine propos to start from New Orleans about the first of April with a steamer and barges capable of holding some 2,000 bee hives. There is no reason why this venture should not prove successful and a new impetus to bee culture given. We Americans are certainly a very ingenious people.

THE CENTURY PLANT.—This interesting plant is common in tropical America, where it attains colossal proportions, and flourishes under a hot sun that withers many other plants. Botanically it is the Agave, and there are a number of varieties to the family, all of which closely resemble each other in general features. The Agave is frequently met with in Florida, and in its development there it often equals its kind found in Mexico, where it is supposed to be most at home. There is at the present writing a magnificent specimen on the grounds of J. D. Mead, at Mandarin, Fla., which attracts much attention in the vicinity from its enormous size and rapid growth of flower spike. It is the *Agave applanta*, and measures about three feet in diameter. The leaves are long, narrow and tongue-like, and radiating from a centre spike or trunk. These leaves are also thick, fleshy and fibrous, slightly serrated on the edge, and terminate in a sharp, thorny point. At the base of the plant the leaves radiate at right angles to the trunk; higher up they grow at a slight angle of elevation, and this angle of elevation increases regularly to the top of the plant, where the leaves are smaller, owing to not being fully developed, and stand vertically about the flower spike; the general outline of the whole plant is dome-like. The flower spike resembles an enormous stick of asparagus more than anything I can think of. Three weeks from the time it was first discovered issuing from the plant it grew to a height of twenty-five feet, and we hope soon to see the flower. What is considered a sign of the latter's appearance is the recent attenuation of the bulbous head of the spike to about half its former size, and there is also the fact that we can't reasonably expect it to grow much higher. I remember last summer having seen from a steamer's deck some Agaves a half mile away on the shore of the St. Johns, where their great size attracted attention. C. D. D.

Mandarin, Fla., May 21, 1878.

A REMEDY FOR POISON OAK AND IVY.—Last summer we published a number of recipes for the cures of woodland poisons. Here is the specific employed by Dr. S. A. Brown U. S. N., Mare Island, Cal., as published in the New York *Medical Record:*

"This specific is bromine. I have used it with the same unvarying success in at least forty cases. The eruption never extends after the first thorough application, and it promptly begins to diminish. Within twenty-four hours, if the application be persisted in, the patient is entirely cured. I used the bromine dissolved in olive oil, in cosmoline and in glycerine. The application with glycerine is painful, and, I think, possesses no advantage to compensate for irritation. The strength of the solution is ten to twenty drops of bromine to the ounce of oil, used by rubbing gently on the affected part three or four times a day, and especially on going to bed at night. The bromine is so volatile that the solution should be renewed within twenty-four hours of its preparation."

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

WILL FEMALE DOGS WORRY SHEEP?—We are anxious to have this question fully investigated, and would like our readers throughout the country to give us the benefit of their experience. A correspondent differs from Dr. Hadden, as may be seen from the following letter from North Manchester, Conn., July 22:

In your issue of July 18 I notice Dr. Hadden's letter in regard to female dogs not worrying sheep. In reply I would say that I have owned two pointer bitches who were notorious sheep-killers, and would go sheep hunting every time they were let loose. One of the bitches I owned several years ago and paid more for the sheep she killed than she was worth. The other is now owned by a friend of mine in this town, and is one of the best partridge dogs I ever saw. Last fall one day while we were out shooting we missed the dogs, and hearing a stampede of sheep, we ran out of the cover and found the bitch in question fastened to a fine wether, and so intent was she on her mutton that two charges of No. 8 at seventy-five yards failed to make her let go. So here are two cases for Dr. Hadden that can be vouched for. W. E. HUDSON.

DOGS IN TEXAS.—*Galveston, Texas, July* 17.—*Editor Forest and Stream:* I have had some severe cases of distemper among my Gordon pups, and will not fail to tell you of a little instrument which has materially aided me in administering medicine, and thereby in effecting cures. To give pills to four pups several times a day (by hand) is not a pleasant job, and, as necessity is the mother of invention, this case set me to construct an instrument. The same consists of a wooden tube, about three-quarters of an inch outside and about three-sixteenths of an inch inside, in which fits a stick that is a trifle longer than the tube (10in.) I force the pill into one end of the tube, open the dog's mouth, push the tube down the throat, and, by a simple pressure of the thumb, detach the pill from the tube, which is withdrawn forthwith, leaving the pill behind. Simple as rolling off a log. Now, take out a patent and be welcome. During the diarrhœa and colic attending the case of one of the pups when three months old, I have found sweet almond oil very useful. Given in doses of one-quarter to one-half oz. three times a day, it arrested the disease and eased the pain without ether or laudanum, and in two days changed the stools from blood into something like their natural condition. I have used this oil for some years with the same result. This litter is very good stock, the dam being by Maj. Allison's "Lorne" (No. 1,602, Loudon K. C. S. B.), out of a bitch of the Gordon kennels at Climey Castle, the genuine Duke of Gordon blood. The sire is Mr. W. F. Ladd's "Guy," bought at the Centennial show, a very handsome and good dog. One of the litter, now three and a half months old, which is being raised twelve miles from here in the country by Mr. Rudolph Hellwig, last week took the scent of a partridge, and found and set it in splendid style. Mr. Hellwig, who turned out some very well-trained dogs, says this one will make a rare one. I have reserved out of this litter one dog and two gyps for my use, and claim for them, respectively, the names: "Lorne" for the dog, and "Silk" and "Beauty" for the bitches, the mother being registered in the F. & S. K. B., No. 168. Pedigreed dogs are coming this way more than ever. Among late arrivals we number Mr. C. C. Pettit's fine Laverack bitch "Flora." The same is "pedigreed" stock sure enough, considering the circumstance that she paid a visit to the great Laverack "Pedigree," at Leavenworth, Kansas, recently. Prairie chickens are nearly full-grown, and sport will be plenty this fall. Lone plover are arriving in quantities, and are in fair condition. As a matter of curiosity, I should like to mention that on the 8th of May Mr. Ostermayer killed in the hay a fine lot of large ducks, among them red-heads, bald-pates and canvas-backs, for which there are extensive feeding grounds of valisneria in our bay. Rather late, is it not? F. W.

A COOL CANINE—*Editor Forest and Stream:* The weather here has been very warm of late—away up in the nineties. Was out the other day and had my cocker pup Don with me (seven months old). We passed into a side street, where there was no shade whatever. Ahead of us were two men carrying a long, wide sign. Don eyed the hind one sharply, then ran to the forward one and took a view of him, then ran back to me and looked up in my face to tell me something. I couldn't make out what he wanted, but told him I guessed it was O. K. He ran ahead again, took another good look at each man, then walked in under the sign in its shadow, and continued in that position until I turned out of the street. He did not care much about leaving it either, as he is not partial to the hot sun's rays. J. B. H.

Buffalo, N. Y., July 16, 1878.

"FIDELITY."—The old watch-dog Fidelity, of the Fidelity Safe Deposit Company of Chicago, has just died of old age in that city. On the night of the great fire, Oct. 9, 1871, old Fidelity was at his post in the Fidelity Safe Depository, and when the hurricane of the fire swept over the city he took refuge in an unoccupied vault in the basement and remained until the morning of the 11th of October, when the debris was cleared away and the faithful old fellow was rescued. He has ever since been an object of interest as the only living thing that passed through the great fire.

COCKER SPANIELS.—The following fine stock of cocker spaniels is owned by Mr. M. P. McKoon, of Franklin, Del. Co., N. Y. The dogs and bitches mentioned are the sources of the fine cockers for which Mr. McKoon's kennels are so favorably known: Captain, liver and white, whelped June 16, 1874, out of Juliette by Romeo, liver and white pair of cockers, not akin imported by Mr. S. J. Bestor, of Hartford, Conn., in March, 1873. Sam, dark liver with white star on breast, whelped May 19, 1876; Sam is out of Nellie by Capt.; Nellie is dark liver with white star on breast, a most beautiful bitch, formerly owned by Mr. McKoon, and said to be from a pair of dark liver imported cockers. Flora, liver and white, whelped November 20, 1875; Flora is out of Juliette by Snip, a beautiful liver and white pair of cockers, not akin. Mollie, dark liver with white star on breast, whelped October 14, 1875; Mollie is out of Topsy by Dash (Topsy was imported via steamer Idaho, September, 1874); Topsy is out of Flora by Wallace; Wallace is by Rap (well known in England as the champion Scarbro dog); Flora is by Guess, the champion at the great Horton show, June, 1875; Dash is by Crossland's Duke out of Dora; Duke is by Findley's Dart, imported May, 1869; Dora was imported by Corney in 1866. Bess, liver and white English cocker spaniel, whelped November 20, 1875; Bess is out of Juliette by Snip. Mr. McKoon has endless testimonials from purchasers attesting the excellence of his dogs.

BROKEN LEGS IN ANIMALS.—We have known of cases where the legs of puppies or dogs having broken their lives were sacrificed. A little good judgment and some slight knowledge of anatomy and plastic surgery might save many a valuable dog. A gentleman in this office gives us the following instance where prompt attention and a little ingenuity were employed with gratifying success:

"A very choice Alderney yearling, at Greenwood Lake, broke its off-hind leg a few days since. A doctor set the leg. The process was as follows: Rolled bandages, five yards long, were thickly sprinkled with dry plaster of paris and rolled into cylinders. These were then wetted a few inches at a time, and applied layer over layer to the leg, plaster being liberally sprinkled over between each layer. This was repeated until a solid wall of plaster of over an inch in thickness encased the leg, and the animal was securely confined until the plaster had thoroughly set and hardened, when she was released and allowed the freedom of a small pen. This was over a week ago, and to-day she is able to hobble about the yard, and seems in a fair way of recovery."

CRYSTAL PALACE DOG SHOW.—There was an entry of 1,057 dogs, and the classes were judged in the order given, and by the following gentlemen: Mastiffs, Newfoundlands, Sheep-dogs, Mr. E. Hanbury; St. Bernards, Deerhounds, Foreign Dogs, Dachshunds, Dalmatians, Pomeranians, Rev. G. F. Hodson and Mr. W. Lort; Bloodhounds, Setters, Retrievers, Rev. T. Pearce; Greyhounds, Mr. Warwick; Pointers, Mr.

J. H. Whitehouse; Spaniels, Major Willett and Rev. A. L. Willett; Fox Terriers, White-haired Terriers, Hon. T. W. Fitzwilliam and Mr. Allison; Bull-dogs, Blenheim Spaniels, King Charles Spaniels, Mr. J. W. Berrie; Bull Terriers, Black-and-Tan Terriers, Smooth-haired Terriers, Mr. J. F. Godfree; Poodles, Capt. the Hon. F. Greville; Bedlington Terriers, Irish Terriers, Skyes, Dandie Dinmont Terriers, Yorkshire Terriers, Pugs, Maltese, Italian Greyhounds, Toy Terriers, rough and smooth-coated, Mr. H. Dalziel.

AWARDS:

Bloodhounds.—Dogs: E Bird's Brutus; 2d, L O Morrell's Rollo; 3d, M Beaufoy's Morton; High com., E Wilbey's Forester and E Nichol's Lusth XII. Bitches: J C Tinker's Dido. Puppies: E R Ray's Duchess; 2d, M Beaufoy's Rodsrick.

Mastiffs.—Champion Class—Dogs: Prize, F G Banbury's Wolsey. Open Class—Dogs: M Beaufoy's Bean; 2d, R J Auld's Benmore, late Druid III; 3d, Rev F W de Castro's Stanley. Puppies—Dogs: R Hampson's Lion. Bitches: 2d, J Nichols' Lady.

St Bernards.—Champion Class—Dogs: Rev G A Sneyd's Hector. Bitches: F Gresham's Abbess. Rough-Coated—Dogs: G de L Macdona's Beyard, late Leo; 2d, F Gore's Kaiser. Bitches, W A Joyce's Queen Bess; 2d, W Tatham's Augusta. Smooth-Coated—Dogs: F C Clarke's Kaiser: 2d, F Gresham's Lion. Bitches: F Gresham's Bernie II; 2d, P R Brewis' Abbess II. Puppies: Dogs: N Sykes' Sefton; 2d, T H Goodwin's Fritz. Bitches: M L Moran's Nora; 2d, R Thornton's Edith.

Newfoundlands—Black—Dogs: H Mapplebeck's Leo; 2d, S W Wildman's Lion. Bitches: H Mapplebeck's Gipsy and Brunette. Other than black: Prize, W Freeman's Landseer.

Deerhounds.—Dogs: Dr J L Hemming's Doctor. Bitches: Dr J L Hemming's Linda; 2d, J Haddon's (M D) Lufra.

Greyhounds.—Dogs: T Jervis' Noison II; 2d, J Waddington's Doctor. Bitches: T Kirby's Ada; 2d, J H Salter's Polly.

Pointers—Large, Champion Class—Dogs: R J L Price's Wag. Bitches: R J L Price's Mend. Open Class—Dogs: G Pilkington's Faust; 2d, R J L Price's Eos Cymru. Bitches: G Moore's Midge; 2d, J E Platt's Mona. Small, Champion Class—Dogs: G Brewis' Roy. Bitches: W H Walker's Helen. Open Class—Dogs: R T Veitch's Don; 2d, G Thorpe Bartram's Special.

Setters.—English, except Black and Tan—Champion Class—Dogs: R L Purcell-Llewellin's Remus. Bitches: Prize and very high com., R L Purcell-Llewellin's Phantom and Princess. Open Class—Dogs: T E Isserd's Bruce; 2d, J E Platt's Rock II; 3d, R L Purcell-Llewellin's Count Wind'em. Bitches: J E Platt's Daphne; G de L Macdona's Meg; 2d, R L Purcell Llewellin's Countess II. Black and Tan.—Dogs: J H Salter's Rex; 2d, C H Mason's Ronald. Bitches: C B Hogson's Regalia; 2d, E L Parson's Jessie; 3d, H Mapplebeck's Mona. Irish—Dogs: R Farren's Rex; 2d, J Waddington's Shot. Bitches: G U G M'Heffie's Mina; 2d, J H O'Brien's Kate.

Retrievers.—Black, Smooth, or Wavy-coated—Champion Class—Dogs: S E Shirley's M P Thorne. Bitches: J Andrews' Beaver. Open Class—Dogs: S E Shirley's (M P) Transit; 2d, E G Farquharson's Beaver. Bitches: E G Farquharson's Bess; 2d, S E Shirley's (M P) Trace. Black, Curly-coated—Champion Class—Dogs and Bitches: No entries. Open Class—Dogs: J H Salter's King Koffee. Bitches: H Mapplebeck's Chicory; 2d, D Lingwood's Kitty. Puppies—Prizes withheld. Other than Black—J Holmes.

Water Spaniels.—Irish: A W Langdale's Limerick, late Paddy; 2d, J S Skidmore's Barney. Other than Irish—J Bishop's Dash; Very high com., W Page's Shylock.

Spaniels.—Clumber—Dogs: W Arkwright's Lapie and Looby. Bitches: A W Langdale's Linnah. Dogs: A W Langdale's Bachelor; 2d, H Hawkins' Rover III. Bitches: A W Langdale's Lizzie.

Fox Terriers.—Champion Class—Dogs: W J Hyde's Buffet. Bitches: F Burbidge's Dorcas. Open Class—Dogs, under 18lb: F Burbidge's Royal; 2d, G. W. Brewis' Tip. Over 18lb: F Burbidge's Bitters. Bitches, under 17lb: C T Abbott's Fan; 2d, J J Pim's Grace. Over 17lb: J H Murchison's (F R G S) Natty.

Sheep Dogs.—Rough-coated, Champion Class—Dogs: G G L Macpherson's Hero. Open Class—Dogs (objected to): J Locke's Joss; 2d, C H Mason's Carlyle. Bitches: S E Shirley's (M R) Hornpipe; 2d, W W Thompson's Bess. Smooth-coated—Bitches: H Mapplebeck's Fan and Lizzie.

Dalmatians.—J Fawdry's Captain; 2d, R J L Price's Tom Crib.

Bulldogs.—Large.—W H Petris's Noble; Medium—Dogs: P. Rust's Sancho Panza; T Verrinder's Slendersman. Bitches: H. Layton's Venom; 2d, G Raper's Rainbow. Small—Dogs: Capt. G E A Holdsworth's Doon Bras; 2d, J Bowman's Top. Bitches: W Oliver's Rozelle; 2d, R Fulton's Rose.

Bull Terriers.—Large: T Hasting's Young Prince; 2d, W J Tredinnick's Young Turk. Medium: C P Dickson's Oremorne; 2d, J T Simpson's Turk. Small: A H Loveys' Pegasus; 2d, C Stearn's Sting.

Terriers.—Bedlington.—J Cornforth's Newcastle Lad; 2d, D Ross' Flint. Smooth-coated, except Black and Tan: J H Mather's Vril, late Tim. Black and Tan.—Large: H Mapplebeck's Jet; 2d, J H Mather's Viper. Small: H Mapplebeck's Queen III. Skye.—Drop-eared: J Pratt's Corrie and Toddy. Prick-eared: F H Vicary's Monarch. Dandie Dinmonts.—Dogs: J Locke's Doctor. Bitches: Capt W A de V Brownlow's, R N, Nell; 2d, G Sharp's Wasp. Yorkshire.—Mrs M A Foster's Smart; 2d, Admiral Sir G Giffard's Cosis.

Dachshunde.—Small Black and Tan.—Dogs: W Schuller's Bissing; 2d, Weyman and Buchanan's Kuno. Bitches: W Schuller's Susella; 2d, Weyman and Buchanan's Waldfrau. Other than Black and Tan.—Dogs: W. Arkwright's Otto and Xaver. Bitches: Rev G F Lovell's Pixie. Large: Rev G F Lovell's Schinpferle; 2d, W Arkwright's Olga.

Pomeranians.—Hothessl and Ramber's Nero.

Poodles.—Lady D. Huddlestone's Mossoo; 2d, Mrs Compton's Kaiser.

Pugs.—Dogs: J Lewis' Sootey; 2d, Miss Jaquet's Tum-tum. Bitches: Miss Monck's Luna: 2d, R L Cosh's Juliet. Puppies: Miss K. Taylor's Young Snub.

Maltese.—Lady Giffard's Hugh.

Spaniels.—Blenheim.—S W Wildman's Duke of Bow; 2d, Mrs Popham's Frisk. King Charles: J Garwood's Prince.

Italian Greyhounds.—Mrs Day's Crucifix, late Tidy.

Toys.—Smooth-haired.—H Mapplebeck's Belle; 2d, R Fulton's Lady Lug.

Extra Prize.—Best sporting dog or bitch born since Jan. 1: H Mapplebeck's Marquis, Gordon setter. Best non-sporting dog or bitch born since Jan. 1: J Pratt's Tody, Skye terrier.

WHELPS—*Philadelphia, May* 8.—T. C. Steel's orange and white setter bitch Zill whelped six bitches and five dogs, orange and white. They are by Major Brown's Grouse, winner of first prize at Philadelphia Dog Show November last.

—*St. Louis, July* 17.—Mr. Vie's setter bitch Russia had ten puppies by imported Statue.

—Mr. A. H. Thomas' (Warrenburgh, N. Y.,) Gordon setter Fannie (Hope—Grouse, both imported,) whelped six on July 12—three dogs and three bitches, by imported Prince; all well. Puppies marked black and tan, with a little white between fore-legs.

—See advertisement of a very superior kennel for sale. The dogs include red Irish, English and Laverack, with Laverack and Plunket puppies. Some of the young dogs are ready for the field, and might be worked over this fall. The dogs will be sold low to good buyers. The kennel is situated at Centreville, on the Newark Branch of the Erie R. R., and can be seen in one hour's excursion from the city.

—A gentleman wants a mastiff pup, or a cross between a Newfoundland and a St. Bernard, the latter breed to predominate. Address "TRAMP," care of FOREST AND STREAM.

—Dr. Strachan claims the name Cyprus for his Sensation-Daisy, lemon and white pointer puppy.

—Attention is invited to the advertisement of Dick-Dalsy puppies. This is desirable stock.

Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
July 26	8	21	4	49	4	15
July 27	9	17	5	49	5	19
July 28	10	09	6	43	6	15
July 29	10	58	7	32	7	06
July 30	11	44	8	22	7	57
July 31	0	02	9	13	8	41
Aug 1	0	49	11	03	9	23

THE LEAD AND ITS USES.

The ordinary hand lead weighs from seven to fourteen pounds. For small yachts, however, one of four to nine pounds will be all that is required. For depths over twenty fathoms, what is known as the "deep-sea" (pronounce *dipsy*), lead is commonly employed, and will weigh from forty to one hundred pounds. Leads should be oblong in shape and have a hollow cup at the lower end and a large eye in the upper. In the cup tallow is placed, so that upon striking the bottom some of it may adhere and be brought to the surface as an evidence of having reached it, as well as to show the character of the "bottom," which may serve as a rough check upon navigation by comparison with the bottoms noted on the chart—sandy, gravelly, mud, fine shells, etc., as the case may be. Lead lines are marked as follows, premising that in short cruises in comparatively shallow water, as for example a sail up the Sound as far as New London, simple knots will suffice, the number of them indicating the number of fathoms: At two fathoms from the lead, two strips of leather; at three, three strips of leather; at five, a white rag; at seven, a red rag; at ten, leather with hole in it; at thirteen, as at three; at fifteen, as at five; at seventeen, as at seven; at twenty, two knots; at twenty-five, one knot; at thirty, three knots; at thirty-five, one knot. And so on. The deep-sea lead is marked in the same manner, though sometimes the marks up to ten or twenty fathoms are omitted, as not coming into play.

The above-mentioned depths are called "marks," those omitted "deeps." To sound when the vessel has headway on, a "breast-rope" should be attached to the shrouds or other convenient place, so that the leadsman may lean over the side to clear the yacht in swinging the lead. According to the speed and depth of water, he throws the lead forward, so that it may be "up and down" when he comes abreast of the line, enabling him to read off the depth by the marks. When going through the water fast he should swing the lead in a vertical circle, letting it fly off forward at a tangent and take all the line it wants with it. Never pay out slack line, but just keep a gentle feel of the weight at all times. Take care to stand clear of the wake of the lead's swing; we once witnessed a serious accident owing to the parting of the line, the lead striking a man looking over the ship's side at the time. If the depth happens to correspond to any of the "marks" enumerated above, the man heaving calls out, "By the mark three or five." If a little below the surface, "Mark under water three or five," etc. Should the depth measure about a quarter or a half a fathom beyond the mark, it is: "And a quarter five," or "And a half five," etc. If a quarter less than a mark, "Quarter less five," etc. Should the depth be judged about at one of the "deeps" not marked on the line, he sings out, "By the deep four," etc. Before going "into the chains," see that the breast rope is well secured, tallow in the lead, and line clear for running. Examine occasionally the "bend" at the head of the lead; it is apt to part sometimes owing to wear. The lead should have a stout leather strap rove through the eye, and the line attached by a "becket bend." Never be afraid or ashamed to heave the lead, but keep it going, unless you know exactly what water you are in. We have heard parties exclaim at the "greenness" of others heaving the lead right up a harbor to the anchorage, but there was nothing green about it; it is the proper thing to do, and betokens carefulness and preparation. The want of just such greenness has caused the loss of many a fine ship, and some noted yachts likewise. There are a variety of patent leads in use, worked by means of a revolving screw or propeller wheel, connected by gearing to dials showing the number of revolutions made in the descent, and consequently the depth. Others fitted with automatic detaching machinery, so that as soon as the line slackens suddenly in your hands you know the lead must have struck. Others again breaking or completing an electric circuit upon striking and ringing a gong on deck; but all these are for deep-sea work, and will not be needed for coasting work. If in deep water and anxious for an accurate cast, either luff or heave to.

To sound with the deep-sea lead on board a schooner, range the men along on the weather side from the cat-head aft to the quarter. Carry the lead, armed with tallow at its base, forward. Pass the bending end of the line forward outside of all, and becket it to the lead on the forecastle. Let each man collect a small coil of line in his hands, commencing with the first man forward, until you think you have enough line in hand to fetch bottom. Be sure to have the other end of the line rove over a snatch-block at the quarter, and belayed inboard so that it cannot get away. The men will then sing out, "All ready forward;" put the helm down to deaden the way. Then give the order, "Stand by! heave!" The lead is hove over clear of the side, the man calling out to the one next aft from him, "Watch, ho! Watch!" As soon as he feels a strain on the line number two pays out what he holds in his hand as the lead takes it, at the same singing out "Watch-ho! watch!" to number three, who will in his turn let the coil he holds run out, and so on till the last man in the range has done the same. All must heave the line well clear of the yacht. The man stationed at the snatch-block on the quarter watches the line sharply and allows as much more to run out as the lead will take. He must be sharp and know his business, or the line will rapidly pay down over the lead and a false depth be taken. In the meantime the word has been passed to "Lay aft and man the line." The slack is rapidly run in through the snatch-block, and when the line tends up and down, the depth is noted by the hand on the quarter. Then run in the line as fast as you can, up helm, fill away, lay your course and note the depth and character of the bottom and time of sounding in the log book. If you are hove to and drifting to leeward fast, pass the line from the weather quarter round the stern and along the lee side. By means of soundings alone many of our coasters navigate from this city to Florida, year in year out, and though we may not approve of such a rough and slipshod way of doing business, it serves to show the great importance to be attached to the lead and the range of its usefulness to be wide.

The *Drift Lead* is the name given to a hand lead hove over the side amidships when at anchor, and generally attended by one hand, if you can spare him. The anchor watch will come in handy for this work. The trend of the lead forward will, of course, indicate that you are not holding but drifting astern, when letting go another anchor or veering chain will be in order. Be careful, however, to give more line to your drift lead if the tide rises after putting it overboard, for unless the lead is on the bottom it will not only fail to indicate, but will deceive by hanging up and down, whereas you may be driving ashore fast in the dark and unknown to you.

YACHTING NEWS.

CORINTHIANS TO THE FRONT.—Since the inauguration of Corinthian sailing, some few years ago, amateur principles have been quietly and rapidly disseminating themselves among the owners of the smaller yachts of our clubs. It is to them that we must mainly look for the rising generation of thorough and able men at the sheet and tiller, and we learn with pleasure that our views are concurred in by many of the most influential members among our junior clubs. These gentlemen have in consideration the offering of a grand prize to be sailed for annually by open boats, under rules of strictly Corinthian character. The matter has been broached among yacht owners generally, and the universal answer seems to be: "Well, if all others will do away with shifting ballast and racing sails, I should be delighted, for it is a nuisance, strains my boat, and, after all, such races are no test of her qualities." The proposition is to limit the number of crew to reasonable figures; to do away with special racing suits, and, above all, to put an end to the mischievous and harassing custom of shifting ballast. Though some difficulty may be met with in the laudable desire of effecting these much-needed reforms, we believe the times to be very propitious to success, and the gentlemen undertaking the work have our best wishes and co-operation in the matter. The true yachting spirit is at war with sailing machines and jockeying, and always will be. May the time soon come when the new Corinthian Challenge Prize will be valued among the public as is the famous America Cup among the schooners of all nations.

RACING YACHTS IN FRANCE.—There has been of late a marked renewal of the yachting spirit in France, and thanks to the efforts of *Le Yacht*, which is across the seas, like the FOREST AND STREAM in America, the recognized organ of the sport, something like system and progress is rapidly being infused into our French cousins at the helm. They are certainly not far behind us in river or smooth water racing, for to look at the model of one of their *bateau a derive*, is enough to convince us that we would have a good deal tougher work cut out for us to beat one of their cracks than it would be to settle matters with a Brighton beach-boat, a Clyde lugger or an Itchen boat. The French craft is an outcome more or less of the American jib-and-mainsail, and the amount of canvas they spread carries one back to such clippers as the *Brown*, *Nettle* and *Fidget* of our own waters. In hull they are not quite so fine, but have a fuller build and a long, overhanging counter, the result, we believe, of following the silly Thames measurement for length, stem to stern post, instead of on the water-line or over all. These racing boats are centre-boards, have very light draft forward, but some drag aft, in imitation of the European cutter. A boat 21 feet on water-line carries about 1,000 square feet of canvas in two sails, a jib and a jib-headed mainsail. This latter is a tall, triangular-shaped sail, something like a mainsail and gaff-topsail in one. The lower portion of the luff works, as with us, on a "railway," and the upper part or apex being extended above the masthead by means of a sprit and single halliards working on a span attached to the sprit. Altogether, these boats have a smart appearance, and so far as looks are concerned seem to have lots of "go" in them.

BEVERLEY YACHT CLUB.—The grand union regatta off Swampscott, Boston, will take place Saturday, July 27, for prizes offered by the gentlemen of that town. Regatta open to all yachts not over forty feet. Time allowance according to the scale of the Dorchester Yacht Club. Start, flying. Centre-boards divided into four classes—28 feet and over, 21 feet to 28 feet, 17 feet to 21 feet, and those under 17 feet. Keels 28 feet and over, 18 feet to 28 feet; keels under 17 feet sail in fourth class for centre-boards; plain sail to be carried only; crews limited as per programme; no trimming by dead weight allowed. This is a most praiseworthy rule. We note that the custom of keeping fast ballast is gaining ground among all clubs, and especially so in Boston and neighborhood, where the baneful custom of "shifting ballast" is hardly any longer recognized as legitimate among the small fry. The judges are Messrs. John Jeffries, Samuel Hammond, Nelson S. Bartlett, F. W. Lawrence and W. Lloyd Jeffries. The regatta committee is composed of Messrs. G. P. Gardner, Jos. G. Minot, Patrick Grant, Jr., J. T. Coolidge and W. Lloyd Jeffries.

LAKE YACHTING.—The well-known sloop *Annie Cuthbert* has been rechristened *Greyhound*, and is now owned by Mr. John Prindeville. She has been in the hands of a shipbuilder for an overhauling, and will soon meet *Cora*, one of Pat. McGehan's cracks. If well-handled we do not think the Canadian craft can hurt *Cora's* record. The Chicago Yacht Club will hold an additional regatta in August, when we hope some real sailing will be done by following our Eastern clubs in abolishing shifting ballast, and limiting crews.

ATLANTIC YACHT CLUB.—The annual cruise of this club will commence Aug. 3. The flag officer on board the *Triton* schooner has issued the following orders: The fleet will rendezvous at Whitestone Bay, Saturday, August 3, at five o'clock P. M., and after arrival of the steamboat from New York, upon signal gun from the flagship, will sail for Glen Cove. Sunday, Au-

gust 4, at 11 o'clock A. M., divine service will be held by the club, under the direction of one or more of the chaplains on board the flagship. All members with their guests, and as far as possible their crews, will be present. Monday, August 5.—Upon signal from the flagship the squadron will get under way and proceed to New Haven harbor, and anchor in Morris Cove. Tuesday, August 6.—Upon signal from the flagship the fleet will sail for New London harbor, anchoring near the city. Wednesday, August 7.—Upon the usual signal the fleet will sail for Greenport. Thursday, August 8—Regatta day.—All yachts not entering in the regatta will accompany the racing fleet and be prepared to receive guests to witness the regatta, for which purpose they will report to a reception committee, to be hereafter appointed. The Regatta Committee will issue full instructions as to course, restrictions, etc., as soon as their arrangements are completed. Friday, August 9.—Orders for the future movements of the fleet will be issued. All signals for starting will be as follows: First gun, to prepare; five minutes afterward, a second gun, to start. All yachts must be at anchor, with jib down, at starting gun. No yacht, without permission, may take a flying start or leave the fleet during the cruise.

Open Regatta at Greenport.—In connection with their cruise, the Atlantic Yacht Club will hold an open regatta at Greenport, L. I., on Thursday, Aug. 8, under the following rules: The race is open to all cabin-sloop yachts of the Atlantic Club, and to those not enrolled in any regular organization, as well as to any cabin sloop belonging to regularly organized clubs east of Throgg's Neck. There will be three classes—45ft. and over, 35ft. to 45ft., and 25ft to 35ft. Limited to plain sail, as in Corinthian matches. Course from main dock to and around stake boat off the buoy on Crow Island Shoal, thence around stake boat off Orient Point Hotel and home. Time allowance according to Atlantic Club rules. Measurement for length, from a plumb at water line forward to extreme after end of counter or overhang. Entries to be in Greenport post office by 8 P. M. of Aug. 6 at latest. One prize in each class, valued at $100. Full information, with printed sailing directions, to be had from the committee the day before the race. The regatta committee is composed of Messrs. Wm. Peet, Latham A. Fish and Ed. Arnold.

Boston Yacht Club.—This club held its second annual excursion in Boston Harbor, Tuesday, the 16th inst, in the steam yachts *Minnehaha*, *Annie S.* and *Dawn*. A dance and a moonlight sail in the evening finished up a delightful day.

Look to Your Rigging Aloft.—The amount of brains of which some yacht builders and riggers can boast is not always liberal, consequently owners will do well to do a little of the thinking themselves and should occasionally cast an eye aloft. The number of jacks or cross trees which can be found cockbilled in a fleet is sign of a lamentable lack of capacity on the part of the riggers who put their work together in such a slovenly manner, and is not over complimentary to the watchfulness of owners and skippers. A large cutter sloop lying off New London, not many days ago, had her cross-trees "all-a-starboard," but no one seemed to notice it. But perhaps the most ridiculous sight to a sailor's eyes is the jack of a yacht, which, instead of spreading the topmast rigging, actually pinches or draws it inboard, being therefore worse than useless, a positive drawback to the spar and serving a purpose the very reverse of what it is intended for. Such an affair has been carried by the sloop *Blanche* this whole season, and not one in a hundred has even casually observed the palpable shortcommings of this prominent part of her rig, and we question whether, to the present day, her skipper is aware of the funny figure his boat cuts up aloft. One might travel through the entire British yacht fleet without seeing a display of such lubberliness as that, and pray is it not time that yachtsmen in America may be expected to have acquired enough seamanship to do away with a veritable greenhorn's rig?

A Book for Cruisers.—For a cruise "down East" you cannot do better than take along Capt. Wm. A. Pratt's Book of Reference. This will give you complete and reliable sailing directions for all ports on your route, lights, their order and height, etc., and will serve to a large extent in place of charts.

Yachting at the Exposition.—From our enterprising contemporary in France, *Le Yacht*, we learn that yachting and boating interests have received full attention at the Exposition, more so, perhaps, than at any similar show. Many will no doubt recollect the meagre and shabby display made at the Centennial of our own nautical interests, our vast yacht fleets and extended boating interests being summarily disposed of by the exhibition of a couple of steam launches and one or two shells, yachtsmen and the boating fraternity having laid themselves open to a charge of neglect and lack of enterprise not likely to be brought against our French cousins. *Le Yacht* gives in its latest issue a diagram, showing a large amount of space devoted especially to nautical interests, and adds to it a long list of exhibitors who confine themselves strictly to the sphere of yacht and boat building and the allied branches of navigation, life-saving, etc. Fishing boats, collapsable boats, steam yachts, patent blocks, full-sized cutters, yachts' guns, lights, sails, and all kinds of boats, together with innumerable fittings especially adapted to *la navigation de plaisance*, form a display upon which those unfortunate individuals, compelled to remain at home, will cast their thoughts with envy. Concerning all that is novel or useful in this department, our special correspondent in Paris will send us information in subsequent numbers.

Yacht and Boat Sailing.—Mr. Dixon Kemp, well known in connection with the London *Field*, and as author of the excellent book on "Yacht Designing," the standard work of its kind, has just brought out a new volume on "Yacht and Boat Sailing," which gives in a popular manner much of the ground gone over more scientifically in his first book, and besides a large number of plans and "lines" of the different types of vessels in use about the British coasts. The new work will also contain in exhaustive treatment the subject of sailing and handling boats of all kinds. The great success of Mr. Kemp's first work will insure a reception as well merited and popular for his second.

Yachts' Windlasses.—Yachtsmen know too well by experience what a hard job it is to break out an anchor by hand, when the windlass won't work. The teeth on the barrel are likely to snap off, and the pall in the shipper too apt to rust and jam fast, while the noise the ordinary ratchet windlass makes when at work is an obstacle to a quiet steal on the rest of the fleet of a fine summer morning. To obviate these defects, Thayer has patented a new windlass, which, though in the market for some years, has not yet been adopted by yachtsmen to the extent its many excellencies would seem to warrant. The ratchet, or teeth in the barrel, are done away with, as is also the pall inside the handspike shipper. In their place a clamp is made to grasp the rim of the barrel, and a socket on the clamp receives the handspike, or windlass bar. If regular breaks are preferred, the lever is fixed to the bitts in the centre, and a link is run down from each arm to the clamps. These links can be shifted in and out on the lever, thereby gaining either time or power as desired. As there is no gearing about the device, there is no noise, no clogging or rusting, and consequently no repairs, the windlass being operated by friction altogether.

New York Yacht Club.—Mr. Vermilye, of the schooner *Atalanta*, and Dr. H. Birney Hare, of Philadelphia, who has chartered the *Resolute*, have been elected members. The annual cruise will start from Glen Cove, Aug. 6.

A Large Steam Yacht.—The Herresboff Manufacturing Co. is building a fine steam yacht, 100ft. long, for Baltimore parties. She is to be very fast, and will be built on the composite principle. Internal arrangements will combine comfort and elegance.

Eastern Yacht Club.—The race for first class schooners, which failed for want of wind at the regular annual regatta, was sailed over again, July 17, in Boston harbor. Course, 28½ miles. *Halcyon* won in 4h. 12m., beating *Foam* 29m. 6s.

The Cutter Muriel.—Mr. Stillman's new cutter is about finished. Her joiner work was completed early this week, and she is now in the hands of the painters. Captain Dand, of the *Wanderer*, has made as neat a job of the rigging as can be seen in New York. The way her main rigging has been "turned in" and "set up" is a handsome piece of work, which many sloops might imitate to advantage. On her recent trial trip the cutter is said to have performed remarkably well, though her canvas was only temporarily bent and not stretched. She goes about "like a cat-boat," and is as easy on her helm as any vessel can be, certainly much more so than our hard sailing sloops, which require a wheel to handle them. Not long ago Mr. Hurst had a finely-carved and brass-mounted tiller sent over from England for his sloop *Active*, but upon trial he was obliged to fall back again upon his usual steering wheel, the sloop being too hard on her helm. The English type of vessel is always a handy craft, for they use tillers even in cutters of 100 tons and over, whereas we find it convenient, if not necessary, to supply a wheel even to the little five-tonner.

Cruise of the New York Yacht Club.—Mr. Ph. Schuyler, fleet captain, has issued the following orders for the annual cruise of the New York Yacht Club from the flagship *Restless*, dated July 19: General Order No. 1.—The squadron of the New York Yacht Club will assemble for its annual cruise at Glen Cove, L. I., on August 6. Signal for captains to report on board the flagship will be made at half-past eight in the evening of that day. The Commodore will suggest, as an outline of the cruise, that the following ports be made: New London, Shelter Island, New Bedford, Edgartown, or Oaks Bluffs, and Newport, leaving their order to the decision of the meeting. Certain harbors will be entered in specified orders of sailing; and, in addition to the customary regattas and boat races, one day will be set apart for squadron evolutions. The Commodore hopes that all yachts in commision belonging to the club will join the fleet, and will regard the presence of the steam yachts as a desirable addition to the squadron.

N. Y. Bay Regatta.—The protest of the sloop *Chemaun* against the *Nettle* in the Bay regatta, June 27, has been decided in favor of *Nettle*. It was claimed that she had fouled a stake-boat, but the captain of the *Nettle* asserted that his boat, being on the inside and overlapping *Chemaun*, was nearest to the buoy, and *Chemaun* should have given way for her, and not forced her onto the stake-boat. After taking the sworn statement of the time-keeper in the boat, the judges declared against the protest. It was also decided that *Fidget* wins the prize in her class.

Nettle wants a Race.—The wonderful *Nettle*, of whose speed and weatherliness we have had something to say before, is out with a challenge to sail *Clara S.*, Mr. Jos. Stelger, a race for $500 a side. Ex-Commodore Jos. Nobles has also accepted a sweepstakes race proposed by Mr. Munn, owner of the *Martha M.* Possibly *Thistle*, *Clara S.*, *Jennie Dilks*, *Chemaun* and others of the class may be entered, in which case an interesting race would be sure to result.

YACHTING DRIFT.

On some of the recent cruises collapsable boats would have been very handy on board the smaller yachts.....What has become of the dory that started across the pond some time ago?.....Mr. Louis L. Lorillard has had a jib-and-mainsail built at Newport, on which he will hoist his flag as commodore of the Newport Y. C. She is 27ft. long, 11ft. beam, and is supplied with a cabin.....Mr. Arthur M. Jones has also had a yacht built at the same place 24ft. by 10ft..... Schooner *Clio*, Mr. John R. Platt, has gone into commission .....Mr. A. T. Serrell, of the Brooklyn Y. C., has purchased the *Gypsie* schooner from Mr. Herman T. Livingston. The *Gypsie* was built by Wm. Foulks at Greenpoint, in 1870. She is 73ft. over all, 63ft. 9in. water line, 18ft. 5in. beam and 6ft. hold..... *Tidal Wave* is to have more head sail set on a flying jib-boom. This will improve her looks....Catamarans are coming into vogue on the lakes.....Mr. Treadwell's sloop *America* has been cruising to the eastward.....New Rochelle annual regatta middle of August.....Schooner *Clytie*, Mr. W. L. Brooks, has been lying off Greenwich, Conn.....*North Star*, Mr. Chas. A. Stevenson, cruising eastward.....Schooner *Triton*, Commodore Thayer, will lead the Atlantic Y. C. on the cruise.....Schooner *Nettie*, Mr. T. P. Osborne, has returned to New York.....S. S. *Mystic*, Mr. A. D. Cordova, is cruising eastward.

OAR AND PADDLE.

THE COLLEGE REGATTA AT OWASCO LAKE.

Editor Forest and Stream:

Reclining on the banks of the beautiful Lake of Owasco, at Ensinore, in company with William Blakie and Chas. E. Courtney, on the morning of the 18th, I lay anxiously watching the driving clouds and speculating as to whether the elements, with their usual capriciousness—especially when a college regatta was concerned—would cause a postponement. Surrounding us were thousands of spectators, whose train of thought ran in the same groove as my own. The surface of the lake presents an almost unbroken face, despite the sharp puffs of wind.

As the afternoon aged the wind became subdued and the water presented a most inviting presence to the shell-boat rower. The facilities for viewing the contest of the freshmen of Harvard and Cornell were of the best possible description. A long platform train had been provided, and this moving grand stand kept abreast of the contestants from start to finish, affording an excellent view of the whole of the struggle. In the centre of this train were stationed the referee, umpires and the timekeepers. In the early morning Cornell won the choice of positions, and took the west shore or inside, which gave them a little advantage both as to wind and course, the inside having a quarter of a length's lead, owing to the starting line being a diagonal one. Up to noon the Cambridge men ruled the favorites, but shortly after dinner the men from Cornell were the choice in the betting. Making my way to the boat house of Harvard, which was located about fifty yards north of the starting buoy, I examined the crew as critically as my limited time would allow. The men were a fine, athletic looking set of young fellows, and although aggregating less than their opponents, they had the appearance of being much heavier than their adversaries. A visit to Cornell's headquarters revealed the fact that the crew were a wiry set of men, who seemed capable of enduring considerable fatigue, although they were not of the cumbersome build. The boats used on the occasion were twin paper boats, 57ft. long by 24½in. beam. Almost with the striking of 4 o'clock the boys of Cornell were seen paddling to the starting buoys. Harvard seemed in no especial hurry to come to the post, and kept her antagonist in the sun for fully fifteen minutes. In the interval of waiting I was enabled to form some idea of the strong points and weak spots of the Cornell eight. Their stroke was the characteristic one, a long drag through the water, with a stiff arm to the finish, and the same old jerk of the head. The weak spot in the boat was No. 2. He slid too soon, and did not seem to be able to pull his stroke all the way through. No. 6 also rowed very wildly at times. No. 3 was rowing in splendid form, as was also stroke, their work being done well and cleanly. When Harvard came down to the starting point almost every movement betrayed the presence of Bancroft. The same clean, well-pulled stroke which was observable as in the University crew, and had their physique been on a par with their tuition the odds are that they would have reversed the verdict of the 18th inst. The make-up of the two boats was as follows:

CORNELL.

Name.	Residence.	Weight.	Age.
Bow—Curtice	Moravia, N. Y	139	22
No. 2—Foster	Ithaca, N. Y	137	22
No. 3—Waterbury	Rensselaer, N. Y	156	20
No. 4—Cowles	Cleveland, O	158	19
No. 5—Allen	Aurora, N. Y	173	18
No. 6—Jaynes	North Norwich, N. Y	165	21
No. 7—Cole	St. Louis, Mo	160	20
Stroke—Shinkle	New Rochelle, Ill	174	21
Coxswain—Ellstum	Cincinnati, O	108	16

Average weight of crew, 157 6-8 lbs.; average age of crew, about 20 years 4 months.

HARVARD.

Bow—Atkinson	Brookline, Mass	139½	19
No. 2—Freeland	Syracuse, N. Y	168	21
No. 3—Hammond	Nahant, Mass	148	19
No. 4—Hawkins	New York	149	18
No. 5—Foster	.....	139	19
No. 6—Hooper	Boston, Mass	166	20
No. 7—Howard	Worcester, Mass	161	21
Stroke—Brandegee	Utica, N. Y	179	20
Coxswain—Browne	Boston, Mass	103	19

Average weight of the crew, about 152½ lbs.; average age of the crew, 19 years 7 months.

The Cornell representatives snatched a three-foot lead from their antagonists as soon as the starting signal was given, rowing an evenly-pulled thirty-six to the minute stroke they were half a length ahead ere one hundred yards had been sped over. At a quarter of a mile three quarters of a length separated the rivals, and at the half they were all but clear. Now commenced a series of spurts and counter spurts which lasted throughout 440 yards. Harvard, taking her stroke up to 38, managed to reduce the lead considerably, but, as the burst of speed died out, they fell further and further in the rear, and it soon became patent to every one that Harvard was destined to row second on this occasion, and the only matter of conjecture was how far the crimsons would be beaten. This was finally solved by Cornell going over the finishing line 14s. ahead of Harvard. The winners' time was 17m. 13¾s.. Harvard rowed the three miles in 13m. 27¾s. Everything passed off in the most satisfactory manner, and every one was pleased especially.

Aquaris.

DOWN THE HOUSATONIC IN A CANOE.

West Cornwall, Conn., July 14, 1878.

Editor Forest and Stream:

The Housatonic is without exception the ablest river for canoeing purposes to be found east of the Mississippi. It runs north and south, whereby one bank is shady in the morning and the other at night. It is very narrow through all its upper course, so that the canoeist can paddle in the shade, except during the very middle of the day. It is full of variety, there being frequent rapids and long stretches of quiet water. Moreover, it is bordered by a railroad, which transports canoes cheaply and carefully. Altogether it is a river which cannot be too much praised, and which must be navigated before the canoeist can feel that he has sounded the deepest bliss of canoeing. In order that future navigators may rise up and call the writer of this letter blessed and manifest their gratitude in various ways—such as Reina Victorias—the following notes of the cruise of the *Lotos* (O. L. Morse) and the *Violetta* (W. L. Alden), two *Nautilus* canoes, belonging to the N. Y. C. C., are submitted:

The canoeist should start from Pittsfield, which he reaches at 2:25 by the 8 A. M. train from Forty-second street. Canoes must be carted from the freight depot to the river, at the bridge below Sullivan's dam. A Mr. Guild—he can be heard of at the Boston & Albany freight house—will cart them very carefully, and will charge only twenty-five cents for each canoe. Immediately after leaving the bridge the river runs with great swiftness, and though there are few rocks, a bright look-out must be kept for sunken logs. About half an hour will bring the canoeist to the best camping spot between Pittsfield and Lenox—a sort of amphitheatre among the hills—on the right bank. Here he will do well to camp and prepare for an early start the next morning.

From Pittsfield to Lenox is eight miles by the railway and about 640 by the river. The extent to which the stream winds is scarcely credible. If it sees a haystack a mile away to the northeast it will turn back, take two clove-hitches round that haystack, and then wander away in search of a hill around which to tie a bowline. In time, however, it reaches the dam at Lenox without indulging in rapids. This is the beginning of a series of dams which will give the canoeist a good deal of work. The canoe must be taken out at the left corner of the dam and carried into the mill flume. The flume is to be descended to the mill, where the canoe must again be carried into the river. The two carries are

very short, and if Mr. George Spoor is asked for at the mill he will give the canoeist all the assistance which could be asked. Thence the river is clear to Lenox Furnace, about two miles further down. Here are two dams, about one-fourth of a mile apart. It is best to make a single carry over both, taking out at the left corner of the upper dam and launching again in the flume just below the pulp mill. At the latter spot is a luxurious palatial horse-shed, which, for camping purposes, is all that could be desired. It even contains three hitching-chains, high enough for suicidal purposes in case the canoeist has been satiated with dams. One mile below is the Columbia Mill. On the way down two more rapids are passed; one is at the head of an island, and in both cases the canoeist should keep to the right. The carry at the Columbia dam is an easy one if the canoe is taken out at the right hand corner of the dam. Half mile below is the dam at Lee; here is a carry of about eight rods around the right hand corner of the dam. The best landing place is just beyond a little wooden building under the willow trees.

Close by is another dam. The flume on the left bank should be used, though, of course, it involves two short carries, the canoe being finally launched in the flume below the mill. There is here a larcenious species of small boy, who should be watched closely. Above and below Lee the small boy is civil, honest and ready to carry all sorts of things. At Lee he is a wild barbarian, and though he will not throw things unless the canoeist signally fails to meet his views, he will prey upon stores and baggage like an oriental locust.

Below Lee, which, by-the-bye, consists of Lee proper and South Lee, is quick water, with many boulders seeking the destruction of incautious canoes. There is nothing, however, which presents any real difficulties, except where the water is unusually low. After the quick water comes a long and exquisitely beautiful reach of deep, still water, shaded with trees on both banks. Here some uncalled-for fiend has placed a dangerous trouser's-trap. It is in the shape of a rustic bench, at the top of a flight of stone landing-stairs, on the left bank. Of course when the canoeist sees it he instantly goes ashore in order to smoke a pipe; but the rustic bench is full of protruding nail-heads, which would tear a pair of sheet-iron trousers. The canoeist wrenches himself free from the trap, with his trousers mangled past identification, and goes on his way filled with holy indignation.

There are two rustic bridges across the river at Stockbridge. Just below the second is a short rapid that is rather rough. It can, however, be run, and the best channel is about one-third the distance from the left to the right bank. The next dam is at Glendale. The rapid below the dam is a bad one, and for the next four miles the dams are so frequent that the Lotos and the Violetta were put on the railway and carried down to Falls Village. This was perhaps a mistake. They might have been launched at Barrington, from whence to the falls at Falls Village there are, as was afterward learned, no obstructions whatever. The canoeist is therefore advised to send his canoe from Glendale to Barrington by rail, to descend the run from Barrington to Falls Village, where Mr. William Hart will cart the canoe around the falls for the usual price, in these parts, of twenty-five cents.

There are some easy and pleasant rapids between Falls Village and West Cornwall, where a dam will be found. The canoe should be slid over the left corner of the dam, and the ensuing rapid should be run, although it looks bad, and is regarded by the villagers as impracticable. The Lotos and the Violetta ran it without taking in any water, although our canoeist was obliged to jump overboard once during the passage. From West Cornwall to Cornwall Pond there is a succession of rapids and old low dams, all of which can be run, although the canoeist will have to jump overboard many times. However, this adds variety to a cruise. Nature has so constructed the human trousers that they can always be dried at a camp fire. To-morrow we proceed down the run. There is an ugly rapid waiting for us just around the corner, and the chances that we come to grief in it seem at present very bright.

W. L. ALDEN.

Sea and River Fishing.

FISH IN SEASON IN JULY.

FRESH WATER.

Trout, *Salmo fontinalis.*
Salmon, *Salmo salar.*
Salmon Trout, *Salmo confinis.*
Land-locked Salmon, *Salmo gloveri.*
Black Bass, *Micropterus salmoides; M. nigricans.*
Muskalonge, *Esox nobilior.*
Pike or Pickerel, *Esox lucius.*
Yellow Perch, *Perca flavescens.*

SALT WATER.

Sea Bass, *Centropristris atrarius.*
Sheepshead, *Archosargus probatocephalus.*
Striped Bass, *Roccus linneotus.*
White Perch, *Morone americana.*
Weakfish, *Cynoscion regalis.*
Bluefish, *Pomatomus saltatrix.*
Spanish Mackerel, *Cybium maculatum*
Cero, *Cybium regale.*
Bonito, *Sarda pelamys.*
Kingfish, *Menticirrus nebulosus.*

TROUT FLIES IN SEASON FOR JULY.

Little Egg, No. 12.—Body and feet of orange and yellow, mohair and hare's ear mixed; wings, bright hyaline, slightly mottled; setæ, same as wings.

Lightning Bug, No. 10.—Body of equal parts, of dark brown, and black mixed, tipped with yellow; feet, of feathers from the English grouse; wings, double, the inner wing black, the outer wing a yellow brown.

General Hooker, No. 9.—Body made of bright yellow and green, ringed alternately; feet; red hackle; wings, of the tail feathers of the ruffed grouse.

Little Claret, No. 11.—Body and feet, dark claret mohair, slightly tinged with blue; wings, of the bittern, or brown hen; setæ, dark brown.

Claret Fly, No. 9.—Body, dark claret; feet, black; wings, of the brown hen.

Fetid Green, No. 10.—Body, feet and wings, a pale green.

FISH IN MARKET—RETAIL PRICES.—Bass, 20 cents; bluefish, 8; salmon, 25; weak fish, 10; Spanish mackerel, 15 to 30; green turtle, 10; halibut, 15; codfish, 6; black fish, 12; flounders, 8; porgies, 6; sea bass, 18; eels, 18; lobsters, 10; sheepshead, 20; Canada brook trout, 50; pompano, 25 cents; soft crabs, per dozen, $2.00.

Bluefish in abundance from all along the coast; pompano and Spanish mackerel plenty in the Chesapeake Bay; a few have been taken just below Long Branch, selling at 30 cents per pound. Salmon have ceased running in the Restigouche and neighboring rivers. Summer demand for all kinds of fish very active, Coney Island and the hotels on it consuming enormous quantities.

TROUT IN NEW BRUNSWICK.—*Andover, July* 10.—I have just returned from a cruise up the Tobique River, where I had fine sport with the *Salmo fontinalis.* Yesterday I fished the Paukeyock or Poke-i-oc, a tributary of the Tobique, and killed nearly as many fish as my Indian guide could carry, besides a fine string of some three dozen, which were destroyed by the crows. N. B.—Never leave your trout exposed where crows can get at them, unless you want them lugged off. Tobique Lake, the head of the Tobique River, a most beautiful body of water, is full of the finest of trout. The best route is by canoe from Andover, a pleasant trip of over seventy miles up a beautiful river with splendid scenery. Good Indian guides can be had here with their canoes for a trip of, say three or four weeks, at 80 cents to $1 per day. These Indians are far more intelligent than the Micmac Indians of the Restigouche. My guide's name is Frank Francis—son of Peter Francis, and is recommended to any sportsman who may visit this region now for trout or later for moose or Caribou.

STANSTEAD.

MASSACHUSETTS—*Nantucket, July* 24.—Bluefish are very plenty. The largest catches are as follows: Vesta, 110 and 86; Dawning Light, 72. Scup plenty; sharks ditto.

JACK CURLEW.

MOVEMENTS OF THE FISHING FLEET.—Late advices from the bay report schooner Jacob Bacon, high line of the fleet, 225 bbls. mackerel; schooner Rattler coming next with 125 bbls., and a few other fares ranging from 40 to 80 bbls. The whole number of mackerel arrivals for the week has been nine, but there have been no other fares of consequence. Number of Bank arrivals, 6; receipts, 200,000 lbs halibut and 110,000 lbs. codfish. Thirty Georges arrivals have been reported, 350,000 lbs. codfish and small lots of halibut. Whole number of arrivals for the week, 45.—*Cape Ann Advertiser, July* 19.

NEW JERSEY—*Forked River, July* 9.—Sheepshead and weakfish are now biting well. Our yacht, the Belle, came in yesterday with Messrs. C. H. Folwell and P. Scull, having caught in a few hours forty-two weakfish and five sheepshead, averaging five pounds each. No bluefish have been taken for the past few days.

ARTHUR.

Kinsey's Ashley House, Barnegat Inlet, July 21.—Fishing has been poor for past two weeks is the cause of my not writing. Past week a decided improvement. I quote: Sheepshead past three days, from 75 to 100 per day; bluefish, only a few taken and run small—best catch, fifteen, by Chas. H. Hammond & Co., of Philadelphia; blackfish and sea bass commenced biting freely again on Wednesday, since which good catches are reported—some as high as fifty in one tide; weakfish are taking the hook nicely, and as high as ninety per boat reported. Sam'l M. Garrigan & Co., of Philadelphia, took sixty in one hour.

B.

PENNSYLVANIA—*Sinnemahoning, July* 20.—Brook trout give us good sport now, and we are improving our time, which is not long, as the season closes with this month.

TEXAS—*Galveston, July* 16.—We have fine fishing. Sea trout, mackerel, pompano and many others are caught almost any time.

C. C. P.

THE BOULOGNE (FRANCE) FISH MARKET.—The total value of fish sold in 1876 in the sixty-one "quartiers maritimes" of France amounted to 88,990,581 francs, and of this sum more than a ninth part was contributed by Boulogne. The average amount earned per man varies in a very remarkable manner in the different ports. For instance, at Boulogne 4,573 men are employed in the fisheries, and the value of the fish sold in 1876 was 9,629,569 francs, making the average earnings of each man 2,100 francs. At Dunquerque the average amount earned per man was only 1,380 francs; at Calais very nearly the same; at St. Valery-sur-Somme only 1,000 francs; at Dieppe, 1,430 francs; at Fecamp, 1,740 francs; while in lower Normandy, in Brittany, and generally on the southwestern shores of the Channel, the average sum gained was even smaller than in Valery.

BASS FISHING IN THE BRANDYWINE.

CHADD'S FORD, Pa., July 15, 1878.

EDITOR FOREST AND STREAM AND ROD AND GUN:

Perhaps many of your readers are not aware that the Brandywine—a stream famed in the history of our forefathers' memorable struggle for Independence—is now furnishing rare sport for those who delight in bass fishing. This expanse of water has its source in the northern part of Chester Co. and flowing southwardly through Chester and Delaware counties empties into the Christiana River at Wilmington, Del. About six years ago, among other streams of Pennsylvania, it was liberally stocked with black bass. A law prohibiting their capture for three years was enacted and rigidly enforced. Some dissatisfaction was expressed in regard to the stringency of this enactment; yet the wisdom of it is now appreciated not only by those who fish for the sport they find in so doing, but even pot-fishers—those scavengers who employ the line, seine, set-net and other devices—have come to look upon it with better feeling.

Bass fishing is now at the zenith of its glory; they take the bait eagerly and are game to the last. A few days ago a party of young men encamped on the banks of the Brandywine in the vicinity of Chadd's Ford, Del., Co., and among other recreations indulged in that of fishing, with very gratifying success. Bass were caught measuring 17 and 18 inches and weighing 3, 4 and 6 pounds each, respectively. Ah! but they were beauties! Imagine the ecstacy of our amateur fisherman struggling in the water with a 4 pound bass, and notice the smile of triumph illuminating his countenance as he safely lands his victim. Perhaps his highest ambition, previous to the introduction of bass, was to catch cat fish and eels. Unfortunately for the camping party, or rather fortunately for the bass frequenting this section of the Brandywine, it began raining on the morning of the third day out, and continuing at intervals for two or three days, rendered the creek unfit for fishing for this particular species. The fly is seldom used in angling for the bass, as they do not readily rise to it. The bait most extensively employed is the crawfish.

The scenery along the Brandywine is of an interesting and varied character, and as the stranger gazes upon this historic stream forcing its way through rugged hills and again meandering gracefully through meadow and copse, now rushing forward with the speed of a mountain torrent, and anon moving onward with scarcely a ripple disturbing its placid surface, the sight is one long to be remembered and cherished.

E. T. C.

FISHING AT KANAWHA FALLS.

KANAWHA FALLS, Va., July, 1878.

This place is on the line of the Chesapeake and Ohio R. R., about 233 miles west of Richmond, Va. The immense basin under the falls affords much excellent sport, not only in bass fishing, but the largest white perch I have ever seen are caught here—one weighed sixteen and a half pounds—besides "buffalo," blue cats, and other kinds of fish. On our way to the wild West we stopped over here for a few days' rest, not with any intention whatever of fishing, but, on seeing a seven-pound bass caught by Mr. Nash, of Beckley's Hotel, our ardor was aroused to the fullest extent, and with a fine trout rig we boldly set out for the rapid water. Being a select party of two, quiet reigned, and it was beginning to be monotonous, when a sudden "I have him! I have him!" from the other end of the boat brought me relief in a glow of excitement, and in an instant I was by the side of the female member of the concern to assist in landing the fish, which proved to be a blue cat of some size. Thus our luck continued, with a variation of a white perch, skip-jack and yaller belly occasionally, which did not come up to our expectations, and we returned to our hotel to await the morrow. When we stepped into our "skiff"—or, as it is generally called hereabouts, "skift"—next morning we were not up to the fishing mark of enthusiasm, caused no doubt by too much musquito singing and its sequence, a sleepless night, when a few minutes after tying the boat to some bushes a violent tug at my bait, with a singing reel, let me know that at last a bass had paid me a visit. I am not just as quick to handle any rod as should be, though no and I had quite a fight for the mastery. My little trout rod bent and swayed with every new turn the bass made, and I thought of the light leader and No. 2 trout hook at the end, while his frequent leaps into the air increased the anxiety for the light rig; but my tackle was the best of its kind, and after some time I had the pleasure of landing a black bass weighing within a few ounces of three pounds. Several smaller ones were caught, the queen of the party landing three or four, the largest weighing over a pound. Other parties met with great success, and Mr. Taylor, of Cincinnati, landed one of seven and a half pounds. This gentleman hooked a channel cat, and after two hours of hard work lost him with a part of his line. These catfish grow to an enormous size, many having been caught here weighing over a hundred pounds; and when one is fishing for something lighter it is quite alarming to hook such a citizen of the water.

Bass are more plentiful here than ever before known, and in the rapids, just below the falls, the fishing is just beginning to be most excellent, the river having fallen nearly within its summer banks. There is a good hotel right at the railroad, where trains stop for meals, kept by Mr. Beckley, formerly proprietor of the Yellow Sulphur Springs, Va., which were burned last August, where the sportsman will find himself at home, and can be accommodated with live bait, boat, and general information. There is also, near this hotel, John Hawkins, a sun-burnt fisherman, who can furnish live bait, and knows not only the very place for bass, but the exact spot where the largest may be caught. Besides all this to recommend him, John has an intimate acquaintance with other families of fish; but on no account let him go with you, as they are all afraid of him and no luck will come to your hook.

Just across the river is the old Kanawha Falls Hotel, no doubt known to fame in the days of staging through Virginia, but now dependent upon the patronage of a few visitors during the summer season, and the travelers from Nicholas and Webster counties throughout the year. It is a beautifully situated place, though very much out of repair, and would be a most excellent place for the sportsman but for the swarms of musquitoes which greet one morning, noon and night, and other little disagreeables which make it anything but a pleasant place to put up at; besides there is no one to furnish you with bait nor information.

IAN BEG.

TROUT IN MIDDLE PARK, COLORADO.

HOT SULPHUR SPRINGS, Col., July, 1878.

EDITOR FOREST AND STREAM:

Trout fishing has been fair to good in Grand River and its larger tributaries ever since the ice went out in March. "Tender feet" (new comers) could hardly make a living at it, however, up to the present time. Most fishing to date has been with bait, though in some streams they have taken the fly up to readily. The grasshopper is the favorite bait, but early in the season they are hard to find. The trout fly (May fly or willow fly) came out this season from the 7th to the 10th of June, and remained about ten days. Most years they are ten days later. But they are not generally distributed, being entirely lacking along some streams, and entirely too abundant along others. Where the latter is the case they naturally feed the fish to repletion, so that hardly any can be caught while they remain, in any way. A few miles down from here they swarmed on the trees and bushes along the edge of the water like colonies of bees. Since June 15 we have fished mainly with minnows, which comes exceedingly awkward. Lead must be used, and the hook sank from two to six feet. Then, when a trout "nibbles," you must let him take his time, cat-fish fashion. He will toy with it for some seconds, and probably at last start for the bottom, across or down stream. Then, by a gentle pull, you can hook him about one time in three. He seldom strikes vigorously, though he sometimes does, but, once hooked, his natural life and activity are at once aroused. Occasionally a fish will come to the surface for a minnow, or will follow it, but either is very rare.

Trout begin spawning in these waters as soon as the ice breaks up—possibly before—and are mostly done by May 1, but this rule is proved by exceptions. Ripe spawn may be found until late in the summer; some say late in the fall. On June 30 I opened a fish that yet contained eight or ten eggs of this year's spawn, while the ova for next year was distinctly visible. This specimen was fifteen inches long, but unusually slender. In a large creel-full—thirty or more fish—this was the only one that contained ripe eggs. The great enemy of the trout in this region is the sucker, called by some red horse. They follow the trout when spawning, and suck up their eggs. Fortunately, the pest is being rapidly "stamped out" by seining in the late fall and early spring, when they congregate in deep holes, and can be scooped out, sometimes by the ton. They are marketable in the mining camps at from ten to twenty-five cents per pound, and two or three men joining together, and catching a wagon load or two, sometimes make a handsome little speculation. Seining, netting, or trapping trout is prohibited by law, but a trout can seldom be caught when seining for suckers.

The trouting season promises well, and is really just beginning. The streams are now going down from the annual snow-water floods, and piscatorial sport will increase rapidly from this date. Already, solitary "pilgrims" meander the banks, and bring to their "boarding bosses" from four to ten fish a day, which is enough to keep them trying. The largest trout to my knowledge taken in this neighborhood this season weighed three and a half pounds.

W. N. B.

A GUIDE TO HEALTH.—"An ounce of prevention is better than a pound of cure" is an old and trite saying, and if persons liable to sick headaches, consumption, impure blood, heart disease and any of the many different forms of organic disorders were only aware of how important a part in the economy of the system the skin and its pores play much more attention would be paid to the bath in connection with medicinal agents than at present. The difficulty and cost hitherto attendant upon a visit to some watering place has been done away with through the introduction of Lubin's Portable Turkish Bath, with the aid of which a regular course of treatment may be undertaken at home, as the baths are within reach of all, and if taken according to directions issued with them cannot fail to be of great benefit and comfort to every household. As noticed in our advertising columns Lubins' Turkish Baths are made in Cincinnati and sent to all parts of the country for the small sum of $10, medicinal agents included.

Game Bag and Gun.

GAME IN SEASON FOR JULY.

July is a close month for game, except as to woodcock, in certain States.

☞ NEW YORK LAW.—The open season for woodcock in New York State begins August 1; for quail, Nov. 1; and for ruffed grouse or partridge, Sept. 1.

MASSACHUSETTS—*Nantucket, July* 24.—The gunning does not commence here until the middle of August, although there are a few birds, the advance guard of the main flight. Monday I shot two small yellow-legs, and noticed a flock of black-breasted plover flying in the direction of Micomet Pond. JACK CURLEW.

NEW JERSEY—*Barnegat Inlet, July* 20.—Bay birds are plenty. They commenced flying on Tuesday last. On Wednesday you could see and hear them at all hours. B.

VIRGINIA.—Curlew, willets and snipe are very plenty at Chincoteague Island.

TENNESSEE—*Nashville, July* 20.—There are a great many doves about, and this is the season for shooting them. Our sportsmen are out in numbers. Mr. Fields killed thirteen the other afternoon. The weather is too hot to shoot, except very early in the morning or late in the afternoon.

FOREST AND STREAM GUN CLUB.—We appreciate fully the compliment paid us by some gentlemen of Nashville by naming their club The Forest and Stream. We wish them full success, and hope to chronicle their exploits. The officers of the club are: John C. Ferris, President; J. Louis Valentine, Secretary and Treasurer.

TEXAS—*Galveston, July* 10.—Plover are appearing in considerable numbers hereabouts, and quail and prairie chickens are being killed above here, though our climate forbids a large bag of game just now. C. C. P.

ILLINOIS.—Some Chicago sportsmen are to organize a club and make their headquarters in Wisconsin, somewhere in the vicinity of Ashland.

Harrison, June 30.—Woodcock are plenty here this season.

OHIO—*Canton, July* 19.—Quail prospects good; woodcock scarce and hot work to hunt them. G. P. P.

IOWA—*Algona, July* 18.—We are sure of fine shooting this season. I never saw so many prairie chickens before. Every farmer that comes to town tells of large flocks of chickens seen every day. The chickens are over two thirds grown. All who want to shoot will have a fine chance this season. J. G. S.

"FATED TO BE FREE."—Two thousand stall-fed pigeons at Petroleum Centre, Pa., were suddenly released the other night, when the flames broke out and their coop caught fire. The sportsmen of that town lost their club room, with all their property, including a champion gold medal.

THE FOURTH AT BLOOMING GROVE.—*Editor Forest and Stream:* The attendance of members and their invited guests at Blooming Grove Park was larger than usual this year, nearly seventy persons participating in the sports, which consisted of rifle and pistol matches for prizes, boating, fishing and archery practice, musical entertainments and readings. The opening of a new road from Millville to the club-house was made the occasion of a celebration, and no pains were spared by the Executive Committee, under the direction of Dr. Bradley, to make the meeting pleasant and memorable to all. The new road from Millville on the Honesdale branch of the Erie Railway to the club-house was surveyed and located by the park engineers, Messrs. George S. Greene, Jr., and John Avery, and found by actual measurement not to exceed seven and a half miles in length. It is a charming drive, following up the romantic Blooming Grove stream through the woods until it reaches the high ground, where the views of the surrounding country are very fine. This will be the favorite route to the Park in future, and ample accommodations are furnished at Millville by Mr. John Deming to parties arriving from New York by the evening trains, and also conveyances to meet all trains. The rifle matches were as follows: 400 yards, off-hand, first prize, a silver-plated revolver, won by Col. P. M. Wilson; second prize, a gold club badge, won by Dr. Glenney; 200 yards off-hand, first prize, a Remington rifle cane, won by H. Kleinhans; second prize, a gold club badge, won by A. H. Wellington. Pistol Match—20 yards, prize, a Smith & Wesson 12-inch pistol, won by Mr. Pattison. Glass ball trap match—10 shots, prize, a gold club badge, won by Dr. Glenney. Members rifle match—200 yards, gold badge, won by Frank Reynolds. There was some archery practice by the ladies, in preparation for the coming contest for a prize silver pin, designed and presented by the secretary, Mr. Avery. The success of this meeting, the opening of the season, was due to the exertions of the Executive Committee, and the careful attention to the welfare of all by Dr. E. Bradley and Mr. T. W. B. Hughes. Trout and black bass were caught in abundance by the piscatorial members—the bass in Lake Giles and Lake Laura, which latter has become the favorite camping ground this season. Excursion tickets, via Erie Railway, can be purchased at Twenty-third street and Broadway by application to the Secretary, 37 Park Row, or to Dr. E. Bradley, Executive Committee, No. 1 West Twenty-fourth street. J. AVERY, Secretary.

—Mr. C. L. Ritzman, of 934 Broadway, offers for sale a very general assortment of sporting goods, including rifles, pistols and shot-guns, with all the necessary rig for fishing. The recoil pad has had already our approval, and we can recommend to our friends. A specialty is to load shells for sportsmen. All the varieties of glass balls are offered for sale. A very handsome split bamboo rod, three-jointed, with extra tip, is offered as low as $18. Mr. Ritzman has a specific for that brute of a black-fly, which fishermen are pretty sure to use.—[*See Adv.*

—Among the numberless knick-knacks of the sportsman's outfit, which in our day of shooting are made easy, considered indispensable, is Dudley's pocket cartridge reloader, whose claims are set forth in our advertising columns.

—Among the leading gun houses in the United States, the firm of Messrs. E. K. Tryon, Jr., & Co., of Philadelphia, is worthy of especial notice. Established most fifty years, always in the same line of business, this house has all the advantages of a thorough experience. For many years as the manufacturers of Tryon's single and double muzzle loading rifles and shot-guns, these arms have been widely distributed throughout the country. All the tools used by gun-makers are made by the Messrs. Tryon. They are also agents for the Derringer pistols and revolvers, and for Parker & Brothers' breech-loaders. In English guns they have constantly in stock full lines of Ward & Sons and Williams & Powell's guns. All kinds of shells and cartridges used for shot-guns or rifles may be obtained. There is a certain wise conservatism about a well-known Philadelphia house, which induces the utmost confidence on the part of customers. Whatever arms may be sold by the Messrs. Tryon may be relied upon. They are exactly as represented. The house does a large wholesale and retail business, and from their catalogue, which is of the most comprehensive character, every want the sportsman requires can be filled.

GAME IN COLORADO.

HOT SULPHUR SPRINGS,
Middle Park, Col., July, 1878.

EDITOR FOREST AND STREAM:

The crop of grouse of all kinds common here—sage hen, blue, pintail and ptarmigan—promises to be unusually large, and the early hatching is ready for the spit or frying pan. The young sage hen is best, and, by a remarkable and pleasing coincidence, very much the most abundant. They inhabit the sage plains between the river bottoms and the timbered hills and mountains. The pintails and blue grouse are found along the edges of the timber, and in the gulches, among willows and aspens. The ptarmigan stays only on the high ranges, and is seldom seen below timber line—that is, the altitude at which timber ceases to grow. Among the rocks and scanty herbage of that elevated region they are very tame, and can be knocked over with stones. In fact, they are hardly suspicious of man. But few people go there, and this rare bird, the most beautiful of the grouse family, is seldom killed. As before remarked, the grouse crop is excellent. The spring has been dry, with no heavy or continuous rains at all, and no severe thunder storms, and the hatch is unquestionably good. Between the 5th and 10th of June I found the old birds sitting or the chicks just out. On the 15th I found one sage hen upon her nest, and half a mile farther on, started up chicks that were able to fly, and looked as large as quails. On the 30th, a covey that appeared to be one-third grown. Have not heard of a single one being shot yet.

Geese and ducks hatch along these rivers in considerable numbers. Young ducks are reported out, but no goslings yet. The settlers have repeatedly raised broods of the latter, but they invariably fall victims to the shot-guns of roving "tender-heels" or "bug hunters" before the season closes, despite the red ribbons and other danger signals about their necks. The hope has been to prove whether or not they will return in successive years to the place of nativity. As it is, they attract, while they last, migratory flocks, and furnish their owners good shooting for a time in that way. And they are a pretty good bird to raise, anyhow, if they could only be preserved. Barney Day, the best authority on hunting and fishing in this neighborhood, avers to me that the wild goose sometimes makes her nest in a tree, generally taking possession of an abandoned eagle's nest. He gives places and particulars, but I still think he may be mistaken. Call another witness.

While on the bird subject let me remark that among the myriads of insectivorous birds—all of which we treat with the utmost friendship—we have immense colonies of swallows that nest by thousands in the cliffs, crowded together like bees. Under some sheltering rocks across the river from my door is one of these colonies, and in the evening their swift circling wings fill the air from the water upward to hundreds of feet, and their twitter mellows the ceaseless roar of the river. Well, the other day I found where one pair of these birds had made their nest in a tree a hundred yards away from the others, and were busily feeding their young ones. It is in a knot hole, where a branch has rotted out.

Early in June I went on a scout with Barney Day and "Poney" Hudson, two valiant and famously successful hunters, away out west from here, over the Gore range of mountains, and into the region marked on schoolboy maps as the Roan Mountains, or Book Mountains. We rode a hundred and fifty or two hundred miles through the freshest and wildest of wildernesses, a very paradise for the hunter and fisherman, unscarred even by the track or the "blaze" of the pioneer settler. Deer are as plenty as cattle in many a civilized pasture, and as tame There is no telling how many we might have killed, but, of course, we took only what we needed for ourselves and dogs. A buck antelope, ditto a black-tail, and one or two yearling fawns filled the list. The yearlings, generally in pairs, were yet with their mothers, and in some instances there were little ones of but a few days old. Elk are also plentiful, but more wary and seldom seen, while we rode by scores or hundreds of deer that often stood in easy range and looked curiously until we passed out of sight. B.

PIGEON MATCHES.

MASSACHUSETTS—*Worcester, July* 18, 1878.—The Marlborough Sportsmen's Club visited this city to-day, and shot at glass balls with the Worcester Club at Jourdan's Pond, Lake Quinsigamond. The balls were sprung from traps, 18 yards distance:

Worcester Team.

A Houghton....1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 0 1
0 1—25.
N D Gilliman...1 1 1 0 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 1 1 1 1 1 1
1 1—21.
L R Budson....0 1 1 1 1 1 1 0 0 1 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 0
1 1—24.
G J Rugg 1 1 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1
1 1—27.
C B Bolden 0 1 1 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1—27.
A P Pond.....1 0 1 1 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 1 1 1 1 1 1 0 1 1
1 1—26.
O L Taft 1 0 1 1 0 1 0 1 0 0 0 1 0 1 0 1 1 0 1 0 0 1 0 1 1 1 0 0
1 1—16.
E T Smith.....1 1 1 1 1 1 1 0 1 1 1 0 1 0 0 1 1 1 0 0 1 1 0 0 1 1 1 1
1 1—22.
J B Goodell 0 1 0 1 0 1 1 0 0 1 1 0 0 0 1 1 1 1 1 0 1 0 0 1 0 1 1 1
1 1—18.
W S Perry.....0 1 1 1 1 1 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 0—25. Total for team, 231.

Marlboro Team.

J F Moore.....1 1 1 1 1 1 1 1 0 1 1 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1—25.
T J Beandry....1 1 1 1 1 0 1 1 1 0 1 1 1 0 1 0 1 1 1 1 1 1 1 0 1 1 1 0
1 0—23.
L Lanois.....1 1 1 1 0 1 1 1 1 1 1 1 1 0 1 0 0 1 1 0 1 1 1 1 1 0 1 1
1 1—24.
Leighton, Jr....0 1 1 1 1 1 0 1 1 1 1 1 1 0 1 1 1 1 0 1 0 1 1 1 1 1 1 1
1 1—25.
F A Marshall..1 1 1 1 1 1 1 1 1 0 1 1 1 1 0 1 1 0 0 1 1 1 1 1 1 0 1 1
1 1—25.
O B Brush.....0 1 1 1 1 0 0 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 0
1 1—24.
L Arnold.....1 0 0 0 0 0 0 1 1 0 1 0 0 0 1 1 0 0 0 1 0 1 0 0 1 0 0 1
1 0—11.
D B Bliss.....1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 1—28.
H W Eager.....0 1 1 0 1 0 1 1 1 0 0 1 1 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1
0 1—21.
N Chamberlain.1 1 0 0 0 1 0 0 1 0 0 1 1 0 0 0 0 1 1 0 1 0 0 1 1 0 1 1
0 0—13. Total for team, 219.

CONNECTICUT—*Stamford.*—Second competition for the "Weed Bowl:"

Scofield.....1 0 1 0 1 0 1 1 0 1 1 1 0 0 1 0 0 0 1 1 1 0 1 0 0—13
Gillespie.....1 0 0 0 1 1 1 0 0 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0—8
Gaylor.....0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0—5
Cumming.....0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0—0
Weed.....1 0 1 1 0 0 0 0 1 0 0 1 0 0 1 0 1 0 1 0 0 0 0 0 0 0—8

Match for Bisbop Revolver:

Scofield.....0 1 1 0 0 1 1 0 1 0 1 0 0 0 0 0 1 1 0 1 1 0 1 1 1—13
Weed.....0 0 0 0 0 0 0 0 0 0 0 1 0 1 1 0 1 1 1 1 0 0 0 1 1 1—10
Oothout.....1 1 1 0 1 1 0 0 1 1 1 0 0 0 0 1 1 0 0 1 1 1 0 0 0—13
Grain.....0 1 0 0 0 1 1 0 1 1 0 1 1 1 1 1 1 0 1 1 1 1 0 1 1—17
Hendrie.....0 0 0 0 0 1 1 0 1 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1—11
Gillespie.....1 1 1 0 1 0 0 1 1 1 0 1 1 0 0 0 1 0 0 1 1 1 0 1 1—15
Foote.....1 1 1 0 1 1 1 0 0 1 1 0 1 0 0 0 0 1 0 1 0 1 0 1 1—15

NEW YORK—*Buffalo.*—Mr. L. Sutter, of Chicago, Ill., presented the Buffalo Audubon Club with an elegant gold medal, valued at $100, to be contested for as follows: Ten wild birds, plunge traps, 26 yards rise, New York state rules, the ultimate holder to win it three times in succession against all members contesting at a club shoot. The first contest took place at Byron Schultz's new shooting park, Buffalo Plains, July 6, 1878. Following is the score:

Ward.....	1 1 0 1 0 1 1 1 1— 8	Jaegar.....	1 1 1 0 1 0 1 1 0 1— 7
Beier, Jr...	1 0 1 1 1 1 0 1 1 0— 7	Franklin, Jr.	1 1 0 1 0 1 1 0 0 —6
Suckow.....	1 0 1 1 0 1 0 1 0 1— 6	Seymour....	1 1 1 1 1 1 1 1 0 0— 8
Quinn.....	1 0 1 0 1 0 1 1 1 1— 7	Schultz.....	0 1 1 1 1 1 1 1 1 0— 8
Dingens....	0 1 1 1 1 1 1 1 1 0— 9	Roberts	0 1 1 1 1 1 1 1 1 1— 9
Fisher.....	1 1 1 1 1 1 1 1 1 1—10	Heinold	1 0 1 1 0 1 0 1 1 1— 7
Heinz	1 1 1 1 1 1 0 1 1 1— 9	Meister.....	1 1 1 1 1 0 1 1 1 1— 9
Vine.....	1 1 0 1 1 1 1 1 1 1— 9	Fleischman.	1 0 1 1 1 1 1 1 0 1— 8
Sutter.....	1 1 1 1 1 1 1 1 1 0— 9	Downs	1 0 0 1 1 0 1 1 1 1— 7

DANSVILLE SPORTSMEN'S ASSOCIATION—*Dansville, N. Y., July* 16.—Three traps; Bogardus rules:

Faulkner....	0 0 0 1 1 1 1 1 0 1—6	Moore.....	1 0 1 1 1 0 1 0 0 0—5
Youngs.....	1 0 0 1 1 0 1 1 0 1—6	Marean.....	1 1 1 0 1 1 1 1 1 1—9
Bryant	0 0 1 0 1 0 1 1 1 0—5	Garnsey.....	1 1 1 1 1 0 0 0 0 0—5
Root.....	1 1 1 1 1 1 0 0 0 0—6	Jeffreys.....	1 0 1 1 0 0 0 1 0 1—5
Green.....	0 1 1 0 1 0 1 1 1 1—7	Warkley.....	1 1 0 0 1 1 1 1 1 1—8
Jeffries.....	1 0 0 0 1 1 1 0 1 1—6	Forsyth.....	1 0 1 1 1 1 1 1 1 1—9
Onley.....	1 0 1 1 1 1 1 0 0 1—7	Schley.....	1 0 0 1 0 1 1 1 1 1—6
Hyde.....	1 1 0 1 1 0 0 1 1 1—7	Toles.....	1 0 1 0 1 0 1 0 1 0—5
Byland.....	1 1 1 1 0 1 1 1 1 1—9	Silker.....	1 0 0 1 1 1 0 1 0 1—6
Robbins.....	1 1 0 0 1 0 0 1 1 1—6	Conklin.....	0 0 0 1 1 0 1 1 1 1—6
Cogan.....	0 0 1 1 0 1 0 1 1 0—5	Foley.....	1 0 0 1 0 0 1 1 0 1—5

Crisfield, Raymond, Youngs, Walder, Burkhart and Shepard broke four each; Sweet, Williams, Gregory, Bradley and McCartney three each; Pratt, Stearns, J. N. Faulkner and Whiteman 2 each; Deaton and J. Faulkner 1 each. Ties of nine won by Forsyth, with 3 straight; seven, by Green, 3 straight; of six, by Faulkner, with 2 and 3.

Class 2—Ten Single rises.

Whiteman..	0 0 1 0 0 1 1 0 1 1— 5	H Faulkner.	1 1 1 1 1 1 1 1 1 1—10
Garnsey....	0 1 1 1 0 0 1 1 1 0— 6	Sanborn....	0 1 0 1 1 1 1 0 0 0— 6
Jeffreys.....	1 1 0 1 1 1 1 1 1 1— 9	Toles.....	0 1 1 1 0 1 1 0 0— 6
McCartney..	0 1 1 1 1 0 0 0 1 1— 6	Root	1 0 1 0 1 0 1 1 1 0— 6
Williams....	1 1 1 0 1 0 1 0 1 1— 7	Youngs.....	0 1 1 1 1 1 0 1 0 1— 7
Marean.....	1 1 1 0 0 1 1 1 1 1— 8	Onley	0 0 1 1 1 1 1 1 1 0— 7
Conklin	1 0 0 0 1 1 1 0 0 1— 5	Fraley.....	1 1 0 1 1 1 0 0 1 1— 7
Jeffries.....	1 1 0 1 0 0 1 0 0 1— 5	Townsend..	1 1 1 1 1 0 0 1 1 1— 8
Youngs.....	1 0 1 0 1 1 0 0 0 1— 5	Moore.....	1 1 1 0 1 0 1 1 0 1— 7
Faulkner...	1 1 1 0 1 0 1 0 1 1— 7	Byland....	1 1 0 1 1 1 0 1 1 1— 8
Silker..	0 1 1 1 0 0 0 1 1 1— 6	Hyde.....	1 1 1 1 1 0 1 0 1 0— 7

Gregory, Crisfield, Cogan, Stearns and Bryant broke 4 each; Reynard, Schley, Robbins and S adley, 3 each; Nicholson, Denton and Pratt 2 each; Shepard, Blek, Burkhart and Boyd 1 each. Ties on eight, won by Byland with 3 straight; on six, by Onley, with 3 and 2.

Class 3—Five double rises.

Byland.....	11 01 01 11 10—7	Bryant.....	...01 10 11 00 01—5
Forsyth	10 11 01 01 11—7	Townsend.....	10 11 10 11 11—8
Williams	01 00 11 11 01—6		

Faulkner and Youngs broke 4 each; Jeffries, 3; Silker, Green and Hyde, 2; Shepard, 1. Ties of seven, won by Forsyth. A sweepstake following was won by Tillotson, Sinclair, Faulkner and Whiteman.

NEW JERSEY.—Palisade Gun Club match for club badge July 20; glass balls, Bogardus traps, 18 yards rise, Long Island rules:

B S Payne.....1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—19
A Anderson.....1 1 0 1 0 1 0 1 0 0 1 1 0 1 0 1 0 1 1 1 0 0—11
O Hesse.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1—19
J C Corbet.....1 1 1 1 1 1 0 1 1 0 0 1 1 0 0 1 1 1 1 1 1—15
Ed Collins.....1 1 1 0 1 1 1 0 1 1 0 1 1 1 1 0 1 0 1 1—15
Jos Pontras.....0 1 1 1 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1—17
L Palmer.....1 0 1 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1 1 1—16
J Von Lengerke.....0 0 1 0 0 1 0 1 1 0 0 1 1 1 1 1 1 1 1 1—18
H Von Lengerke.....1 1 1 0 1 1 1 1 1 0 1 1 1 0 1 1 1 1 1 1—17
W C Payne.....0 1 1 0 1 1 0 1 1 0 1 0 1 1 0 1 1 1 1 1 0—13

Ties on nineteen—21 yards rise.

B S Payne.....0 1 0 1 1—3 O Hesse.....1 1 1 1 0—4

JERSEY CITY HEIGHTS GUN CLUB.—The fourth regular competition at Marion, N. J., July 17; three Bogardus traps ten yards apart; trap-puller three yards behind shooter; balls sprung on casting of a die after shooter has taken his place:

J Cole, 14 yards.....1 0 1 1 0 1 1 1 1 0 0 1 0 0 1— 9
W F Quimby, 16 yards.....1 1 0 1 1 0 0 1 1 1 1 1 1 1 0 1—11
J A Van Gelder, 15 yards.....1 1 0 0 1 1 0 1 1 0 0 1 1 1 1—10
J B Burdett, 18 yards.....0 0 1 1 1 1 1 1 1 1 1 1 1 1 0 0—11
A Heritage, 18 yards.....1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—14
C Leroy, 16 yards.....1 1 0 1 1 1 1 0 0 1 1 1 1 1 1 1—12
Geo B Eaton, 18 yards.....1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—15
—— Andrews, 18 yards.....0 1 1 1 1 1 0 0 1 1 0 0 0 1 1— 9
W Hepsley, 21 yards.....1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1—14
O Remmey, 14 yards.....0 0 1 1 1 1 1 0 0 1 0 1 1 1 0— 9
W Hughes, 18 yards.....1 1 1 1 1 1 1 1 1 1 0 1 1 1—14

July 20.—Regular competition for double ball gold badge, held by Heritage; one Marshall and one Bogardus trap, ten yards apart; both traps sprung at the same time:

J A Van Gelder, 15 yards.....01 01 11 11 11 10 11 00 11 11—15
Geo B Eaton, 15 yards.....01 11 01 11 01 00 01 11 11 11—14
J B Burdett, 18 yards.....10 10 01 10 00 10 w
A Heritage, 21 yards.....00 11 11 00 11 10 11 10 00 10—11
W Hughes, 18 yards.....11 11 10 11 11 10 11 11 11 01—17

JACOBSTAFF.

Hackensack Association of Protection of Game weekly match for badge, July 16; heat revolving trap; 18 yards rise:

Jas Blanvelt.....	1 1 1 1 1 1 1 1 0 1 1 1 1 1—14		
D W Arnold	1 1 1 1 1 1 1 1 1 0 1 1 1 1—14		
W Holberton.....	1 0 1 1 1 0 1 1 1 1 w		
J Wood.....	1 1 0 1 1 1 1 1 1 1 1 1 0 w		
Geo Ricardo.....	1 1 1 1 0 1 0 0 1 1 w		
J Anderson.....	0 1 1 0 0 1 1 0 1 1 1 w		
W Tein.....	1 1 0 0 1 1 1 1 0 1 0 w		
Ed Ackerman.....	1 1 0 0 0 1 1 1 0 1 0 w		

Ties on fourteen.

J Blanvelt.....1 1 1—3 D W Arnold.....0 1 1—2

Owing to a scarcity of balls, those having no chance to win withdrew.

SEA SIDE GUN CLUB.—*Sea Girt, N. J., July* 20.—Pigeon shoot, ten birds each, 25 yards rise, 100 yards boundary, five traps, English rules. Ties shot off, bird and bird:

Leonard.....	1 1 1 1 1 1 1 1 * 1—9	Hastings....	1 * 1 0 1 1 0 1 1 0—6
Sands.....	1 1 1 1 0 1 1 1 1 1—9	Phelps.....	1 0 0 0 1 1 1 0 0—5
Payson.....	1 * 1 1 0 1 1 1 1 1—8	Nelson.....	1 0 0 1 1 0 0 0 1 0—4
Hewes.....	1 1 1 1 0 0 1 0 1—7	Lennox.....	0 1 0 0 1 0 1 0 0 w
Hemstreet...	0 1 1 0 1 1 1 0 1 1—7	Hastings....	0 0 * 1 1 0 0 w

Ties on nine.

Leonard....1 1 1 1 1 1 1 1 1 1—10 Sands.....1 1 1 1 1 * 1 1 1 0—8

Same Day—Glass ball sweepstakes, 18 yards rise, 20 balls, Bogardus rules. The score was as follows:

Hastings.....	11	11	11	11	11	11	11	1*	11	11—19
Payson.....	11	11	11	11	11	11	11	11	10	10—18
Olden.....	11	01	11	10	11	11	11	11	10	11—17
Coombs.....	11	11	10	11	11	01	10	11	11	11—17
Sands.....	11	10	10	11	10	11	11	11	11	11—17
Peabody.....	11	11	11	11	10	11	10	01	10	11—16
Moore.....	11	10	01	11	10	11	11	01	10	01—14
Martin.....	10	10	01	11	11	10	11	01	01	10—13
Sherman.....	01	10	10	10	01	01	0 w			
Opydyke.....	10	01	11	10	10	0 w				
Young.....	10	10	10	01	11	0 w				
Williams.....	01	00	11	00 w						

The third and last event was a pigeon sweepstakes, 10 birds each; 25 yards rise, 80 yards boundary, five traps, Long Island rules. It was won by George Sands.

LONG BRANCH GUN CLUB.—Club match for a $250 gold badge, presented by Mr. Insloe A. Hopper; handicap at five single birds and five double birds. Singles governed by Hurlingham and doubles by Long Island rules:

E Murphy, 25 yards	1	1	1	1	1	11	11	11	11	10—14
A Jamieson, 22 yards	1	1	1	1	1	11	11	11	11	10—14
R Traphagen, 25 yards	1	1	1	1	1	11	11	01	10	w
W Murphy, 24 yards	1	1	1	1	1	11	10	10	w	
A J Sewell, 24 yards	1	1	1	1	1	10	11	10	w	
W S Green, 25 yards	1	1	1	1	1	10	11	10	w	
L Bright, 26 yards	1	1	1	1	1	11	11	00	w	
W Manning, 24 yards	1	1	1	1	1	10	10	w		
B West, 26 yards	1	1	1	1	1	01	11	w		
J S Hoey, 21 yards	1	1	0	1	1	10	w			
E Fox, 21 yards	0	1	1	1	1	10	w			
R Murphy, 23 yards	1	1	1	1	0	10	w			

W. Stone, Dr. Zolnowski, J. W. Morgan, F. N. Levy, W. Henderson, A. R. Warner, I. A. Hopper and J. R. Grant withdrew.

Ties on fourteen.

E Murphy.....11 01 11—3 A Jamieson.....11 00 w

Regular glass ball shoot for the club badge; 18 yards, 3 traps, 25 balls, Bogardus rules:

Traphagen	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1—25
West	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1—24
Bright	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	—22
Jamieson	0	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	—19
W Stone	0	0	0	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1—18
Warner	0	0	1	1	1	1	0	1	1	0	0	1	0	1	1	1	1	0	0	0	1	0	1	1—15
Dr Zolnowski	1	1	1	1	1	1	0	1	1	1	0	1	1	0	1	1	0	w						
M Murphy	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	w							
Bright	0	1	1	1	1	1	1	1	1	1	1	0	1	1	w									
E Murphy	1	0	1	1	1	0	1	1	1	1	1	1	0	0	1	w								
Hoey	1	1	0	1	1	0	1	1	0	1	1	1	0	w										
Manning	1	1	1	0	0	0	1	0	0	1	1	0	1	0	0	0	0	w						

F. Levy, W. Green, R. Murphy, E. Fox and I. A. Hopper withdrew.

Sweepstakes for those who never shot at a pigeon out of a trap; five birds, 21 yards rise; two traps and Hurlingham rules, won by R. B. Holmes with four out of five.

TENNESSEE—*Nashville, July* 20—Glass balls; Bogardus rules and traps; Paine's patent balls. Lannom won first match with five straight. In second match, Turner, Lannom, Brackman and Mitchell tied on five; Mitchell won shoot-off. In third match, double balls, Mitchell and Valentine tied on nine and divided. Fourth match, Turner, Polston, Phillips, McKiney, Lannom, Mitchell, Gilbert and Valentine tied on five each, Brackman and Phillips tieing again on 12 each and dividing. In the fifth match, Turner, Fields and Mitchell tied on five; shoot-off won by Mitchell. Sixth match, double balls, Valentine and Gilbert tied on nine, latter winning shoot-off.

CHICAGO SHOOTING CLUB.—First match, July 20, for gold medal, presented by Audubon Club, of Chicago, at State Association, and won by Chicago Shooting Club team. To be won three times by same individual to become his property; to be shot for according to Hurlingham rules, twelve birds each, 30 yards rise, 5 ground traps, 80 yards boundary:

R B Organ	1	1	1	1	1	1	1	1	1	1	1	0—11
G Masker	1	1	1	1	1	1	0	1	1	1	1	0—10
C E Willard	1	1	1	1	1	0	0	1	1	1	0	—9
J D Kendall	0	0	1	0	1	1	0	1	1	1	1	1—8
W H Haskell	1	1	0	1	1	0	1	0	1	0	1	1—8
J Mather	1	1	0	0	1	1	1	1	1	1	1	0—9
Dr Rowe	0	1	0	1	1	0	0	0	1	1	1	1—7
A Kleinman	1	1	1	1	1	1	1	1	1	1	0	1—11
F P Taylor	0	1	1	1	1	1	1	1	1	0	1	1—10
J B Wiggins	1	1	1	1	1	1	1	1	1	1	1	1—12
E Gale	0	0	1	0	0	1	0	0	0	w		
L R Brown	1	1	1	1	1	1	1	1	0	0	1	1—10
O Green	0	0	1	0	1	1	1	1	0	0	1	—7
G Beaumont	1	1	1	0	1	1	1	1	0	1	0	0—8
R Fitzgerald	0	0	1	1	1	1	1	0	1	1	1	1—9
Chas Kern	1	1	1	1	0	1	1	1	0	1	1	1—10

BOGARDUS MATCHED.—Bogardus, and Wallace of England, shot a match at the Notting Gun Club last Friday, 100 birds. The result was a tie on 97 birds, an excellent score. Another match was appointed for July 26.

CAPTAIN BOGARDUS—*London, July* 23.—In the return pigeon-shooting match between Captain A. H. Bogardus, the American champion, and Mr. Cholmondeley Pennell, member of the Hurlingham Park and Gun clubs, each to shoot at 100 birds for $1,000 a side, Captain Bogardus was the winner, killing two birds in excess of the number killed by his antagonist. August 9, the captain shoots a match with Mr. Aubrey Coventry, who has been chosen by the International Gun and Polo Club as the first British pigeon-shooter. A gentleman who was present at the first match gives us an amusing account of Mr. Pennell's method of shooting. He was accompanied on the ground by no less than four supernumeraries. One attendant held an umbrella, a second a waiter with refreshments, a third loaded and handed the gun, while a fourth stood ready to sponge off and rub down Mr. Cholmondeley-Pennell. Our informant states that both Englishmen and Americans were ready to back Bogardus to the amount of £20,000, but that bets after the match commenced were few. We are requested to state that in the first match with Mr. Pennell all the money on Captain Bogardus' side was ready, and if the entire amount was not made up it was not on the American side.

WALLACE—BOGARDUS.—The cable dispatch announces, just as we are going to press, that in the Wallace match Bogardus was defeated.

Rational Pastimes.

LACROSSE.—The match at Toronto, Ont., July 20, between the Torontos and Montreals, resulted in a victory for the former, who now retain the championship. In the Buffalo game between the Tuscarora Indians and the Union Lacrosse Club, of Port Colburne, Ont., the Indians won three out of five games.

ENNIS-GUYON WALK.—The match between these two pedestrians was ended at Buffalo last Saturday evening, Ennis having walked 347 miles, and Guyon 324.

RACKETS.—The concluding games of the racket tournament between James Keating, of this city, and Oscar Manning, of Philadelphia, for the American championship, at Philadelphia, last Friday, resulted in a victory for the New York player. The score at the end of the nineteenth and final inning was 21 to 6 in Keating's favor. B. McQuade, William Ryan and Professor John Manix, all of the New York Racket Club, are in training and settling, by a series of forty-five games, which of them shall challenge Keating to a contest. Of the nine rubs, best three in five games, to determine who should challenge Keating, three have already been played. In the first, Manix won three straight games from B. McQuade, and in the second an equal number from W. Ryan; in the third he was defeated by McQuade, three to one.

ALBION SOCIETY ATHLETIC GAMES.—The fourth annual games of this society for gold and silver medals took place at Jones' Wood last Monday. The contests were as follows:

One Hundred Yards Handicap—Final heat won by James Henry in 12s.

Running Long Leap—Won by James Henry, 14ft. 2in.

One Hundred Yards (for contestants under nine years of age)—Won by C. Parsons, aged 8; time, 10 2-5s. (?)

One-half Mile Run—Won by F. Banham, H. A. C., 2m. 13 4-5s.

Old Man's 220-yds. Race—Won by G. Hawkins in 38 2-5s.

Four Miles Walking Handicap—Won by E. Lewis in 35m, 49 4-5s.

Quarter-mile Run—Won by E. Smith in 1m. 6s.

Handicap 220-yds. for Boys—R. H. Butler, 29 3-5s.

Three Miles Walk for Professionals—Won by George Odell, 150 yards start, in 25m. 35⅕s.

One Mile Walk—Won by T. S. Griffiths in 9m. 39 4-5s.

MANHATTAN VS. ST. GEORGE.—A cricket match between these clubs at Prospect Park, Brooklyn, last Friday, resulted in a score of 61 for the St. Georges, and 109 for the Manhattans.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

CIVIS, New York.—The partridge season in Pennsylvania opens Oct. 15.

G. D., Carthage, Ill.—The pinnated grouse season opens in Missouri August 15.

F. T., Tilsonburg.—Mr. Hallock is now on his Western tour. Will not pass over the C. S. R. R.

B. C. C., Boston.—For sink-boxes for wild-fowl shooting go to Scheffer, gun maker, 16 Elm st., Boston.

BREX, Ashtabula.—1. No such maker. It is a trade mark put on guns. 2. Address your State representative.

W. V., St. Louis.—Write them again. Your handwriting is not very plain. Perhaps that was the reason you had no reply.

L. W. R., Durham, N. Y.—Paper for mounting pressed seaweed can be obtained by writing to The Naturalist's Agency, Salem, Mass.

F. C. B., Catskill.—The perch season has already opened at Betterton, Md. You will find good accommodations there at moderate rates.

J. E. F., Ocean Beach, N. J.—Our Barnegat, N. J., correspondent reports bay birds plentiful there, and we presume you can find them at Squaw Inlet, N. J.

B. C. E., Coney Island.—The jelly-fishes you occasionally encounter in the surf are not at all dangerous. One kind may sting you a little, as a nettle does, but it will not hurt you.

SEP, South Bend, Ind.—What is the pronunciation of Cones in the name of Dr. E. Cones? Ans. The ou has the sound of ou in scout. The name is pronounced as if written Cows.

A. H. R., Redwing—Where can Col. Fletcher's "bell metal glass ball be found and what are they worth? Ans. Address Fowler & Fulton, 300 Broadway, New York. Do not know price.

AGILE, Philadelphia.—You are right. Make the shell whenever you can the full length of the chamber. Most guns have a shoulder; this stops, or prevents a clear delivery when shells are cut too short.

T. C. G., Cedarville, O.—Can you inform me where Fletcher's bell ball can be procured at and probable cost? Ans. Address Fowler & Fulton, New York. Do not know cost. Just coming into the market.

H. D., Jr., Peace Dale, R. I.—My setter has distemper. Sores on the ears and back of his head. What must I do? Ans. Apply kerosene for about twenty minutes once a day and then wash off with castile soap and water.

C. D. D., Morrisania, N. Y.—You will find in Illinois, Iowa and Minnesota pinnated grouse shooting at almost any of the stations of the railroads advertised in our columns. See our back numbers for mixing Dittmar powder.

H. M. H., Philadelphia.—Chincoteague Island, Va., is reached by rail from Philadelphia daily; by rail to Greenbackville, thence ferryboat to the Island. You will find hotel accommodations with J. English, $2 per day; guides for snipe, $2.50.

S. R. D., Boston.—I am afraid that a boy I know working in a lead factory may get lead disease What ought he to take? Ans. He should use iodide of potassium administered in small doses and then increased. You had better consult a physician at once.

H. L., New Orleans.—I desire to try your correspondent R. O. C's. remedy for distemper, but do not know how to administer. Should both salts be given dry? I do not understand what R. O. C. means by liquid measure in both cases. Ans. The salts should be dissolved in a little water.

KING, Cambridge, Mass.—What would be the best manner of shooting a glass ball match of 200 glass balls a side, each club consisting of ten men; match for fun? Ans. Take ten men on a side, and shoot 20 balls each; shoot alternately; go to score by numbers to be drawn at random.

J. M.—M bets P that a crook is a young crow. Will you kindly state in your next edition if M is correct? Ans. Never heard a crook called a crow, but this does not decide the question. Have you not got crook and rook mixed? Now, a rook is not a crow. The first is the *frugilegus* and the crow is *C. corone*.

VIRGINIAN DOVE.—Turtle dove and mourning dove, in this country, are different names for the same bird, *Tenædura carolinensis*. The turtle dove of Europe is a different bird, much nearer the genus *Columba*. In some parts of the South, mourning dove is applied to a dove about half the size of the turtle dove.

W. S. B., Rochester.—With a .44 cal. rifle, using 75 grains of powder, which would give the best results in hunting, where the rifle cannot be wiped after each shot, to use a smooth, patched bullet or a grooved bullet, the grooves being filled with a lubricator, and a wad and lubricating disk being used over the powder in each case? Ans. The grooved bullet would be the better.

H. S., Salt Lake City.—Weight of Express 9 to 10 pounds. Almost always double-barrelled. Shells made both straight and bottled. All leading English gunmakers manufacture them. The great principle is a heavy charge of powder and light bullet. You must have excess of powder. We have in former issues fully described the Express. For a .450 calibre the exact weight of the ball is ½ oz.

DE L. B., Fort Hamilton.—Yesterday, July 20, I shot a red-bellied nuthatch (*Sitta canadensis*). Is it not very unusual to find one of these birds here in midsummer? They are not common here at any season, and I thought their breeding place was beyond northern boundaries. Ans. The *Sitta canadensis* is unusual here at this season. It might have been a failure to migrate. In the fall they are abundant.

SAM, Galeon, O.—We send you Hallock's "Vacation Rambles" which were republished from this paper by the Grand Rapids and Indiana R. R. From the information of a score of excellent summer camping resorts you may make your choice of a vacation resting place. By applying at the railroad offices in your city you can readily learn rates of travel. A portable boat will prove useful in Michigan waters.

MR. F.—Your plant, commonly called "Resurrection plant," is probably *Selaginella lepidophylla*, a native of Texas, Mexico, Columbia, etc. It is closely allied to *S. convoluta*, but it is much stronger in texture, the leaves being densely lubricated, bluntish, nearly as broad as long, and the branching pinnate. Have not seen the Adiantum you refer to. If you can send a specimen, will endeavor to find it out for you.

FARM SPECULATORS.—We fully appreciate the philanthropic motives of several correspondents, who have put themselves to some trouble to set us right about that farm speculation, discussed in these columns three weeks ago. We must, however, confess to a most egregious stupidity, as we fail to find any other solution of this weighty problem than the one we have already given. We are still open to conviction.

TEXAS NATURALIST.—The work referred to some time since in the article on *Crotalidæ* in this paper is "Notes on the Herpetology of Dakota and Montana," by Drs Elliott Coues and H. C. Yarrow. It appeared in the "Publications of the U. S. Geol. and Geog. Surveys, Dr. F. V. Hayden in Charge;" in "Bulletin," Vol. IX., No. 1. Can perhaps be obtained by application to the Department of Interior or the authors.

OHIO, Grand Valley, O.—Could you name a locality within 150 miles of New York city where I could settle and have ruffed grouse and gray squirrel shooting and black bass fishing? Ans. You might find a suitable locality in Orange county, say, at Florida, Turner's, or at Port Jervis. Except regarding game we could not advise you as to the desirability of any one place without knowing what your business is, etc.

R. R. P., Philadelphia.—For instructions as to a pedestrian tour through the White Mountains we know no better book than the one of Osgood's series of American guide books devoted to New Hampshire. Distances, hotel accomodations, practical instructions, and a very valuable compendium of information about the country will be found in this manual. We know several persons who have enjoyed their pedestrian tours through the White Mountains.

C. S., Brooklyn.—My setter had distemper when very young which continued for a long time. Passes dark matter. Is uneasy all the time. Lies down and cries with pain. Is now a little better. What shall I do for him? Ans. The dog has probably had inhammation of the bowels; give him a teaspoonful of castor oil and 10 drops of laudanum once a day until better. Continue the treatment for mange and give 2 grains of quinine three times a day if weak.

DRAWER 69, Galveston, Texas.—There are few good books on boat building published. The best is "Neilson's Practical Boat Building for Amateurs." Can be obtained from Van Nostrand, 27 Murray st., N. Y. Price about $1. Mention our name when you send for it. A larger work on yacht and boat building and sailing by Dixon Kemp, of England, is about to appear. Cost about $8. It treats of large boats for beach and open water sailing. See also back numbers of this paper for sixteen articles on boat and yacht building.

R. S., Holyoke, Mass.—1. Where can I get the Game Laws of Massachusetts and other States? 2. Where can I get the O'Neil testing pads, and price? 3. Where can I get the sportsman's closing rubber drinking cup, and price? 4. What did you think of the new gun sight advertised in you paper, April 11? Ans. 1. Write to your State representative, or buy *Fur, Fin and Feather*. 2. O'Niel testing pads not on the market yet. 3. Peck & Snyder, Nassau st, N. Y. Don't know price. 4. We do not know which sight you refer to. Be more explicit.

S. R. W., Norfolk, Va.—On one of my setters the hair comes off outside of his ears in a place about an inch in diameter. Think he shows symptoms of mange. Put on an ointment of green iodide of mercury. The place is now raw and suppurating. Indications of mange are plain. Pray give me proper treatment. Ans. The dog has been overfed. Give him no meat for a time, and exercise freely. Apply kerosene once a day to the affected parts, and then wash off with Castile soap and water. Also, give him a little sulphur three times a week.

F. T., Tilsonburg, Ont.—Neilson's "Boat Building for Amateurs" is an English publication, and has not yet been received in America. Will send you a copy when shipment comes to hand. It does not treat of yachts, but only of boats. For small yachts see our back files for sixteen serial articles on "Yacht Building." "Ouida" is the *nom de plume* of a woman at present by profession a novel writer. Some of her works do not reflect a very high moral character on her part. Her last work, a Greek novel, however, is a very excellent story. Antecedents unknown to us.

J. D. A., San Francisco.—Those wishing to enter team must subscribe to the following: "I desire to compete for a place on the American Rifle team to represent the United States in the Centennial Long Range Rifle Match of 1878 for the Centennial Trophy, and hereby agree to conform to the conditions prescribed for the selection of said Team. If I am a successful competitor I hereby pledge my word that I will shoot in the match and will in addition perform such practice and submit to such discipline and government as the Captain of said Team shall direct." The composition of the team is as follows: The team shall consist of a Captain, Adjutant, eight men and two reserves. The Captain may or may not be one of the shooting members of the Team.

E. B., Rhinebeck.—1. How do you clean a gun? 2. What parts do you oil after it is cleaned? 3. What will remove rust from inside the barrel? 4. In loading, as a rifle, does a regular hunter put first powder, wad, bullet, and then another wad; or does he put first powder, and then wrap the bullet in a piece of greased buckskin, and shove it down to the powder? 5. Are the Rocky Mountains opposite Lubarge City explored? 6. When and how did Kit Carson die? Ans. 1. We use, first a brush, and then equal parts of lard oil and benzine. 2. Inside and outside barrel. 3. Use oil, but rust having eaten into the metal, never will come out. 4. Use the greased patch around ball; no wad on top. 5. The only Labargo we know of is in Michigan. Be a little more definite in your inquiry. 6. In 1872 or 1873, we believe.

F. N. B., Boston.—For lengthy cruising, in which speed is not so much an object as permanent and fixed accommodation, a cabin sailboat is to be preferred to the catamaran. The latter is best adapted to short runs and high speed, and can be used also for cruising near home by using a tent stretched across the boom for quarters. The catamaran is the safer of the two. The Tarantella has recently made a cruise from this city to Greenport, L. I. The cost of the boats is about equal. Catamarans cannot carry as many conveniently and without loss of speed as a yacht of ordinary type. For short river work they are not as suitable as a cat-boat or jib-and-mainsail, as they are slow in tacking. Small catamarans have not been found as successful as larger ones, and we do not take much stock in one so small as 20ft., but would prefer an ordinary yacht of that length. Price, new, about $200, but you can find plenty good second-hand yachts from $75 or $100 up.

M. A. S., Rochester.—1. Do you consider the Dobson bait good for black bass in Hemlock Lake, Liv. Co., N. Y? 2. How may I identify it and where would I be likely to find it? 3. What charge of Dittmar Powder would you suggest for a 10 bore full choked 5¾ pound Hollis gun for cover shooting and ducks? 4. Can buckshot be used from a choke-bore without injury to the gun? 5. I have fished for lake trout some years on Hemlock Lake and have caught them weighing from 2 to 12 pound, but at very rare intervals, not over 2 or 3 in a season, trying everything in the shape of squids. Those I have caught have been on the fillet of a perch; minnows, craw fish, worms, nothing seems to attract them. Can you suggest a taking bait? How would shrimp do, or lobster and crabs, or clams? Ans. 1. Believe it might be used with success; that is at certain seasons. 2. The Dobson is the hellgramite of the South. They are the full grown larvæ of an aquatic species of the Sialind. They may be found under submerged stones and driftwood, and in the soft mud on the bank. 3. 3¼ measured drachms—same as black powder. For ducks you might use up to four drachms. 4. Perfectly well, but chamber from muzzle. 5. Try shrimp in preference to lobster; but quite often how to make a fish bite is something that "no fellow knows, you know." Have heard from others that the fish in Hemlock Lake were fastidious.

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, JULY 25, 1878.

To Correspondents.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, July 26.—Trotting at Cleveland, O., and Providence, R. I. Running meeting at Saratoga. Base ball: Worcester vs Buffalo, at Buffalo; Manchester vs Star, at Syracuse; Hoboken vs Amateur, at Centennial Grounds.

Saturday, July 27.—Beverly Yacht Club Regatta of Swampscott. Running meeting at Saratoga. Base ball: Chicago vs Indianapolis, at Chicago; Cincinnati vs Boston, at Boston; Milwaukee vs Providence, at Providence; Manchester vs Star, at Syracuse; Springfield vs Rochester, at Rochester; Worcester vs Hornell, at Hornellsville; Jersey City vs Witoka, at Jersey City; Montgomery vs Astor, at Union Grounds.

Tuesday, July 30.—Trotting at Westminster, Md.; Buffalo, N. Y. Freeport, Ill.; Sullivan, Ill. Running meeting at Saratoga.

Wednesday, July 31.—Trotting and running meeting as above.

Thursday, Aug. 1.—Trotting and running as above.

—Eighteen feet steam yachts, $250.
GEO. F. SHEDD, Waltham, Mass.—[*Adv.*

TO THE NORTH POLE.—James Gordon Bennett, on his return to the United States, is fully occupied with the many details of his expedition to the North Pole. From a communication addressed by him to the Navy Department, it seems that a double expedition is contemplated, one by Behrings Straits and the other by the Spitzbergen. In addition to the Jeannette, the Dauntless is to be fitted out. Possibly as much as $150,000 will be expended by Mr. Bennett in this double enterprise. Mr. Bennett wishes the Navy Department to furnish the crew, officers and provisions for the Dauntless. Petermann, the celebrated German geographer, has given the benefit of his council. The Dauntless is a staunch vessel, and with the engine and screw with which Mr. Bennett proposes to fit her, at his own expense, would be an excellent craft for the Arctic voyage. The same liberality which was given to African exploration will certainly be tendered by Mr. Bennett in the Arctic expedition. If, through the energy of the proprietor of the New York *Herald*, at last the *ultima Thule* be arrived at, it will be a crowning achievement.

THE FLYING DRAGONS OF THE WEST.

HOW marvelous are the revelations of paleontology? It is one of the most interesting branches of modern science, and the discoveries made by its followers within the past twenty years have done more, perhaps, than those in any other field to change the scientific thought of the age, and to establish beyond any question the great truths of the development theory. It is in America that the most surprising strides have recently been made in this department of science, and they have been important not only in themselves, but also in their bearing on the beliefs of a very large class of the non-scientific public. Did not Professor Huxley, the first of anatomists, when he lectured before a New York audience, draw his demonstrative evidence of evolution from American specimens and American facts? The genealogical line of the horse, with which all our readers are of course familiar, without *Mesohippus*, *Orohippus* and *Eohippus* to carry it back from the middle Miocene to the earliest Eocene, would be incomplete indeed. How wonderful are the *Dinocerata*, those gigantic herbivores with their six horns and their long trenchant tusks shaped like those of the walrus! The *Tillodontia* are not less strange. What a curious combination of characters; were they the first of Edentates, or a side branch of the Rodents that blossomed out so strangely only to become extinct? We do not know. All is as yet vague and indistinct, but when the material has all been worked up and the relationships of all these strange forms determined, as who can doubt they will be, how interesting will be the story which will be told us of their lives! More thrilling than any tale of love or war that was ever recited.

The discoveries made in the Cretaceous formation are not less wonderful than those of the Tertiary. From these beds came the Toothed Birds, a sketch of whose history recently appeared in the columns of FOREST AND STREAM. These have an especial interest since they form, as has already been shown, a connecting link between the birds of to-day and the reptiles. But, besides these, many forms lived and flourished in the greatest abundance which have now no living representatives, and to appreciate which requires, in the mind of one who has given no special attention to the subject, a considerable exercise of the imagination. Such were the strange Mosasauroid reptiles, a group which occurs sparingly in Europe, but in the greatest abundance in the wide inland Cretaceous sea which once covered so large a portion of what is now the United States. These huge reptiles were perhaps more nearly like the fabled sea serpent of the present day than anything else, but had fore and hind paddles somewhat resembling the flippers of a whale. In length they varied from ten to sixty feet, their wide-gaping jaws bristled with long and sharp pointed teeth, and they were well defended against the attacks of their enemies by an armor of bony dermal scutes. Thus armed and protected they must have proved formidable antagonists to the most ferocious of their marine companions, and we can easily imagine that even the gigantic sharks of that day would have avoided an encounter with these monarchs of the ocean.

But if these creatures excite our wonder how much more do the Pterodactyls, the monarchs of the air? These were large flying reptiles which lived in great numbers about the islands and shores of the Cretaceous ocean which the Mosasaurs inhabited, and their remains are found very abundantly entombed in the yellow chalk which once formed its muddy bottom. They were of various sizes, and the huge leathery wings of the largest species, when expanded, measured twenty-five feet from tip to tip. The membrane which supported the Pterodactyls in flight was apparently similar to that of a bat's wing. Of course, as it consisted merely of skin, it has never been found preserved with the bones, and in only one specimen, from Europe, has any trace of it ever been detected. The Eichstadt Pterodactyl found in the beautifully smooth lithographic stone of Bavaria, shows, owing to the favorable conditions of its preservation, the impression of this membrane, and thus confirms the conclusion previously reached by biologists as to its character. Although in a general way bat-like, the Pterodactyl wing is peculiar. The bat's wing is formed by the four outer fingers being turned downward and outward, and greatly elongated, so that they supported the skinny membrane of the wing like the ribs of an umbrella; that of the *Pterosauria*, on the other hand, is upheld by the fourth, or, as it is called to distinguish it from the other digits, which are short and armed with sharp claws, the wing finger. This is greatly developed, and the membrane, when the wing is expanded, is stretched along this finger, the side of the animal and its hind leg.

The bony skeleton of these curious reptiles is of the utmost lightness consistent with strength. The bones are hollow, and their walls are often scarcely thicker than paper. From this it results that they are never found whole, but are always more or less crushed or flattened by the weight of the mass of earth beneath which they have been buried for so many ages.

Remains of Pterosaurs are abundant in the deposits of the Mesozoic age in Europe, being found from the Lias up through the Chalk; the only ones known from American strata, however, are those discovered in the Cretaceous formation of Kansas. The European Pterodactyls were all comparatively small, and the bodies of the largest of them was hardly greater than that of a cat. All of them had teeth, while in no American *Pterosauria* have any trace of teeth been found, and it may safely be said that these toothless forms are the last stage in the development of this extraordinary group before it became extinct. The oldest of the European forms, *Dimorphodon*, had the entire jaws armed with teeth, and had a long tail. The genus *Pterodactylus*, which lived later, had almost entirely lost the tail, but retained the teeth, while *Ramphorhynchus* had retained the elongated tail, but had lost the teeth from the front of each jaw. In the American genus *Pteranodon* there are, as has been said, no traces of teeth, and the tail is merely a rudiment.

As suggested by Prof. Marsh, these reptiles seem to have followed the same path as the birds in loss of tail and teeth. The resemblance is merely a superficial one, however, and must not lead any one to suppose that the affinities of this group were with the birds. The reverse is true; for a study of the more important characters of the *Pterosauria* renders it at once clear that they are a remarkably aberrant type of true reptiles, totally off the line through which the birds were developed.

The problem as to how the American Pterodactyls lived, and what were their habits, is one which has not yet been solved by the paleontologist. We can easily conceive how the smaller European genera might capture animals of considerable size and strength, for they were strongly built, and their long, sharp teeth would be effective instruments with which to kill small mammals, birds or fishes. But the American forms, so far as known, lacked any weapons whatever, and their great size must be counted against them in "the struggle for existence." An animal with a spread of wings of twenty-five feet would require a considerable amount of food, and from the general weakness of the structure of the skeleton of *Pteranodon*, it seems a fair inference that this food was not secured by the exercise of strength, but was either dead food or consisted of minute organisms.

These questions cannot now be answered, but, happily, there is at present in our Museums a very large amount of material, the study of which will, no doubt, throw much light on all such doubtful points; and we may look hopefully forward to the day when the ancient fauna of Cretaceous times will be thoroughly understood, and all its apparent contradictions explained.

CORINTHIAN PRINCIPLES.

AS a number of yacht clubs contemplate getting under way and cruising in squadron during the coming month, a few remarks, having in view the furtherance of seamanship and navigation, will not come amiss. From our yachting columns it will be seen that those gentlemen who are wont to lead in the sport are in full accord with ourselves on the importance of eliminating as far as possible everything that smacks of the professional racing hack from our amateur tars. Not that we would abolish altogether the sailing captain and his hired crew—for they are often indispensable in their way—but no one will question the propriety of inducting the amateur rather deeper into the science and skill required to navigate his own yacht with safety and due economy. Too many of the favored ones, whose purses have no soundings, carry on the sport simply as a sort of traveling pastime, and look upon their craft as luxurious means of conveyance, concerning the management of which it is not their business to inquire. We are happy to say that of late a marked change for the better seems to have set in, and if the current is not yet at full tide, we trust that, through the efforts in the right direction of many leading spirits of the sport, and such aid as we can ourselves extend, the time may not be far distant when the sailing-captain will no longer be sailing-*master*, and the owner may know enough to skipper captain and crew himself, and to get his money's worth. It is not necessary that the gentleman amateur should crawl in at the bawse-pipe and work his way aft to the quarter-deck, nor need he deem himself a lubber because he may never have scraped down spars, slushed and tarred his rigging, or holy-stoned decks—though certainly there can be no harm even in learning things from the lowest rung up; but none can claim the title of yachtsman who cannot sail and navigate their vessels in any kind of weather and in any kind of water without giving up the trumpet or their trick at the wheel as soon as it comes on to blow a little stiff, or when in a ticklish channel with lights around you as thick as candles round a birthday cake. On the coming cruises may yachtsmen improve their opportunities to the best. Post up before you go afloat on the parts you propose to visit. Take down your sailing directions and chart; practice laying out courses; allow for tides and variations; look up the barometer, log and lead, and take bearings with an azimuth of objects all round the compass; note the times of flood and ebb; examine special local currents and counter currents. Look to it that you can make with ease and readiness something more than a "granny's knot" or a clove-hitch; learn to know every rope in your ship, so that you may find them in the dark, and lead out the gear for your crew, while, of course, such elementary matters as making and taking in sail, furling, reefing, loosing to dry, tacking, wearing, jibing, etc., should be at your fingers' ends, in practice as well as in theory. When you don't know a thing be not ashamed to ask—it is the only way to learn. Above all, let the flag officers encourage actual seamanship and navigation, and cultivate an *esprit de corps* and feeling of emulation among their brother yachtsmen, so that when the cruise winds up there may have been something learned and something to remember more gratifying to your pride as sailors than a mere recount of places visited, hops attended and fair hearts lost and won.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2. Sec'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

VIOLATION OF THE GAME LAWS.—It is currently stated in Ballston Spa that one of the Saratoga Lake hotel proprietors was in that village a few days since and offered to resident hunters fifty cents per bird for every woodcock and grouse brought to him before August 1. We hope the Saratoga Game Club will keep watch of these fellows and arrest the first one caught at this business. The guests at Saratoga may go without woodcock.

STEALING GAME IN ENGLAND.—The English courts have again ruled that a conviction for larceny for stealing game from a manor cannot be sustained, because at common law wild animals cannot be made the subjects of larceny. The Lord Chief Justice held, the case being that of a man who had killed and carried away sixty rabbits, that killing rabbits was not larceny; that killing and keeping possession of them did not amount to larceny, and that, so long as possession remained in the prisoner, he would not be guilty of larceny.

VIRGINIA PROTECTIVE ASSOCIATION.—The annual report of the Virginia Fish and Game Protective Association, just published, gives evidence of activity and progress. During the past year the membership has largely increased, no less than sixteen other regular associations have been formed throughout the State as well as numerous private clubs not in correspondence with the main association. In addition to the good results already manifest in its own State, the Association has been instrumental in arousing an interest in this subject in South Carolina and Georgia. The association has a large and important field of work. Virginian waters are to be restocked and made to yield the rich returns which in years past were the rule. Lawless destruction of game is to be abated, and the supply fostered and increased. By repeatedly calling public attention to the merits of their cause, and judicious action, the friends of game protection in Virginia are securing their ends.

BIRDS AND PARIS GREEN.—This lavish use of Paris green in certain sections, as a remedy for the potato-bug pest, is attended with consequences which prompt the inquiry whether, after all, the remedy is not worse than the disease. The Springfield (Mass.) *Republican* says of its use: "It is a bonanza for the dealers in this poison, but the reckless application of the green is killing off birds by the hundred in all this region. The sweet singers fall dead from the trees, and local experts who have examined into the cause charge it to the potato-bug poison. Fish are also killed by eating the beetles that get into our ponds and streams." This should suggest at least a more cautious use of this destructive agent. Farmers may find, when the birds are dead and the insects free to increase and multiply, that they have brought upon themselves even a worse calamity than the inroads of the Colorado beetle.

The Rifle.

THE ELCHO SHIELD—IRELAND WINS.

On Friday morning last American riflemen were gladdened by the news that to Ireland the victory in the Elcho Shield match of the previous day had fallen. Not only had they won, but by such a score as had never yet been dreamed of on the Wimbledon range. The Scotch, English and Irish teams were all high up, but, with a score of 1,610, the Irish eight left everything in the way of Wimbledon precedent far behind, and for the fourth time in the thirteen years that Ireland has appeared in the lists as an Elcho Shield competitor the emblem goes across the Channel. Really it is there now, for Ireland was a winner last July with what was then looked upon as a very fine score. The victory was a thorough one, not a mere fluke at the finish, but from the start the Irishmen led, keeping their advantage through the several ranges, and finishing with a lead of 50 points over the English team, the next one on the list, and yet that team had a total which no preceding English team has ever yet been able to equal. Scotland was 12 points further in the rear, and yet, as in the case of the English team, her total was the best aggregate ever made by a Scotch eight at Wimbledon.

The day was perfect, as we know them at Creedmoor—at least an American team of riflemen would have been suited with it. A hot sun poured down its brilliant rays, while from the Glen Alger, that deep gorse-stunted gulley running between the firing points and the targets, the mirage rose strong and gave the targets a dancing appearance. Such days are rare at Wimbledon, and rarer still among the stormy and misty ranges of Scotland. The Scots accordingly failed to get the full advantage of the day. The American practice of the Irish riflemen stood them in good stead now. Upon the Creedmoor range they had met just such a day. On their own ranges at Dollymount, Clandeboye and Dundalk the Irish riflemen had experienced no such days as this scorcher, and but for their American experience they could not have rolled up the magnificent total they did. The full notes of the day's doings have not yet come to hand, but it is very safe to hazard the opinion that there was something of the American team system controlling the working of the Irish eight. There could not have been a retention of that old each man-for-himself style of doing things which in former years was so characteristic of team work at Wimbledon and the other British ranges. Insensible, but most forcibly, the visiting teams to Creedmoor have been compelled to see that there was much to learn of the American team shooters. The rifle makers, too, have had good hints given them in the Creedmoor matches. It is certain that the teams which visited us and who had fired for a decade before over the Elcho Shield ranges at home, were not getting from their small-bores all that the weapons were capable of doing. A stereotyped way of loading, of sighting and of cleaning had brought a certain mediocre grade of scores, and with these had come satisfaction, until the matches of '74 to '77 opened the eyes of the British riflemen of all grades. In one way or another improvement has been going on, until the magnificent Elcho score of 1878 goes upon record. For this contest the best of preparation had been made. The English riflemen had been selected with great care, as the trophy was in Irish hands, and Scottish riflemen of the small-bore stripe had many a defeat to wipe out. Last year they were at the bottom of the Elcho list, and for two years preceding they had filled only second place; besides, there was their failure on the American ranges to be swept away, and no pains were spared to put a good team in the field. The story of the day's work is briefly told:

The firing opened shortly after 9 o'clock from the green sward in front of the grand stand. Ireland, from the very start, secured a lead, and rolled up a range total of 543 points, or an average of a little more than 67 per man. England scored 534 and Scotland 532. There was much dissatisfaction among the Scotch, and the Englishmen boasted that the fight was not yet over when this result was announced. But it was evident to all that the day was to the Irish team. They seemed to grasp the weather better and kept their guns under better control. The Irish total had never been before beaten at Wimbledon, and only equalled by themselves a year ago. The Scotch and English totals were, with this exception, the best scores yet made, and it was evident that the day was to be one of big scores. The 900-yard range scores were; Ireland, 535; England, 521; Scotland, 523. This made the total for the two ranges: Ireland, 1,078; England, 1,055; Scotland, 1,055. The 1,000-yard range was fired over very carefully, and the light and wind holding as before the scores did not show any very marked falling off. Taking into account the difference in the ranges, the 532 of the Irishmen at 1,000 yards is even better than 543 at 800 yards. The Scotchmen fell off at the 1,000 yards, while the Englishmen did not do much better. Compare the work of this day with the previous Elcho Shield scores which have been made upon the new target during the five years past. That Ireland is picking up wonderfully is shown in the fact of four victories in the past six years, and each time, too, by rattling high scores. The comparative table shows:

THE ELCHO MATCH.

		800 yards.	900 yards.	1,000 yards.	Total
1874	Scotland	504	488	445	1,437
	England	483	468	454	1,405
	Ireland	465	473	440	1,378
1875	Ireland	502	527	477	1,506
	Scotland	498	511	494	1,503
	England	515	504	483	1,502
1876	England	489	490	481	1,463
	Scotland	501	503	454	1,458
	Ireland	472	449	455	1,383
1877	Ireland	543	517	508	1,568
	England	513	478	473	1,464
	Scotland	530	470	440	1,439
1878	Ireland	543	535	532	1,610
	England	534	521	505	1,560
	Scotland	532	523	497	1,552

What Creedmoor has done in comparison should be known to every reader of the FOREST AND STREAM; but it is some satisfaction to know that Creedmoor yet holds her own for big scores, and that the big American team totals of last year have not yet been passed by anybody, anywhere. What Creedmoor actually has done the following table will tell:

CENTENNIAL MATCHES—CREEDMOOR.

1876.	800 yards.	900 yards.	1,000 yards.	Total.
FIRST DAY.				
Scotch	536	528	523	1,586
Irish	545	524	523	1,584
American	550	518	509	1,577
Australian	531	521	490	1,543
Canadian	521	476	493	1,490
SECOND DAY.				
American	527	515	509	1,549
Irish	503	486	535	1,522
Australian	523	494	501	1,517
Scotch	525	462	490	1,477
Canadian	492	465	476	1,433
1877. FIRST DAY.				
American	568	547	540	1,655
British	553	537	539	1,629
SECOND DAY.				
American	575	554	550	1,679
British	559	536	518	1,613

DR. CARVER'S SHOOT.

The match of Dr. Carver to shoot against all previous records and recorded times in breaking 5,500 glass balls with a rifle in 500 minutes, has created no small interest throughout the country. Our full report of last week is now supplemented by the detailed exhibit of the official time-keeper, displaying the work in a somewhat different form to that of the summary given with our full score a week ago. The record is given by hundreds, according to the time and number to be broken. A schedule time of 9m. 5 5-11s. per hundred is given, and these added to any period of the match will give us as in the "schedule time" column the grade of the match at that point. An actual time column explains itself as the total time actually spent in shooting up to any particular point of the contest. The two following columns give the time ahead or behind the schedule at any point, and the column of misses will be interesting in connection with the time.

It will be noted that the best time per hundred was in the first hundred fired at, which was broken in 5m. and 5s., but this pace did not hold, and before taking the rest in the middle of the match, 16m. and 30s. were consumed in breaking a single hundred. Of course in such a case there were short delays while the Doctor received a rapid treatment of the eyes, and besides the intervals between rifles were very marked. The average time per hundred in breaking was 8m. 16s. and a trifle over. In the 31st hundred a rest was taken, and from the time of leaving to his return to the score 32 minutes had elapsed. This, with the 12m 32s. with which he is credited at the end, leaves a margin of 44m. 30s., making the time actually consumed in shooting the 55 hundred balls 7h. 35m. and 30s. Starting with a lead of 4m. after the first hundred, this was added to until at the end of the 22d hundred there was a margin of 33m. 29s. in favor of the marksman. During the third thousand balls this was cut down until before leaving the field for a short respite he was but 13m. 3s. ahead, and after a pause of more than half an hour resumed his task with 16m. 32s. against him. Then came a really plucky stage of the match: it was up-hill work, but gradually the hill was climbed, and the skillful Doctor threw off the score against him until at the close of the 45th hundred a margin of 1m. remained to his favor. From there on the fight was to widen the difference, and on the last 8 hundred over 12m. were gained, and, with the rest, took off 44m. 30s. from the 500 minutes. There are several points deserving of attention as among the lessons of the match. As to the guns, it was shown that they are capable of as rapid a manipulation as the most practiced expert can subject them to. When Dr. Carver could empty his favorite rifle of fourteen accurately aimed shots in 15 seconds, each shot bringing down a broken ball, there is little more to be expected from the weapon. It could as easily have done work twice as rapid had any one been found able to handle the piece. Under this severe and, better still, practical test, the weapons behaved admirably, and this is more noteworthy as the rifles used were ordinary stock rifles and not special pieces gotten up for such work. This is a great triumph for our American rifle makers, and it is doubtful whether any foreign make of weapon could as successfully undergo such a trial. When our long-range small bores make perfect scores at each of the long ranges, as the records of Creedmoor will show that they have, and our repeating rifles show such a record as fourteen hits in fifteen seconds, there would seem but little room for improvement in the direction of accuracy or rapidity.

There can be but little doubt that the pulling of the black powder smoke and the products of combustion operated upon Dr. Carver's eyes. The shifting nature of the sky against which he shot may have had a large share in irritating and dazzling, but no one could suffer the constant puff of sulphurous acid in the face and the delicate membranes surrounding the eye without feeling an evil effect. Had some measures been taken to guard against this infliction, it is quite certain that the time would have been much reduced, and by the elimination of many of the misses a further gain would have been effected. It is a noteworthy fact about the misses, that they are to be traced to the use of new weapons, although the guns are, as near as can be by the use of machinery, made as like as like can be. Yet there is a difference, which in the finer discrimination of actual use becomes apparent. Thus, when the Doctor took his old rifle in his hands every shot fired meant a struck ball, and upon taking up one of the stock rifles, exactly similar in every respect, the misses were likely to come. Not that the second rifle was one whit inferior, but there was wanting between it and the shooter that exactitude of action which long practice had enabled him to acquire with the one rifle. Either rifle is as good as the other, but the incalculable element of personality had much to do with this. The whole match was interesting, not as an exhibition there and then, but as a record showing one of the extreme reaches of the possibilities in rifle shooting. It has settled many important points, and an inspection of the subjoined table will be of interest, not of the extreme point to which Dr. Carver may push his skill, for the match was so managed as to fail to bring the highest possibility of work from the Western marksman, but of what may be done in actual work with a Winchester rifle by a specialist:

OFFICIAL TIME RECORD.

	Time per hundred. M. S.	Schedule Time. H. M. S.	Actual Time. H. M. S.	Ahead. M. S.	Behind. M. S.	Misses.
100	5 05	9 05	5 05	4 00	—	6
200	6 25	18 11	11 30	6 41	—	2
300	7 50	27 16	19 20	7 56	—	5
400	6 40	36 22	26 00	10 22	—	2
500	6 20	45 27	32 20	13 07	—	4
600	7 10	54 32	39 30	15 02	—	10
700	5 50	1 03 38	45 20	18 18	—	2
800	6 00	1 12 43	51 20	21 23	—	12
900	7 00	1 21 48	58 20	24 28	—	9
1,000	8 00	1 30 54	1 06 20	24 34	—	10
1,100	10 10	1 39 59	1 16 30	23 29	—	9
1,200	5 50	1 49 04	1 22 50	26 44	—	6
1,300	8 00	1 58 09	1 30 20	27 19	—	10
1,400	10 10	2 07 15	1 40 30	26 45	—	9
1,500	7 50	2 16 21	1 48 20	28 01	—	6
1,600	7 50	2 25 26	1 56 10	29 16	—	13
1,700	11 10	2 34 32	2 06 20	28 12	—	18
1,800	8 00	2 43 37	2 14 20	29 17	—	16
1,900	8 00	2 52 42	2 22 20	30 22	—	23
2,000	7 00	3 01 48	2 29 20	32 28	—	20
2,100	9 00	3 10 53	2 38 20	32 33	—	20
2,200	8 10	3 19 59	2 46 30	33 29	—	15
2,300	10 10	3 29 04	2 56 40	32 24	—	11
2,400	15 00	3 38 09	3 11 40	26 29	—	28
2,500	8 30	3 47 15	3 20 10	27 05	—	21
2,600	10 20	3 56 20	3 30 30	25 50	—	10
2,700	10 10	4 05 26	3 40 40	24 46	—	5
2,800	12 30	4 14 31	3 53 10	21 21	—	8
2,900	16 30	4 23 37	4 09 40	13 57	—	12
3,000	10 00	4 32 43	4 19 40	13 03	—	21
3,100	35 30*	4 41 48	4 55 10	—	16 22	16
3,200	6 30	4 50 54	5 01 40	—	13 46	16
3,300	7 30	4 59 59	5 12 10	—	12 11	10
3,400	6 30	5 09 04	5 18 40	—	9 36	10
3,500	8 30	5 18 10	5 27 10	—	9 00	11
3,600	11 30	5 27 15	5 38 40	—	11 25	22
3,700	7 20	5 36 21	5 46 00	—	9 39	10
3,800	9 10	5 45 26	5 54 10	—	8 44	22
3,900	9 10	5 54 31	6 03 20	—	8 49	16
4,000	9 20	6 03 36	6 12 40	—	10 04	24
4,100	9 00	6 11 41	6 21 40	—	9 59	17
4,200	7 30	6 20 47	6 29 10	—	8 23	10
4,300	8 10	6 29 52	6 37 20	—	7 18	14
4,400	6 20	6 38 58	6 43 40	—	4 42	6
4,500	7 20	6 48 03	6 51 00	—	2 57	18
4,600	9 20	6 57 08	7 00 20	—	3 12	19
4,700	7 00	7 06 14	7 07 20	—	1 06	9
4,800	7 00	7 15 20	7 11 20	1 00	—	13
4,900	7 00	7 24 26	7 21 20	3 06	—	15
5,000	7 50	7 34 31	7 29 10	5 21	—	16
5,100	8 10	7 43 36	7 37 20	6 16	—	8
5,200	6 20	7 51 42	7 43 40	8 02	—	18
5,300	8 20	8 00 48	7 52 00	8 48	—	16
5,400	8 10	8 09 55	8 00 00	9 55	—	21
5,500	7 30	8 20 00	8 07 30	12 30	—	11
Total misses						712

* Rest of 32m. included. Actual breaking time 6m. 30s.

BOSTON, *Walnut Hill, July* 20.—Amateur series, 200 yards possible 40. Score:

O M Jewell	4	5	5	5	5	5	4	5	4	—47
L L Hubbard	4	4	5	5	5	4	4	5	4	4—41
L L Hubbard (re-entry)	4	4	4	5	4	4	5	4	4	5—43
J N Frye	5	4	4	4	4	4	5	4	5	4—43
J N Frye (re-entry)	4	5	5	4	5	4	4	5	4	4—43
E B Souther	4	4	5	5	4	4	5	4	4	4—43
J N Nichols	4	4	5	5	4	4	5	4	5	5—43
H E Lord	4	4	5	5	4	4	5	3	5	4—42
T Silas	4	4	4	4	4	4	4	4	5	4—41
T Dempster	4	3	4	5	4	5	4	4	4	5—41
E Bennett	4	4	5	4	3	4	4	4	5	4—41
W Parker	4	5	4	3	3	5	4	4	5	4—41
S R Ball	4	4	4	4	5	3	5	4	3	3—41
G D Curtis	3	4	5	3	5	3	5	4	5	4—41
E Ring	4	4	4	4	4	4	4	4	3	3—39
W Bartlett	3	5	5	3	4	4	4	2	5	3—38

No-cleaning match; 200 and 300 yards; possible 70. Score:

	200 yards.	300 yards.
L L Hubbard	5 4 4 5 4 5 4—31	4 4 4 4 4 3 5—28—59
L L Hubbard (re-entry)	4 4 5 4 5 5 4—31	4 4 3 5 3 5 4—28—59
J N Frye	5 4 3 5 4 4 4—29	4 3 4 2 3 4 4—24—53
E B Souther	5 4 5 4 4 5 2—29	4 2 3 4 4 3 4—24—53
J N Nichols	5 2 4 4 3 3 4—23	3 2 3 4 4 3 3—22—45

BOSTON—*Walnut Hill, July* 17.—First competition Massachusetts Rifle Association, 800, 900, 1,000 yards, fifteen shots at each range; wind steady, but there was rain later. The shooting was admirable. Attention may be called to Captain W. H. Jackson's score at 800—74 in a possible 75. Mr. Sum-

ner's score of 212 is immense. We give the seven leading scores, there being twelve competitors.

J S Sumner.

800	5	5	4	5	5	5	5	5	5	5	5	3	5	5—72
900	4	5	5	5	5	5	5	4	5	4	5	5	5	5—72
1,000	5	4	5	4	5	3	5	5	4	5	5	5	4	5 4—68—212

G W Davison.

800	4	4	3	5	4	5	3	5	5	5	4	5	5	5—67
900	5	5	4	4	5	4	5	5	5	5	5	4	5	5—71
1,000	4	4	3	5	4	5	5	4	4	5	5	5	5	5—68—208

Captain W H Jackson.

800	4	5	5	5	5	5	5	5	5	5	5	5	5	5—74
900	0	4	4	5	5	4	5	4	5	4	5	5	3	5—64
1,000	5	5	5	3	5	5	3	5	4	3	5	4	5	5 4—65—203

William Gerrish.

800	5	4	5	5	5	5	4	5	4	5	5	5	5	5—72
900	5	4	5	4	3	4	5	4	3	5	5	4	4	0 4—59
1,000	5	5	5	3	3	4	4	5	5	5	4	5	4	5 5—67—198

Salem Wilder.

800	4	5	4	5	5	5	5	5	5	4	5	5	5	5—72
900	5	4	5	5	5	5	4	5	4	4	4	4	3	5 3—65
1,000	5	3	4	4	5	3	3	3	5	4	4	3	3	4 5—58—195

H L Lee.

800	5	4	3	5	3	5	5	5	5	5	5	5	5	5—70
900	4	3	3	5	4	4	5	4	5	5	5	5	4	5 5—65
1,000	5	4	3	4	5	3	4	4	4	5	3	3	3	4 3—57—193

W Arthur.

800	5	5	5	5	3	5	5	5	5	5	5	5	5	5—73
900	5	5	5	5	5	5	4	4	5	5	5	5	5	3 5—71
1,000	3	5	0	3	0	5	3	5	5	4	3	3	5	4 4—48—192

ABINGTON—THE ARNOLD RANGE, *July* 16.—Massachusetts vs. Abington teams of four. German ring target, composed of 12-inch rings. The Massachussetts team were the victors.

Boston Team.

Captain W H Jackson	210
John A Lowell	202
L L Hubbard	190
J B Osborne	167—769

Abington Team.

N W Arnold	213
L W Farrar	205
S C Noyes	181
S E Rlug	159—758

CONNECTICUT—*Stamford.*—Sixth competition for Sharps rifle; 200 yds. Mr. Sanford having won three times, now takes the rifle:

Sanford	4 4 4 4 4 4 4 5 4 4—41	Nichols	4 4 3 4 4 4 4 3 4 4—38
Swartwout	4 5 4 3 4 4 4 5 4 4—41	Wilson	4 5 3 4 4 4 4 3 4 4—38
Provost	4 3 4 4 4 5 4 4 4 4—40	Minor	5 5 4 3 3 3 4 4 3 4—38
Smith	4 5 4 4 4 4 4 3 4 4—40	Swords	4 3 3 3 4 4 4 4 4 4—37
Bendrle	4 4 4 3 5 3 4 5 4 4—40	Taylor	3 4 4 4 4 3 4 4 3—37
Teackle	4 4 4 4 4 4 4 4 4 3—39	Warren	4 2 4 3 4 4 3 5 3 4—36
Bennett	4 4 4 4 3 5 4 3 4 4—39	Hurlbutt	3 3 4 3 2 3 4 2 2 3—29

Williams Badge competition; 200 yards. Badge now won three times in succession by Sanford, and now becomes his property:

Sanford	4 4 4 4 5 5 4—30	Bennett	4 3 4 4 3 3 4—25
Keene	5 4 4 4 4 5 4—30	Wilson	3 3 4 3 4 5 3—25
Teackle	4 4 4 4 4 5 4—29	Ferguson	3 4 5 4 3 3 3—25
Provost	4 4 5 4 4 4 4—29	Warren	3 3 4 4 4 3 3—24
Minor	4 4 4 4 4 4 4—28	Swartwout	4 4 3 4 4 0 3—22
Swords	4 4 4 4 3 5 4—28	Hurlbutt	2 0 0 3 3 5 5—18

Willowbrook, July 13.—Connecticut Rifle Association; long-range match; ten shots at each distance.

	800	900	1,000	T'l.		800	900	1,000	T'l.
Cage	43	44	43	130	Jones	35	43	35	113
Binns	46	44	36	126	Washburn	37	35	36	108
Perrier	44	40	31	115	Kingman	37	36	28	101

F. Wessel and Wallace Gunn withdrew before completing their scores.

Remington Mid-range Match.

Washburn, Hartford	49	Hubbard, Hartford	45
Case, New Britain	46	Binns, Hartford	44
Atkinson, New Britain	45	Woodbridge, Manchester	42

Military Match, Springfield Rifle.

	200	500	T'l		200	500	T'l
Faughran	26	29	55	Lieut Clark	27	24	51
Corp Chapin	27	28	55				

"Any Military Rifle" Match.

	209	509	T'l		200	500	T'l
Lieut Clark	32	29	61	C H Faughran	26	29	55
Corp Chapin	28	27	55	Capt Woodbridge	29	25	54

All Comers' Match (any rifle)—200 yds.

Atkinson, New Britain	32	Hubbard, Hartford	27
Mooks, Collinsville	31	Williams, "	26
Tucker, Hartford	29	Washburne, "	25
Pillard, New Britain	28	Carlton, New Britain	24

CREEDMOOR—*Wednesday, July* 17.—The long-range members of the Amateur Rifle Club shot over the ranges at 800, 900 and 1,000 yards. Col. H. F. Clark completed his score in the first competition for a place on the American team of 1878. His score was 200, which, added to 203, the number of points scored by him on the previous day, gives him a total of 403 points. The first match contested was for the "Olyphant" trophy. It was open to teams of eight from any company of the National Guard, and the firing was by files and volleys. Three teams were entered, and the first prize was won by Company G, Seventy-first Regiment, the following members comprising the team corps: Demmler and Frazier, privates Addison, McCahill, Farrell, Engel, Morse and Cochrane. The scores were as follows:

	File.	Volley.	Total.
Company G, Seventy-first	124	100	224
Company I, Seventh	117	91	208
Company H, Seventh	92	86	178

The first competition for the "Gildersleeve" trophy took place at 200 and 500 yards distance, five shots at each range. There were 90 entries, of which the following are the leading scores:

C H Eagle	45	H W Clements	37	T J Dolan	34
E W Price	44	W H Heiser	37	W A Bryant	33
J R B Bayley	43	E W Ketchum	36	M B Engel	32
J B Holland	41	B R May	36	G E Jantzen	32
Capt W C Reddy	40	E W Candee	36	P Shaefer	30
J F Bullman	40	H T Lockwood	36	L Goldsmith	29
J H Abeel	40	E Demmler	35	James Harris	29
J W Hitchcock	39	P McMorrow	35	W N Nardbruck	28
Capt J L Price	39	L H Ayre	35	W E Magnesson	27
G F Merchant	39	T Whaley	35	J McKnight	27
Corp J W Gardner	39	A P Riker, Jr.	34	E F Wells	26
G H Moller, Jr.	38	A Steele	34	A A B Ettinger	26
W J Underwood, Jr.	38	J B Grohman	34	E B Bragg	25

The Empire Club held its monthly competition for the "average" trophy at 600-yards distance; 10 shots per man. The best scores were as follows, the highest attainable number being 50 points:

H Rathbone	47	Homer Fischer	45	J W Todd	38
Dr S T G Dudley	46	J P Waters	45		

—We mention with regret that Mr. Charles E. Blydenburgh, the well-known rifle shot, will leave shortly for Salt Lake City, where he intends to reside. Of course this is not intended to be an obituary notice, only that our loss is somebody else's gain. Mr. Blydenburgh will teach the Salt Lakers some new things in long-range shooting. So westward the course of long range rifle shooting wends its way.

CREEDMOOR—*Saturday, July* 20.—For the Sharps match there were thirteen entries. Conditions: Open to all-comers, any rifle, distance 800, 900 and 1,000 yards, fifteen shots at each range; highest possible number, 225 points:

	800 yards.	900 yards.	1,000 yards	Total
I L Allen	71	70	64	205
R Rathbone	67	66	68	201
L Geiger	71	61	65	197
J P Waters	65	51	64	170
F H Holton	68	54	60	182
Wallace Gunn	67	52	62	181
N D Ward	61	58	54	173
S C Kingman	60	53	51	164
J L Paulding	56	41	retired.	
J A Hatry	53	51	retired.	
Homer Fisher	63	retired.		
J W Todd	24	retired.		

Tenth competition—*Turf, Field and Farm* match—twenty-one entries. Conditions: Distance, 200 yards, ten shots, off-hand. Following are the scores:

J L Paulding	4 5 5 4 5 4 5 4 5 4—45		
C E Blydenburgh	5 4 4 4 5 4 5 5 4 4—44		
J R Grohman	4 4 4 4 4 4 4 5 5 4—42		
C H Eagle	5 5 3 4 4 5 4 4 4 4—42		
M M Maltby	4 5 4 3 5 5 4 4 3 5—42		
F A Holton	4 4 4 4 4 3 4 4 3 5—41		
S T G Dudley	4 4 4 5 3 4 4 4 5 4—41		
H Fisher	4 4 5 4 3 5 4 3 5 4—41		
J H Teackle	5 5 3 4 3 4 5 4 4 4—41		
F C McSewell	4 4 4 4 4 4 4 4 4 4—40		
I E Irwin	39	J M Allen	35
E A Perry	39	L Cass	32
J W Todd	38	C E Truslow	30
A A Thompson	37	G C Jantzer	29

The Amateur Rifle Club shot for the second time for the "mid-range" badge at 600 yards, fifteen shots. The scores were as follows: F. H. Holton, 72; J. P. Waters, 70; Leonard Geiger, 70; Isaac L. Allen, 69; R. Rathbone, 67; Homer Fisher, 64.

The Seventh Regiment Rifle Club shot for the "shells" at 500 yards' distance, five shots. Edward W. Price was the winner upon a clean score of 25 out of a possible 25 points. The next best scores were: C. H. Eagle, 24, and Capt. C. F. Robbins, 23.

COMPETITION FOR THE SELECTION OF THE AMERICAN TEAM.—As may be seen by a special notice in this paper, the days for testing the skill of riflemen to form the American team and reserve have been determined: On the 16th, under these conditions: Distances, 800, 900, and 1,000 yards; 15 scoring shots at each range; highest attainable number, 225 points, the following scores were made:

	800 Y'ds.	900 Y'ds.	1,000 Y'ds.	Total.
Col. H. F. Clark	70	66	67	203
R. Rathbone	71	64	63	198
Homer Fisher	68	63	53	184
Dr. S. T. G. Dudley	69	65	Retired.	

July 24.—Complaint is made that sufficient attention is not paid by the officers of the N. R. A. to the shooting of those desirous of entering for places on the American Team. The fact is that there is every interest shown. On the 24th the following riflemen tried their skill for places:

	800	900	1,000	Total.
R. Rathbone	68	68	67	203
Col. H. F. Clark	63	65	61	198
B. G. Doughty	58	48	61	167
Dr. S. T. G. Dudley	64	51	43	148
H. Fisher	58	61	Retired.	

There were about 200 members of the National Guard on the range, representing the Seventh, Eighth and Ninth Regiments, who were shooting for the purpose of selecting a regimental team to contest in the autumn prize meeting of the National Rifle Association. The Eighth Regiment Rifle Club shot for the "Stewart" gun at 200 and 500 yards, five shots at each range. The leading scores were as follows: Dr. G. T. Hobart, 76; Samuel C. Clark, 75; J. Welsh, 73; Charles Heigman, 69; Lieut. J. A. Gee, 69.

THE BRINTON RIFLE RANGE.—The opening of this new range on Saturday was one of the leading events. Named after Gen. George B. McClellan, whose middle name it bears, the range is situated upon a plain between Elizabeth and Elizabethport, on the N. J. C. R. R. The targets are of canvas, and are admirably adapted to the purpose, and being arranged *en echelon*, the necessity of moving backwards or forwards to various ranges is no longer necessary. The ground is amply large, some 112 acres, allowing ranges from 100 to 1,200 yards. For the very short time it has taken to plan and perfect this range, its present excellent condition reflects the greatest credit on the directors. A contract has been made with the military authorities of the State by which the members of the National Guard have free use of the short and mid-range targets on Monday and Thursday, and of five targets on Saturday of each week. To-day the range will be formally opened by General McClellan. The members of the New Jersey Legislature, the Mayor of Jersey City and other officials have signified their intention of being present. Marksmen from the First, Third, Fourth, Fifth, Sixth, Seventh and Ninth New Jersey regiments and the American Team will compete for gold medals. The ease with which the Brinton Rifle Range can be reached from New York, when compared with Creedmoor, will certainly make it very popular. Of course it may take quite a number of years before the New Jersey range equals, for excellence of appointments, our New York one, but that it will be one of the leading rifle grounds in the United States there can be no doubt. The officers are composed of gentlemen who thoroughly understand their business, and the experience they have gained at Creedmoor has been of the greatest advantage to them.

INTERNATIONAL RIFLE MATCH.—Competition for places. On Tuesday the competition should have regularly commenced, but owing to the absence of the officials of the N. R. A., and from the fact that the meeting had not been generally known, it was determined to postpone the regular competition to the following days: July 23, 24, 30 and 31; August 6, 7, 13 and 14. Some four riflemen having competed yesterday, the scores made will be allowed to stand. The conditions were as follows: Distances, 800, 900 and 1,000 yards; 15 scoring shots at each range; highest attainable number, 225 points. Following are the scores:

	500 Yards.	900 Yards.	1,000 Yards.	Total.
Col. H. F. Clark	70	68	67	203
R. Rathbone	71	64	63	198
Homer Fisher	68	63	53	184
D. S. T. G. Dudley	69	55	Retired.	

The Eighth Rigiment Rifle Club shot for the "Heizman" mid-range rifle at 500 yards, 20 shots in any position. The leading scores were as follows, the highest attainable number being 100 points: G. W. Hobart, 80; Capt. Edward Barker, 80; E. A. Styles, 75; Lieut. J. A. Gee, 75; John Welsh, 74; W. Reed, 73; J. C. Clark, 70; W. H. Cochran, 69; Thomas Murphy, 00; W. Stuart, 65; Charles Heizman, 64; W. J. Douglas, 61; Col. G. D. Scott, 54.

MICHIGAN—*Glen Alger Range, Harrisville, July* 18.—The following very handsome score, even after taking the single 0 into consideration, was made by D. McGregor. Distance, 500 yards; 25 shots; Sharps rifle:

5 5 5 5 5 5 5 5 5 5 5 5 0 5 5 5 5 5 5 4 5 5 5 5—119.

Mr. McGregor says: "I used a Sharps new model mid-range rifle, 70 grains powder and 370 grains lead. The miss on the fourteenth shot I cannot account for; seemed to have a good sight and pull-off. At two different times before I had the same experience—all low and falling short of the target. I load the cartridges carefully, using old shells. Perhaps some brother sportsman can tell me where the kink is."

CHARLESTON, S. C.—The interest in rifle shooting seems to be on the increase here, and almost every afternoon the sharp crack of the Remington, Sharp, and Winchester may be heard at the ranges of the different military organizations of the city. The Carolina Rifle Battalion have commenced a series of eleven matches, open to members of the Battalion only. The prizes are two handsome medals, one gold and the other silver. The member making the best average score will be entitled to the gold medal, and the second best score to the silver medal.

Below I give result of match between two picked teams of ten men each from the German Hussars and German Fusiliers. Bulwinkle's Far Range, 200 yards off-hand, Creedmoor target, open sight, any military rifle; ten shots to each man; highest possible score, 50. The shooting was not as good as was expected, but considering the stiff breeze that was blowing, the average score per man was very fair:

GERMAN HUSSARS.		GERMAN FUSILIERS.	
Bulwinkle, H.	26	Williams, A. M.	37
Harkens, T. H.	38	Heger, J.	39
Bessman, F.	28	Gleason, P.	37
Osterhoitz, F.	32	Schachte, P. F.	41
Windhelm, F.	27	Schachte, A.	34
Lubs, H.	31	Schachte, H.	38
Thees, H.	37	Schachte, E.	36
Bulwinkle, J.	32	Gunby, F. M.	40
Seel, C.	36	Scharfer, F. W.	27
Mabus, H.	38	Marjenhoff, O. G.	38
Total	325	Total	367

Savannah, July 17.—An exciting contest took place between teams of five at 200 yards, five shots, in which the Savannah Cadets were the victors. Military rifle was used: Savannah Cadets, W. M. Mills, Captain, 99; Co. B, Savannah Volunteer Guards, George Allen, Captain, 97; German Volunteers, H. Von Glahn, Jr., Captain, 92; Republican Blues, J. McFarland, Captain, 90; Co. C, Savannah Volunteers, W. P. Hunter, Captain, 88; Chatham Artillery, G. P. Walker, Captain, 88; Irish Jasper Greens, T. J. Daley, Captain, 76. In the individual match, three shots, Mr. C. M. Cunningham won the prize.

OHIO—*Cincinnati, July* 10.—Cincinnati is developing a decided taste for rifle practice. A year ago you never heard of such a thing as a rifle club in our city, but now there are three flourishing clubs and many very good shots. The O. N. G. gave an exhibition of their skill at Price's Hill, the 10th instant, free to all comers, at 200 yards, ten shots, second class target, in which Mr. T. O'Hare carried off the prize. This is a very poor range, and one over which many would not shoot, hence so few entered.

Dustin	0 3 3 3 0 4 3 3 3 0—22	Wells	3 3 3 4 4 3 4 4 4 3—35
O'Connor	4 4 2 4 4 4 4 3 3 4—39	Carroll	2 4 3 3 3 4 3 3 3 2—30
Davies	3 2 2 4 2 5 4 4 4 0—30	O'Hare	3 3 5 4 4 5 4 4 4 4—39
McIntyre	0 2 3 3 5 3 3 3 4 4—30	Bryant	3 4 3 3 4 4 3 5 3 4—36

Mr. O'Hare is a member of the Irish-American team of this city.

Cincinnati, July 21.—Cincinnati and Germania Rifle Clubs, Massachusetts targets, 200 yards:

Cincinnati Club.

O Taph	10	11	7	11	10	11	10	6	10	10	5	10	11	9 6—140
W Campbell	8	9	7	0	7	8	10	11	8	9	10	8	7	8 8—118
D Disney	10	10	8	5	7	9	8	10	6	9	6	11	9	9 11—123
W Hall	7	12	7	7	10	7	9	10	6	9	3	9	5	10 10—121
W Caldwell	10	11	7	10	7	11	8	10	7	9	8	11	8	9 10—136
T Bsum	9	8	11	9	6	10	11	7	11	8	9	7	7	9 10—132
W Y Sedan	8	12	5	11	9	10	11	12	12	11	4	11	10	11 10—147—922

Germania Club.

W Stuebe	4	7	11	9	8	11	5	11	10	10	7	11	11	8 10—133
W Meyer	10	10	10	5	6	9	7	10	10	7	2	9	11	8 11—126
G Hinsen	10	11	12	9	9	9	11	12	9	10	8	6	8	8 10—142
L Feder	6	10	0	12	12	9	8	11	8	10	12	0	10	10 11—135
C Roos	7	7	9	9	10	10	9	12	8	9	10	11	7	11 9—136
M Gendelin	6	7	10	10	10	8	8	10	9	10	10	10	8	9 9—134
G Ehlarding	10	8	8	12	0	12	0	5	9	9	8	11	9	9 10—110—915

IRISH RIFLE ASSOCIATION.—It is pleasant for us to record some superb scores made by members of the Irish Rifle Association on the occasion of their meeting on June 25. The familiar names of Righy, Millner and Fenton appear over and over again, always on the lead. No wonder, as we have recorded it to-day, that the Irish team carried off the Elcho Shield. We give some of the scores. At the 500 yard All-comers' match, seven shots, the following were the scores: J. K. Millner, 27; Lieut. Fenton, 27. In the 800-yard competition, seven shots, Mr. John Rigby led with 34, Millner making precisely the same score, and in the same order—all bulls'-eyes but the third shot, which was a four. For the Marlborough Cup, 1,000 yards, ten shots, Mr. John Rigby made 45; Mr. Milner 44. For the Abercorn Cup and All-comers's prize, which gives a place in the eight, the scores were simply superb. We give the leading ten scores:

Aggregate Scores—First Day.

	800	900	1,000	T'l.		800	900	1,000	T'l.
Rigby, John	75	69	93	—237	Greenhill	70	64	88	—222
Millner	72	69	84	—225	Smith	70	64	88	—222
Banks	70	71	83	—224	Rigby, W.	67	68	86	—221
Fenton	70	68	86	—224	Joynt	69	67	85	—221
Browne	68	66	89	—223	Dyas	70	57	93	—220

At 800 yards, Mr. Bigby made a full score. On the second day of the same match the scores were as follows:

Aggregate Scores—Second Day.

	800	900	1,000	T'l.		800	900	1,000	T'l.
Fenton	67	70	89	—226	Hanks	70	66	88	—224
J Rigby	70	68	91	—229	Greenhill	69	69	86	—224
Millner	71	67	88	—226	Johnson	67	63	92	—223
Browne	72	69	85	—226	Joynt	68	67	87	—222
Dyas	72	68	85	—225	Walters	71	65	81	—217

Challenge Gold Medal, presented by Mr. Wilkes, of the New York *Spirit of the Times*, value $400, five shots at 1,100 yards, any rifle; the competitors to be those who shall have made the highest scores in each club team-shooting in the All-Ireland Challenge Shield Match, Mr. Millner won with 4 5 5 5 5—24; Wilson, 5 3 5 3 5—21.

SCOTLAND—*Aberdeenshire—Wappingshaw.*—The meeting of the Aberdeen Volunteer and Artillery Association was a bril-

liant one. In the small-bore match, with seven competitors, it was Mr. John Johnson, of Milwaukee, a native of Aberdeenshire, who won the prize. We give the whole score. Small-bore competition, all comers; ten shots each at 800, 900, 1,000 yards. First prize, £10; second, £5; third, £4; fourth, £2.

Mr J Johnstone, Auchnagatt	800	5 4 4 5 4 4 5 5 5 5	—46
	900	5 5 5 5 4 5 5 4 5 5	—48
	1000	4 5 3 5 4 5 3 0 5 4	—38—132
Color-Sergeant Ferguson, Inverness	800	4 4 5 5 5 5 5 4 5 5	—47
	900	3 4 5 5 4 3 5 4 5 5	—43
	1000	3 3 3 5 4 4 5 3 5 5	—40—130
Lieut.-Col Jopp, Aberdeen	800	5 4 5 5 5 5 5 5 5 5	—49
	900	5 5 3 0 5 5 3 3 4 4	—37
	1000	5 5 5 5 4 2 0 4 3 5	—38—124
Private Blake, Kemnay	800	4 3 4 2 3 5 5 3 5 4	—38
	900	4 5 3 4 4 5 4 5 4 5	—43
	1000	5 3 0 3 5 3 3 2 5 3	—32—113
Mr A Davidson, Muglemoss	800	3 5 4 5 4 4 5 5 5 4	—44
	900	4 4 4 5 4 3 4 5 4 5	—42
	1000	0 5 3 3 0 2 5 0 2 5	—25—111

Our Milwaukee friends will have a good Scotch jollification when Mr. Johnstone comes home.

WITH A WESSON .22.—A correspondent at Bridgeport sends us a score—4 5 5 5 4—23, and 3 4 5 4 5—21—made at 200 yards with a Wesson .22. He says that firing at a rest he was surprised at its accuracy, and trying it off-hand made the above score. The cartridge was the U. M. C. Co.'s long .22. "S. H. S." concludes by saying: "As I have never heard of any shooting over 70 or 75 yards with so small a gun, I thought that this might be of interest to you."

A WARLIKE ASSORTMENT.—Last week the steamer J. B. Walker left New Haven for Constantinople with a full cargo of military Yankee notions. The assortment was as follows: 20,000,000 cartridges, 47,000 Winchester rifles, 54,000 bayonets, and 10,000 scabbards, amounting in all to $1,035,000. With such nice little playthings does the Turk disport himself.

SHOOTING WITH BOTH EYES OPEN.—A correspondent sends us the following explanatory of Dr. Carver's method of shooting with both eyes:

"On throwing the rifle to your face do not commit the common error of looking first at your sights, but gaze in the air steadily at your mark. Now, if the shooter has shot much his arm at once obeys the left, or object eye as we shall call it, and covers the mark, making an allowance for speed, direction and parabola. Instantly, without an effort, the right eye takes the sight line, and the sights are seen clear, distinct and without the haze noticeable when one is closed. This is the golden moment for the trigger-finger, and the ball dissipates into a sparkling cloud of fragments. To prove my indirect assertion of the independent action of the eyes, let the shooter now present the rifle from the left shoulder, and the gun will look pointed across him. This is because having educated the right eye by practice as a sight eye, the left looks not at the sight but for the mark, and the right for the sights. It is my firm conviction that Carver's fine work could not be done by any one closing one eye. CESTRIUS.

Westchester, Pa.

A DISCIPLE OF DR. CARVER.—We take the subjoined from the leading Salt Lake paper. The Doctor has a number of promising pupils in the West. Glass ball shooters with shotguns must look sharp, for those who can break glass balls with rifle balls make telling scores with shot-guns. Mr. Mecars has broken 63 out of 73 glass balls. Mr. Fletcher, the inventor of the bell metal ball, is also very expert with the .22 calibre Ballard, which is the arm Mr. Mecars uses:

"Mr. Geo. A. Mecars, yesterday morning, did some very fine shooting with a Winchester rifle. Being out on the North Bench he tried his hand shooting at indiscriminate objects, from the size of an egg to that of a pigeon, thrown up without consideration of height or distance. Mr. Mecars made forty-one out of fifty possible shots. This we consider pretty good shooting, with, to him, a new rifle, and only practice for fun. We think we are raising the champion shot of the world, a shot that will require Dr. Carver to look out for his laurels."

EFFECTS OF THE EXPRESS BULLET ON A PIECE OF CAST IRON.—*Editor Forest and Stream:* There seems to be a great difference in the work done with the Express bullet by different sportsmen. I think this variation does not all come from the bullet, though it may be out of proportion to do the work properly. I imagine that most sportsmen are using the Express bullet in the common hunting rifle, patterned in a measure from the long-range rifle, bored and rifled to carry the long bullet, and the Express rifle, which is bored and rifled to carry the short, light bullet. The result of the Express bullet varies widely when shot from the different rifles. Since reading that very interesting letter from Mr. Van Dyke, I tried the Express bullet on a piece of cast iron, five-eighths of an inch thick, using the same rifle and amount of ammunition as reported in FOREST AND STREAM, Feb. 28, 1878, when it penetrated the block. Result as follows: The first two struck about three inches from the edge, and each broke the iron in pieces. The third struck eight inches from the edge, and drove a hole through the iron at fifty feet distance. I shoot the same bullet and charge into a snow-bank, and the bullet will expand one inch to one and five-eighths inches, and you have power enough to drive it along, and the work it does is fearful on game. I have often shot through six to eight inches of wood, and the hole where the bullet came through would be but little larger than if done by a solid bullet.

Now, here are statements that almost contradict themselves. Nevertheless, I have endeavored to state them as near as possible, as my experiments have shown them to be. Mr. Van Dyke's bullets are very similar to those I use, only slightly hardened with tin. They correspond so near that the different results cannot arise from the bullet.

Worcester, Mass. A. G. M.

The piece of cast iron which has been sent us is 9-16ths of an inch thick. The iron very dense and clean. The spalling of the iron covers a space of some 1¾ inch, and is the side on which the Express bullet struck. The hole in the iron is quite through, and is about one quarter of an inch wide. The back of the piece of iron is driven out by the bullet.

NEW YORK—*Newark, July* 17.—The Amateur Rifle Club at 1,000 yards. The intense heat told on the marksmen, and accounted somewhat for the low records:

W H Nicholoy	4	4	5	4	0	5	5	1	5	2	4	5	5	5	5	4	—61
E B Elliott	4	3	2	3	3	4	5	5	5	3	5	4	4	5	5	—60	
W F Nutten	3	3	3	3	3	3	3	5	2	5	5	5	4	4	5	—56	
F Garlick	5	3	3	5	0	4	4	5	3	5	4	4	3	4	2	—54	

DR. CARVER.—A last opportunity will be given the public of witnessing Dr. Carver's performances. Under the auspices of the Jersey City Heights Gun Club, an exhibition will take place at the West Side Driving Park, at Marion, N. J., some time toward the close of this month or the beginning of August, of which full particulars will be published. On the same occasion the Jersey City Heights Gun Club will have a glass-ball sweepstakes. As the Driving Park can be reached within thirty minutes from the City Hall, we may expect that there will be a numerous attendance.

The Doctor will shoot on Saturday, July 27, at Hartford; on Wednesday, July 31, at the Dearborn Park, Marion, N. J.; at Albany on the 6th and 7th of August; thence the Doctor goes to Saratoga, and will show his skill there on one of the off days during the race week. It is needless for us to say that Dr. Carver has his eyes wide open, has cut his eye-teeth, and can still hit a bumble-bee on the wing with a rifle ball.

PENETRATION, POINT BLANK AND EXPRESS RIFLES.

EDITOR FOREST AND STREAM: March 30, 1878.

Your impression of March 14 contains various letters which are exceptionally interesting and instructive, both as regards shot-guns and Express rifles. The first which I observed is that of "H. W. K.," in reference to "momentum and penetration," a subject on which Mr. Dongall, Sr., has for many years written in order to draw attention to the inconsistency of the assumption that the greatest velocity must give the greatest penetration, a fact which, from our experience, we have also found. It is not my intention now to enter into the cause of this, for it is a simple law of nature which many admit to be true in other things, but will deny it of guns, and the mysteries of nature are more worthy of respect than to put against them the infallibility of the paper pad. The question of momentum naturally bears on that of "chilled and hard shot," and if these be manufactured so that the pellets are lighter than those of soft shot, it is a point beyond cavil that the soft shot, possessing greater weight, thereby possesses greater momentum, and consequently range. An Express bullet, being light and before a heavy charge of powder, possesses greater velocity for a short distance. To my mind, chilled shot may likewise assume greater velocity than soft, for a short distance, and thereby be preferable for certain game; but that it can, if it be lighter, have equal range, I cannot see, and it is merely a matter of logical reasoning to come to this conclusion. The hardness of the chilled shot is undoubtedly an advantage, and in fact a necessity in a thorough choke-bore gun, where the exit of the shot injures the latter's roundness; but if you can produce a kind of "choke-bore" gun which will give you as good shooting with the ordinary soft shot as it will with the chilled, you have a gun which is decidedly preferable. That is a result our firm never loses sight of, and I have witnessed instances of guns which had been bored to shoot hard or chilled shot alone, that were shooting miserably because the owner was using whatever shot came to his hand, or was, in fact, unable to get the chilled. Is it the experience of any of your readers that chilled shot shoots better with a quicker burning powder than with a coarse grain slow burning? If so, I could assume that the lightness of the pellets of chilled is the reason. The desideratum is, a hard shot of equal weight with soft shot, pellet for pellet.

Major Merrill defines what is meant by "point blank:" the English being, the distance to which the ball goes without the barrel being elevated, the ball never rising above the line of sight; the American being, the ball rising above the line of sight, and coming down again, is point-blank when it touches the line of sight further on. Now, as you thus have the two alternatives, viz., that your rifle must either throw its bullet on a curve, as you do in throwing a quoit, or must, if you do not elevate the muzzle, begin to fall to the earth from the moment it leaves the muzzle. What or which trajectory is the best for sporting purposes? Although this is fully explained in the chapter on Express Rifles in my father's book, "Shooting; its Appliances, Practice and Purpose," it may be herewith repeated. The sporting trajectory is certainly that which requires no elevation of the mozzle. In playing quoits the aim is to drop the quoit on the mark. If you throw short or beyond, of course you miss it and lose your money, if you have any money on. However, likewise, if your rifle throws its bullet as you would your quoit your bullet falls on this side of your game, or on the other side over its back, and you lose your (edible) game. But that projectory which, without elevating the mozzle, goes a certain distance, is preferable, and the object of the maker of a proper Express rifle is to prolong that distance as far as possible to prevent the bullet from dropping downward; and, as you look straight at a bird and drop it at a certain range with your shot-gun without sights, to do likewise with your Express rifle with almost no sight.

As your correspondent, "H. W. C.," in his No. 1 letter on the sporting rifle, remarks, 200 yards is and ought to be an "outside limit" at which a sportsman should propose to shoot at large game. Much industry has been devoted to the production of an Express rifle which shall maintain the bullet as far as possible before it reaches the ground, and we have certain opinions as to how this is to be obtained, which practical use has corroborated, and considering the very eminent deer-stalkers who have furnished us with their experiences with our rifle, there is little doubt that if you succeed in carrying out in practice that which you know in theory, as explained above, an Express should be, it is, a weapon without a peer for large game.

Mr. Henry Fulton is pretty correct about the "Upset of Bullets," how that a bullet may expand in the chamber before it has got into the rifling. It may happen this way: There are so many varieties of cartridges now that a rifle may be chambered for one case and shot with another. We have a rifle which was chambered for a straight thick case. It was shot with a tapered thin case. The recoil was terrible and the shooting bad. We found that the thin tapered case expanded in the chamber, and the bullet, expanding with it, was too big behind for the rifling. This is an instance exactly in point, just as Mr Fulton argues and experienced.

There are, perhaps, not more than five firms in England who might be intrusted with the order of a man who wanted a crack "Express," and even these five differ much in their mode of production and in the results of the shooting of their weapons. It is possible to have good shooting and much recoil—bad shooting and little recoil—bullets that penetrate too much or too little—and the best aim is the happy medium and—the bull's-eye—nevertheless. J. D. D.

London, England.

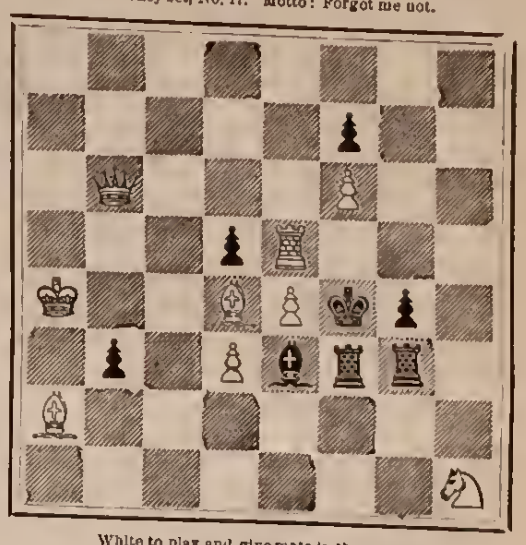
—Worcester's Dictionary is certainly entitled to warm recognition of its claim to superiority when its merit provokes such a testimonial as the following from William Cullen Bryant: "The new and authentic etymologies, the conciseness and completeness of the definitions, the nicety with which the different shades of meaning in synonyms are distinguished, and the conscientious accuracy of the work in all its departments, give it, in my judgment, the highest claims to public favor." This opinion is confirmed by almost universal concurrence.—[*Adv.*

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 54, Wolcottville, Conn."

Problem No. 21.

Tourney set, No. 17. Motto: Forgot me not.



White to play and give mate in three moves.

Game No. 69.—BERLIN DEFENCE TO K B OPENING.

Played by correspondence between "J. G. W.," of Keene, N. H., and the Montpelier Chess Club:

White. M C Club	Black. J G W	White. M C Club	Black. J G W
1—P-K4	1—P-K4	21—Kt-K Kt3	21—B-Q3
2—Kt-K B3	2—B-Q B4	22—Kt-K B5	22—B-Q2
3—B-Q B4	3—P-Q3	23—P tks B	23—B tks Kt
4—P-K R3	4—P-K R3	24—Q-K sq	24—Q-K Kt4
5—P-Q B3	5—Kt-K3	25—Q-K4	25—Q-K B3
5—P-Q4	6—Kt-K Kt3	26—B Q3	26—P-Q Kt4
7—P tks P	7—P tks P	27—B-Q Kt2	27—P-Q Kt5
8—Kt-Q B3	8—B-Q Kt3	28—Q R-Q sq	28—B-Q B2
9—P-Q5	9—P-Q B3	29—R-K Kt3	29—B-Q3
10—Castles	10—P-Q B4	30—B-Q B4	30—P-Q R4
11—B-Q Kt5	11—Kt-Q2	31—P tks P	31—P-Q R5
12—P-Q Kt3	12—Castles	32—B-Q Kt3	32—R tks P
13—B-Q B4	13—P Q R3	33—B-Q B sq	33—Q R-R sq
14—Kt-K2	14—B-Q R4	34—P-Q6	34—B-Q B2
15—B-Q2	15—Q-K B3	35—B-Q B1	35—B-Q Kt3
16—B-Q B3	16—B-Q B2	36—R-K Kt6	36—R Q R2
17—Kt tks Kt	17—Q Kt-K4	37—P-K B6	37—Q-Q sq
18—P-K B4	18—Kt tks Kt	38—R tks K Kt P check	
19—P tks Kt	19—Q-K Kt3		38—R tks Q R P
20—R-K B3	20—P tks P	39—Q-K R7 mate	39—K-R sq

Game No. 70.—SCOTCH GAMBIT.

Correspondence game played between Prof. C. Jacobus, Glenwood Institute, Matawan, N. J., and F. W. Martindale, Peterborough, N. Y. in 1874:

White. Martindale	Black. Prof Jacobus	White. Martindale	Black. Prof Jacobus
1—P-K4	1—P-K4	15—Kt tks Kt	15—P tks Kt
2—Kt-K B3	2—Kt-Q B3	16—Q-K6	16—P-Q B3
3—P-Q4	3—P tks P	17—Kt-Q4	17—B K Kt3
4—Kt tks P	4—Q-R5	18—R-Q	18—K-Q B2
5—Kt-Q Kt5	5—Q tks P ch	19—P-K B4	19—Kt-Q2
5—B-K2	6—Kt tks Q	20—P-K Kt4	20—B K6
7—Castles	7—P-Q3	21—R-K	21—P-Q4
8—Q Kt-B3	8—Q-K Kt3	22—B-Q2	22—Q R-K
9—B-K R5	9—Q-K B4	23—B-B3	23—Kt-Q B4
10—R-K	10—B-K3	24—P-K B5	24—Kt-Q6
11—Q-K B3	11—Kt-K B3	25—R-K B	25—B-K R4
12—Q tks Q	12—B tks Q	26—Kt-Q B3	26—Kt-K B5
13—B tks K B P	13—B tks Q B P	27—Resigns	
14—Q-Kt Q5	14—Q Kt-K4		

CURSORY JOTTINGS.

—We lay before our readers two correspondence games played by two of our contributors. We very much regret our inability to append notes to them, but as we have to enjoy our annual recreation just now, sufficient time therefor is not at our disposal on that account. For the novelty of it we urgently request our readers to send notes to these games, which we will publish if interest enough be manifested. The Professor desires all to express opinions on his play—but be careful, reader. We shall lay before our readers whatever information we may receive from our exchanges concerning the International Tourney at Paris.

NOTICE TO EXCHANGES.—The following have not yet come to hand: *Schach Zeitung, Saloonblat* and *Nordisk Skatlende;* the Jan., Feb., June and July numbers of the *Chess Players' Chronicle;* June numbers of *La Strategie* and *Nuova Rivista degli Sacchia,* and the *Huddersfield Colleg Magazine* for June. Will these exchanges give this attention?

—The *American Chess Journal* for June is at hand, and is a very valuable number. Although it alludes to the Centennial critics in no flattering manner, we nevertheless cordially recommend it to our readers. While we and others, without fear or favor, expressed opinions on the subject, we do not pretend to or assert the infallibility of our judgment. We had hoped that this issue was, if not settled, at least buried; but if it must again come to the surface, we can vindicate ourselves. We much prefer, however, to look upon the question as an honest difference in opinions, and logically consider it. But if it must be otherwise, we can also let fly a charge or two in an off-hand and reckless manner. For the sake of harmony we are willing to have it now cease, but further remarks of that kind will force us to the support of those whose opinions on a certain subject do not materially differ from those which we entertain. The *Journal* might profit, as well as please its readers, by following the example of the *Nuova Rivista,* and occasionally publish an article on the art of problem composition or end games.

GREAT REDUCTION IN PRICES.

A choice assortment of spoons, minnows, split bamboo rods, linen, etc., to be sold at cost to close out that line of goods. My address on and after Sept 1 will be Mumford, Monroe Co., N. Y. Sarah J. McBride, Broadway and Fourteenth st, N. Y., Domestic building, room 6.—[*Adv.*

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of or more, $3 per annum

A GEORGIA BEAR STORY.—The Georgia Historical Society must be a profoundly solemn body if they failed to roar at the following story, which was read to them the other day by Captain W. W. Paine:

"Morgan Gillis was a hunter of some renown, and a bold and powerful man. One day, hunting in the piney woods, he killed a fine buck, and while engaged in skinning it he discovered several Indians creeping toward him. There was no time to deliberate or to tarry. Springing to his feet and leaving rifle and venison behind, he ran for life, and reached the swamp, where he noticed a large poplar, which had been broken off near its top, and had the appearance of being hollow. A knurled or knagged hickory which rested against this enabled him to easily climb the tree, when, to his great joy, he found it hollow, with an opening in the top sufficient for him to enter. He entered it, and sliding to the bottom, found it tenanted by two fat cubs, and at once discovered that he was in the den of a bear, which, fortunately for him, was not at home. About three feet from the bottom of the den was a small knot-hole, from which Gillis saw the Indians approaching, and who seemed much puzzled at not finding him. After hunting around, the Indians disappeared, supposing that Gillis had escaped to the river. Waiting some time, and the Indians not reappearing, Gillis thought it time to leave his hiding-place, and, attempting to do so, found to his dismay that he could not climb out, and that he was entombed within the wooden walls of a tree. Our friend was not the first man, nor the last, who had gotten into a scrape and found it difficult to get out. Gillis could not perish with hunger for some days, for he could eat the cubs; but he might perish for water. Having his large hunting knife with him, he commenced trying to cut his way out of the hollow, and while thus engaged he heard, as he supposed, some one climbing on the outside of the tree. He thought of the Indians, and gave himself up as lost. Soon the aperture at the top of tree was darkened, and an object commenced descending, and, horror of horrors! it was the old bear. Bears always descend a tree backward—and as Mrs. Bruin neared the bottom Gillis, in terror, commenced using his knife vigorously on her, and she not expecting such a warm reception in her quarters, hastily ascended, and Gillis, taken advantage of her discomfiture and hasty retreat, seized hold of her shaggy hair and was drawn to the top. He escaped and reached home in safety, a wiser if not a better man."

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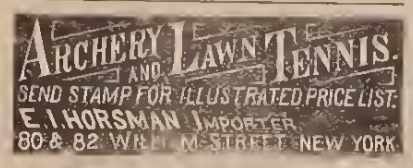

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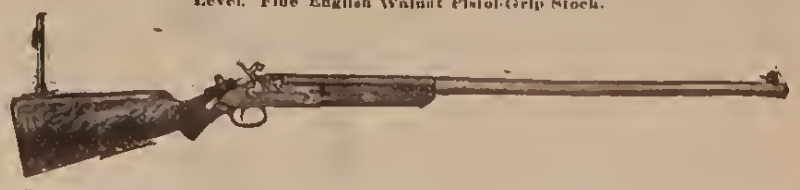

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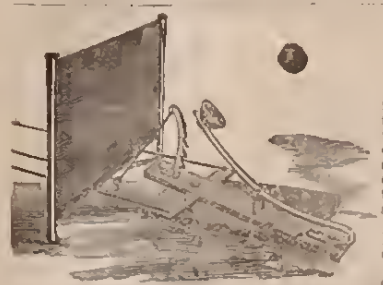

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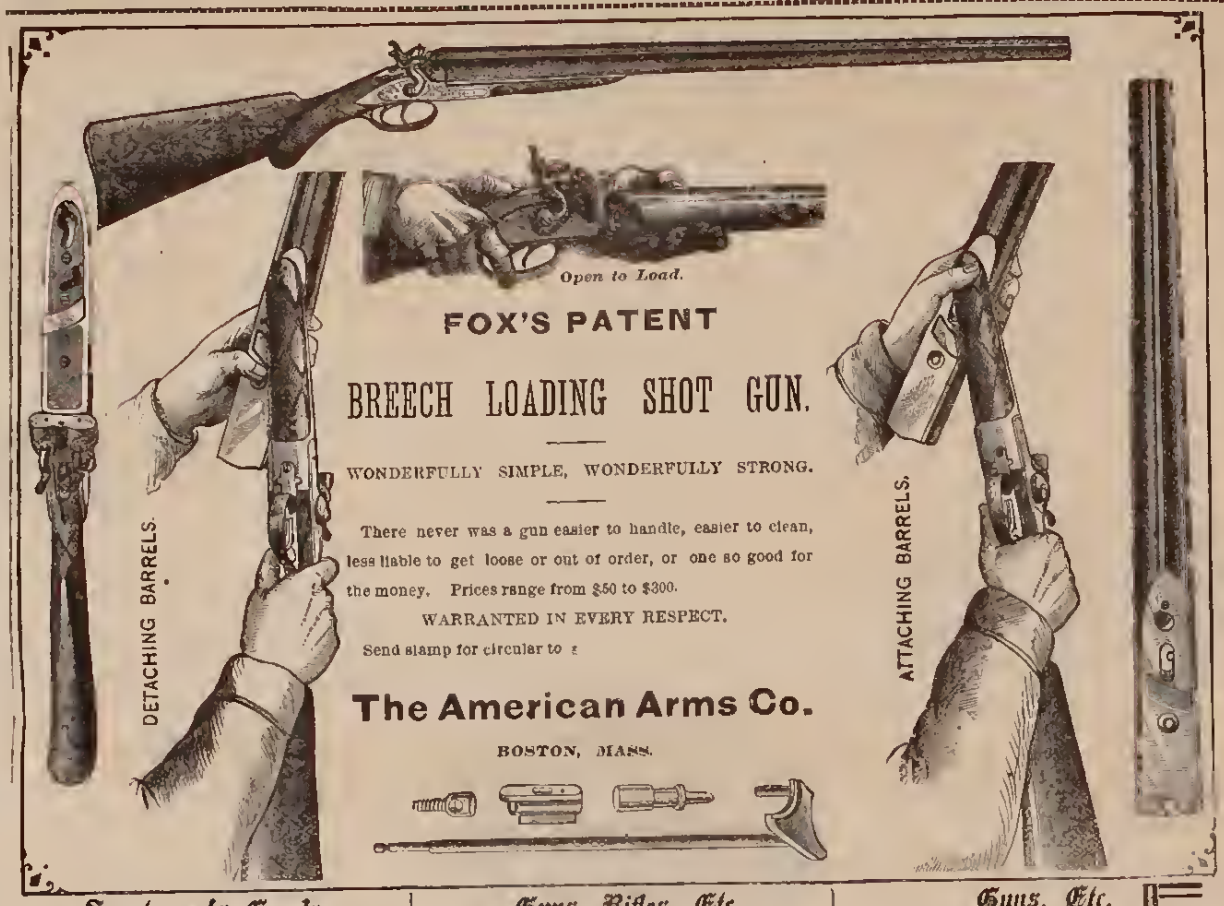

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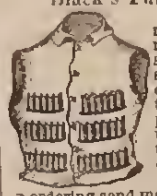

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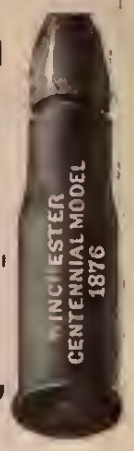

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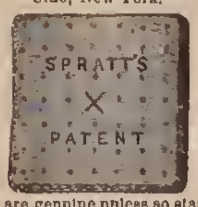

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WANTED—A spaniel dog decently broken on woodcock and partridge. Prefer a cocker. Address, giving description and price, E. F. BEARDSLEE, Gouverneur, N. Y. jy25 2t

FOR SALE CHEAP, when eight weeks old, six Gordon setter puppies, three dogs and three bitches, whelped July 12. Dam, Fannie (Hope—Grouse, both imported); sire, Prince, imported. The puppies are black and tan, with very little white between the fore-legs. Address A. H. THOMAS, Warrensburgh, Warren County, N. Y. jy25 3t

WANTED—A St. Bernard or English mastiff pup. Address, stating age and price, F. N. BROWN, Box 946, Boston, Mass. jy25 2t

DICK-DAISY PUPPIES.

For sale, a few Gildersleeve setter puppies out of Daisy by Dick. These pups are great beauties, evenly marked and well ticked. Parents unexcelled for remarkable beauty and great intelligence in the field. No better anywhere; full pedigrees; pups only $10 each. FRANCIS MORRIS, Philadelphia, Pa. jy25 1t

FOR SALE OR TRADE FOR SETTER DOG—Gyp. year and a half old, Gildersleeve stock. Well broken on birds and snipe. Address J. H. SHIRK, Lancaster City, Pa. jy25 4t

For Sale.

FIELD, COVER AND TRAP SHOOTING.

BY CAPT. BOGARDUS.

New and enlarged edition, containing instructions for glass ball shooting, and chapter on breeding and breaking of dogs by Miles Johnson. For sale at this office. Price $2.

FOR SALE—BARGAIN—Extra fine English (best maker) B. L. double, 12 bore, modified choke, laminated steel, 8½ gun, with loading tools, case and about 100 shells. Also two Maynard rifle barrels, with shells, etc., complete. Address HOWARD, this office. jy25 1t

FOR SALE, in Warrensburgh Village, a Lot, with good two-story house and store. Also barn, hen houses and garden. Good trout and bass fishing. Woodcock and partridge hunting within a few minutes' walk. Deer hunting within one day's drive. Three miles from railroad and six miles from Lake George. For terms, address A. H. THOMAS, Warrensburgh, Warren County, N. Y. jy25 3t

FOR SALE—The following property of a gentleman about to leave town will be sold at a sacrifice: One red Irish setter bitch, thoroughly broken on all game; one orange and white dog also broken; a number of red Irish puppies with black points. The above dogs are of the best stock in the country. Pedigrees furnished. One Greener triple-wedge gun, with tools and two cases, and one fine muzzle-loading gun with case. Address I. SCHODDER, Box 12, Scotch Plains, New Jersey. jy25 1t

FOR SALE—One horizontal 10, th. P. steam engine; one upright tubular 2 H. P. boiler (new), gauges, pumps, etc. Will exchange for a first class breech-loading gun. Address P. O. Box 500, Millbury, Mass. jy18 2t

BARGAIN.—FOR EXCHANGE—One Scott's (Eng.) best No. 10-calibre, extra fine laminated steel shot-gun; cost $250; will exchange for 16-calibre Greener new choke-bore. Address P. O. Box 303, Atlanta, Ga. jy18 2t

FOR SALE—Crystal Spring Fish Farm and Picnic Grounds, Oakland, Bergen County, N. J. Buildings cost over $1,200; five years old; gothic frame villa; all modern improvements; tenant's house, stables, etc.—in one, four horses; twenty-three acres, four acres grove, with from twenty to thirty ponds; fine garden; 100 young fruit trees; apple orchards. Address B. B. P., care this office. je13 tf

CITY AND COUNTRY PROPERTY bought, sold and exchanged. C. S. PECK, 8 West Twenty-fifth street, New York. Sept27 1y

FOR SALE—English breech-loaders, central fire, twist barrels, fixed locks, snap action, fine finish. Price $35. FRANK PERCEY & CO., Oshkosh, Wis. jy11 3t

25 Fashionable Cards, no 2 alike, with name 10c. post paid. GEO. I. REED & CO., Nassau, N. Y. Oc14 1y

$66 a week in your own town. Terms and $5 outfit free. Address H. HALLETT & Co., Portland, Maine.

Wanted.

WANTED—Cheap for cash, a single-barreled breech-loading shot gun, 4, 6, 8 or 10 bore. Address DUCK, 1009 Locust street, St. Louis, Mo. jy18 2t

GOLD Any worker can make $12 a day at home. Costly outfit free. Address TRUE & Co., Augusta, Maine.

Medicinal.

BRANDRETH'S PILLS.

We believe these celebrated pills are predestinated by their inherent merits to be the medicine of the world. They impart a power by which every organ of the body becomes healthy. Nature has formed the bowels so that they are capable of drawing to them the impurity of any organ of the body, however distant. So we have little more to do when we are sick than to purge freely with a medicine time has proved will not hurt. This treatment always quickly restores the health when adopted in time.

BRANDRETH'S PILLS

cure both costiveness and diarrhœa. Ask the man who was dying from constipated bowels what cured him; he tells you Brandreth's Pills. Ask him who had dysentery for months what cured him; he says Brandreth's Pills. They are the best medicine for Small Pox, and they prevent any marks. A case occurred recently where Brandreth's Pills cured a deep ulcer of the foot, which the doctors said could only be removed by amputation; yet twenty-five boxes cured it and restored the patient's health. Reference W. M. Skinner, of White Plains.

Brandreth's Pills are not a quack medicine, but a scientific preparation, which have been prepared by the present proprietor for over fifty years. They are wholly composed of innocent herbs and vegetable essences, are incapable of hurting the most delicate, yet sure to cleanse the bowels and blood and exert a curative effect upon every form of disease. Where for twenty years the patient had no movement of the bowels without medicine or mechanical means, a month's use of Brandreth's Pills cured, restoring the bowels to regularity.

The secret of recruiting the vital principle is discovered in this medicine; it generates and increases healthy animal warmth. Provided the great organs are not irreparably injured, there is no disease Brandreth's Pills will not cure. Remember, they concentrate the vitality of the system to eject the disease wherever located in the body.

BRANDRETH'S PILLS

are sold by all dealers—25 cents a box, either sugar-coated or plain—and at Dr. Brandreth's

PRINCIPAL OFFICE,

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TAKE NOTICE. WE have the LARGEST and best selling Stationery Package in the world. It contains 18 Sheets of Paper, 18 Envelopes, Pencil, Penholder, Golden Pen, and a piece of valuable Jewelry. Complete sample package, with elegant gold stone Sleeve Buttons, Set Gold-plated Studs, Engraved Gold plated Ring, and a Ladies' Fashionable Fancy Set, Pin and Drops, post paid 25 cents. 6 PACKAGES with Assorted Jewelry $1. SPLENDID WATCH AND CHAIN FREE WITH EVERY $50 WORTH OF GOODS YOU BUY. Extraordinary Inducements to Agents. J. BRIDE & CO. 297 Broadway, New York

Auxiliary Rifle.

SHELTON'S Auxiliary Rifle Barrel for Breech-Loading Shot Guns.

This barrel can be placed in a gun ready for use in a second of time with the same ease as a cartridge, and can be removed just as expeditiously. There is no wear on the rifle barrel, nor on the shot-gun, and it cannot get out of order. With this Auxiliary Barrel, which weighs about one pound, almost instantly a breech-loading shot gun can be converted into a most accurate rifle. The AUXILIARY BARREL will fit any standard make of gun of 10 or 12-calibre—calibre of rifle 32, 38, or 44, as desired. Length of barrel, twenty inches. The shells used with the best advantage are the Winchester Repeating Arms Co.'s cartridges, No. 32 and 38, extra long, and No. 44, model 1873. Send for a Circular and Price List.

AUXILIARY RIFLE BARREL COMPANY,

P. O. Box 715 NEW HAVEN, CONN.

CHAS. F. ORVIS,

MANUFACTURER OF AND DEALER IN

FINE FISHING TACKLE,

MANCHESTER, VERMONT.

RODS, REELS, FLIES OF MY OWN MANUFACTURE.

First-class goods at reasonable prices. Reels to the trade at a liberal discount. Send for price list. Mention FOREST AND STREAM.

W. W. Greener's Champion Treble Wedge Fast, Breech-Loader.

THE WINNING GUN.

At the international pigeon shooting, Monaco, Feb., 1878, the Grand Prix de Casino, an *objet d'art* valued at £169, and a money prize of £105, this the greatest prize ever shot for at Monaco, was competed for by sixty-six of the best shots of all nations, and won by Mr. Cholmondley Pennell, with a full-choke bore Wedge-Fast Gun by W. W. Greener, killing 11 birds out of 12 at 28 yards and 1 foot and 29¾ yards. He also won the second event, killing 8 birds in succession at 33 yards, making a total of 19 birds out of 20. This is acknowledged to be the best shooting on record. The winning gun at the choke-bore match, 1877, beating 17 guns by the best London makers, and winning the silver cup, valued at 50 guineas, presented by Mr. J. Purdey, the gunmaker.

The winning gun also at Philadelphia, 1876, in the pigeon shooting match between Capt. Bogardus and Mr. South for $500 a side, South killing 86 birds out of 100, using one barrel only.

The winning gun also at the great London Gun Trial, 1875, beating 102 guns by all the best makers of Great Britain and Ireland. THE PATENT TREBLE WEDGE FAST BREECH-LOADER is the strongest and most durable ever invented, and the most successful gun of the period. Patented in the United States, Oct. 5, 1875; No. 168,328. BEWARE OF INFRINGEMENTS OR IMITATIONS.

W. W. GREENER, St. Mary's Works, Birmingham, England.

H. C. SQUIRES, Agent, No. 1 Cortlandt Street, New York City.

Hart's Sportsman's Favorite Metallic Shells.

FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside.

Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country.

HART & SLOAN, Newark, N. J.

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

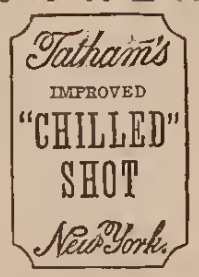
TATHAM & BROTHERS,

NEW YORK.

MANUFACTURERS OF

BLUE LABEL.

AND



RED LABEL.

Compressed Buck Shot.

FIRST PREMIUM, CENTENNIAL EXHIBITION—REPORT.—"Exact uniformity of size, truly spherical form, high degree of finish and general excellence."

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PAINTING.

EVERY ONE THEIR OWN PAINTER.

50 Per Cent. Saved.

We are manufacturing a very fine Pure Ready-mixed Paint, mixed in such a manner that any ordinary stable or farm hand can make as good a job painting as a painter can with paint mixed in the old way. This is because our paint does not set quick, and thus show marks of the brush. We sell it lower than materials can be bought in the ordinary way, and pay freight on certain sized orders.

Any one wishing to Paint, will have mailed free, upon application, our book—"How Every One can Paint and Select Harmonious Colors." Address INGERSOLL PAINT WORKS, South and Dover streets, New York.

Musical Instruments.

WATERS' MIRROR TOP SOUVENIR ORGANS.

These beautiful organs are remarkable alike for purity of tone and perfect mechanism. Their cases are all richly finished in Solid Black Walnut. We sell a better instrument at a lower price than any other house in the United States.

Waters' Pianos

Grand, Square and Upright, are the BEST MADE, the Tone, Touch, Workmanship and Durability unsurpassed. Warranted for SIX YEARS. Extremely Low for Cash or on Installments. A liberal discount to Teachers, Ministers, Churches, etc. AGENTS WANTED. Catalogues Mailed. Second-hand Pianos and Organs at GREAT BARGAINS. HORACE WATERS & SONS, manufacturers and dealers, 40 East Fourteenth Street, New York.

GEO. A. PRINCE & CO.'S

ORGANS.

The oldest, largest, and most perfect manufactory in the U. S.

OVER **58,000** NOW IN USE.

Two New Styles Just Out.

Send for Price-Lists.

Address BUFFALO, N. Y.

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The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia, Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,

Gen. Passenger and Ticket Agent,

ap Richmond, Va.

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday, Wednesday and Friday at 3 P. M. Full information given at office, 197 Greenwich St., New York. sep28 1y

FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

NIGHT LINE.—The Elm City leaves New York at 11 P. M., connecting with passenger train in waiting on wharf at New Haven, leaving 5:15 A. M. Tickets sold and baggage checked at 944 Broadway, New York, and 4 Court street, Brooklyn. Excursion to New Haven and return, $1.50. Apply at General Office, on the pier, or to RICHARD PECK, General Agent.

Saratoga Races.

TAKE THE

PEOPLES LINE STEAMERS

DREW AND ST. JOHN.

THE FINEST STEAMERS IN THE WORLD.

Leave Pier 41, North River, foot of Canal street, daily at 6 P. M., arriving in Saratoga each day in time to see the races.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
BOUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING JUNE 3, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, 10:15, 11:30 A. M., 1:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:45 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:45 12:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:50, 9:13, 10:20 A. M., 12:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 4:00, P. M. trains from New York and to the 7:45, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 5:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, all offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Septe 1y H. P. BALDWIN, Gen. Pass. Agent

TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing. Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
FRANK THOMSON, Gen'l Manager. feb1t-tf

CHICAGO & ALTON RAILROAD.

THE ONLY DIRECT RAILROAD from Chicago to St. Louis, and Chicago to Kansas City,

WITHOUT CHANGE OF CARS.

FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

JAMES CHARLTON,
General Passenger Agent,
Chicago, Ill.

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 22 South Delaware Avenue, Phila.

Dec14-1y

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Butternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season fished by sportsmen. Between Silver Creek end Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, white rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequamegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides. The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.
Send for Guide Book.

HENRY PRATT, G. T. A.
my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and Black Bass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound.

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

A. B. LEET, G. P. A.,
Grand Rapids, Mich.

A. HOPPE,
Eastern Agent, 116 Market St., Phila., Pa.

mar28 4mos

CONEY ISLAND—BRIGHTON BEACH.

Opening of the
BROOKLYN, FLATBUSH & CONEY ISLAND R. R.

SUMMER ARRANGEMENT,
Commencing July 2, 1878.

Trains for Coney Island—Leave depot on Flatbush avenue, William Entrance, Prospect Park, at 6:20, 7:30, 8:30, 9:30, 10, 10:30, 11, 11:20, 11:10 A. M., 12 M., 12:40, 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:15, 7:30, 7:45, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Beach—7, 8, 9, 10, 10:30, 11, 11:20, 11:40 A. M., 12 M., 12:40, 1, 1:20, 1:40, 2, 2,20, 2:40, 3, 3.20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, 11 P. M.

Sunday Trains to Island—8:30, 9, 9:30, 10, 10:20, 10,40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5,20, 5:40, 6, 6:20, 6:40, 7, 7:15, 7:30, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Island—9, 9:30, 10, 10:20, 10:40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, 11 P. M.

Time to Coney Island, ten minutes. Excursion tickets, 40 cents; single fare, 20 cents. Grand concerts every afternoon and evening by Conterno's Twenty-third Regiment Band.

MR. LEVY, the celebrated cornet soloist, has been engaged for the season.

The following horse-car lines run directly to depot: Flatbush avenue from Fulton Ferry; Bergen street, S. B.; Franklin avenue, from South Seventh street Ferry, E. D., and Nostrand avenue, from foot of Broadway.

W. E. DORWIN, Sup't.

St. Louis, Minneapolis AND ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul,

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids.

C. J. IVES,
Gen. Passenger Agent.

E. F. WINSLOW,
General Manager. tf

LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M. Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M. and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.
J. CHITTENDEN, Gen'l Pass. Agent. je6 tf

Sportsmen's Routes.

Cromwell Steamship Line.

NEW YORK, HALIFAX, N. S. AND ST. JOHNS, N. F.

THE FIRST-CLASS STEAMSHIPS

CORTES, Capt. Bennett, and
ALHAMBRA, Capt. Mellhinney,

form a regular line between above ports, leaving Pier 10, North River, New York, three times a month. Persons visiting Nova Scotia, Newfoundland or the Lower St. Lawrence will find this the cheapest and most direct route, avoiding changes and detention. Time between New York and Halifax about sixty hours, one half of trip through Long Island and Vineyard Sounds, in smooth water.

Cabin passage, including stateroom and meals, New York and Halifax, $15 gold; New York and St. Johns, $20, gold. Excursion tickets at reduced rates. For schedule of sailings and further particulars apply to

CLARK & SEAMAN,
56 West street, N. Y.

AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. je20 6m

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THE SPORTSMAN'S ROUTE.

Chicago & Northwestern RR.

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W. H. STENNETT,
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We challenge any Hotel in the World to show as large and as elegantly furnished rooms as those of the SHERMAN. je20 tf

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Pullman Parlor Car on 4:30 P. M. train.

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PRAIRIE FIRES NEVER SPREAD FASTER
THAN THE SALE OF THIS BEAUTIFUL AND POPULAR BALL.

NOTICE TO SPORTSMEN:

Through an unavoidable accident we have been prevented from filling our very numerous orders for the two last weeks, we now take this opportunity of informing the public in general, and the **Dealers in particular,** that we are fully prepared to meet and fill all orders for the

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has used them in preference to all others. No better criticism could be given the ball than the gratuitous praise bestowed upon it by the press of the entire country since its production.

PAINE'S PATENTED FEATHER-FILLED BALL

is the ball of the future as well as of the present.

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Every ball made to scale, and no imperfections. **$1,000** Reward to any one who can find a single ball in ten thousand beyond the maximum weight (two ounces). No thick sides or bottoms. Its uniformity of thickness won it favor from the first, and out of the immense number sold we have never had one complaint.

NO CLOSE DECISIONS.--A Feather-filled Ball once struck by shot, and the tale is told. *It satisfies every one on the instant, and saves all unpleasant work for Referees*

NO SHORT COUNT.--Every barrel is warranted to contain over three hundred to allow for reasonable breakage. Will also contain copies of the Standard Rules for Glass Ball Shooting for one, two or three trsps.

FOR SALE BY ALL DEALERS IN SPORTING GOODS THROUGHOUT THE WORLD.

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apr26 3m

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W. HOLBERTON & CO.,
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Trout Flies, per dozen, $1.

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Sportsmen's Goods.

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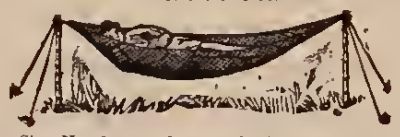
Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.



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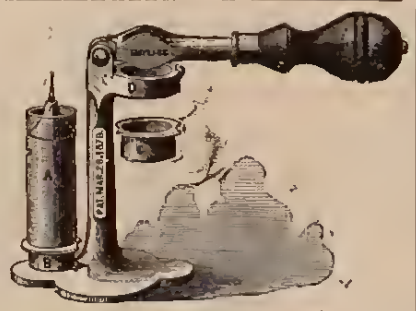

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COMBINATION
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Sportsmen's Goods.

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No. 1 book, stiff cover, holding 1 gross flies, $7 00
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Fish & Simpson's
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Pocket Scale for Sportsmen.

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FOREST AND STREAM & ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Terms, Four Dollars a Year. Ten Cents a Copy.

NEW YORK, THURSDAY, AUGUST 1, 1878.

Volume 10.—No. 26. No. 111 Fulton St., N. Y.

For Forest and Stream and Rod and Gun.

A Bass in the Meshes of the Law.

WE have upon our bench two enthusiastic fishermen—Judges M. and J. They are both tall, large men, of full habit, hardly adapted to the labor of following a trout stream all day through difficult country, but for sitting patiently upon a log or in a boat they can't be beat. They both are possessed of the true inspiration of old Izaak Walton, and calm contentment fills the soul of each when comfortably seated by lake or pool with rod in hand. They have their specialties. That of Judge J. is trout; of Judge M., bass. This paper is to be devoted to an account of a contest between Judge M. and a black bass last summer, at Oconomowoc; but I like to be impartial, and will preface it with a story lately told me by an eye witness of an incident in the experience of Judge J. A small party, including the Judge, once went to one of the bays of Michigan in pursuit of recreation. One day they found themselves at the mouth of a trout brook emptying into the bay, which furnished excellent fly fishing at its junction with the lake waters. Now the Judge was not particularly expert with a fly—his best hold was mud worms—and he proceeded alone up the stream to find a spot where he could use his worms to advantage. He found, after a good deal of labor in scrambling over rocks and through bushes, and once tumbling into the brook and getting well soaked, a splendid pool. It lay at the foot of a high fall between elevated rocky cliffs. With difficulty he established himself in a good position, disposed his basket handily near by, took off his coat, wiped the perspiration from his brow with a sigh of relief and satisfaction, and proceeded to business. He found the pool well stocked with trout, and he had plenty of customers for his worms. He had laid away three or four in his basket, and happiness coursed all through his veins. He was thoroughly at peace with himself and all the world. It is too bad to disturb the serenity of this picture and to ruffle the placid brow of the Judge, but I am writing history. He had again cast in his worm and was waiting quietly for the expected bite, when a strange thing happened; a goodly sized trout emerged from the centre of the pool and proceeded, flapping and struggling, straight up toward heaven. In amazement the Judge followed him with his eye until he saw him land in the hands of a lusty boy at the top of the overhanging cliff, and he saw two small faces peeping at him and two fish poles sticking over the edge. He took in the situation at once, and his brow clouded with righteous wrath. Here was a clear trespass upon his rights; was not this *his* pool? Had he not discovered, and, as it were, pre-empted it? Was he not in the actual and visible possession? Whether he had a valid legal title or not, he had the *pedis possessio*, and trespass would lie as against a mere intruder. Law and equity were both on his side. He shouted to the boys in tones which rose above the roar of the waterfall, and ordered them away, but they did not go away worth a cent; instead thereof two lines descended into the pool beyond the reach of the Judge, and other trout began to go struggling toward heaven in the wake of the first. This was insufferable, unendurable. He fumed and threatened, but there the boys stayed and the trout continued to ascend. He shook his fist at them and hurled at them all the terrors of the law. He would send them to jail for the larceny of his fish; he would commit them for contempt of court; but they would not listen to reason and cared naught for the threats of the law. The only reply vouchsafed was made by one of the boys placing his thumb to his nose and making sundry gyrations with his fingers. The heights were inaccessible to the Judge, and he was compelled to sit there and see his fish dancing up right before his face to swell the string of those boys, until the pool was exhausted. Could the agony of Tantalus have been greater? Where now was the majesty of the law? Was all respect for the judicial ermine gone from the land? Had communism come with its destroying hand, striking at the very foundation of society, and effacing all regard for the rights of property or persons? With sad and gloomy heart the Judge gathered up his basket, with its five or six trout, put on his coat and departed. To this day, occasionally, the Judge sitting on the bench, apparently in a reverie, wears a despondent and angry expression. He is thinking of those boys.

We will leave him to his melancholy reflections and turn to the more cheerful picture of the two experience of Judge M. He was spending a few days at Oconomowoc during his summer vacation, lured there by the reputed beauty of the country, the charm of its numerous lakes, the attractiveness of its good fishing, and the *dolce far niente* of all its surroundings. The day following his arrival he sallied forth, accompanied by an *amicus curiæ*, to test the fishing. Armed with a light rod and a Kentucky reel, he was prepared for work. Genesee Lake was selected as the *locus in quo*. A bucket of minnows was provided, a good boat procured; the friend took the bow, the boatman took his seat and the Judge settled himself in the stern, and all was ready. "Open court!" said the Judge, and off they went. The day was beautiful, and the good-natured face of the Judge beamed in sympathy with the serenity of nature surrounding him. Soon the fishing-ground was reached, and the Judge prepared for sport. He put on his spectacles, without which he would have been as Hercules without his club. He placed a minnow scientifically upon his hook, raised himself to his feet and straightened out his tall form, and seemed to gather together all his powers for business. He poised himself gracefully, but firmly, and essayed to make a cast. Swinging the rod in circles two or three times about his head to gather momentum, he sought to launch his bait to a distance across the water, but neglecting to remove his thumb from the spool of the reel, where he had been instructed to place it, the line failed to run, and the minnow sailed off "upon his own hook" and left the Judge's behind. The Judge was a little discomfited, but excused himself by saying that his attention had not been called to the point. Another minnow was adjusted and another cast attempted, and this time with better success. The bait struck the water about two rods away, and, as good luck would have it, close by where a bass was lying in wait, and he immediately levied upon it. Now began a contest worthy the pen of Homer. In what fitting language can my poor pencil, unused to war, portray the varying fortunes of the mighty combat? As soon as he recovered his presence of mind, disturbed by the suddenness of the bite, the Judge struck the fish hard and the hook was securely set in one of his capacious jaws. The fish, startled at this unexpected interference with his personal liberty without due process of law, contrary to the provisions of the Constitution of the U. S., concluded that he was in danger of falling into lawless hands, and started for home at his best gait. He was a robust, healthy young fellow, and he made the Judge's reel hum and his line smoke as it flew after him. The Judge began to get excited. This fish was evidently intending to fly his jurisdiction, in other words, to give leg bail. He seized the handle of the reel and brought him up with a "round turn," to wit: a turn of the reel. I think the Judge was right; the fish was caught in the act of stealing the bait, and no warrant was necessary. The fact that the Judge had himself hooked the bait is immaterial.

The bass now thought he would look at the situation above, and taking a good run to obtain headway, he sprang three or four feet out of the water and looked about him. He saw the determined expression of the Judge's face, the set lips and the eyes glittering through the glasses with fierce excitement; he saw the towering form firmly planted upon his outspreading legs, while he held the rod with an iron grip. Satisfied that the Judge was prejudiced against him, he immediately moved for a change of *venue*, and started hastily off for the next county; but the Judge overruled the motion, and began to reel him in. The bass now felt that his case was well nigh hopeless, and that the court was organized to convict; but he concluded to join issue and fight it out on that line, hoping to detect some flaw or error in the proceedings. He struck for a lot of rushes and weeds, growing near by, and notwithstanding the exertions of the Judge to prevent, he reached them in safety. He wormed himself back and forth and sideways through them until he had got the line wound and snarled and twisted all about them, and then he sat down to rest and prepare for trial. But the Judge was not idle. If he could not reel the fish to the boat, he could reel the boat to the fish, and he did. Then calling upon the *amicus curiæ* to prod round in the weeds with an oar, after great efforts, got his line clear, and forced the fish to leave his retreat and strike out into the open water; but he was now well rested and full of fight. With the speed of a bird he rushed through the water, carrying out with him a hundred feet of line, and then he flung himself high out of water, and shook his head vigorously, seeking to tear loose from the restraining hook, but in vain. The Judge held him with a firm hand. He then turned himself about and rushed straight for the boat, and this unexpected manœuvre nearly saved him. The sudden slackening of the line nonplussed the Judge, and he gazed about him in amazement. In a moment the fish came rushing past the boat, and then the Judge saw the trick, and went to work upon his reel with a vengeance. Fortunately for him the hook was deeply set, and the fish could not cast it out. However, he nearly parted the line when the end was reached, and he was brought to with a jerk. He then went hunting round for a stump or snag to which he might fasten the line; but, failing to find one, he resorted to short lunges to break it, but it was strong, and held him. He then thought to throw himself upon the mercy of the court, and put his head above water for that purpose, but the stern ferocity of the Judge's face discouraged him, and he was dumb. He now gave himself up as lost, and struggled but feebly, and soon the Judge had him alongside, and he was easily taken in with the landing net, and was scheduled by the Judge among his net assets. The Judge had triumphed, and the victim of his skill lay an unresisting captive in the clutches of the law. No appeal, writ of error, or *habeas corpus* could help him, and he gracefully submitted to the inevitable. I have omitted to detail the various mishaps of the Judge on his side. I could tell how his line repeatedly got snarled on the reel, and bunched on the spool; how it got fouled on an oar; how he occasionally in his excitement ran the reel the wrong way; how he nearly broke the rod when he first struck the fish, etc.—but respect for my own safety when I next appear before him constrains me to silence, *quoad hoc*.

I have a friend who is a skillful artist, and, having often derived great enjoyment from reading and seeing (especially seeing) illustrated fish stories in *Scribner's*, I asked him to prepare for me a first-class illustration of Judge M. fishing for bass; but, forgetting to read him my story, he has drawn largely upon his imagination, and the picture don't fit the story. If I had seen the picture before I told the story, I could easily have made the story fit it, as the cooper made a barrel around a bung-hole; but I don't want to write my story over, and besides, no such adventure as that depicted by the artist happened to the Judge, and I like to keep somewhere within sight of the truth when I am writing history. My hero certainly did not tumble upon his beam-ends in the attitude in which he appears in the picture; neither did the boatman tip over upon his hands and knees as if he were about to drink from a spring, while the Judge strove to lift him toward heaven with the hook set in his pants, and the bass stood upon his tail and laughed (the artist says he is laughing in the picture). Poetic license might perhaps permit me to say that this is an illustration of how the Judge caught his second fish, but I don't dare to, as I am compelled sometimes to go into his court room, and he has a healthy and vigorous bailiff who looks as though he would do almost anything the Judge should tell him to. I think you had better have the picture nicely framed in gilt, and hang it up in your sanctum, labelled "Bass," in honor of my Cincinnati friend. My artist friend goes fishing and hunting with me, and this season we have selected a new ground for a month in the woods, where we are assured black bass, trout and game abound, and if the place proves as fine as we have good reason to suppose it to be, I think we'll write you a letter from there with illustrations; and if the article or the illustrations prove too heavy for your columns you need not feel embarrassed, but just forward it to the *Edinburgh Review* with my compliments. I like the method which was adopted by the trout fisherman at the Rangeley lakes, of preserving the evidence of his big trout. You recollect he drew a picture of him on birch bark and sent it to *Scribner's* and had it published. Could anything be simpler or more convincing? If any one should be incredulous about its weighing nine pounds, all the fisherman had to do was to point to the picture and tell the man to note his length, breadth, etc. I propose to do the same thing. I shall take along the right kind of eye-glasses, and when I catch an extra large fish I shall have Jim (my artist) put on the glasses and draw him in birch bark, and then I shall send it to you. Birch bark is much better for this purpose than paper, as it bears upon its face an air of rustic, untutored honesty. You say at once, "There's no humbug about that. It comes straight from the woods where the fish was caught, and the fish was drawn from sight and not from memory." The bark is better as a convincer than an affidavit. It will be hard to beat with bass the Rangeley nine-pound brook trout, but if my artist does not "forget his cunning," and the bark holds out, I'll try hard to do it.

G. C.

Chicago, Ill., June, 1878.

For Forest and Stream and Rod and Gun.

THE BEE TREE.

YEARS ago, when life was complete and nothing to think of only to plan for fun on the morrow, we one morning strolled into the log house of a friend, Joe B., in the back woods of Canada, and found him and his brother Mose and a settler, Phil. C., preparing to start for the woods to cut a bee tree. A hearty invitation was extended to us to be one of the party, and Joe B. set off the fun we would have in his quaint, rattling way, till he, boy-like, was filled with excitement. "It's a real peeler now, I tell ye; one I lit on 'bout a year ago, an' there's as much honey in it as would sweeten the tempers of all the old maids in the country. By Jinks, it's a buster!"

Bee hunting is great sport, followed as it is in the most beautiful season of the year, and has been deemed worthy the attention of such writers as T. B. Thorp and Mrs. Kirkland. It is a fascinating amusement, and, in those who follow it, excites almost the spirit of gambling, the stake is so small as compared with the possible prize. It must be admitted that the temptation is great, when the small amount of labor required to cut down a half decayed bee tree is repaid by quantities of first rate honey, a luxury at any time and place.

There are various ways of finding bee trees; the most common way is by burning some comb and honey in some likely locality, to scent the air and attract the bees, and leaving a small quantity inclosed in a box with a glass top, the bees, if in the neighborhood, will soon be buzzing around and make for the box. The cover is then shut down, and the box closely watched till nearly loaded up; then the cover is carefully raised, a small pinch of flour sprinkled on the insect, and a note taken of the time. (This is done in order to distinguish this bee from the others who will likely return from the tree to the bait box with him, and the length of time elapsing during his trip determines the distance of the tree.) Presently the bee wings his way out of the box, the bee hunters throw themselves down, and, shading their eyes, watch the bee as he circles rapidly around, and then is off on a bee line for the

hive till he is lost to view. Patiently they wait, knowing well that the bee will lose no time, but return as soon as he can and in as straight a line as when he departed, and will likely be followed by three or four others, all of whom will, without any circling prelude, fly into the bait and proceed to load up. These bees will all be dusted with flour and the time again noted, as they may not all belong to one swarm.

The bee hunter watches them as they fly to and fro, and notices that they steer clear for a wooded ridge some distance off, and moves his bait-box toward it, keeping as near the bee line as possible. Back come the bees again; the box is moved nearer the ridge. The flour besprinkled bees make short trips now. The bait-box just buzzes with the "busy bee." The hunter is in raptures, moves closer and closer to the ridge, and, watching like a hawk, sees the bees enter a tree, generally high up the trunk. He goes nearer to fully satisfy himself and to judge of the size of the swarm, cuts his name or mark on the tree (the law of the woods makes it his), and at some convenient opportunity returns for the honey, which he gets, if Master Bruin, who has a very sweet tooth, has not been there first, in which case he finds nothing but a tree pretty well torn to pieces, and pieces of comb and dirty honey strewn about its base.

Mark Twain says the average bull-whacker is, in the matter of profanity, "gifted beyond the sons of men," but in a case like this, and I have listened to artists in this particular, it's a "stand-off" between the bull-whacker and the bee hunter.

Our friend Joe speaks of all such methods of bee hunting as I have attempted to describe with scorn, and, trusting solely to his trained senses, meets with good success.

"Come, now," said he, "don't keep me waiting; my mouth fairly waters for a taste of the sweetnin," and, taking the trail down the river, we crossed the rapids and followed him to the tree.

The swarm was in a large bass-wood, high up from the ground, among the great limbs, and, to our unpracticed eyes, invisible. Joe, however knew he was right; but, remembering Josh Billings' advice as to fooling with the "business end of a wasp," and knowing, from sad experience, that a bee is fully as vicious when he makes his mind up for attack, he made preparation for the fight. Putting on his heavy coat, he tied it snugly about the neck and wrists, drew his boots over his buckskin leggings, wrapped his head and face up with a thick veil, put on his leather gloves, then taking his axe commenced chopping vigorously.

Phil lit his pipe, and, as usual, began cracking jokes on the entire company. Mose found some dry leaves, bark and chips, and set them on fire, making a smudge to stupefy the bees, who would swarm out by the hundred when the tree fell.

Joe in the meantime had, with many an energetic blow, hacked the tree nearly through; the bees began to be alarmed, their leafy home to sway and tremble, which, with a crash, came thundering to the ground.

"Quick, Mose, give me the 'smudge!'" said Joe, running up and placing the smoking pile of chips directly under the hole from which the bees were issuing.

The effect of the smoke was apparent at once. The bees, in pouring out, passed through the smoke and blaze, and numbers of them with scorched wings and dizzy heads fell to the ground.

Joe mounted the log and began to make a cut a foot or two beyond the hole. The bees that were uninjured were flying about him; but used to such work, he continued chopping, heedless of their presence, till suddenly he dropped his axe, sprang from the log, tore his coat off, and with a yell of pain exclaimed, "Heavens! boys, I'm bit; there's a whole bee-hive down my back!" and charging around wild through the under-brush, he made us all laugh so we could hardly render him any assistance. Finally, however, we secured the one bee that had made all this tumult, and putting on his armor again, he proceeded with his chopping. Making two cuts half through the tree on each side of the hole, he split the block out, and there, neatly stowed away, was the long roll of honey.

"Young swarm," observed Joe, as he broke off the clear, rich flakes of comb and laid them carefully in the pails, "see how white it is!"

We did see. Furthermore we tasted the honey and found it superb, differing slightly in taste from the honey made in the settlements from garden flowers and clover; but to us just then the difference was in favor of the wild article.

"Condemn the little sharp-p'inted rascals; I'll take my revenge now for the nip they gi' me," quoth Joe, taking a seat, with a flake of honey in one hand and a "hunk" of bread in the other. "'Tain't bad to take, is it, boys?"

The good old fellow presented a highly satisfied, as well as ludicrous, picture, as he sat perched, bare-headed, on a log, the honey streaming down his thick beard and his little black eyes twinkling with good humor.

Phil, who is a restless mortal, and never so happy as when playing practical jokes, determined to put a stop to Joe's feast, and, stealing softly up behind him, gave him a sharp prick with a pin. Dropping his bread with a yell, Joe sprang from his perch, amid a roar of laughter, and wildly blaming Phil for his fright (for he supposed another "bee-hive was down his back"), he threw his honey at him with his usual good aim and struck him fairly in the mouth. Phil had not bargained for any such return, and made a rush for him, but Joe, snatching up two handfuls of honey, threatened to anoint him from head to foot if he came any nearer. Reckless Phil, who never yet stopped to calculate chances, closed with him at once, getting the second installment of honey where he did the first, and a friendly rough-and-tumble muss came off there and then, Joe getting his antagonist under in a few seconds, when he "gave it to him" at his leisure, smearing his face and head with the "sweetnin" till he could scarcely cry enough. When the affair was over two more dirty men it were hard to find. Smeared all over with honey, dirt, leaves and moss sticking to them as they stood panting and "jawing" each other, a "douse" in the brook near by made them a little more like their natural selves, and, filling our pails, we all took a bee-line for the village.

HAVILAND.

"SPORT AND THE DRAMA."—It is significant that we have journals devoted to "sport and the drama," where we may find the points of Clara Morris discussed in one paragraph, while the next waxes eloquent over the charms of Lady Suffolk, or whatever else the crack mare of the day may be called. Edwin Booth and Budd Doble are mentioned in the same breath. It is very much like hanging Titian's "Ascension" beside the latest sensational wood-cut in the *Police News*. So prominent has this feature of the drama become that many of our best people have considered it a sign of vulgarity to show an interest in dramatic affairs.—*Atlantic Monthly.*

Fish Culture.

For Forest and Stream and Rod and Gun.

THE U. S. FISH COMMISSION IN GLOUCESTER.

ALTHOUGH the *Speedwell* has not yet entered upon the work of dredging and trawling, some valuable additions have already been made to the National Museum collections. These are due mainly to the good will of Gloucester fishermen, who deserve credit for their zeal and efficiency in advancing our knowledge of the creatures of the sea. More than one museum possesses choice specimens which will prove a lasting tribute to the Gloucestermen who presented them. The famous *Alepidosaurus* and the new *Chimæra* (*C. plumbea*, Gill) are a portion of such treasures, and we now have to record some equally interesting captures. Inasmuch as the first arrival was not fish, but fowl, we will begin with

THE SKUA OR JAEGER, *Stercorarius skua.*

This bird, which was about to soar beyond the pale of American ornithology, returns to establish the veracity of early writers. A Gloucester fisherman—Capt. Daniel Carroll—captured it on Georges Bank early in July by means of a fish hook. Its wings were clipped, and it was kept on board a schooner for eight days. For a time it could not stand erect, but gradually it "got its sea legs on" and stalked the deck as a mighty jaeger of old might have trod the forest. After safely reaching the port of Gloucester, this unfortunate captive had to run the gauntlet of a mob of unappreciative small boys, who finally realized their fondest hopes in his death and consignment to the element from which he came. As if to make the most of himself even in his cadaverous condition, he floated under the wharf assigned to the Fish Commission, whence he was quickly taken and prepared for the National Museum collection, in which he will undoubtedly acquire the title and perquisites of a *skua redivivus.*

Another chimæra has been added to the catalogue—

Chimæra plumbea, GILL.

This individual was presented by Capt. Jos. W. Collins, schooner *Marion*, of Gloucester. It is an adult female. There is a short caudal filament. The color is not "uniformly plumbeous," as in the type specimen. The ground color is a purplish brown, and there are mottlings of red, white, blue and brown. Capt. Collins states that the animal was caught on a trawl line, at a depth of 275 fathoms, thirty miles southeast by south of the eastern light of Sable Island. Three specimens of the species are now recorded in museums—one male in the Boston Society of Natural History and two females in the U. S. National Museum. Capt. Collins brought in also a

GRENADIER, *Macrurus rupestris*, BLOCH.

The readers of FOREST AND STREAM have already learned through its columns of the occurrence of this species floating at sea near Gravesend, Long Island. Mr. J. F. Whiteaves collected the same species in the Gulf of St. Lawrence. Ours is, therefore, one of three known specimens. The Gravesend specimen was presented to the National Museum by Mr. E. G. Blackford. Fishermen state that the grenadier is common and is often taken on the trawl lines. The chimæra is seen occasionally, according to the same authority.

The National Museum is indebted also to Mr. Philip Merchant, of the schooner already referred to, for some very choice

CORALS

belonging to the genera *Mopsia* and *Isis*, the names giving no clue to their gracefulness and beauty, to say nothing of their rarity.

The Commission has good prospects of making valuable collections during the summer. Since the above was written a male *Chimæra plumbea* has been received, and a specimen of *Alepidosaurus ferox*, both presented by Mr. Thomas Burns, of Gloucester.

TARLETON H. BEAN.

THE CAPELIN MOVING SOUTH.

MR. EDITOR: A very curious incident of the change of range in marine fishes is that of the capelin (*Mallotus villosus*, Cuv. and Val.) making its appearance this summer in some abundance in the harbor of Halifax, and various parts of the neighboring coast. For many years not a specimen has been observed south of Cape Breton, and for scientific purposes we have always had to procure examples from Newfoundland. As this fish is considered an arctic form, loving the colder waters of the boreal regions, it would be interesting to know the cause of its sudden and unusual appearance so far south of its accustomed limits. One fact is worthy of mention, as it may throw some light upon the question—viz., the abnormal condition of our shore waters at the present time, which are remarkable for coldness at a season when we usually find a high temperature, showing evidence of the divulgence westwardly of the cold northern current which passes our coast, flowing south. Singular to relate, the salmon appears to feed upon the capelin, for I am assured by a friend, who is a very accurate observer, that he procured two last week from the stomach of a salmon caught off the harbor.

As the capelin may not be generally known to the readers of FOREST AND STREAM, I append a brief description of an example from Newfoundland, submitted to me for examination some few years ago, should you think it worth inserting:

D. 13—A. 22—P. 18—V. 8.

Body elongate, compressed; extent, 7 inches. Scales small; lateral line straightened to the region of the anal, where it bends upward to the caudal bone. Eyes large, diameter, 3¼ lines. Nostrils double, horizontal, having the posterior cavity 1¾ lines from the ocular margin. Mouth small; vertical gape, 5 lines; horizontal gape, 3 lines; the lower jaw longest; width above eyes, across occiput, 3 lines; depth immediately in front of anal, 10 lines; at caudal base, 4 lines; width of body immediately in advance of dorsal, 6 lines; extent from point of lower jaw to posterior margin of opercles, 1 inch 4 lines; from frontal extreme to base of occipital cleft, 10 lines. Upper and lower jaws armed with sharp, conical teeth, bending inwards, extending on the former to the base of the maxillaries. A row of similar teeth on either side of the palate. Head compressed, attenuate; facial outline, declivous; at upper angle of operculum arises a filamentous, fin like process, which runs parallel with and immediately above the lateral line to the caudal base, the mass partaking of the character of flaccid fringe.

The dorsal commences 3in. 3¼ lines from frontal extreme, and has its first ray longest, 8 lines; last ray shortest, 4¼ lines. Basal extent, 6¾ lines.

Pectoral fins flabelliform, commencing immediately behind the lower angle of the opercles, 6 lines beneath the dorsal ridge. Basal extent, 4¾ lines; twelfth ray longest, 8¾ lines; expanse, 6¾ lines.

Ventrals commence in a line with the dorsal; the sixth ray longest, 8¼ lines; basal extent, 3¼ lines; expanse, 10 lines.

The anal commences in a line midway between the dorsal and adipose fins, having its fifth ray longest, 5¼ lines. Basal extent, 7¾ lines.

Caudal forked; lobes equal, 9½ lines extent; cleft, 3¼ lines; expanse, 8½ lines.

Adipose fin commences 9¼ lines behind dorsal. Basal extent, 3¾ lines.

Color—Whole upper part (including head) from the region of the lateral line, olive green, fading into silvery pearl beneath; the opercles dotted with dark spots, and the whole body under the lens more or less covered with dark specks. The whole fish shines with metallic lustre. Cheeks and gill covers silvery; fins transparent. J. MATTHEW JONES.

Halifax, N. S., July 15, 1878.

ARTIFICIAL HATCHING OF THE CUNNER.—We thank the Secretary of the Smithsonian for the following interesting letter in regard to the hatching of the eggs of the cunner, which has been accomplished by Mr. C. G. Atkins. The letter is written from Bucksport, Me., July 20, and is addressed to Prof. S. F. Baird, U. S. Commissioner of Fish and Fisheries:

While at Georgetown I came upon a pair of spawning cunners (*Tautogolabrus*), and hatched out a few dozen of their eggs. I find that the eggs are about one-half millimeter in diameter, having increased very slightly, if any, after coming from the fish; are exceedingly transparent, perfectly free, adhering neither to each other nor to any other object at any time; they are slightly buoyant in sea water, and slowly rise to the surface, where, if in still water, they remain suspended until hatched. Both impregnated and unimpregnated eggs rise at first, but after the lapse of a few hours the unimpregnated lose their buoyancy and sink to the bottom. The yolk is more buoyant than the outer shell and rises to the upper side of the latter, which it very readily fills. The embryonic disk forms on the lower side of the yolk. I kept my eggs in vials in my tent, renewing the water from time to time, and think the average temperature maintained was 60 deg. Fahrenheit; possibly a little higher. Under these circumstances the eggs hatched in three days. In the natural place of deposit the water is undoubtedly considerably colder, possibly 10 deg., and the eggs would then be four or five days in hatching.

CHARLES G. ATKINS.

MOVEMENTS OF EELS.—*Salem, Mass., July* 23.—*Mr. Editor:* I am three weeks behind in reading your interesting journal, having been absent. Have just returned from salmon fishing the Nepisiquit. Your correspondents on eels call to mind what I saw while fishing one of the pools at Pavoneau Falls. My guide called my attention to the vast numbers of small eels trying to mount the rapids at the head of the pool, some actually clinging to, others wriggling up the perpendicular face of the rock. The advance guard would slime the dry rock as far as their material would last, then wait for the rear to pass, and so on until it was smooth going, and then a grand rush. The whole movement was an entire success, and if they were not trying to reach the headwaters, I think they were taking a great deal of pains to no purpose. I doubt if they were merely trying the experiment to see what they could do or playing follow master. C. T. J.

RESTOCKING LAKE GEORGE.—A meeting was held at Black Mountain Point, on Lake George, last Saturday, to organize an association for the purpose of stocking Lake George with fish, and improving the lake and its surroundings generally. Dr. J. W. Dowling, of New York City, acted as chairman, and Cyrus Butler as secretary. Speeches were made by the Rev. Drs. Gillette, Tuttle, Butler and Huntington, and Messrs. Roessle, Crosby, Hayden, Verplanck, Colvin and Cyrus Butler. The lake will be stocked without delay under the auspices of Seth Green.

Natural History.

A MOLLUSK ON ITS TRAVELS.

THE problem of the distribution of fresh-water fishes and shells is one of the most intricate of those to which the zoologist has to give his attention, and the evidence which bears on this point is as yet somewhat unsatisfactory. Mr. A. R. Wallace, in his great work on "The Geographical Distribution of Animals," has discussed this subject at some length and with his usual ability; but he acknowledges that, so far as observations go, we are not furnished with many facts from which to draw definite conclusions.

The fact that the same species of fresh-water fish are frequently found in rivers and lakes which have absolutely no connection with each other proves conclusively that they have some means of dispersal over the land, and Mr. Wallace regards waterspouts, whirlwinds, etc., which often carry up into the air considerable quantities of water, and which might easily take up small fish also, as one of these means. This view is confirmed by the many trustworthy accounts which we have of showers of fish falling in heavy rains. Another method may be by means of volcanic explosions. Humboldt states that, in South America, the fish inhabiting subterranean streams are sometimes thrown up during these outbursts. But fish may also be distributed by means of their eggs being transported from place to place through the agency of other animals. Ducks and geese feed largely on the eggs of fish, when they can obtain them, and it is stated by Gmelin that some of these eggs pass through their bodies with their vitality unimpaired. If these birds were migrating at the time it is evident that such eggs might serve to stock bodies

of water at a long distance from the locality where they were deposited. Besides this, eggs may be transported by becoming attached to the legs, feet or bill of aquatic birds.

The chief method of the dispersal of land and fresh-water shells is, as Mr. Darwin has so admirably shown in his Origin of Species, through the agency of aquatic birds which frequent ponds and marshes. He says: "I suspended a duck's feet in an aquarium, where many ova of fresh-water shells were hatching; and I found that numbers of the extremely minute and just hatched shells crawled on the feet, and clung to them so firmly that, when taken out of the water, they could not be jarred off, though at a somewhat more advanced age they would voluntarily drop off. These just-hatched mollusks, though aquatic in their nature, survived on the duck's feet, in damp air, from twelve to twenty hours; and in this length of time a duck or heron might fly at least six or seven hundred miles, and, if blown across the sea to an oceanic island or other distant point, would be sure to alight on a pool or rivulet." Mr. Darwin also gives an instance of the capture of a water beetle with an *Ancylus* (a fresh-water shell like a limpet) adhering to it.

Such means as those enumerated would then seem amply sufficient, with time, to effect a very widespread distribution of fresh-water shells. Land shells present more difficult conditions, but we must for the present pass them by.

It will interest our readers to learn that Mr. Arthur F. Gray, a frequent contributor to the columns of FOREST AND STREAM, has recently communicated to Mr. Darwin a fact of great interest bearing on the geographical distribution of mollusca. His letter, with the recipient's comments on it, has been printed in *Nature*, accompanied by a sketch showing a *Unio* clinging to the extremity of the middle toe of a duck's foot. Mr. Gray's letter was as follows:

"*Dear Sir:* The following case will, I think, prove of interest to you, as it corroborates your belief that fresh-water shells are sometimes transplanted by the agency of aquatic birds.

"In the sketch I have endeavored to give you a correct idea of the way in which the shell was attached to the duck's foot.

"It was given to me by Mr. R. L. Newcomb, who shot the bird, which was a blue-winged teal (*Querquedula discors*), while flying, near Artichoke River at West Newbury, Mass., September 6, 1877. The shell, the common mussel or clam (*Unio complanatus*), is a very abundant species, being found in nearly all the rivers and ponds of the Atlantic slope. How long the shell had been attached is only a matter of conjecture, but it had abraded the skin of the bird's toe, and left quite an impression. It was living when the bird was shot.

"It would undoubtedly have been transplanted to some pond or river, perhaps miles from its original home, had the bird not been shot, and might then have propagated its kind.

"*Danversport, Mass., May* 8. ARTHUR F. GRAY.

"To C. Darwin, Esq."

We take great pleasure in offering our congratulations to Mr. Gray on this extremely important observation.

NOTES ON FAMILIAR BIRDS.

EDITOR FOREST AND STREAM:

Jan. 19.—Noticed a flock of twenty or more horned larks (*E. alpestris*). The largest number I have observed at one time.

Feb. 12.—Shot female purple finch (*C. purpureus*).

Feb. 14.—Saw another purple finch, but failed to secure her. These are the only ones I have observed about the the house in winter.

Feb. 28.—Observed four robins (*T. migratorius*) flying over.

March 1.—Blue birds (*S. sialis*) in flocks. Saw purple grackles (*Q. purpureus*) in flocks in the yards. We have a number of evergreens in the yards and one or two pairs of grackles nest in them every year. The robins and grackles often have fierce battles, chasing each other around the yard.

March 7.—One flock of pigeons (*E. migratorius*) seen.

March 8.—Song sparrow (*M. melodia*); Phoebe (*S. fuscus*), gull supposed to be Bonaparte's (*L. philadelphia*), as I have one in my collection which was shot on the Chemung River near the city.

April 2.—A friend, who is in the woods much of the time, reports having found two ruffed grouse nests, one with eleven and the other thirteen eggs.

April 9.—Robin building her nest in a tree just in front of my window.

April 12.—Golden-winged woodpecker (*C. auratus*) observed to-day.

April 14.—Belted kingfisher (*C. alcyon*).

April 24.—Indigo bird (*C. cyanea*).

May 2.—Yellow warbler (*D. aestiva*).

May 3.—Male Baltimore oriole (*I. baltimore*).

May 8.—Black-billed cuckoo (*C. erythrophthalmus*).

May 20.—Black-poll warbler (*D. striata*).

The habits of the purple finch (*C. purpureus*) are quite interesting. The male is a handsome, pugnacious bird, and one of much vocal power. There are some six or eight in the yard every morning, and such a delightful concert as they give! each one giving his best efforts in song and display of bright plumage to win the affections of the demure female, who sits on a limb viewing them with distrust, since the concert often ends in a battle. What I admire most is their habit of every little while rising in the air to the height of fifty or sixty feet, then, setting their wings, they sail down, pouring out a perfect flood of song, and alighting on the top of an evergreen. They are very cute in hiding their nests. Of four now under my observation, every one is among the short, thick branches of an evergreen, and cannot be seen at all from the ground. The nests are built of twigs of the evergreen for the foundation, then grass and horse-hair, and in the bottom of one was a nice bed of cow's-hair. The eggs are five in number, green, with blotches of brown at the large end, and on some eggs there are a few spots all over. Wilson says of the birds: "They are soon reconciled to confinement, and in a day or two are quite tame."

Elmira, N. Y. E. B. GLEASON.

THE AMPHIOXUS LANCEOLATUS OFF OLD POINT COMFORT.—Mr. H. J. Rice, of the Hopkins University, now engaged in research at the Chesapeake Zoological Laboratory, Fort Wool, near Old Point Comfort, Va., writes us thus glowingly of a new find, under date of July 19:

On the 9th of this month I was fortunate enough to find a specimen of *Amphioxus lanceolatus* in the first dredgeful of material which we dredged from the bay here. The next day another one of our party found another specimen, and yesterday, 18th, I found a third specimen. I have them as I write before me in a bowl of sea water with sand at the bottom. They are all alive and doing nicely. This is the farthest north *Amphioxus* has ever been discovered along the coast of the United States. It has been found in Florida, and also along the southern part of the coast of North Carolina, and, I think, nowhere else, until these specimens were taken here. They must be very scarce here though, as we have made a great many dredges for them, but have not succeeded in finding any but the three specimens. They are wonderfully active little beasts, flashing out of the sand when stirred up, through the water and back again, burrowing into the sand so quickly that they can be said to be there only by the dust they kick up. That is a good deal like some people, is it not? However, I don't mean to compare *Amphioxus* to them in any other respect. Amphi is a very valuable little body. If you are inclined to doubt, ask Mr. Darwin. I have been trying to get *Amphioxus'* consent to be interviewed, but he, or she, is a bashful beast and declines with compliments, or something to that effect, since whenever I have got him under the microscope, and thought I was going to get along nicely with him, he has thrown himself out of the dish on to the table, and even tried to get down upon the floor. If a desire to be lowly is a characteristic of the *Amphioxus* family it is a pity that it did not stick to some of the evolved families of higher vertebrates. We have also found quite a number of specimens of *Lingula*, which is also a rarity. We are finding a goodly number of *hydroids*, *discophoræ* and *ctenophoræ*, and perhaps some new ones. We are pretty well satisfied with our work here thus far, and are exceedingly well pleased with the place as a summer resort in the "hot country."

CAUGHT AT SEA.—We acknowledge from Lieutenant Commander R. D. Evans, U. S. N., a Carolina rail, which was captured at sea. The bird we have put in a cage, and he seems not much the worse for his long journey. Like all the *Ralidæ*, however, he does not take to a perch very comfortably, crossing his legs awkwardly on the cross-piece. We have been feeding him on canary and rape seed. Should we think that the bird is pining we will set him free on the salt meadows near the city, so that he shall have a good chance for life. The following letter is from Lieutenant Commander Evans:

U. S. S. "SARATOGA," NEWPORT, R. I., July 28.

EDITOR FOREST AND STREAM: I take the liberty of sending you a rail, which flew on board my ship three hundred and fifty miles from the Capes of Virginia during a heavy westerly blow on Tuesday last. He struck the rigging and fell to the deck, and although used up, was still able to run. I at once made him comfortable, and now present him to you, with the hope that you will accept him, and either care for him yourself or give him a fair wind to some snug harbor.

R. D. EVANS, Lieut. Commander, Commanding.

A CURIOUS CASE OF NESTING.—*Editor Forest and Stream:* I send you the following curious case of nesting, with the assurance that the facts came under my personal knowledge. A hole large enough to admit a man's hand had been knocked in the siding of a passenger car, which leaves this town at 7:30 A. M., and returns at 4 P. M. six days of the week, and in this hole, back against the foot of a brace, a bluebird started to build her nest, working in the early morning and evening after the train was side-tracked. The men were much interested in the performance, and all hands were on the lookout when the car came in for their little lodger, who was usually on a near tree or on the telegraph wire, ready to go on with the work. When nearly finished, this was torn out by some precious coward; but the bird was not discouraged, and in a little while a new one was under way. Finally, one egg appeared, but the number was not increased, so that when the poor youngster broke his shell yesterday morning, he was an only child and a temporary orphan, exposed to the tender mercies of three or four vigorous wet nurses, under whose ministrations he swallowed sundry grasshoppers; but either the quantity or quality of this first meal disagreed with him, for when his mother flew up as the car stopped, the little one was dead. From all that I can learn, I am convinced that the bird has never followed the car, so that the egg may be said to have been artificially hatched, the mother protecting it from the night air only, excepting on Sundays, when she was constant in her attentions. W.

Grand Tower, Ill., July 18, 1878.

THE HIBERNATION OF SWALLOWS.—There is an interesting communication in the *Ornithologisches Centralblatt* of May, from Herr J. Rohweder, under the head of "Ornithological Notes from Schleswig-Holstein." Herr Rohweder certifies to the competency and trustworthiness of the observer who communicated the facts to him. After the house swallows (*Hirundo urbica*) in the autumn of 1870, from the beginning to the middle of September, had held their usual assemblies by hundreds on the sunny side of the roofs, stormy and rainy cold weather suddenly supervened. As suddenly did most of the swallows take their departure for the south. The few that remained behind flew about restlessly and anxiously, unable in the cold north wind to obtain sufficient insects to appease their hunger. Within a day after the others these also disappeared. Three days after, during which time no swallow was observed, Herr Rohweder's informant saw peeping out of the entrance of some nests, under the projecting roof of the east side of his house, here a wing, there a tail or a few feathers. A ladder was obtained and the nests tapped, but no motion. On pulling at one of the overhanging wings a swallow was dragged out. It was alive, but seemed paralyzed. After the swallow was held in the hand a while it fluttered about a short space and then fell to the earth. A second bird behaved in the same way, and a third showed few signs of life. A fourth appeared quite lifeless. In other nests six and ten, and even fourteen swallows were found huddled together. Their condition was similar to those first found. The birds near the entrance of the nest appeared in a state of sound sleep, while those further in showed no signs of life. The former soon were able to fly, with difficulty, a larger or shorter round, only one flying to a considerable distance; the latter were thrown on a neighboring heap of straw. On the following day, when the observer returned, no birds were found. The exact locality of these observations is not given.—*Nature.*

FIRST DREDGING EXPEDITION OF THE SPEEDWELL.—On Tuesday of last week, the *Speedwell*, Commander Beardslee in charge, made the first dredging expedition, Professor Baird being on board. The vessel steamed out some fifteen miles from Gloucester, Mass., and dredged in some forty-five fathoms. Sea anemones, with starfish, shrimps, shells, etc., were brought to the surface. A peculiar anemone, common to European waters, but rare here, was found. The *Octopus bairdii* rewarded the explorers on their first expedition.

—We call our readers' particular attention to the advertisement of the old firm of Messrs. Dodd, Mead & Co., 751 Broadway, who make a specialty of works in natural history. They solicit correspondence with libraries, reading clubs, and book buyers generally.

Woodland, Farm and Garden.

THIS DEPARTMENT IS EDITED BY W. J. DAVIDSON, SEC. N. Y. HORTICULTURAL SOCIETY.

For Forest and Stream and Rod and Gun.

HARDY FLOWERS.

THE emblazonry of "bedding" plants as Pelargoniums, Coleuses and the like are now the main decoration of most gardens, and though such gaudy paraphernalia, when moderately used and properly disposed, are becoming enough alone, they are poor furniture for a garden. We want a variety of flowers at all seasons—something hardy, profuse and showy, and that will yield an abundance of blossoms for vase and other bouquets. Though May and June are the hey-day of hardy plants in blossom, we have also a multitudinous assortment from that time till October.

Just now (the middle of July) the Japanese white lilies (Lilium longiflorum) and its beautiful variety Takesima are in perfection. Pentstemon barbatus has long, wand-like stems, laden with orange-scarlet flowers. Many kinds of Speedwell are neatly clad in blue, and of Bell flowers there is quite an assortment, from the tiny Campanula cespitosa to the cushion-like C. carpatica and the European harebell. Their prevailing color is blue, but there are also white varieties of most of the species. Allied to the bell flowers are Platycodon grandiflorum, blue and white, and one of the finest perennials of its season; also the Siberian Adenophora, with pretty little bells. Delphinium grandiflorum has intense blue flowers and a branchy habit, and is invaluable for cutting. If perennial Larkspurs are cut over just as soon as their flowers are shed, a second crop may be expected in fall. Aconitum variegatum, blue and white variegated, is coming into bloom and is the best of its class. Clematis Davidiana, a "new" herbaceous species from N. China, has crowded blue flowers somewhat like those of single hyacinths, and very fragrant. Of evening primroses, Œnothera Missouriensis, large and yellow, fruticosa var. linearis, small yellow, and speciosa, white, are among the finest; but they have also a host of kin-auxiliaries that are brilliant and beautiful, and they are gayer from late afternoon till early forenoon than during the day-time; hence their name. Phloxes are blossoming out in great variety, presenting all shades of color from white to pink and purple, and lovely flowers they are. Our bee balm, Monarda didyma, has very showy heads of scarlet and crimson, and is a very desirable plant. To keep it vigorous, transplant it every second year. Holyhocks are in their glory, and what can be finer than the brilliantly-colored full double sorts? Transplant them every second year, and keep up a young stock from slips and seed. Perennial mallows (Callirhoe) of our western and southwestern prairies have brightly colored rose-purple flowers, and are very profuse and pretty. Blue day-lilies (Funkia) are bursting into blossom in the open border, and better still in shady places, where, too, the saffron day-lily (Hemerocallis) is in perfection, and most at home. The pink-root (Spigelia marilandica) is a neat little herb with red blooms, and Stokesia cyanea of the Southern States is copiously beset in blue. It is not usually considered hardy, but it is hardy enough with us, and that on a clay soil too. And nothing is gayer at present than the musk mallow (Malope moschata), rose and white. And when we enter the composite family, almost an endless variety of yellow flowers present themselves. They include perennial kinds of Coreopsis Rudbeckias and Gaillardias brighter and better, if possible, than the annuals of the same genera. And there is a great variety, too, of Pyrethrums, Achilleas, Anthemises, etc.; indeed, Anthemis tinctoria, bright yellow, is one the finest of hardy herbaceous plants. Among stonecrops we have Sedum album, white, spurium, and pulchellum pink, and all neat, little and copious kill-not plants that will grow in ground so dry that most other plants would perish in it. Verbena aubletia, and its variety montana, are perfectly hardy, compact, and profuse in purple blossoms. The everlasting peas (than the white variety of Lathyrus latifolius, few tropical flowers are prettier) are in perfection, either sprawling along the ground or supported on trellises or stakes.

In addition to these we have also a great variety of seasonable, hardy flowers, such as Lysimachia clethroides, yellow Columbines, Betonicas, Sages of many kinds, Scabious, Pinks, Meadow-rue, and several others. With annuals, too, our gardens may be ablaze; but though excellent for mixed borders, only a very few of them are worthy a place in choice flower-beds. This is not because they are not pretty enough, but on account of the brevity of their existence. The late storm knocked Nemophilas and Collinsias all to pieces, so now they are past. Among the finest annuals, also perennials treated as annuals, at present in perfection, are Eschscholtzia, Mignonnette, Coreopsis of sorts, Petunias, Salpiglossis, Schizanthus, Drummond's phlox, Convolvulus tricolor, and Morning glories, Gilia densiflora, capitata and achilleæfolia, Phacelia congesta, Cocbrancu heliotropioides, Gaura Lindheimeri, Candytuft, Balsams, Browallias, Australian everlastings (except Helipterum Manglesi, which is past), Tagetis signata pumila, Godetia grandiflora, Marigolds, dwarf Lupins, Clarkias, Wahlenbergia gracilis, Campanula Loreyi, Malope malacoides, Didiscus cœruleus, Nasturtiums, Brachycome iberidifolia, Dimorphotheca pluvialis (tassel flower), Catch-fly, Sweet peas and many more. It is worthy of note that annuals sown where they are to remain, and thinned well after germination, and those sown in boxes or frames and "pricked out" once before transplanting permanently, grow better, live longer, and blossom more copiously than those nursed in pots. Again, our "tender" annuals, if sown in May or as soon as the ground

is warm enough for speedy germination, become finer in after life than hot-house gaspers. And another curious fact is that if the seeds of tender annuals, like balsams, be sown out of doors in March or early April, they will rot rather than germinate on account of the coldness of the ground; while, on the other hand, if the Balsams, Browallias, etc., were allowed to ripen and scatter their seeds last year, those seeds will, after lying in the ground all winter, germinate freely this year.

Besides with the above, our gardens are also gay with lovely Clematises and Honeysuckles, Trumpet flowers, and the second crop of Wistaria blossoms, and from the first to the middle of July is the hay-day of the prairie rose, with its great profusion of clustered corymbs, after other roses are mostly all past. The Catalpas are in bloom, and so are Rhododendron maximum, Æsculus parviflora, Smoke-tree, Ligustrium ovalifolium, Bladder-sennas, Spiræa Douglasi, callosa, and Fortunei Ceanothus Americanus, etc. Calluna vulgaris, the European heather, is coming into bloom and will last through August, and so is Erica vagans, also an Old World heather. And with all these beautiful July flowering plants, which any cottager can have and grow to perfection without a glass frame or a hot house, what need have we of such gaudy masses of Pelargoniums and other tropical and semi-tropical coloring?

W. FALCONER.

Cambridge Bot. Gardens, Boston, Mass.

TREATMENT OF THE DROWNED.

WE presume that every one who reads this has more than once before seen directions of a like nature. Not one in a hundred, however, is a bit the wiser for what he has read. In an emergency he would not know how to proceed. We republish the following very excellent directions, taken from the *Scientific American*, and cannot too strongly urge our readers to thoroughly master the method. This cannot be done by merely reading this. The proper manipulation should be learned by practical experiments. Let one individual assume the *role* of a drowned person while another goes through the operation here described. Parents should instruct their children, and teachers their pupils. The process should be so familiar that when the occasion comes there may be intelligent treatment of the patient:

RULE I. (Fig. 1.)—*To Drain and Force Water from the Lungs and Stomach.*—Instantly place patient face downward, a hard roll of clothing being placed beneath the pit of the stomach, to raise it as much as possible above the level of the mouth. Put one wrist of the patient under his forehead to raise his mouth off the ground. With hands well spread upon the patient's back, above the roll of clothing, throw upon it your whole weight with a forward motion, and keep up the pressure about three seconds, so as to force all water from the stomach and lungs out of the mouth, ending the pressure

FIG 1

with a push which will help to jerk you back to your upright position. Repeat this once or twice, and then quickly proceed with—

RULE II. (Fig. 2.)—*To Make the Patient Breathe.*—Turn the patient face upward, the same roll of clothing being now beneath his back, the shoulders slightly drooping over it. Bend head backward and downward, putting throat on the stretch to the utmost. Place the hands of the patient on top of his head (one twist of a bankerchief or string around the crossed wrists will keep them there). Rip or strip all clothing from waist and neck. Now kneel astride the patient's hips. Grasp the front part of the chest on both sides of the pit of the stomach, your thumbs pointing to patient's chin, and your fingers fitting into the grooves between the short ribs. Fix your elbows firmly, making them one with your sides and hips, and then, firmly pressing the sides of the patient together, and using your knees as a pivot, throw yourself slowly forward for two or three seconds until your face almost touches the face of your patient, and your whole weight presses upon his chest. End this pressure with a short push which suddenly jerks you back again to the upright kneeling position.

FIG. 2

Rest three seconds while the ribs spring back; then repeat this bellows-blowing movement as before, gradually increasing the rate from seven to ten times a minute; but take the utmost care, on the occurrence of a natural gasp, not to interrupt it; but, as the ribs fall, gently press them and deepen the gasp into a longer breath. Continue this until the natural breathing, which you are imitating, needs no further assistance. If all fails, keep on, because any moment within an hour's effort you may unexpectedly be rewarded with success.

Avoid impatient vertical pushes; the force must be upward and inward, increased gradually from zero to the maximum the age, sex, etc., may indicate.

If a second person be present and can do it, the tongue should be held out of one corner of the mouth by the thumb and finger, armed with a piece of dry cotton or linen rag (Fig. 2 *a*).

We take our illustrations from the London *Lancet*.

The Kennel.

TO CORRESPONDENTS.—Those desiring us to prescribe for their dogs will please take note of and describe the following points in each animal:

1. Age. 2. Food and medicine given. 3. Appearance of the eye; of the coat; of the tongue and lips. 4. Any changes in the appearance of the body, as bloating, drawing in of the flanks, etc. 5. Breathing, the number of respirations per minute, and whether labored or not. 6. Condition of the bowels and secretions of the kidneys, color, etc. 7. Appetite; regular, variable, etc. 8. Temperature of the body as indicated by the bulb of the thermometer when placed between the body and the foreleg. 9. Give position of kennel and surroundings, outlook, contiguity to other buildings, and the uses of the latter. Also give any peculiarities of temperament, movements, etc., that may be noticed, sign of suffering, etc.

SPAYING.

SO many queries have been addressed us of late in regard to spaying, that we think it advisable to make an abstract of an article on this subject, published last year in this paper, and due to our correspondent "South Fork." A distinguished surgeon, who has kindly given us advice in regard to spaying, tells us that the operation had better be performed by a professional man. People not used to the anatomy of a dog might commit some fatal errors. Comparative surgery might be tried, and it would not be unwise for those wishing to spay a bitch to practice first on a dead animal. This advice is also given us, that the operator's hands be warmed in hot water, then dipped into a solution of carbolic acid (one part to forty of water), before entering the cavity of the abdomen; also that cat-gut ligatures prepared in carbolized oil be used in place of silk ligatures, and thus there would be less liability to subsequent suppuration. The puppies should be operated on before being weaned:

First, the pup should fast for several hours before the operation, and be from about four to six weeks old. The only instruments needed are a scalpel or sharp knife, a pair of scissors, some threads of surgeon's silk, a soft sponge, and some ether to render the animal insensible to pain during the operation, which should be performed in a warm room as nearly the temperature of the animal as possible, as the exposure of the bowels to the cold atmosphere renders the liability of inflammation (peritonitis) following more probable. The patient is now placed on a small table, and with the aid of an assistant the ether may be administered by pouring a couple of teaspoonfuls on a folded napkin and holding it over the nose in much the same manner as though the patient were a human being. A few minutes will suffice to effect unconsciousness. The animal will now be placed upon its back, and an incision be made along the little groove in the middle of the belly (*Linea alba*) from the navel, extending backward an inch and a half to two inches toward the crotch. There will be no bleeding worth speaking of, as no blood-vessels cross the middle line of the abdomen.

The operator will, after cutting into the abdomen, place the animal's head pointing toward his chest for convenience. The first object seen after opening carefully into the abdominal cavity will be the bladder, which will easily be recognized, and a little gentle pressure upon it will expel the fluid from it through a natural channel, and enable the operator to more readily search for the womb. A few folds of the intestines may now be drawn out to one side to give more room to work. The womb must now be sought for immediately beneath the bladder, which will be found to be a very small, tortuous and cord-like organ, lying transversely and crescentically beneath the bladder, and to the inexperienced operator looks like part of the intestine. When the womb is found, draw it up gently and follow its course transversely to its extremity at one side of the abdomen, and there will be found a little hardish nodular body, about the size of a flattened garden pea, resting like a little knob on the lateral extremity of womb as it were. This is one of the ovaries, and is one of the two similar organs to be removed in spaying. Now put a silk thread around its pedical, or base, tie tightly, and cut the thread close to the knot, and then remove the ovary with the sissors close to the ligature. Now follow back the tortuous comb till the opposite side is reached, when the other ovary will be found, which is to be removed also in the manner just described. The opening in the abdomen is now to be sewed up with silk, carrying the stitches completely through the lips of the wound on each side, and tying them upon the surface of the abdomen at intervals of about half an inch. After this support and coaptate the spaces between the stitches with adhesive plaster, cut into strips quarter inch wide and three or four inches long, and applied warm.

The little patient will now show symptoms of prostration, and the operator will in all probability conclude that "the dog is dead," or at least about to die, but don't be alarmed. Give her a teaspoonful or two of equal parts whiskey and water, and wrap her up in a blanket, and place her near the fire, when she will go to sleep, and the next day be ready to fight one of her brothers for the possession of a bone, which her starved condition will make her regard as a very desirable thing just now. The mother will attend to keeping the wound clean, but it may be inspected daily by the operator, to see that the plasters have not been licked off by the assiduous attentions of the mother. The wound heals rapidly, and at such points as it seems to be united the sutures or stitches can be cut and drawn out, drawing on them toward the wound so as not to tear it apart, first, however, taking the precaution to replace any loose adhesive straps, so as to give the wound and abdomen such support as will prevent protrusion (*hernia*) of the intestines occurring. The incision in the middle line of the abdomen is the best, because here no muscles are divided, and consequently no liability to interfere with the future free and perfect locomotion of the animal.

ORIGIN OF WORMS IN DOGS.—*Editor Forest and Stream:* My attention has been called to a discussion upon the origin of the helminthes, or worms, in dogs, and I feel called upon to say a word upon the subject. This is scarcely the age when spontaneous generation will answer as a theory for the existence of animal life, so that we must account for their presence in the animal in their consummated development, not through a *Generatio Æquivoca* (out of diseased organic matter, as is very commonly supposed), but by the fact that their seeds or ova find their way into the animal in some way from without, no doubt chiefly through the medium of food or drink, and find an appropriate soil for existence and development, together with subsequent evolution or generation. Of course, it must be admitted that we are often in the dark as to how the various Entozoa do gain admission into the animal organism; but that they do in some way gain admission from without is now scarcely to be doubted. When once in the body if they meet with a nidus which is congenial to their nature they generally multiply very fast, as all intestinal worms are provided with organs of generation. At the same time, the enormous quantity of ova which some of the Entozoa produce must, in the main, pass out of the animal in an undeveloped condition, and entering into other media, find their way again into other animals. In this connection it should be remembered that these ova are endowed with an almost marvelous tenacity of life, which has given a stronger ground for the arguments in favor of spontaneous generation in connection with Entozoa than almost any other form of animal life. All scientific investigation goes to show, in the first place, that Entozoa (worms) are introduced to the interior of animals from without, and chiefly through the media of food and drink; and, in the second place, that they seldom propagate themselves in the same animal in which their development has been consummated, the seeds or ova passing out of the body to be developed elsewhere. In relation to the case mentioned by Mr. Wanmaker in your issue of the 18th, of course it is difficult to determine exactly how the embryos obtained admission to the interior of the puppies. It is, however, quite possible, I think, that they were obtained through the mother's milk. Valentin and other observers found such embryos in the blood of dogs and other animals. It is supposed that they get there by boring their way into the blood-vessels of the intestinal canal, so that it is still more probable that such embryos might be found in the milk of a suckling mother.

S.

WILL BITCHES WORRY SHEEP?—We have additional testimony from most worthy authority that the premises held, that the female of the canine species will not attack sheep, wants further confirmation. We are anxious to have all the testimony we can procure in order to settle this question:

Mr. Editor: I am much surprised to see the idea put forth that bitches will not kill sheep. There is no truth in the notion. I have often taken them in the very act, and shot them on the spot. No breed is exempt from the vice nor any sex. No dog properly trained and cared for will commit such crimes against society. A sheep-stealing dog always belongs to a lazy master. This vice, like all other moral, mental and physical qualities, is liable to be transmitted to offspring. This is, however, a conclusion well authenticated in my experience. A spayed bitch is much less disposed to wandering habits—especially when left loose at night—than any other, and therefore much less liable to temptation and less prone to mischief. If the operation is performed before the age of six months, the disabling and disfiguring obesity will be avoided, which will ensue if it is delayed until the sexual character is fully developed. I have owned spayed bitches of the following breeds: Setters, pointers, Newfoundlands, hounds, terriers and cockers. I have found them to be equal in instinct, courage and endurance to any dog I have owned or hunted with, and more docile, affectionate and cleanly, and less troublesome to keep than any other dogs. I recommend to breeders to spay their bitch puppies freely at from sixty to ninety days old; and I also recommend to bench shows and field trials to present special classes for spayed bitches. Finally, I would suggest to gentlemen living in town that spayed bitches will give them less trouble, will bear confinement much better and cost less to keep than other dogs.

M. J. E.

Blacksburg, Va.

MINNESOTA KENNEL CLUB—*St. Paul, July 27.—Mr. Editor:* The committee hope to receive a large number of entries from all parts. Exhibitors may rest assured of receiving a hearty welcome, as the members of the club propose to do their best to make their stay as pleasant as possible. We have already received numerous applications, very many of whom ask about the prospects for chicken shooting. Well, I am glad to tell you that from all parts of the State the news is, "Very plentiful." The committee held a meeting Monday and determined to hold a public field trial immediately after the Show, and from what I can now learn it will succeed, providing a satisfactory place can be secured within an easy distance from the railroad, and plenty of birds, good accommodations, etc. There seems to be no doubt about securing all these. You can rest assured nothing will be left undone to make them a grand success. The committee have already secured from the Railroad Company free transit for dogs, and half fare for passengers, to and from St. Paul to some point in the neighborhood of Sauk Centre. The entries close Aug. 19. Yours truly,

CHAS. LINCOLN, Sup't.

MASSACHUSETTS—*Cambridge, July 21.*—There was landed Wednesday, July 17, for the Harvard Kennel, the bitch, Countess Vests, by Dan out of Countess. She is in good condition and a very fine bitch. She was served by Browis' Dash II. before leaving England. Dash was the winner at Horsehead this year.

WHELPS—*Marshalltown, Iowa, June 23.*—Mr. I. S. Jones' orange and white Phœbe whelped, June 17, twelve puppies, eight dogs and four sluts, out of his Jet.

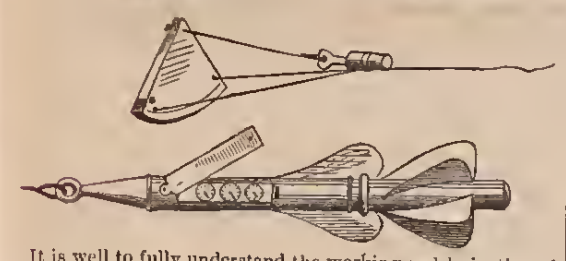
Yachting and Boating.

HIGH WATER FOR THE WEEK.

Date.	Boston.		New York.		Charleston.	
	H.	M.	H.	M.	H.	M.
Aug 2	1	39	10	53	10	06
Aug 3	2	31	11	41	10	53
Aug 4	3	24	0	07	11	43
Aug 5	4	22	1	03	0	11
Aug 6	5	23	1	55	1	11
Aug 7	6	23	2	55	2	20
Aug 8	7	38	4	07	3	30

THE LOG.

Though the common or "chip" log has been almost entirely superseded by patent metallic or towing logs in the merchant service and in our yachting fleet, it is still the only one in use in the U. S. Navy, and from present appearances is likely still to remain so for a long time. Its advantages are mainly the impossibility of getting out of order and the readiness with which such a speed measurer can be put together aboard ship. Its disadvantages are the number of hands required to attend or "heave" it, and the fact that, being hove only periodically, the variations of the ship's speed in the intervals will not be taken into account. These, if large, are estimated by the deck officer and allowance for the same made when noting the speed indicated at the heaving of the log. In the navy there is no objection to the use of several men when heaving, as there is plenty of "beef" to be had in the "afterguard" and among the marines; and the order, "Afterguard, hold the reel!" given by the dapper middy of the watch, brings to their feet promptly two or three sons of the Fatherland, bravely serving Uncle Sam in the stiff-necked uniform of a marine, or an equal number of *dagos* undergoing their probation as landsmen to the tune of $13 a month. In connection with the common log a sandglass is used, and in it lies a second source of possible error, hence occasionally testing the glass both ways by comparison with the chronometer is a precautionary measure not to be overlooked by a careful captain. On the whole, the log has proved entirely efficient, and it is seldom that a good navigator is compelled to ascribe to mysterious but convenient ocean currents the difference between his positions at sea by "dead reckoning," and "observation."



It is well to fully understand the working and derivation of the chip log even aboard a yacht, since the patent arrangements may give out or be lost, when, with a piece of board, an ax and a line, a chip can be rigged to do duty instead. The figures given herewith show the chip, the reel and the sandglass above, and a patent log underneath.

The chip is made of thin board, so shaped as to include a segment of 60 deg. to 90 deg. of a circle, whose radius may be from six to eight inches, and is loaded on the circular side to an extent sufficient to keep the board upright in the water, without causing it to sink. To this chip the line is attached in the following manner: Bore holes in all three corners. Through the lower two reeve a span, turning in knots at the back of the board. Through the upper hole reeve a single piece of line, having at its end a "toggle" of wood. To the span bend on the regular log line, which will be furnished with a wooden thimble for the toggle to fit or lock into. See that all three parts leading to the chip are of like length when toggled, so that the wood may float upright, and not skim along the surface. Often, instead of "bending" on the line to the span, its end is used for one leg, and a short piece spliced in for the second. This makes the neatest arrangement. The thimble is simply siezed on with rope yarn well rubbed down, or with twine. The line is divided and marked, and then reeled up on a skeleton reel ready for use. The divisions on the line are termed "knots," their length depending upon the principle that they should bear to a sea mile the same proportion as the running time of the sand-glass bears to the hour. If, therefore, you are using a half minute glass, the knot should measure 1-120 of a sea mile. The latter contains 6,086 7-10th feet, hence the knot on the line should be 51 feet in length. Each knot is again sub-divided into 10 fathoms. Since it has been found in practice that a ship will generally overrun her reckoning, the above measures are often shortened 3 or 4ft., so as to be on the safe side. The glass is influenced more or less by the weather, and a comparison should often be resorted to. If no chronometer is on board regulate it by these directions: Fasten a plummet on a line and hang it from a nail, making the distance from nail to centre of plummet 39⅛in., then swing the plummet and count its vibrations while the glass is running out, the number observed will be the time of running in seconds. This method depends upon the law of the isochronous vibrations of the pendulum. Mark the logline when wet. The glasses in general use are of 28 sec. and 14 sec., known as the "long" and "short" glass. Should the 28 sec. glass be used each knot must measure 47ft., less a few feet for precaution. It is customary in the navy to make the knot 7½ fathoms long, or 45ft.

To heave the log, let one man hold the reel clear of his body, another the glass, while the third throws the log overboard from the lee quarter. When he observes that the "stray" line has run out (about six to ten fathoms, enough to allow the chip to go clear of eddies in the ship's wake), and the first mark (a white rag) is passing through his hands, he sings out "Turn!" The glass holder answers, and watching the glass closely sings out "Up!" as soon as the sand has run out. The line is immediately caught (nipping it over the rail is a good way) and the nearest mark outboard read off. The distance between it and the place caught is estimated in fathoms. If the wind has not been constant since a previous heaving, allowance must be made, similarly if before the wind and it is deemed that the heavy sea has set the chip toward the ship during the operation.

Patent logs may be divided in two general classes—those which tow astern and require hauling in to read them off, and others having the indicator located on the taffrail. The latter kind, known as "taffrail logs," have, of course, one great advantage over the first in not requiring hauling aboard every time you may wish to know the distance made. They consist of a revolving fan towed astern, the revolutions being imparted to the line, the latter in turn being connected with the wheel gearing in the indicator placed on the rail aft. As each revolution of the fan in the water corresponds to the known "pitch" of the fan, it is an easy matter, by a system of wheels in the indicator, to reduce a certain number of revolutions, equivalent say to one knot, so that the hand on the dial will point to 1, double that number of revolutions (in other words, twice the distance run) will send the hand to 2, and so on. These logs are made by Ritchie, of Philadelphia, and we have his assurance that they work well and indicate truly, though we have never done a day's work with them ourselves, and must therefore take the verdict of others. Generally the fan is towed by a line, but if fine wire cable is substituted, it would seem more satisfactory to us, unless the weight of it would be an objection. Of the common towing logs, Massey's and Walker's are best known. The latter is the subject of our illustration. It consists of a metal cylinder, only the latter portion of which revolves, the leading half containing the wheel gearing for registering the number of miles corresponding to certain numbers of revolutions of the rotating half. This is, of course, arranged according to the pitch of the vanes or fans on the latter half. The two fins observed on the register half are intended to keep the latter in a vertical plane, as it must always keep the same position, the rear portion only being forced to rotate at a speed in obedience to the speed of the ship. This log must be connected to its towline, from 15 to 40 fathoms, according to the size of the yacht, the register set at zero, the cap turned on over the dials and then hove over, noting the time of beginning the count. The Walker log can be depended upon for great accuracy, unless, indeed, the wind should be very light and flawy and a heavy ground swell or sea on at the same time, when its vertical motions will cause it to show a greater distance than actually run; this is an error on the safe side, however. You can use two logs, one to check the other, if desired.

The ground log is the name given to a log line with a lead attached to it, for ascertaining speed over the ground in a current or tideway, when "on soundings." A statute mile is 5,280 feet, and a knot or sea mile 6,086.7 feet; hence, to convert sea miles into statute, multiply by 1,153, and to change statute into sea miles, multiply by 0.868.

YACHTING NEWS.

NOVA SCOTIA YACHT SQUADRON.—The second racing event of the season came off on Saturday, July 13, at Halifax, when eight yachts sailed over No. 2 Basin course for three prizes, presented by Mr. Sumichrast, Hon. Secretary. It was blowing stiff from S. W., with heavy squalls, and the schooners for once had the race all their own way, squandering the fleet of fast sloops in good style. Rear Commodore Stairs had charge of the race, and at 2:05 P. M., fired the starting gun. The line was crossed by:

Name.		Owner.	H.	M.	S.
Albatross	Schooner..17	D Crosan	2	6	15
Lily	Sloop..... 5	W H Weeks, M D	2	6	30
Circe	" 5	D C Chalmers	2	6	48
Seafoam	Schooner. 27	Capt Larcom, R A	2	7	38
Meta	Sloop.....3	St Kervison, R A	2	8	13
Wavelet	" 2	W H Brookfield	2	8	47
Psyche	" 7	St Capel Crow, 20th	2	9	17
Edith	" 5	W Atkinson	2	10	48

With a leading wind the whole fleet spun along for Navy Island flag-boat, round which the *Albatross* and *Seafoam* led, but here the former made a mistake, continuing to stand up the Basin instead of tacking short around, as the *Seafoam* did. The latter fetching Rockhead, got the benefit of the torrent of wind pouring out of the N. W. Arm valley, and fairly flew past the Four-mile House flag-boat, leading the *Albatross* handsomely. The *Circe* and *Psyche* were astern of the two schooners, doing fairly well; but the *Wavelet* and *Lily* had come to grief, the former carrying away her peak-halliards, the latter losing her topmast in one of the squalls. *Seafoam* lost time by having to hunt for the flag-boat off Bedford, which had been moored in the wrong place, and this allowed *Albatross* to crawl up on her, the timing as they jibed around the mark being:

Name.	H.	M.	S.
Seafoam	3	25	22
Albatross	3	27	55
Circe	3	33	15
Psyche	3	34	30

Once on a wind *Psyche* showed to better advantage, and before a couple of miles had been covered she was close on *Circe's* heels. In the Narrows she weathered her beautifully sailed rival and went ahead, soon placing the time allowance to her credit. *Seafoam* meanwhile had kept her lead of *Albatross*, and the race, which was sailed very fast, ended thus:

Name.	H.	M.	S.
Seafoam	4	27	55
Albatross	4	29	55
Psyche	4	46	35
Circe	4	49	37

The others not timed. *Seafoam* took schooners' prize, *Psyche* first, *Circe* second sloops' prizes. *Circe* was sold the same evening to a Lunenburgh gentleman, and sailed for her new abode the following Wednesday. Her owners have purchased a new and larger yacht.

Mr. Sumichrast has presented the third prize won by his sloop on the 21st of June as a special prize, to be sailed for on the 17th of August.

Vice-Commodore White having returned from Europe, has assumed command of the squadron, and on the 20th led the fleet out for squadron exercise, his beautiful yacht *Kestrel* being flagship.

Mr. Brookfield has purchased the little *Wavelet*, formerly owned by Mr. R. Macdonald, of the *Xiphias*. She was built by Moxley.

Sloop *Mystery*, Mr. Sumichrast, and yawl *Nymphia*, Mr. C. E. Brown, were to sail on the 22d of July on a cruise to the eastward, but their departure was delayed by thick fog and head winds.

CORRECTION.—In Mr Sumichrast's letter in issue of July 18, *Sultana* was printed for *Jullanar*. There is no racing yacht in England at present of the name of *Sultana*.

LAKE YACHTING.—*Belleville, Ont., July* 19.—Many yachts are on their summer cruises at present. The *Irene*, of Port Hope, visited this port a few days ago. She is a sloop of 33 tons, and is a very fine cruiser in every way. Mr. Stone, of Oswego, has purchased the open yacht *Joseph B. Sprague*, a 20-ton craft, formerly of Ithaca, N. Y. She is a fast sailer, and will be quite an acquisition to the Oswego fleet. The famous *Annie Cuthbert*, lately of Hamilton, Ont., has gone to Chicago. She has been re-christened the *Greyhound*, and will probably sail a race at an early date with the *Cora* of the same place for the champion flag of Lake Michigan. Our civic holiday will occur on August 2, when there will be a grand aquatic carnival, including a race between the first-class yachts *Dauntless* and *Madcap* for the B. Q. Y. C. challenge flag; a race between the second-class craft (10 tons and under), for a beautiful silver cup presented by ex-Commodore Kelso; a contest between third-class yachts (5 tons and under), for a purse, besides which there will be rowing races, a sailing punt race and other aquatic sports. Several yachts of the local fleet will start for their annual cruise on August 5. They will visit Oswego, Charlotte and other south shore ports, and will probably find time to take part in the Brookville regatta, which is set for the 14th and 15th of August. PORT TACK.

QUINCY YACHT CLUB.—This club held its second championship regatta, July 19, off Mears' Hotel, Quincy, Mass. Course—Eight miles for first, seven miles for second, and six for third-class boats. Light wind from the south. First and second class failed to make the race, owing to want of wind. In the third class *Dolly Varden* managed to cross in 3h. 6m.; corrected time, 2h. 30m. 38s. The larger boats will resail at a future day.

SAN FRANCISCO YACHT CLUB.—The fleet of this club met in squadron on the Fourth of July, and made a four-days' cruise to Napa, under the command of Vice-Commodore C. H. Harrison. The fleet comprised the *Frolic, Consuelo, Emerald, Startled Fawn, Ariel, Enid, Virgin, Lively, Clara* and the *Magic* of the Undine Club, besides Dr. Merritt's new schooner *Casco* and the *Matthew Turner*. *Clara*, a New York boat, seems to have been the best off the wind, but as she did not do any turning while in company with the fleet, her weatherly qualities seem still to be an open question, though we think she will not be found wanting in that respect. Social festivities and races among the yacht boats varied the programme. The annual regatta takes place the first Saturday in August. The club house is approaching completion. *Pacific Life* adds that: "One of the boys sailing a yacht up Napa Creek got the chart wrong side to, and was working the bends from Napa down while sailing the other way. He thought there had been many changes since the chart was made."

NEW YORK YACHT CLUB.—The following schooner yachts have signified an intention to participate: *Restless*, Commodore S. Nicholson Kane; *Rambler*, Vice-Commodore Wm. H. Thomas; *Madeleine*, ex-Commodore John S. Dickerson; *Dreadnaught*, Mr. A. J. Osborne; *Intrepid*, Mr. Lloyd Phoenix; *Estelle*, Mr. J. P. Smith; the three-hull catamaran *Nereid*, Mr. Anson Stokes; *Tidal Wave*, Mr. Cook; *Clytie*, Mr. Brooks; and *Clio*, Mr. King. In addition to the above the *Columbia, Comet, Foam, Nettie* and *Vesta*. The sloops that will go are the *Active, Dudley, Regina, Vision, Vixen, Volante*, Mr. Stillman's new cutter *Muriel*, and the *Recreation*. It is thought that the steam yachts *Lurline, Ideal, Vidette* and *Promise* will also accompany. While at Newport there will be a gig race among the yacht crews for the Bennett Cup.

ACCIDENT TO THE INA.—The sloop yacht *Ina* was capsized by a squall off South Point, while on her way from Milwaukee to Racine, July 21, and her crew climbed on her bottom. Mr. Henry Elliott started to swim ashore to obtain assistance, but has not since been heard from. The others were rescued, when the yacht finally drifted ashore.

NAHASSETT YACHT CLUB.—The second regular regatta of the Nahassets this year took place Saturday, July 20, off Nahant. The start was from an anchor, under conditions already published in our columns. The following is a summary of the race:

FIRST CLASS.

Name.	Owner.	Actual Time. H. M. S.	Corrected Time. H. M. S.
Fanchon	Arthur Burgess	2 28 26	1 56 49
Ruth	W Basset	Not taken.	

SECOND CLASS.

Name.	Owner.	Actual Time. H. M. S.	Corrected Time. H. M. S.
Fanny	P Grant, Jr	3 17 55	2 49 36
Ida	F P Emery	Withdrawn.	
Druid	F A Drew	Withdrawn.	
Avon	R D Sears	Withdrawn.	
Ardrience	P Pafaff	3 36 50	2 55 58
Eurus	P Dalen	3 42 32	3 02 20
George	H Hocker	3 53 00	2 52 53
Marion	J A Story	Not taken.	

THIRD CLASS.

Name.	Owner.	Length. FT. IN.	Actual Time.
Psyche	King & Clark	17 06	3 15 43
Beesie	G P Upham, Jr	17 05	3 19 12
Nora	R P Snelling	16 11	3 27 41
Arla	W C Haskell	17 01	3 47 40
Mira	S W Burgess	17 11	2 44 31
Rose	F E Abbott	15 09	3 29 19
Lillie	W P Peters	17 04	3 53 44

FOURTH CLASS.

Name.	Owner.	Length. FT. IN.	Actual Time.
Splash	C S Hodges	10 06	56 55
Josephine	C H Minot	13 06	58 00
Sadie	O S Dean	11 06	58 32
Nimport	D J Aspinwall	12 00	Withdrawn.

UNION REGATTA IN BOSTON BAY.—The Union regatta, held off Strawberry Hill, Saturday, July 20, proved a great success. Wind strong from E. S. E., but it died out somewhat during the latter part of the race. No first-class yachts were started, most of them being absent on cruises. The first prize in the second class for centre-boards went to the *Folly*, and the second prize to the *Napoleon*. The first prize for keel boats in this class was awarded to the *Lottie*, and the second prize to the *Gael*. In the third class the *Nettie* took the first prize and the *Posey* the second, the *Emily* taking the third. The fourth class was composed entirely of centre-board boats, and the *Waterwitch* came in first, with the *Rescue* second and the *Lulu* third. The course was eight miles, and the judges were Messrs. M. J. Kiley, H. A. Keith, S. S. Goodwin, George W. Morton, George C. Melvin.

WARWICK YACHT CLUB.—The Union Regatta of this club was sailed July 24, over the regular club course off Rocky Point, Narragansett Bay. A stiff breeze was blowing from the south. The course was around Hope Island and return, about thirteen miles. Prizes were the entrance fees. *Hope* won in the sloop class in 1h. 53m. 59s., beating *Starlight* 55s.; and *Wilcox*, among the cat-boats, in 1h. 45m. 7s., beating *Warwick, Venona* and *Edith*.

BROCKVILLE, C. W., REGATTA.—In the yacht race sailed at Brockville, July 24, there were four starters. Wind blowing a gale, and *Lennon* and *Sleepy Canadian* capsized. *Peerless* went ashore, and *Pari* took the prize.

NEWPORT CAT-BOAT RACE.—The race July 25 among the large fleet to be found in and about Newport during the season, was an event long to be remembered among the owners of the small fry, for the regatta brought together a larger number of craft of this class than ever before came to the starting line. Owing to the exertions of the committee in charge, composed of Messrs. Philip Schuyler, Robert Center and Stuyvesant Leroy, no hitches occurred, and the vast fleet was well got off, and the race a complete success in every way. Course for first and second class, from southeast end of Goat Island around stake-boat to the north of Gould Island, thence around Brenton's Reef lightship and around the Black Can buoy off the southerly end of Goat Island, and finally across line from schooner *Restless* to the shore. Third and fourth class did not round the lightship or the buoy off Beaver Tail, but turned a stake-boat off Castle Hill and finished across a line from judges' boat and Goat Island. The two courses were twenty and sixteen miles. The start was made at 12h. 37m. Wind moderate from S. E., but freshened so that reefs would have done some of the craft no harm. *Dart* sprung her spar, and *Hebe* was fouled by *Marion*; *Dick* carried away peak-halliards, and *Sunshine* capsized in an attempt to jibe. After a very prettily-sailed race the result was as follows:

FIRST CLASS.

Name.	Start.	Return.	Elapsed Time.	Corrected Time.
	h. m.	h. m. s.	h. m. s.	h. m. s.
Wanderer	12 37	3 51 31	3 17 31	3 12 25
DeLoney	12 37	3 57 00	3 20 00	3 15 40
Catharine	12 37	4 29 02	3 45 02	3 40 02
Dart	12 37	4 02 40	3 25 40	3 22 20
Hebe	12 37	4 06 01	3 29 04	3 23 14
Carrie	12 37	4 06 46	3 29 46	3 25 36
Annie and Katie	12 37	4 07 04	3 30 04	3 28 28
Una	12 37	3 54 31	3 40 09	3 36 19
Marion	12 37	4 03 29	3 33 31	3 33 31
Mattie	12 37	4 06 05	3 29 05	3 25 05

The *Wanderer* was awarded the first prize and the *DeLoney* second.

SECOND CLASS.

Axis	12 39	4 22 26	3 43 25	3 37 55
Lizzie	12 39	4 04 53	3 25 53	3 25 18
Myra	12 39	4 10 42	3 31 42	3 27 32
Harvest	12 39	4 04 57	3 25 57	3 22 42
Lizzie Cameron	12 39	4 14 05	3 35 05	3 33 55
Dick	12 39	Not timed.		
Edna	12 39	Not timed.		
No Name	12 39	Not timed.		
Jeff	12 39	Not timed.		
Glide	12 39	Not timed.		
Sunshine	12 39	Not timed.		
Gracie	12 39	Not timed.		

In this class the first prize was won by the *Harvest* and the second by the *Lizzie*.

THIRD CLASS.

Jerboa	12 41	3 24 10	2 43 10	2 40 55
Wilcox	12 41	3 25 30	2 44 30	2 44 00
Darkis	12 41	3 37 35	2 56 35	2 56 35
Niva	12 41	3 29 52	2 48 52	2 45 52
Buster	12 41	3 45 47	3 04 37	3 03 42
Elinor	12 41	3 38 33	2 57 33	2 57 03
Mascha	12 41	3 39 06	2 58 06	2 57 36
Reindeer	12 41	Not timed.		

The prizes in this class were taken by the *Jerboa* and the *Wilcox*.

FOURTH CLASS.

Martha	12 43	3 34 21	2 51 21	2 51 21
Wasserfrau	12 43	3 39 50	2 56 50	2 52 00
Nathalie	12 43	3 40 52	2 57 52	2 56 28
Rambler	12 43	3 45 50	3 02 50	3 01 10

Prizes awarded to *Martha* and *Wasserfrau*. *Wanderer* is the property of Mr. W. Davis, and measures 25ft. 6in.; *DeLoney* belongs to Mr. DeLoney, and measures 25 ft. 11in.; *Harvest*, Mr. J. W. Arnold, measures 23ft. 1½in., and *Lizzie*, Mr. B. Briggs, 24ft. 5½in. In the third class *Jerboa*, Mr. J. D. Hilder, measures 17ft. 5in., and *Wilcox*, Mr. C. Wilcox, 18ft. ½in. In the fourth class *Martha*, Mr. A. W. Aldred, measures 16ft. 10in., and *Wasserfrau*, Mr. John Johnson, 14ft. 5in.

NEW ROCHELLE REGATTA.—The fifth annual regatta of the New Rochelle Yacht Club is set down for August 17, off the Neptune House, at that place. Classification of yachts as follows: 25ft. to 30ft., 20ft. to 25ft., cats 20ft. to 25ft., cats 15ft. to 20ft., and cats under 15ft., liberal prizes are offered, and it is expected that the entries will equal those (46) of last year. We have not yet been informed concerning the rules of the ballasting and crews to be enforced, but we hope that the regatta committee, when it comes to the consideration of the matter, will give its adherence to Corinthian principles as adopted by the Seawanhaka Yacht Club and many others, for it is time that yacht sailing were brought to a higher level and divorced from the machine jockeying heretofore in vogue.

THE CUTTER MUEIEL.—This smart little sea going yacht has been on the screw-docks, East River, for several days last week and has had a coat of bronze put on her bottom. She excited much attention and comment. Some sailing between her and the *Volante* will be in order, to compare notes between the compromise model of the Messrs. Hitchcock's cutter and Mr. Stillman's full blooded English craft.

HANDINESS OF THE CUTTER RIG.—Upon a recent cruise East we had a very fair opportunity of practically testing the handiness of a regular cutter rig and do not hesitate to pronounce decidedly in its favor. By so reeving the staysail sheet or foresail sheet, as our cousins abroad put it, that it works itself when turning to windward, there was no more gear to handle than in the sloop; while splitting the headsail into two pieces made it very much easier to hoist, trim, or stow, and each sail could be brought aft flatter than the single jib. For cruising this rig is to be preferred to the usual sloop, and if you happen to get into rough water—it does not take much of a breeze to raise a sea for a little 30-foot craft—reefing the bowsprit will come in handy, save the stick and increase speed. Of course, to those who may either not care or not have the leisure to go much beyond five or ten miles from their mooring grounds, the efficiency of the cutter rig will offer no special inducements, for to them it would have the offset of slightly increased expense in fitting a rig, the advantages of which might not be called into play at all. But yachtsmen who are unfortunate enough to have their sailing confined to a bay or sound, can hardly be deemed cruisers, much as many of them would like to undertake lengthy voyages. With the increase of wealth and leisure in the country, the venturesome spirit of the amateur sailor is beginning to carry him beyond the confines of Fort Schuyler and Fisher's Islands, and he is also showing his good sense and love of seamanship in taking to a safe sea boat and the sailor-like rig of the genuine cutter.

MADISON YACHT CLUB—*Mr. Editor:* The eighth annual regatta of this club on Lake Mendota, July 24 and 25, proved very successful. For the first day nine first-class craft entered: The *Niobe* and *Perequa*, of Oshkosh; the *Geneva* and *Agamemenon*, of Geneva Lake; the *Lulu*, *Idler*, *Eclipse*, *Sadie* and *Grey Hawk*, of Madison. In the second class were the *Gracie*, *Zephyr*, *Active*, *Nannie*, *G. E. Esty*, *Silver Heels* and *Jud Stone*, of Madison. The course was eight miles and repeat; the prize, $100 in gold and $50 in gold to first-class yachts. In second class race the prize was $40 and $20 in gold. The start was a flying one, and the *Perequa* took the lead and kept it on the first course. The *Geneva* followed closely, and then the *Agamemenon*. The *Niobe* was the last boat to start, but was the fourth to pass the home flag on the first course. In the second course she took the lead on the fourth mile, followed by the *Perequa*, *Grey Hawk*, *Lulu*, *Agamemenon*, *Geneva* and *Eclipse*. The race was won as follows:

Name.	h.	m.	s.	Name.	h.	m.	s.
Niobe	3	2	47¼	Perequa	3	11	2
Grey Hawk	3	5	5	Agamemenon	3	14	38
Lulu	3	10	26	Eclipse	3	18	7
Idler	3	11	24¼	Sadie	3	36	21
Geneva	3	18	49¼				

In the second class race *Zephyr* won the first prize and the *Gracie* the second. The prizes for the second day were $50 in gold for first prize and $25 in gold for second. There were five entries. The *Niobe* took first money and the *Agamemenon* second. Everything passed off pleasantly, visiting yachtsmen expressing their delight at the manner in which the races were conducted. Madison boasts of the finest sailing grounds in the West, and this is the opinion of all experienced yachtsman. Freeman's Pier was a busy place during the races, and the accommodating captain did all in his power to add to the success of the regatta. ROVER.

Madison, Wis., July 26, 1878.

YACHTING DRIFT.

Yachting lively in San Francisco.....The New York yacht *Clara* has been found wanting on a wind in rough water, *Emerald* having weathered her recently in San Francisco Bay .....*Casco*, schooner, of that port, is bound on an outside cruise down the Pacific coast.....*Prospero* has visited Boston .....Newport is full of yachts.....Schooner *Nito*, of Rockland Park, Conn., capsized in the Sound, Tuesday, July 23. Trouble, too much beam, too little depth. Crew saved..... *Artful Dodger*, Capt. Jake Schmidt, is ready for the other jib-and-mainsails with $100. Step up, *Nettle*, *Thistle*, *Susie S.*, etc.....Time allowance is bothering our British cruisers..... Everybody is out cruising, all the anchorages are deserted..... Catamarans make Englishmen stand aghast. What next from Yankeeland, they think.

NEW BEDFORD YACHT CLUB.—In the third of a series of five races of this club, sailed at New Bedford, July 27, *Sylph*, Mr. James C. Beetle, took the prize, others having been ruled out for going over wrong course.

NEWPORT YACHT CLUB.—The following officers were elected Saturday last: Commodore, Samuel F. Pratt, of Boston; Vice-Commodore, Henry A. Mott, of New York; Secretary, W. V. Olyphant, of New York; Treasurer, Lieutenant E. M. Steadman, U. S. N.; Measurer, Richard Ycomans, of Newport.

OAR AND PADDLE.

COLUMBIA COLLEGE CREW RECEPTION.—The victorious Columbia College Crew will be received by their comrades in the lower bay. The steamer *Blackbird* has been chartered for the purpose. The crew will leave Liverpool in the steamship *Berlin* Aug. 1, and will arrive in this city about Aug. 10. They will be escorted to Delmonico's and there received in public. Alderman Biglin's municipal committee have not yet published their programme, but will see to it that America's great victory receives due public recognition. There are high times ahead for the brave four that snatched from Great Britain her prestige on the water and transferred to American shores the Visitors' emblem of superiority at the oar.

BRASS BUTTONS AGAIN.—At a meeting of delegates from twenty-two precincts, held Sunday, 14th inst., the Metropolitan Police resolved to hold a regatta on the Harlem, Sept. 3. Races will be open to all members, and will comprise single sculls, working boats, pair-oared and a four-oared race, when, for the nonce, the club will be exchanged for the oar.

CITIZENS TO THE FRONT.—Newark expects a great time at the National Regatta, Aug. 20 and 21. Over $500 has been subscribed by local clubs, and prominent citizens have taken the matter in hand, so that a hearty welcome may be extended to the visiting oarsmen.

BAYONNE-VIKING REGATTA.—The race between the Bayonne Rowing Association, of Bayonne, N. J., and the Viking Boat Club, of Elizabeth, N. J., came off, June 27, in Newark Bay. Course, one and a half mile and return. Jasper of the Bayonne crew was somewhat indisposed, and the race went to the Vikings, composed of the following gentlemen: C. H. Halsey, stroke; J. H. Stoddard, H. E. Duncan, F. Pinned, bow, and B. Darragh, coxswain. Time, 10m. 52s., beating Bayonne 2s. only. The race for the Junior Champion's Gold Badge of the Bayonne Club was won by Hay in 11m. 5s., Edward Mallet giving out. C. H. Waudell and H. L. Weston were judges; F. W. Gifford and W. E. Van Buskirk, timers.

PACIFIC AMATEUR ROWING ASSOCIATION.—At the meeting of the executive committee of this new association, held July 13, it was resolved to hold the annual regatta at Soncelito, September 24, both yacht club houses having been tendered them for the occasion.

PORTLAND, CAL., BOAT RACING.—The Willamette Rowing Club, of Portland, Cal., held their regatta in that city recently. Course, 1½ mile. Entries, Cressid and Occident crews. Won by Occidents in 28m. 5s.

LOUISIANA STATE AMATEUR ROWING ASSOCIATION.—The regular annual regatta of this association was held Monday, Tuesday and Friday, July 15, 16 and 19. The races of the first day were four in number. First race for single sculls; course, two miles. Entries: Atlantic, A. Ahascal; St. John, R. B. Musgrove; Orleans, C. N. Edwards; Galveston Rowing Club, J. Crotty; Perseverance, F. J. Mumford; Hope, J. O'Donnell. Hope went to the front on the way up, all, however, steering very wildly. Crotty, of Galveston, turned first and Mumford second, Ahascal having capsized. Crotty crossed the line first, winning in 16m. 2⅜s. Galveston was elated at this victory of their best sculler. Second race, for single scull working boats; course, same as before. Entries: Orleans, Owen Reilly; Pickwick, L. Vadres; Riverside, P. Gallagher; Hope, J. Cannavan; R. E. Lee, W. H. Brooks; Southern, H. Deckbar; Louisiana, J. Rocquet. Lee worked out to the front, turned first, and retained his lead all the way home. Time, 15m. 59⅛s. Third race, four-oared gigs; two miles. Entries: Perseverance, *Katie F.*; Louisiana, *Blonde*; Magnolia, *Cora V.*; Hope, *Nettie Norton*; Howard; Southern, *C. H. Allen*. Hope took the lead, Magnolia and Southern following. Howard, Hope and Southern turned the stake together, but on the homestretch Hope again went to the front, winning by five lengths. Fourth race, single sculls, light weights. Entries: Perseverance, *John F.*, J. Keegan; Orleans, *Emma*, B. Shield; St. John, *St. John*, W. Lemonnier; Louisiana, *Jane*, C. Trustou. Won by W. Lemonnier; time, 15m. 14⅛s.

Second day (Tuesday)—Owing to roughness of water, only the large race was pulled late in the afternoon. Entries: R. E. Lee, *Unknown*; Perseverance, *Katie J.*; Hope; Riverside, *Mary G.*; and Atlantic, *Wm. McKee*. Riversides took the lead, and on the way up had a close race with the Hopes. The latter, however, turned first, followed by the Riversides and R. E. Lee. It was a close race on the homestretch, Hope crossing first and winning in 14m. 11⅛s.

Third day (Friday)—The remaining races, postponed to this day, were started at 5 P. M. First race, double-sculls, two miles. Entries: Perseverance, *Lula*; Hope, *J. L. Harris*; and St. John, *Aurelia*. Perseverance took the lead, but were passed by the others, St. John and Hope turning almost together and in opposite directions, causing a bad foul and bringing them to a dead stop. Perseverance in the meantime came up and went on her way home rejoicing, winning in 13m. 58⅛s. Second race, four-oared shells, three miles. Entries: R. E. Lee, *Sophie Swan*; St. John, *J. Glynn, Jr.*; Southern, *J. P. McElroy*; and Hope, *J. Wolkart*. Riversides withdrew. *Sophie Swan* got the best of the start, Southerns next, Hopes third. Hopes turned first, St. Johns second, then Southerns and the Lees. The Hopes came in winners; time, 19m. 32⅛s. They receive the champion pennant and retain it as property, having won it three times. Last race was a "consolation" race for single-sculls. Entries: R. C. Musgrove, of St. John, and C. M. Edwards, of the Orleans. Won by Musgrove. The umpire and judges decided to row the double-scull race over again on account of the foul, but Perseverance objects and rightfully claims the prize.

WHAT A RELIEF.—It has been decided, after occult consultation among the powers that be, that hereafter the Wingfield Sculls will be open only to amateurs of the United Kingdom, and that American scullers must keep their hands off. This is a wise, if questionable decision, and the British sculler now has a sure thing of it. Lee, of Newark, cannot interfere with our cousin's sport; they are to have it all to themselves. But what fearful consternation have not the American oarsmen recently created in the British mind, that they must needs make safe of a prize at Henley in the future by debarring all others!

GENEVA REGATTA.—It is proposed to hold a grand professional regatta on Geneva Lake, N. Y., some time in September, when all the celebrities are expected to be present, from Courtney and Hanlon down.

COURTNEY AT SILVER LAKE.—Under the auspices of the Eastern Rowing Association, Courtney will probably meet Reilly, Plaisted, Johnson and others on Silver Lake, Mass., on the 15th or 22d of August.

BEARDED IN HIS DEN.—The British lion has been cowed. The Shoe-wae-cac-mettes, naturally enought not satisfied with the result at Henley, challenged the London Four to a second race. The London crew declined. They prefer to cling to accidental victory rather than risk defeat in a fair square pull. The old-time Bull was not so easily scared, and would no more have thought of refusing a "square trial" to a crew which had come 4,000 miles to meet him on his own water, than did the modern Bull expect to see his cherished Visitors' Cup go to join the America Cup in the very safe keeping of the Greater Britain of the West.

BRITISH TIMERS.—The wonderful instruments used for timing at Henley were of the very finest London make. Nothing but the highest grade of cast iron was used in their construction, while the movements were set in cobble stones of the purest water. They are presumed to vary somewhat in theory, though never more than 20s. over the 10-min. course at Henley. They put the Shoes over the course in 8m. 4s., which was a little too fast for phlegmatic John Bull, so the judges thought it would be *about* the right thing to add 20s. to the indicated time. Evidently there is a field for Sam Slick and his wooden clocks across the sea.

A BAD RELAPSE.—Mr. Brickwood, of the London *Field*, writing in deference to the narrow-minded tastes of a rapidly disappearing clique of self-sufficient cockney snobs, wants the British Consul to certify to the character of Americans going to England to beat them at the oar. All right. And let the American Consul certify as to the real gentlemanly conduct of amateurs in Great Britain, and issue a written guarantee against willful fouling on their part, as well as an assurance that the race is to be pulled on a river, not in a half dry gutter. But best of all is Mr Brickwood's candid admission that English oarsmen cannot learn to steer without ballast in the shape of a coxswain. The recommendation to fall back to the usages in vogue in the halcion days of King Canute, will provoke a compassionate smile on this side of the Atlantic at the pitiable inefficiency of England's men in the bow.

THAMES ROWING ASSOCIATION.—The new boat-house of this association, of New London, Conn., was opened a short time ago with appropriate ceremonies. It is a substantial and tasty structure, built just below the New Haven Railroad bridge, and the roomy float in front has served us a good purpose recently when freeing our dinghy from water and giving her a cleaning, while on a cruise down East. The association has a crew in practice to meet the men from Norwich, who some time ago expressed a desire to pull them when and where they would. Since New London has the honor of being the headquarters of the annual 'varsity race, boating ought to look up in that neighborhood, and the Thames Association has gone to work with a will to infuse life into the young scions of the brave old race of whalers who have settled down to permanent moorings in that quaint old town.

NATIONAL ASSOCIATION OF AMATEUR OARSMEN.—The national regatta of America will be held Tuesday and Wednesday, August 20 and 21, on the Passaic at Newark, N. J. It is open to all members of Amateur Rowing Clubs which have been organized three months prior to the date of this regatta. The rules of the National Association will be in force, including those recently adopted concerning amateurs and junior scullers. Races will be as follows: Single sculls, double sculls, pair-oared shells, four-oared shells and junior single sculls; one and a half mile straight away. Besides the cups and plate of the association, individual prizes will be given to the winning oarsmen, and a silk flag to the clubs of the winners. A reception committee has been appointed

by the Eureka and Triton clubs, of which Mr. George O. Miller is chairman. He will give all information to applicants who address him at No. 703 Broad street, Newark, N. J. The City Council has offered their meeting room to the Committee of the National Association, and from our information to hand, the event promises to eclipse all similar ones held previously, and will go far to establish permanently the favorable hold the National Association has upon public sentiment. Entries close August 6, and should be made to Henry W. Garfield, Esq., Secretary Regatta Committee N. A. A. O, Albany, N. Y. Entrance fees: Fours, $15; doubles, $10; pairs, $10; singles, $5.

Down the Housatonic in a Canoe—*New York, July 30.—Editor Forest and Stream:* The Housatonic is certainly an eccentric stream, for, while it is deep for the first fifty miles of its course, it suddenly becomes shallow and virtually uncanocable a few miles below Falls Village. The trouble is that it attempts to spread itself out and rival larger rivers in breadth. It follows as a necessary result that it has not water enough to cover the nakedness of its stones, and its rapids become too shallow to be shot except when the water is unusually high.

From West Cornwall to Cornwall Bridge is a continuous succession of rapids. The water is usually about a foot deep, but the rocks and stones are so numerous that a canoe cannot float a rod without striking. There is an old dam and a rather formidable looking rapid below it at Cornwall Bridge, but it can be run by keeping close to the right bank. From thence to Kent are about half a dozen more rapids, all of which must be waded. Now, to wade rapids under a July sun, when the bottom is composed of round stones that make the footing extremely precarious, is not an unalloyed pleasure. In fact two days of it are all that any rational man can require. For my part I became entirely satiated with the rapids below West Cornwall, and as the river from Kent to New Milford is but a repetition of the shallow rapids between West Cornwall and Kent, I prevailed on my companion—who would gladly have waded for the next six years sooner than abandon a cruise—to make the rest of the cruise to Bridgeport on an express train.

Let me repeat that the upper Housatonic from Pittsfield to Falls Village is the best canoeing river in the world—even in spite of dams. From Falls Village to New Milford it is one of the most tiresome streams the canoeist can possibly find, unless indeed the trip is made when the river is high. Six inches more water than we had would have covered most of the rocks in the shallow rapids. W. L. Alden.

Sea and River Fishing.

FISH IN SEASON IN AUGUST.

FRESH WATER.	SALT WATER.
Trout, *Salmo fontinalis.*	Sea Bass, *Sciænops ocellatus.*
Salmon, *Salmo salar.*	Sheepshead, *Archosargus probatocephalus,*
Salmon Trout, *Salmo confinis.*	Striped Bass, *Roccus lineatus.*
Land-locked Salmon, *Salmo gloveri.*	White Perch, *Morone americana,*
Grayling, *Thymallus tricolor.*	Weakfish, *Cynoscion regalis.*
Black Bass, *Micropterus salmoides; M. nigricans.*	Bluefish, *Pomatomus saltatrix.*
Muskalonge, *Esox nobilior.*	Spanish Mackerel, *Cybium maculatum*
Pike or Pickerel, *Esox lucius.*	Cero, *Cybium regale.*
Yellow Perch, *Perca flavescens,*	Bonito, *Sarda pelamys.*
	Kingfish, *Menticirrus nebulosus.*

Fish in Market—Retail Prices.—Bass, 20 cents; bluefish, 8; salmon, 25; weak fish, 10; Spanish mackerel, 20; green turtle, 10; halibut, 15; haddock, 6; king fish, 20; black fish, 12½; flounders, 8; porgies, 6; sea bass, 18; eels, 18; lobsters, 10; sheepshead, 20; Canada brook trout, 40; pompano, 25 cents; smoked salmon, 18; dry cod, 7; hard crabs, per 100, $3 00; soft crabs per dozen, $1 50.

Fish of all kinds very scarce, and prices have advanced materially. During the past week four specimens of the tarpum have been taken off Long Island, one of them, weighing 75 pounds, taken in Gravesend Bay.

Canada—*Matapedia, July 24.*—Good fishing here for the last few days. The recent heavy rains have caused the rivers to rise nearly two feet, and fresh-run salmon are taken every day, averaging all the way from twelve to thirty pounds. I took four fish yesterday and the day before, that weighed 24, 10, 14, and 12 pounds each. S. H. K.

Canada Salmon Streams.—Mr. Thomas J. Havemeyer, of New York, was salmon fishing on the Lower St. Lawrence last month, accompanied during the last few days by R. W. Cameron. Between June 11 and July 2 Mr. Havemeyer had thirteen days' fishing, excluding three Sundays and six days when it rained or the water was too muddy, in which time he took seventy-six fish, weighing 1,599 pounds and averaging twenty-one pounds. There was one salmon of thirty pounds and one of thirty-two; the best day's sport was Friday, June 28, when he landed fourteen salmon weighing 313 pounds. Mr. Cameron fished six days, landing twelve salmon, weighing 233 pounds and averaging nineteen and a half.

Massachusetts—*Bromfield House, Boston; July 26.*—There has been a good deal of black bass talk here since the season opened, and as my party was said to have the best basket ever taken in one day from Massapoag Lake, Sharon, Mass., I give the score: One three-pounder, one two and a half, two of two pounds each, five of one pound each, and nine half-pounders. Smaller than that don't count. Our friend Morse, of Medford, took one last week of four and a half pounds from the same lake. Fishing parties who may visit the lake will find Capt. Thomas Decatur, of the Massapoag House, ready to furnish any information wanted. The number of sojourners at this delightful summer resort is daily increasing, and if Boston people generally knew of the attractions to be found on and about Massapoag Lake, Capt. Decatur's well kept hostelry would not be large enough to hold a respectable minority of the visitors during the vacation season. M.

Nantucket, July 27.—Bluefish plenty, but the wind has been so strong that the boats could not go outside. Next week there will be splendid sport, as the wind has driven the fish inshore. Sharks quite plenty; the catch as follows: *Vesta*, 3; *Undine*, 1; *Norcross Brothers*, 5; Yesterday a party brought in a ball fish about five feet long, which they caught while sword fishing. Jack Curlew.

New Bank, July 27.—A party chartered the yacht *Metrick*, yesterday, and on the south side of Nashawena Island encountered a fine school of bass, taking 25, the largest weighing 44 pounds. Charles S. Randall, Esq., caught one weighing 32 pounds at Cuttyhunk, this week; in fact, the south side of the islands are literally alive with bass and bluefish. The school of bass usually stay until the last of August. Concha.

Movements of the Fishing Fleets.—The number of fishing arrivals reported at this port the past week has been 66, viz., 16 from the Banks, with 220,000lbs. of codfish and 415,000 halibut, 45 from Georges, with 575,000lbs. codfish, and 5 from Shore mackereling trips, with about 400 bbls. mackerel of inferior quality. Mackerel have made their appearance in this vicinity, and the boat and dory fishermen have taken small quantities, while amateur fishermen have found good sport in their capture. The receipts of large mackerel have been confined to about 20 bbls. from Block Island, and with the exception of these and a few small lots of good 3s, the receipts have been confined to tinkers.—*Cape Ann Advertiser, July 26.*

Rhode Island—*Block Island, July 26.*—Three 50 pound bass were caught by Dr. Voris yesterday afternoon. A. D. D.

Pasque Island Club—*Pasque Island, R. I., July 21.—Mr. Editor:* Since our club opened, June 25, fishing has been excellent. The striped bass have been more abundant than for several seasons past. The largest so far taken being 30 and 31 pounds. There is great rivalry among the members as to who will be the fortunate one to take the largest bass, and thus gain the prize at the end of the season offered by the club. Our president landed a large black fish while fishing for bass, which turned the scales at 13½ pounds. One of our members struck a large bass a week ago that made one straight run until he had taken out all the line on the reel (900 feet) and then broke away. It was impossible to hold or turn him. We have all been conjecturing as to his possible weight. The writer has been here a week and has taken 117 pounds, the largest two weighing 24 and 25 pounds respectively.

July 25.—The writer had the pleasure and sport to-day of taking with rod and reel a striped bass weighing 60½ pounds. Labrax Liniatus.

New York—*Baldwinsville, July 21.*—Jack's Reef, Seneca River, at the mouth of the Big Ditch on Eel Wier Point, seven miles from here, is one of the best fishing points in this vicinity. Black and Oswego bass, catfish, etc., afford abundance and variety of sport. There are a number of camps there now, and success attends them all. Eels.

Adirondack Trout.—Mr. W. E. Webb, of this city, caught in Meacham's Lake (Adirondacks), three of the largest speckled trout which have been captured in those waters for several years. They weighed five, three and two and a half pounds, and were sent to Vice President Wheeler. The rod used was a Holberton split bamboo, weighing a little over seven ounces.

A Good Bass Country.—When our angling friends start out to renew the summer campaign on their old tenting grounds, or to discover new fields of conquest and renown, we make it a point, as a matter of duty toward our readers, to hint that loyalty to the craft calls for a record of the trip for these columns. In response to such an exhortation, a correspondent writes thus enthusiastically of the piscatorial attractions of Greenwich, N. Y., under date of July 21:

I find myself in the heart of a magnificent bass country. Within a mile of where I am writing you can kill as fine a string of fish in a couple of hours, either with the fly or dobson, as one need care for. Go north eight or ten miles and you strike Gifford's Lake, where are caught bass ranging from three-quarters of a pound up to three and a half, four, and four and a half pounds in weight. Further to the east Lake Coessayuna contains bass weighing from two to four pounds, and pickerel or muscallonge (whichever they may be is not fully decided as yet) running up as high as sixteen pounds. Then running across to Lake MacDougall you again find bass in abundance. Several New York and Troy parties have already been here, and they are still coming. Sportsmen should make Greenwich their base of operations, and thence branch out to the various points specified. Parties coming here can receive the best of accommodations, at most reasonable terms, by stopping with Mr. D. W. Mandell, a gentleman and sportsman—one of the Adirondack pioneers, and to whom one may apply for all information. In this quiet household one finds a home where his outgoings and incomings are governed by his own whim. My camp-meeting experiences recur to me, and I can now sing, with (*entre nous*) perhaps a greater appreciation of my blessings than then:

"This is the place I long have sought,
And wept because I found it not." H.

New Jersey—*Forked River, July 25.*—Weakfish and harb biting well. Some of our boats to-day took as high as 100. No large bluefish for some time past, but plenty of small ones, running from 1 to 3 pounds. Some fine large sheepshead have been taken during the week. Arthur.

Pennsylvania—*Bradford, July 22.*—That most delectable little fish, the trout, seems to make every little stream in this lively country his special home and delight. And no wonder. Water cold as ice, full of deep pools and sparkling ripples, shady banks and an abundance of food. What could a trout ask more? The Kinzua especially is worthy of notice for its trout, and, being little fished over, the sport to be had there is very good. Tuna.

White Perch at Tolchester Beach, Md.—*Baltimore, July 23.—Mr. Editor:* The steamer Pilot Boy is now making two trips a day to the celebrated beach of Tolchester, which has lately become as famous for its fishing grounds as years ago was the well-known Gersham Hall of our fathers, and during the warm weather the disciples of Izaak Walton are making daily visits, and are being well remunerated with magnificent catches of the finest perch of the Chesapeake. The fishing grounds are nearly opposite Gersham Hall, a few miles from Tolchester Beach, and are more commonly known as the deep shoals of Tolchester, and consist of a bar covered with oyster beds. Visitors to Tolchester can be accommodated with boats covered with awnings and accompanied with skippers, who have a thorough knowledge of the fishing grounds. During last week several well-known fishermen visited these shoals, and the catches of fish have been much greater than in former years. On Thursday last three different parties went aboard the Pilot Boy, and after two and a quarter pleasant hours' ride on the Chesapeake landed at Tolchester, and took sailboats for the shoals, in order to enjoy a few hours' sport. One of the boats returned with fifty dozen white perch; the second boat, containing the party of Mr. Clarke, were compensated with seventy-five dozen, while the third party, which consisted of S. M. Webb and five other well-known fishermen, caught over one hundred dozen fine black-backed perch, and brought them alive in a box in fine condition to shore. This is extraordinary fishing, and considering the poor sport of last season, seems almost incredible. The fish are caught with hook and line in twenty-five feet of water, while feeding on the oyster beds, and are far superior to the fish generally brought to market. I was one of Mr. Webb's party, and while catching the perch, two and three at a haul, I was reminded of "Artemus Ward's experience when in Salt Lake City." He was asked by a half dozen young widows to marry them, and when he respectfully declined the honor, they exclaimed with one voice, "It is too much." He thought it was the muchness of the thing he did not like. So, with the catching of perch on the above occasion, it was too much. E. B. N.

Virginia—*Bath Alum, July 26.*—Trout fishing is excellent in the mountain streams near Bath Alum Springs. The fish are large and of fine flavor.

Winchester, July 27.—A bass weighing 6 pounds, caught in the Shenandoah by Mr. Leo P. Wheat, was brought to Winchester this week. It was the largest ever seen there.

West Virginia Angling.—A bass weighing 6¾ pounds was captured by Charles Harmison, of Romney, West V., last week. Mr. Harmison was crossing the South Branch on horseback and discovered the bass in very low water, alighted from his horse and killed it with a stone.

Mississippi—*Paulding, July 20.*—If fish would only bite what a nice thing it would be to sit in the shade of some fine bay or magnolia and lure them with dainty bait this hot weather; but alas! joys come singly. We have bass (called trout here), bream, and perch for game fish, and I may add eels, catfish, buffalo, drum, etc., are also found here. There are no creels taken of consequence at present, owing to intense heat. Val.

Wisconsin—*Ashland, July 21.*—The continued heated weather has driven visitors here from every quarter. No less than fifteen different States are represented on the pages of the Chequamegon Hotel register for the past four weeks, showing that the attractions of this delightful resort are already popularly known. Guests are here from Massachusetts, Alabama and Colorado—east, south and west. Among them are many distinguished names. New York and vicinity is abundantly represented. Rev. Chas. Hall Everest and family, formerly of Puritan Church, Brooklyn, now of Chicago, are in town. Everybody goes fishing. Bass, pike and muscallunge are found in the lakes near by, and a dozen trout streams empty into the bay. The intense heat has interfered with anglers; nevertheless hundreds of pounds have been caught on favorable days. The weather is cool now, and hopes deferred are revived. Steam and sail yachts enliven the bay. The scenery is beautiful. No summer trip from the east can be more enjoyable than that by the great lakes, arriving either by the north or south shore and returning by the other. Visitors from sections not so accessible find the Wisconsin Central Railroad a comfortable route of access. Ashland is twenty-four hours from Chicago. Hal.

The Labrador and Columbia River Fisheries.—We are only too glad to learn from an interesting letter in the New York *Sun* that the reports of a bad catch in Labrador are unfounded. Quite to the contrary, the fishery on Labrador is pronounced very successful this season.

All the fleet is well supplied, and the weather has proved uncommonly propitious. The Newfoundlanders, however, still neglect to follow the advice of Prof. Hind, an attache of the Colonial Government, who, in his extensive researches throughout the island and its dependency, Labrador, found that in the northernmost parts of the latter, which are never frequented by fishing vessels, cod, salmon, mackerel and herring abound in seemingly inexhaustible quantities."

From the same enterprising newspaper we have interesting data from the pacific coast. Last year the catch of salmon reached 1,250,000 fish, averaging 23 pounds, caught in some 45 miles of nets, set out every night. The 28 canneries on the river put up 450,000 cases containing 11,600,000 pounds of salmon last season, and about the same quantity may be expected this year. Fish cost now something like 50 cents. In former days, when canneries were not so numerous, they were worth 10 cents. In British Columbia and Alaska 5 cents is the price.

Fisherman's Philosophy.—What cares the angler so long as the fish bite? A Philadelphia manufacturer was bluefishing at Barnegat the other day, when a telegram came, saying that his factory was burning up. The immediate reply was: "Building and stock fully insured. Bluefish taking the squid beautifully. Will return in course of a week."

Game Bag and Gun.

GAME IN SEASON FOR AUGUST.

Woodcock, *Philohela minor.*	Red-backed sandpiper, or ox-bird, *Tringa americana.*
Black-bellied plover, ox-eye, *Squatarola helvetica.*	Great marbled godwit, or marlin, *Limosa fedoa.*
Ring plover, *Egialitis semipalmatus.*	Willet, *Totanus semipalmatus.*
Stilt, or long-shanks, *Himantopus nigricollis.*	Tattler, *Totanus melanoleucus.*
Red-breasted snipe, or dowitcher, *Macrorhamphus griseus.*	Yellow-shanks, *Totanus flavipes,*

"Bay birds" generally, including various species of plover, sand piper, snipe, curlew, oyster-catcher, surf birds, phalaropes, avocets, etc., coming under the group *Limacolæ* or Shore Birds. Many States permit prairie fowl (pinnated grouse) shooting after August 15.

Opening of the Season.—The silence of field and copse was this morning broken by the opening shots of the campaign. To-day the patient-waiting and law-abiding sportsman may reap to the full the reward of his discretion. From the scores of reports sent to us from different parts of the country and published from time to time in our game columns, we may infer an unusual amount of good sport this season.

Man and nature have combined for this result. The principles of protection, thanks to the continual drumming and thrumming on the subject by its advocates, have become better understood, and consequently more carefully observed. A mild winter and an early spring have been most favorable for nesting, and in many localities the birds have improved their opportunity for second broods. Ere another issue of the FOREST AND STREAM comes to our readers they will have gone forth with dog and gun to prove anew the pleasures of the field. We shall be most happy to record for them their successful notes. Royal sport to all! But remember that butchery is not sport.

MASSACHUSETTS—*Salem, July* 29.—Shooting quiet, except on woodcock and uplands. They catch it. R. L. N.

Nantucket, July 29.—Black ducks very thick, but I think they will leave before September 1. A great many grass plover, which are very wild. Large flocks of curlew are seen now and then. JACK CURLEW.

NEW YORK—*Hornellsville, July* 29.—Grouse, woodcock and robins have all raised two broods this season. Ruffed grouse will be plentiful if we can get evidence to convict some of our illegal shooters. J. O. F.

PENNSYLVANIA—*Bradford, July* 22.—The prospects for good shooting were never better. Woods are full of partridge; deer never so plenty; and bear are to be found any day. Let some weary brother of rod and gun take for his vacation a trip to the Bradford Oil District, make the Parker House (kept by the old favorites of Niagara, Messrs. Lewis & Davis) his headquarters, and our word for it he cannot find a more pleasant place for a short stay and good hunt after the season opens. TUNA.

TENNESSEE—*Nashville, July* 27.—Prospects for quail and large game never better throughout the State. J. D. H.

MISSISSIPPI—*Paulding, July* 20.—Our game law covers everything from March 15 to September 15, and Nimrod is quiet at present. Squirrels and quails are numerous, and turkeys are rather plentiful. Deer are occasionally met with. Take it all around, the shooting season bids fair to be lively. VAL.

OHIO—*Lancaster, July* 27.—Woodcock are unusually plentiful in the sloughs west of the city this summer, but are let severely alone by sportsmen on account of the rattlesnakes which infest these swamps in great numbers. The prospects for quail were never more abundant, but then this splendid little game bird was never scarce here. Squirrel have been very scarce, but will likely be here in large numbers in the fall. The Hockhocking Shooting Club will send a party into the wilderness of Northern Minnesota this fall for bear and deer. We are making great expectations and anticipate a fine time in the woods. SANDY.

WISCONSIN—*Menasha, July* 23.—Game will be very plenty this fall. The past winter was so mild that all kinds of game have increased wonderfully.

COLORADO—*Hot Sulphur Springs, July* 24.—Mountains are alive with tourists and sportsmen. Grouse prime, and both shooting and fishing excellent. W. N. B.

FOR COLORADO.—A. Williamson, Esq., of Edinburgh, Scotland, *en route* for Colorado, paid us a visit on Monday last. This gentleman is a noted deer stalker, and is now going to try his hand with the wapiti. Mr. Williamson's battery consists of a double Express rifle.

MESSRS. E. K. TRYON, JR., & CO.—Wanting to be on the safe side when we wrote about that leading firm in Philadelphia with the above name, we said that "their house had been in existence for fifty years." Messrs. Tryon write us that we were in error. "The present business was established by G. W. Tryon in 1811, making the age of the house sixty-seven instead of fifty years. We claim to be the oldest gun house in the country, and our business is now in the third generation." This is indeed a long and honorable career.

PIGEON MATCHES.

CANADA—*Toronto, July* 23.—Club shoot, Lsanes Island; 15 blackbirds; two traps, H and T; 80 yards boundary, 20 yards rise. Twenty-five members toed the mark with the following result:

H Moore	14	W Kennedy	12
D Smith	14	J H Graham	11
J Webster	13		

MAINE—*Topsham, July* 29.—The sportsmen of Brunswick and Topsham, Me., have organized a club under the name of Riverside Shooting Club. Fourteen members were admitted, and the following officers elected for one year: C. M. Baker, President; W. A. Stinson, Sec., and C. L. York, Treas. A. Q. Gond and Sam Knight, together with the above-named officers, were chosen as the Executive Committee. A club shoot for silver medal was held July 26, with the following result:

C Gond	1 1 1 0 1 1 1 1 1 1 1 1 1 0 1	13
C L York	0 0 0 0 1 1 1 1 1 1 1 1 0 1	10
C M Baker	0 0 1 1 1 1 1 1 1 1 0 1 1 0	10
C Keyes	1 1 1 1 0 1 0 1 1 0 1 1 1 1	11
S Knight	1 1 1 1 0 1 0 1 1 1 0 1 1 1	12
N A Stetson	0 0 0 0 0 0 0 0 0 0 0 0 0 1	1
B Lakey	1 0 0 0 0 1 0 1 0 1 0 0 0 1	5
J S Bonney	0 1 0 0 0 1 1 1 0 1 1 1 0 0	7
A Q Gond	1 0 1 1 1 1 0 0 1 1 1 0 1 0	10
M C Hall	0 0 0 0 0 0 1 0 1 0 1 1 0 0	7

CONNECTICUT—*Stamford, July* 26.—Second competition for Weed Bowl; Mole trap:

Wm Scofield—9¾ lb., 10-bore Parker gun—1 0 1 0 1 0 1 1 0 1 1 1 0 0 1 0 0 1 1 1 1 0 1 0 0—14.

R H Gillespie—7¼ lb., 12-bore Parker gun—1 0 0 0 1 1 1 0 0 1 1 1 0 0 0 0 t 0 1 0 1 0 0 0—10.

A G Weed, Jr—7¾ lb., 12-bore Parker gun—1 0 1 1 0 0 0 0 1 0 0 1 0 0 1 0 1 0 0 1 0 0 0 0—8.

L B Gaylor, Muzzle-loader—0 1 0 1 0 0 1 0 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0—5.

Thos Cumming—10 lb., 10-bore Scott gun—0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0—0.

Second match for Bishop revolver:

F K Grain—8¾ lb., 10-bore Parker gun—0 1 0 0 0 1 1 0 1 1 0 1 1 1 1 1 1 0 1 t 1 1 0 1 1—17.

R H Gillespie—7¾ lb., 12-bore Parker gun—1 1 1 0 1 0 0 1 1 1 0 1 1 0 0 0 1 1 0 0 1 1 0 1 1—15.

G S Foote—8 lb., 12-bore Remington gun—1 1 1 1 0 1 1 1 0 0 1 1 0 1 0 0 0 1 0 1 0 1 0 1 1—15.

Wm Scofield—9¾ lb., 10-bore Parker gun—0 1 1 0 0 1 1 0 1 0 1 0 0 0 0 0 1 1 0 1 t 0 1 1 1—13.

H Gothoul, Jr—8½ lb., 10-bore Parker gun—1 1 1 0 1 1 0 0 1 1 1 0 0 0 t 0 0 1 1 1 0 0 0—13.

G Hendrie—9¾ lb., 10-bore Parker gun—0 0 0 1 0 1 1 0 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1—12.

A G Weed, Jr—7¼ lb., 12-bore Parker gun—0 0 0 0 0 0 0 0 0 0 1 0 t 0 1 1 1 1 0 0 0 1 1 1—10.

MEDWAY VS. FOUNTAIN.—Match at Brooklyn Driving Park, Parkville, L. I., July 24, between members of Medway Gun Club, of Malawan, N. J., and Fountain Gun Club, of Brooklyn: 21 yards rise, 80 yards boundary, 1¼ oz. of shot, H and T traps. Long Island rules to govern:

Medway Gun Club.		Fountain Gun Club.	
Lambertson	1 1 1 1 1 1 1—7	Eddy	1 1 1 1 1 1 1—7
Terbune	t 1 1 1 1 1 1—7	Miller	1 1 1 1 1 1 1—7
S Lambertson	1 1 1 1 1 1 1—7	Bohling	1 1 1 1 1 1 0—6
Warts	1 1 1 1 1 1 1—7	De Fraine	1 1 1 0 1 1 1—6
Ilyer	1 0 1 1 1 1 1—6	McMahon	1 0 1 1 1 1 1—6
Warner	1 1 1 0 t 1 1—6	Wingert	1 1 1 0 t 1 1—6
Applegert	1 1 1 0 1 1 1—6	Race	1 1 1 0 * 1 1—5
Haight	1 1 1 0 1 1 1—6	Kearney	1 1 1 1 * 1 0—5
Disbrow	1 0 1 1 1 0 1—5	Madison	1 1 0 1 1 * 1—5
Irving	1 t 1 0 0 1 1—5	Blankley	1 t 1 1 0 0 0—4
Van Brockle	1 t 0 0 1 1 1—5	G'Connor	0 * 1 1 1 1 0—4
Wilson	0 0 1 1 0 1 1—4	Slano	0 1 1 1 0 t 0—4
Wychoff	1 1 0 0 1 0 1—4	Helmstedt	1 0 0 1 1 0 1—4
Conover	1 0 0 1 0 1 1—4	White	1 1 1 0 0 1 0—4
Vanderveer	0 0 1 1 0 1 1—4	Cleaver	0 0 0 1 0 0 0—1
Total	83	Total	74

Referee—Mr. W. A. Dunlap. Time of shooting, four hours and ten minutes.

LONG ISLAND GUN CLUB—*Dexter's Park, Cypress Hills, L. I., July* 26.—Regular monthly pigeon shoot of the Long Island Shooting Club for the club championship cup; shot for at seven birds each from H and T traps; handicapped rise, 80 yards boundary; L. I. S. C. rules:

L Redding..25 yds.	1 0 1 1 1 1 1—6	Durfee....25 yds.	1 0 1 1 1 1 0—5
Broadway...25	0 1 1 1 1 1 1—6	Madison...25	1 1 0 1 1 1 *—5
Gildersleeve21	1 1 1 0 1 1 1—6	Walton ...21	1 1 1 1 * 0 0—4
Robinson...21	1 1 0 1 1 1 1—6	J Miller....21	1 0 0 1 1 1 0—4
Hemming ..21	1 1 1 1 1 * 1—6	Wynn 25	0 1 0 0 0 1 1—3
Hughes.....25	1 1 1 1 1 0 1—6		

Ties on six.

Redding	1 1 1—3	Robinson	1 1 1—3
Broadway	1 1 1—3	Hemming	1 1 0—2
Gildersleeve	1 1 1—3	Hughes	0 w

Second tie.

Redding	1 1 1—3	Gildersleeve	1 1 0—2
Broadway	1 1 1—3	Robinson	0 w

Third tie.

Redding	1 1 1—3	Broadway	0 1 1—2

The following withdrew: Shot at 5—Thompson (25) killed 3; Morton (21) 2. Shot at 3—Atkinson and Blankley each killed 1; Williams (21) 2. Shot at 3—Atkinson and Blankley each killed 1; Williams (21) lost 3 out of bounds; Terrett (25) missed 2, lost 1 out of bounds; H. Miller missed 1, lost 2 out of bounds.

Same Day—Sweepstakes, $2 entry, shot for at three birds each, 25 yards rise, 80 yards boundary:

*Broadway	1 1 1—3	*Gildersleeve	1 1 1—3
*J Miller	1 1 1—3	*Williams	1 1 1—3

Messrs. Wynn, Terrett and White each killed 2 out of 3. Madison, Atkinson, Hughes, Hemming and Joeger each killed 1 out of 2 and withdrew. Morton killed 1 out of 3, and Robinson missed his first bird and withdrew.

* Divided the money. Referee, Mr. C. E. Dexter.

NEW JERSEY—*Hackensack, July* 23.—Bergen County Sportsmen's Association; weekly badge contest, glass balls, hidden trap; fifteen yards rise, fifteen balls each:

Ricardo	14	Wood	10
Blauvelt	18	Anderson	6
Linn	14		

NEW JERSEY—*Spring Lake Beach, July* 27.—Pigeon shooting match between shooting teams of ten from New York, members of the Sea-Side Gun Club, and ten from Philadelphia; 21 yards rise, 80 yards boundary, H and T traps, 1¼ oz. shot, Long Island rules:

New York.		Philadelphia.	
Hamilton	1 1 1 1 1 1 1 1 1—10	Gwens	1 1 1 1 1 1 1 1 1 1—10
Hastings	1 1 1 1 1 1 1 1 1—10	Green	1 1 1 1 1 1 1 1 1 1—10
Yales	1 1 1 1 1 1 1 1 1—10	Clarkson	1 1 1 1 1 1 1 1 * 1—9
Leonard	1 1 1 1 0 1 1 1 1—9	Forteaque	1 1 * 1 1 1 1 0 1 1—8
Bowes	1 1 1 1 1 1 * 1 1—9	Budd	0 1 1 1 0 1 1 1 1 1—8
Putney	1 1 t 0 1 0 1 1 1 1—8	Spencer	1 0 1 0 0 1 1 1 1 1—7
Ellis	1 1 * 1 1 0 1 1 1 1—8	Sanford	1 1 1 0 1 1 0 0 1 1—7
Clark	1 1 1 0 0 1 1 1 0 1—7	Mason	1 1 * 1 1 0 1 1 * 1—7
Cleghorue	1 1 1 0 1 1 0 1 6 1—7	Weir	t 1 1 0 0 1 0 0 1 1—6
Nelson	1 0 1 1 0 1 0 0 1 1—6	Mullen	1 0 0 1 0 1 1 1 0 0—5

Ties on ten—miss and go out.

New York Side.		Philadelphia Side.	
Hamilton	1 1 1 1 0—5	Owens	1 1 1 1 1 1 0—6
Hastings	1 1 1 0 —4	Green	1 1 1 1 1 0 —5
Yales	1 1 1 0 —3		

Second tie.

Hamilton	1 1 1 1 1 1 1 1 1 1—10	Owens	1 1 1 1 1 1 1 0 1 1—9

July 27.—Match for Sea-Side Gun Club's badge; 10 birds each, 21 yards rise, 80 yards boundary, H and T traps; Long Island rules:

Hastings	1 1 1 1 1 1 1 1 1—10	Hempstreet	1 1 1 1 0 1 1 0 0—7
Sands	1 1 1 1 1 1 1 0 1—9	Phelps	1 0 1 1 0 1 1 0 1 0—6
Leonard	1 1 0 1 1 1 1 1 1—9	Nelson	1 1 1 0 0 1 1 0 1 0—6
Payson	1 0 1 1 0 1 1 1 1—8	Hastings	0 1 0 1 1 t 0 1 1 0—6
Howes	1 1 1 1 0 1 0 1 0—7	Coomes	1 0 1 t 0 0 1 1 0 1—0

Second Match—Pigeon sweepstakes, $5 entrance, 10 birds, 25 yards rise, 100 yards boundary; 5 traps, English rules. Ties shot off bird and bird.

Leonard	1 1 1 1 1 1 1 1 1 1—10	Peabody	1 1 0 0 1 1 1 1 1 0—7
Sands	1 1 1 1 1 1 1 1 1 1—10	Martinez	0 1 1 0 1 1 1 0 1 0—6
Hastings	1 1 1 1 1 1 1 1 1 0—9	Coomes	1 1 1 1 0 t 0 1 0 0—6
Olsen	1 0 1 1 0 1 1 1 1 1—8	Nelson	1 0 0 1 1 0 1 0 1 0—6
Payson	1 1 1 1 0 1 1 1 1 0—8	Lennox	0 1 1 0 1 0 0 1 0 0—4

Third Match—Glass-ball sweepstakes, $2 entrance, 25 balls, handicap rise, 80 yards boundary; Hogardus rules:

G Sands	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1—25
W C Irvington	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1—24
A Payson	1 1 1 0 1 1 1 1 1 0 1 1 1 1 1 1 1 1 1 1 0 1 1 1—22
G Coomes	1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 0 1 1 1 0 0—19
W Olsen	0 0 1 1 1 0 1 1 1 1 1 1 1 1 0 1 1 0 1 1 0 0 1 1 0—17
L B Peabody	1 1 1 1 1 0 0 1 1 1 0 1 1 0 1 1 0 1 1 1 0 1 0 1 0—17
W Payson	1 0 0 1 0 1 1 1 0 1 1 1 0 1 0 1 0 1 1 0 1 1 0 0 1—15
W Hempstreet	1 0 0 1 1 1 1 0 0 1 0 0 1 0 0 1 1 1 0 0 0 0 w
R Lennox	1 0 1 0 0 1 1 1 0 0 1 0 0 1 0 0 0 w
C F Manning	1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 0 0 w
A Washburn	0 0 0 0 1 0 1 1 0 0 1 1 0 1 0 0 0 0 w
L Hastings	1 0 0 1 0 0 1 0 1 0 0 0 1 1 0 0 0

LONG BRANCH GUN CLUB—*Elberon, N. J., July* 27.—The first event was a match for a cup at 10 birds; 5 traps, 25 yards rise, Hurlingham rules. Inslee A. Hopper missed first, fifth and seventh; E. Fox killed second and sixth.

Second Event.—Handicap sweepstakes, open to all members of the club; miss and go out; 5 traps, Hurlingham rules. B. West, 25 yds., 18; E. Murphy, 25 yds., 18; R. Murphy, 23 yds., 18; W. Murphy, 23 yds., 9; A. Jameson, 25 yds., 4; W. Green, 25 yds., 3; I. A. Hopper, 22 yds., 2; A. Sewell, 25 yds., 1. The stakes were divided among the three first named.

Third Event.—For the Durand badge; 50 glass balls, 3 traps, 18 yards; Long Island rules. Won by Walter Murphy on the following score: Walter Murphy, 41; Edgar Murphy, 37; Arthur Sewell, 34; R. G. Murphy, 24; B. West, 31; A. Jamieson, 29; I. A. Hopper, 4; F. Levey, 4; H. Howland, 7; E. Fox, 2.

Fourth Event.—Sweepstakes; 5 glass balls, 3 traps, 18 yards; Long Island rules. H. Howland, 4; J. Dodd, 1; F. Levey, 1; I. A. Hopper, 1. The club will meet next Saturday to contest for the club badge.

TENNESSEE—*Nashville City Park, July* 22.—The following matches were shot under the Hogardus rules; Bogardus traps:

First Match.

Maskey	1 1 1 1 1—5	Meadows	1 0 0 1 1—3
Legler	0 1 1 1 1—4	Gilbert	1 1 1 1 1—5
Lannom	1 1 1 1 1—5		

Ties on five divided stakes.

Second Match.

Maskey	0 1 1 1 1—4	Meadows	1 1 1 1 1—5
Gilbert	1 1 1 1 1—5	Lannom	1 1 1 1 1—5
Valentine	0 1 1 1 1—4	Legler	0 1 1 1 1—4
Wheat	0 0 1 1 0—2		

Ties on five divided stakes.

Third Match.

Burkholz	0 0 1 1 1—3	Waterman	0 1 1 1 1—4
Meadows	1 1 1 0 1—4	Wheat	1 1 1 1 1—5
Maskey	1 1 1 1 1—5	Legler	1 1 t 1 1—5
Gilbert	1 1 1 1 1—5	Valentine	1 0 1 1 0—3
Lannom	1 1 1 1 1—5		

Ties on five—Maskey, Gilbert, Lannom and Wheat, after breaking six straight balls each, divided stakes.

Fourth Match.

Burkholz	0 1 1 1 1—4	Valentine	1 0 1 1 1—4
Meadows	t 1 1 1 1—5	Waterman	0 1 1 0 1—3
Legler	1 1 1 1 1—5	Wheat	1 1 1 1 1—5
Maskey	1 0 0 1 1—3		

Ties on five divided stakes.

Fifth match, double balls, 16 yards rise.

Burkholz	11 11 11—6	Waterman	10 10 10—3
Meadows	10 00 10—2	Valentine	11 10 10—4
Gilbert	10 10 10—3	Legler	11 11 11—6
Maskey	10 10 11—4	Brown	10 10 10—3

Burkholz and Legler divided stakes.

Sixth and seventh match.

Burkholz	1 1 1 1 1—5	0 0 1 1 0—2	
Oules	0 0 1 1 0—2	0 1 1 0 1—3	
Meadows	0 1 1 0 1—3	1 1 1 1 1—5	
Waterman	0 t 0 1 1—3	1 0 0 0 0—1	
Legler	1 1 0 1 0—3	1 1 1 1 1—5	
Wheat	1 1 1 0 1—4	1 1 1 1 0—4	
Brown	0 1 1 1 1—4	1 1 1 0 1—4	
Valentine	1 1 1 1 1—5	0 t 1 1 1—4	
Brackman	1 1 1 1 1—5	1 0 0 1 1—3	
Maskey	1 1 1 1 0—4	1 1 1 1 1—5	
Nicholson	0 1 0 0 0—1	1 0 1 0 0—2	
Brooks	0 0 1 1 0—2	0 1 1 0 1—3	
Jones	1 1 1 1 1—5	1 1 1 1 1—5	
Gilbert	1 0 1 1 1—4	1 1 0 1 1—4	

In both the above matches the ties on five divided stakes.

Eighth Match.

Burkholz	0 0 1 1 0—2	Waterman	1 0 0 1 0—2
Meadows	1 1 1 1 1—5	Brown	0 1 0 1 1—3

J. D. H.

MICHIGAN—*Detroit, July* 25.—Match for Detroit Gun Club medal club rules; 21 yards, 80 yards boundary:

E H Gillman	1 1 1 1 1 1 1 0 1 1 1 1 1 1 1—14
"Nimrod"	0 0 1 1 0 1 0 1 0 1 0 1 0 1 1—8
J E Long	0 1 1 0 w
J V D Eldridge	1 1 1 1 1 1 1 1 1 1 1 1 0 1 1—14
Phil Jones	1 1 1 1 0 1 1 0 w
F Gregory	1 1 1 1 1 1 0 1 w
W Schwelkart	1 1 1 1 1 1 0 1 0 w
Goff Steuton	1 1 1 0 1 1 1 1 1 0 w

Ties on fourteen—26 yards.

E H Gillman	1 1 1 0 1—4	J V D Eldridge	0 1 0 1 w

OHIO—*West Alexandria, July* 20.—Twin Valley Sporting Club; match between L. W. Eltzroth and J. E. Motter; ten double rises each; 20 yards rise, 15 yards between Hogardus' side traps. Paine's ball. Bogardus rules to govern:

Eltzroth	01 11 11 11 11 11 01 11 11 11—18
Motter	11 10 11 00 10 11 11 11 10 11—15

IOWA—*Lemars vs. Sioux City.*—Match at Lemars, July 23; wild pigeons:

Sioux City Squad.		Lemars Squad.	
Kirk	1 1 0 1 1 1 1 1 1 1—9	Myers	0 0 1 1 1 1 1 0 1 1—8
Burton	1 1 1 1 1 * 1 1 0 1—8	Wild	1 1 t 0 1 0 1 0 0 1—6
Athey	1 1 1 1 1 0 1 1 1 1—9	Porter	0 1 1 1 1 0 1 t 1 1—8
Goeway	1 0 1 1 1 1 1 t 1 1—9	Parks	1 1 0 1 1 0 1 0 1 0—6
Jackson	1 1 1 1 1 1 1 1 1 1—10	Aldrich	1 1 1 1 1 1 0 1 1 1—9
McDonald	1 1 0 1 1 1 1 1 1 1—9	Perry	1 1 1 0 1 1 1 1 0 1—8
Total	54	Total	44

BOGARDUS.—*London, July* 29.—Capt. Bogardus shot a pigeon match to-day with Capt. Shelley, of the Nottingbill Gun Club, for £200 each, to shoot 100 birds at thirty yards rise. Capt. Shelley retired at the 69th bird, having killed only 64, while Captain Bogardus had killed 77. The latter continued shooting and killed 84 out of 100 birds. This is the highest score ever made in England.

Rational Pastimes.

WITH A BOW AND ARROW.—"You see," said Dr. Carver, as he deposited a whole sheaf of brightly feathered arrows on a table, took off his umbrageous felt, and drew up a chair, "I must be shooting something or other all the time. If it isn't a Winchester it's a bow and arrow. Pretty, they are." But most too fine! Fancy things, these arrows, for handsome young ladies to shoot on grass plats at straw targets. Now, an Indian arrow is a good bit longer—maybe thirty-two inches—and when a Sioux draws it check up to the bow it fairly hums when he lets it fly. An Indian arrow has grooves cut in it behind the barb, that is to say the ones they use in hunting, so that the blood can flow, otherwise the wood would spoil and swell. The fighting arrows are nasty things. The barb is so put on the shaft, that when it hits you the steel, or old hoop iron, stays in the flesh when you go to pull out the arrow. Dear sakes! what ugly wounds I have seen them make. An Indian boy begins to handle a light bow when he toddles, maybe at four or five. His bow is taller than he is. He shoots at most anything around the camp. When he is twelve he uses sharp arrows. A boy must be strong at eighteen to use a man's bow. Now, a white man who takes an Indian bow for the first time has all he can do to bend it. It wants some strength, but more knack. The bow is made straight. When it is strung, the cord, even when in tension, almost touches the bow. It is thick, some 4½ to 5 feet long—that is their hunting bow—and has extra stiffening by having sinews pasted on it. I have seen We-shessa-has-ka, that's the Long Man, and he was the best of the Ogala Sioux, kill an antelope with his arrow at 125 measured yards. We-shessa-has-ka was nearly seven feet tall, and a good Indian. On horseback, broadside to an buffalo, I have more than once known that Indian to send an arrow clean through a big cow. The arrow hung out on the other side. The bow for horseback and for war is a trifle shorter, and maybe stiffer. You do not draw the arrow to the eye, but catch aim as I do when shooting from the hip. That can only be acquired by long practice. The string is drawn by the clutch of the whole fingers, though some of the tribes use the thumb and three fingers. The Long Man could shoot an arrow in the air out of sight, and so can I (the Doctor pointed to an arrow buried up to the feather in the ceiling of our office, his own pecular ornamentation of the FOREST AND STREAM sanctum). I think that in a couple of months I could get into perfect practice, for I used to hold my own with any Indian on the plains. Sometimes after I had been shooting with my Winchester, and Indian would come up and show his bow, and tell me his bow was 'muchee good;' but then I used to take his own bow and beat him at it.

"To pass away the time when I was at the Brooklyn Driving Park, I bought me an English bow and arrows of Holberton, and soon got into the trick of it. I hit blocks of wood thrown into the air quite as often as I missed them. The English bows and arrows are fancy, but good. I would rather have an old Sioux one, made of hickory or ash; but the bows bow I ever owned was made of buffalo ribs. An Indian carries his quiver of arrows over his right shoulder, so that he can get his arrows quickly. When he has discharged one arrow (the

Doctor pronounces arrow with a single letter; he calls it au R), with the same motion as he uses in pulling the string he clutches another arrow. If he shoots one hundred yards he has three or four arrows in the air, all going at the same time. It's great fun shooting at a bird with a long tail that flies over the prairie. Knock his tail out and his steering apparatus is gone. I have knocked the tail out of many a one, and so caught him in my hands when he tumbled. See here. Talking about these things just makes me long to be back again on the plains. New York is a mighty good place, and I have made lots of friends; but somehow I want a horse, and a big field with miles on miles before me to gallop over, and buffalo just a showing on the divide." And here Dr. Carver shut his eyes and seemed lost for a while in the visions of rolling prairies in the far-off western wilderness.

A CHAPTER ON ARCHERY.—*Mr. Editor:* It is impossible in this article to go into the history of archery, or even lay down all the necessary rules and directions for practicing the same, but there are some hints that can be given in this short chapter that will very much assist the beginner. Archery appears to have become very popular among us lately, owing a great deal to the charming articles written by Mr. Maurice Thompson. He has done more to introduce this splendid sport than any one else, and it is right and good that it should be so popular, for no other pastime has so much to be said in its favor. It is the healthiest, noblest and most graceful of all our out-door sports. Mr. Thompson has made some statements, however, in regard to bows which has surprised many archers. It is possible that he has never used a bow of Spanish yew, the lightest, strongest and most lively of all woods. Lemon wood, whether self or backed with other hard woods, makes a cheap and heavy bow, very little admired among archers. Italian yew comes next, and English yew last in the list of yews, but all of them are ahead of other woods. Mr. Thompson evidently has never handled any of that prince of maker's bows and arrows, viz., T. Aldred, of London, or he would not praise so highly some other makers. Get the best bow you can afford—it is the cheapest in the end—but do not overweight yourself with too heavy a weapon; it will spoil your aim and cause you to shoot wild.

To String the Bow.—I believe it is impossible to teach this simple thing by words. It is better to get some friend to show you. Do not attempt to copy the lady in last week's *Harper's*. The action, as shown in the print, is decidedly wrong. The proper way is to place the lower end of the bow against the left side of the right foot, which should be slightly advanced, grasp the plush with the right hand, and pull toward you, while at the same time push from you with the left hand the upper end of the bow. When bent enough, slip the loop in the nock with the thumb and first finger. Always remember to bend the flat side of the bow out. Now place the arrow on the string at right angles with the bow, stand perfectly erect, with the left side toward the target, looking straight at it over the left shoulder, extend the left hand fully, with the bow firmly grasped, toward the gold, and see it to the left of the bow, draw back the arrow and string with the two first fingers, and as soon as your hand touches your cheek bone let it go quickly. Look at the target intently, but not at the arrow, which, by the way, should rest to the left of the bow. The position in Thompson's book, "The Witchery of Archery," I deem faulty. The archer faces the target instead of standing with the left side toward it.

Best bows for ladies are those pulling from twenty to thirty pounds, and gentlemen from forty to sixty pounds. The regular distance for ladies to shoot is from fifty to seventy-five yards. Gentlemen shoot from seventy-five to one hundred yards. Beginners must commence at ten yards, and increase the distance as soon as they can hit the target twice out of three arrows. The necessary implements are the bow, arrows, arm guard, glove quiver, target and stand, and a tassel to wipe off the arrows. Be careful to shoot on a lawn where the grass is short, for arrows hide in the most wonderful manner, causing much vexatious delay.

W. HOLBERTON, President Oritani Archers.

LACROSSE.—Last Saturday, at Prospect Park, Brooklyn, the Prospect Park Lacrosse Club won two goals of lacrosse to one by their opponents, the New York Athletic Club team.

CRICKET.—This is a whole week of cricket in the immediate vicinity of New York. Monday, the Peninsulars, of Detroit, Mich., played the St. Georges at Hoboken; Tuesday, the Peninsulars played the Staten Island Club; yesterday, the St. Georges met the Merions, of Philadelphia, at Hoboken; the same clubs play again to-day; the Peninsulars play the Germantown Club at Philadelphia to-day, and again to-morrow; Friday and Saturday the Merions play the Staten Island Club.

PENINSULARS VS. ST. GEORGES.—In a match at Hoboken last Monday, between the Peninsulars, of Detroit, Mich., and the St. Georges, of this city, the former were easily successful, and displayed much strength in bowling, batting and fielding. It should be explained that among the absentees of the St. George Club were Messrs. Soutter, Cross, J. R. Moore and Jones, three of their strongest batters and the club's swiftest bowler. The score is as follows:

ST. GEORGE.

First Inning.		Second Inning.	
Bance, b Dale	10	b Dale	0
Hosford, b White	2	b Dale	3
Giles, c Irvine, b White	0	b Dale	16
Marsh, b Dale	1	b Dale	14
Moeran, b White	5	b Dale	0
Moore, b Dale	1	b Francis	8
Roper, c Dale, b White	0	l b w b Dale	0
Sleigh, b Dale	0	b Dale	0
Talbot, c Calvert, b Dale	2	l b w b Francis	0
Conover, b Dale	2	b Francis	8
McDonald, not out	0	c Davies, b White	0
		Byes, 6; leg-byes, 2	8
Total	22	Total	58

FALL OF WICKETS.

First inning	2	10	10	13	20	20	20	20	22	22	—22
Second inning	0	6	26	26	34	34	35	56	57	58	—58

PENINSULARS.

First Inning.			
Francis, b Moeran	23	Calvert, run out	11
White, b Giles	5	Banfard, c Marsh, b Moeran	0
Davies, c Bance, b Giles	1	Heigho, not out	1
Irvine, Bance, b Moeran	16	Littlejohn, b Moeran	7
Dale, c Giles, b Marsh	12	Byes, 7; leg-bye, 1	8
Armstrong, b Marsh	0		
Hinchman, l b w b Moeran	0	Total	83

FALL OF WICKETS.

First inning	8	24	48	49	49	51	69	69	78	83—83

Umpires—Messrs. Smith and Young.

Answers to Correspondents.

No Notice Taken of Anonymous Communications.

☞ A number of anonymous correspondents will understand why their queries are not answered, when they read the lines at the head of this column.

J. L. E., Palatine Bridge.—See article in to-day's issue on spaying.

E. J. S., Bedford av., Brooklyn.—Excellent hotel at Scroon Lake

B. L. H., Holidaysburg.—Address Fowler & Fulton, 300 Broadway, New York, about the ball.

M. J. S., Vermilion, La.—It is incurable. Dog never is worth anything. We advise getting rid of him.

R. D., Kingston, Adams Co, Mass.—We can send it to you, second-hand, in good condition: postpaid for $1.50.

A. D. S., Fort Johnson, N. C.—Messrs. Fowler & Fulton, of 300 Broadway, New York, are the agents for the Fletcher brass ball.

SKEPTIC, New York.—The Muriel is a cutter, pure and simple. Go see her, foot of Twenty-fourth st. East River, and convince yourself.

G. S., Buffalo.—About Lindey, Ont., you will find deer, duck, partridge and snipe shooting. Black bass, muscalonge and other fish in plenty.

C. H. W., Huntington, Ind.—Would like to know which is the best shell (paper shell) in use for breech-loader. Ans. American shells are excellent.

L. D. LEROY.—1. Your 32-inch rifle might be cut to 30 with impunity. 2. Would advise Western Texas and a sheep ranch. Could not give you address.

T. W. B. New York.—We can obtain for you a map of the Thousand Islands, published two years ago, for $1.00 There is no map of the eastern side of Lake Ontario, etc.

R. B. G., Portland.—The new work on yachts by Mr. Dixon Kemp will be reviewed at length in our columns, when you can judge for yourself whether it is suitable for you or not.

WHITE, Rawsonville, Ont.—If you read Mr. Hallock's letters you may from them learn just what railroad and steamboat lines he takes on his present trip. To repeat them here would be needless trouble.

J. L. R., San Antonio.—The firm you mention is perfectly reliable. They have attended to your case at our suggestion. Numbers of papers containing articles on boat building have been sent as requested.

CHESAPEAKE, Baltimore.—Give me a remedy to rid my kennel of fleas. Although I scrub my kennel it is infested, Ans. Lime or insect powder will destroy them if the kennel is kept clean; use a small amount of carbolic acid in the water you scrub with.

T., Baltimore.—Mr. W. L. Alden is one of the original founders of the New York Canoe Club. This organization is in a flourishing condition. There is ample opportunity for extensive canoeing in Baltimore waters and vicinity. Would advise you to get a Shadow canoe, as designed by Mr. Alden.

HUNTER.—The obstacle to making a fortune by market hunting is the difficulty of communication between the game country and the markets. The State of Texas, as you will often see in the accounts of our correspondents, is a good country for game. If you could send your game to a suitable market.

R. L. G.—1. Four men shooting rifle at target for prizes; score counted string measure. A makes one shot on B's target and claims another shot. Objects and they leave it for your decision. 2. Are there rules governing string shooting and where can I get them? Ans. A loses. 2. No rules save custom.

W. E. H., North Manchester.—How does the shot manufactured by —— of New York compare in quality with —— and other first-class makers? Ans. Very favorably. We may say shot is shot. No manufacturer now can put shot which is not spherical on the market. Seconds are sold, but then they have no name put on the base.

QUILLDRIVER, Milford.—What cal. pistol and length of barrel is used, or required by rules for fine target practice offhand, and is trigger pull limited? Can you send any printed rules for such practice, etc? Ans. Pistols not limited as to cal., but must not be over 12 inches long. The 22 cal. Stevens most in use; plain sights. Trigger pull not limited. No rules.

D. W. C. P.—Curare is very difficult to obtain and is only procurable from specialists. It is worth 10 cents a grain. We have not the least confidence in its capability for curing hydrophobia any more than with asparagus tops. Read the paper, which gives full details about hydrophobia and what has been done for it. You might obtain curare in Boston.

V. & Co., Warren, O.—My setter pup, 6 months old, has a large lump formed on his neck under his jaw, has come within last five days, his hair is also coming out, and to-day for first time refuses to eat. What is the trouble, also what shall I do for him? Ans. He is probably having distemper, and should be systematically treated for the disease. Your question about gun not received.

ROD AND GUN, Buffalo.—Have a valuable setter pup, 3 months old, which is troubled with continuous itching. The hair is coming out rapidly from behind his ears, over his eyes and around his feet. It is not caused by vermin. Can you tell me what ails my dog, and a remedy for the disease? Ans. Very probably has lice. Use Kerosene on the parts afflicted, and then wash with castile soap and water.

T. D., Utica.—In your last edition you publish an account of worms in puppies, and you say, "we publish Mr. Wanmaker's ideas with pleasure. But worms exist in the puppies when they are born, even before birth. Parasites are discoverable in innumerable creatures when in *utero*." Will you be kind enough to state the reason? Ans. In such cases it is through the blood of the mother. See Kennel.

C. E. W., New York.—After the distemper my setter puppy had a strange jerking of the legs. What shall I do? What is the matter. Ans. Your dog has St. Vitus' dance. Give him 1½ grain of quinine, with ⅙ grain of nux vomica in a pill three times a day. Keep him in the open day. Every third day open the bowels with castor oil; small doses. Try and build him up. We regret to say that the chances are against a perfect recovery.

J. C. S., Philadelphia.—My bitch had a fit, and then allowed her pups to draw milk from her. Will it hurt puppies? Please give best receipts for fits and distemper. Ans. The pups are very likely to be affected in such a case. There is no "receipt" for distemper or fits any more than there is for typhoid fever in man. Distemper is a form of disease which requires systematic treatment in accordance with symptoms as they develop.

C. McJ.—Use ¾ inch oak for a lee board for your canoe. About 30 inches long, 16 wide on bottom and 8 on top. Round off corners and chamfer down edges. A neat method of shipping it is to have two hooks or plates near the top which are to fit into corresponding holes, or sockets, brass lined, in the deck. You can then readily lift it from side to side when you go about. Strengthen the upper part which receives the hooks by having it ¾ inch thick, or by nailing with copper rivets a piece across the top 4 inches wide.

W. E., St. Dands, Ontario.—1. What is the lowest price of "Hallock's Gazetteer" mailed to a Canadian post office? 2. Also, what are glass balls per dozen? 3. What is the best material to make a tent out of? How is it to be made, one that a person can carry? Ans. 1. Three dollars. 2. Two cents each. 3. Canvas or thick drilling, or duck will do. Cut a single piece 15 feet long and 10 feet wide, then when in the woods, select a sapling of 15 feet, support this on two uprights and stretch the cloth over it, securing the bottom with pegs. Better go to an awning maker.

C. B. C., East Saginaw.—A catamaran of the most approved type is a very complicated structure, owing to many iron braces and stays, and as all these have to be shown on plan, the charge for the latter is high. Herreshoff controls the patent for flexible joints, and without these it is doubtful if the catamaran would be a success. You may write to George Roehr, boat builder, Harlem, who may do better with you. See answer to "F. C.," of East Saginaw. If possible we will publish designs later on, but cannot afford time and trouble at present during busy season.

C. M. F., New York.—The essential points in which the cutter differs from the sloop are, less beam, greater depth, and ballast. This renders such boats much easier in a seaway than the flat sloop, while they are absolutely "uncapsizable." You may put their mastheads under water, and yet they will right. Their rig differs by having the mast stepped nearly amidships, and cutting the sloop's jib into two smaller and, consequently, handier sails, one called the foresail or forestaysail, and the jib. This reduces the length of main boom. Bowsprit and top mast are always fitted to house.

J. R. S., St. John, N. B.—Do you consider Spratt's dog cake a good permanent diet, whether during the shooting season or otherwise, and what quantity would you consider a fair daily allowance for a medium sized field spaniel? Ans. A good food, but not used constantly day in and day out. Two to three biscuits at a meal is a fair quantity. They may be soaked in a little water over night. When in the field a provision of Spratt's biscuit is very valuable. We prefer Spratt's biscuit for the first meal we give a dog. Sometimes the biscuit scours the dog, especially when he is confined.

G. G., Montreal.—A man who builds and rigs boats for a livelihood is a professional, according to rules adopted by National Association of American oarsmen and other clubs, etc. Placing a man on the whiskers onboard is certainly to be considered as coming within the spirit and letter of Rule 21, Sailing Regulations of Montreal Yacht Club, nor does the plea of saving the mast justify such "planking out," for the mast should have been secured by means within the laws and rules of the club. The boat which sent and kept a man out on the whiskers forfeits her title to any prize.

F. C., East Saginaw, Mich.—You will find dimensions of catamarans in our No. 16, Vol. X. No plans have been published. Every builder follows his own bent pretty much. To make a successful catamaran it is necessary that the hulls should not be rigidly connected, but have flexible or universal joints. Upon the latter, Herreshoff, of Bristol, R. I., has a patent. To use it you must apply to him. He charges very high for a set of plans, because they are quite complicated, on account of the many iron braces, etc.; but you can readily enough build a craft according to your own ideas by following dimensions given in our paper. Can send you a sketch (not plan) of one for $2. It will show general arrangement, etc.

GUNNER, Providence.—1. What would be the result in loading a 7 lb. double gun, 11 gauge, muzzle, laminated steel barrels with 4½ drams best coarse powder and 1¼ oz. shot, each barrel in the ordinary manner? 2. Where can I get "Fur, Fin and Feather," and when does the next edition come out, and the cost? 3. In your Gazetteer "Rules for Handling Guns" it says after firing one barrel the cartridge is to be taken out of the other to see if the charge has shifted. Please say whether this is really practical, and is it necessary. 4. Is there any possibility of loaded shells exploding when carried around the body? What part part of the body should the belt cover? 5. What is your opinion of —— shot gun? Ans. 1. A first-class kick, nothing more. 2 Address "Fur, Fin and Feather," New York. August. 3. If you use brass shells, examine the gun, if paper shells no matter. 4. None in the least. Around the waist. 5. A very good arm.

C. H. B., New Britain, Conn.—There is no special work upon yachting signals extant. Yacht clubs have adopted different codes, some Marryatt's, others Acker's, etc., but the International code is displacing all others, as it enables vessels of different nations to communicate. It is published in book form, and can be procured from the Bureau of Navigation, Navy Department, Washington, D. C., or we can get it for you. If you refer simply to club signals they are only of two kinds. Each club adopts a pennant according to its taste, this to be hoisted at the "fore" on schooners, and on the masthead of sloops. Each owner adopts his private colors, which he flies at the main of a schooner, or in place of the club flag on a sloop. All yachts must carry the Government yacht flag—the American ensign, with foul anchor surrounded by thirteen stars in the blue field. See club books of yacht clubs. For "Practical Boat Building" by Neilson, write to Van Nostrand, 27 Murray st., N. Y., and mention our name.

P. F. G., Amesbury.—1. What is considered a full choked gun? Is there any standard; or, in other words, how many No. 8 shot, 1¼ or Dixon's measure is a full choked gun supposed to put in a 30in. circle at 40 yds.? 2. How much would you consider a gun choked that will put in 425 No. 8 shot, 1¼ or Dixon's measure, 40 yards—30in. circle? Is it not more than is called full choked? 3. Is it an established fact that a full choked gun will throw shot harder than a cylinder gun, everything being equal as to powder and shot, same gun, one barrel full choked, other cylinder? Think it will. 4. Which grain (or number) a very fine grain or coarse grain of any kind of powder will give the highest velocity and best penetration, and which will give best pattern? (This question has been argued to considerable length in our club) 5. Is it considered necessary to use two pink-edge wads over powder to get hard shooting? 6. Is not a full-choked gun liable at any time (with best of care in loading) to give a very poor pattern, what we call open centre? Ans. 1. Two-thirds of the counted pellets is a fair rule. 2 Not the effects of a full-choke. 3. People seem to think so. Penetration pads look that way. 4. The finer grained the powder the greater the penetration. 5. Two pink-edge cartridges do give better effects. 6. No. There ought to be no irregularity.

THE COMMON SENSE CHAIR.—To look at this chair one would not believe it to be such a reliable and praiseworthy source of comfort as it really is. Talk of real comfort, why one does not know what it is until one has settled down into one of these chairs, with an interesting book, or a cigar, or, happily, both. One may praise the stuffed chairs endlessly, yet of one thing the fortunate possessor may be sure—that his Common Sense Chair is the most inviting and satisfactory resting place he can find. This opinion of the chair a new purchaser will confirm enthusiastically.—[*Adv.*

FOREST AND STREAM
ROD AND GUN

A WEEKLY JOURNAL,

DEVOTED TO FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, PRESERVATION OF FORESTS, AND THE INCULCATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUT-DOOR RECREATION AND STUDY:

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NEW YORK, THURSDAY, AUGUST 1, 1878.

To Correspondents.

All communications whatever, intended for publication, must be accompanied with real name of the writer as a guaranty of good faith and be addressed to the FOREST AND STREAM PUBLISHING COMPANY. Names will not be published if objection be made. No anonymous communications will be regarded.

We cannot promise to return rejected manuscripts.

Secretaries of Clubs and Associations are urged to favor us with brief notes of their movements and transactions.

Nothing will be admitted to any department of the paper that may not be read with propriety in the home circle.

We cannot be responsible for dereliction of the mail service if money remitted to us is lost. NO PERSON WHATEVER is authorized to collect money for us unless he can show authentic credentials from one of the undersigned. We have no Philadelphia agent.

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CHARLES HALLOCK, Editor.

T. C. BANKS, Business Manager. S. H. TURRILL, Chicago, Western Manager.

CALENDAR OF EVENTS FOR THE COMING WEEK.

Friday, Aug. 2.—Trotting at Buffalo, N. Y.; Freeport, Ill.; Sullivan, Ill. Base ball: Worcester vs Star, at Syracuse; Springfield vs Buffalo at Buffalo. Running meeting at Saratoga.

Saturday, Aug. 3.—Beverly Yacht Club Regatta of Swampscott; Duxbury Yacht Club Regatta. Base ball: Chicago vs Indianapolis, at St. Louis; Cincinnati vs Providence, at Providence; Milwaukee vs Boston, at Boston; Worcester vs Utica, at Utica. Running meeting at Saratoga.

Tuesday Aug. 6.—Chelsea-Lakeman four-oared rowing match, at Boston. Trotting: Richfield Spa, N. Y.; Rochester, N. Y.; Prophetstown, Ill.; Piqua, O.

Wednesday, Aug. 7.—Beverly Yacht Club Regatta, at Beverly; Northwestern Amateur Rowing Association Regatta, Detroit, Mich. Trotting as above, and at Mansfield, O., and Charlotte, Mich.

Thursday, Aug. 8.—Atlantic Yacht Club Regatta, at Greenport; N. A. R. A. Regatta as above. Trotting as above.

DRAFTS AND MONEY ORDERS.—We wish it distinctly understood that all drafts, checks and postal money orders sent to us should be made payable to "The Forest and Stream Publishing Company." By observing this rule our subscribers and advertisers will save us much needless annoyance.

OUR YOUNG AMERICAN NATURALIST.—There is no reason why Mr. Fred. Ober should not attain very shortly the same position in the United States as that now enjoyed by Mr. Wallace in Europe. Already well known throughout the country for his explorations in Florida, first published by us, Mr. Ober, like a second Stanley, has been pushing through the wilds of South America, if not combating human foes, at least struggling with malarial diseases quite as deadly as those found in Africa. Urged by a love of natural history, Mr. Ober has risked his life a hundred times.

We are pleased to announce that we have made an arrangement with Mr. Ober for the publication of his adventures and explorations in South America and the West Indies. These articles will embrace the traveler's experiences in monkey hunting, in deer and wild guinea fowl shooting, with his life among the Caribs. The whole of his discoveries in ornithology will be exhaustively treated. As may have been noticed in our last issue, Mr. Ober's contributions to natural history have been most important, as Mr. O. N. Lawrence, who has been engaged in arranging the birds sent by our young naturalist to the Smithsonian, estimates that ten entirely new birds have been found by Mr. Ober. We have no doubt that these letters will excite general interest. We trust some time in September to commence this series. We may add that abroad the work already done by Mr. Ober has attracted general attention. At last dates our correspondent was in Martinique, slowly recovering from a dangerous attack of fever.

UNITED STATES FISH COMMISSION.

THE following is the *personnelle* of the U. S. Fish Commission, now at Gloucester: Prof. Spencer F. Baird in charge; Department of Invertebrates, Prof. A. E. Verrill, assisted by Mr. B. Rathbun; Department of Fish and Fisheries, Prof. G. Brown Goode, assisted by Dr. T. H. Bean. Marine plants will receive the attention of Dr. W. G. Farlow. The vessel, the Speedwell, will be in charge of Commander L. A. Beardslee, U. S. N. Dr. J. F. Brandsford is Surgeon, Mr. Galt, Engineer, and Mr. Drury, Paymaster. Capt. H. C. Chester, of Polaris fame, will have the dredging operations in charge. Mr. H. E. Rockwell is Secretary of the Commission. Records of temperature will be kept by Mr. A. Hall. Officers and men on the Speedwell number thirty-four, and there are fifteen members in the scientific party.

The work is continuous. Trips are to be made every day in the Speedwell. On board there is ample space for study and examination. As a supplement, however, a loft has been fitted up at Fort Wharf, in Gloucester, where specimens can be preserved and examined at leisure. The business of dredging, and arrangement and study of specimens will continue until the middle of September. Excursions will be made some fifteen to twenty miles out from Gloucester, and, if time and opportunity allow, the Georges will be visited. Formerly the headquarters of the Commission were at Woods Holl. It is quite possible that new varieties of fish not found in more southern waters will now come under observation.

The importance of the work now under the direct superintendence of the Secretary of the Smithsonian Institution can hardly be appreciated. The method of investigation is a purely scientific one, and not empirical. Nothing is left to hearsay. Before any fact in regard to a fish is stated, every circumstance having to do with the advent or departure of the fish is freely studied. The many complex phases which surround fish are compared, and all the forms of plants and animals which are found in the waters are observed. Microscopic observations are as useful as the more positive and practical details of capturing fish. It is the thorough sifting of a whole mass of careful observations which only finally brings out the positive data. The country is to be congratulated in having at its command so much intelligence, zeal and perseverance. If the character of the work is, to many, apparently scientific, the results it gives us are of the most practical character. What the U. S. Fish Commission wishes to do amounts simply to this: To study thoroughly the whole question of food fishes in American waters; to account for their being plenty at one season and scarce at another, with the great ultimate end of increasing not only the food of our own people, but of the world at large. Every step we make in advance is of benefit to those engaged in the same researches abroad. We may be justly proud of the work already done by the U. S. Fish Commission, and may anticipate some notable results as crowning the campaign just opened this year at Gloucester.

"THE WITCHERY OF ARCHERY."

There is a pleasant alliteration about that phrase. It is the title which Mr. Maurice Thompson has given to his book on the game of archery, and we are inclined to believe that there must be a literal witchcraft about this pastime. How else could it have sprung so suddenly into such popular favor? A year ago no one but very small boys thought of bows and arrows and targets. Now there are hundreds of archery clubs of men and women; and from Cape Cod to the Golden Gate enthusiastic devotees of the quiver have gone back to the primitive sports of their pre-historic ancestors. No sportsmen's emporium is now complete without a full assortment of archery outfits, equally suitable for the warlike equipment of a howling, naked savage, or for a merry party of laughing school-girls. Great staring targets of blue and gold confront us on the street corners, the monthlies make room for the narrations of archery experts, and the weeklies are out with full-page illustrations of pretty girls drawing the winged shaft to its head. Sir Izaak, who has hitherto held his place without a rival in the sportsman's calendar, must look well to his laurels and his fishing-hooks, or he may find his popularity shared by another canonized patron, that apostle of the twanging string, Sir Roger Ascham, in his day, doubtless, a very cross beau, but in these latter times destined to be a great favorite with the fairer sex. At the earnest solicitation of numerous of our readers, especially of the ladies, whose appeal our gallantry and discretion forbid us to pass unnoticed, we have consented to devote to the game of archery such space as our friends may demand. We do this with the distinct avowal that our allegiance to the worthy patron of all fishermen, who presides over those papers which are devoted to interests piscatorial, is to be in no way diminished or altered. We must also express our most earnest hope that archery amateurs will not follow the culpable advice of Mr. Maurice, and perfect their skill by the indiscriminate slaughter of our feathered friends. Besides being contrary to common sense, this destruction of insectivorous birds is happily forbidden by our laws. We are surprised that author and editor should have permitted such instructions to mar what is otherwise a delightful volume.

MIDSUMMER JAUNTS OUT WEST.

BY THE EDITOR.

JAUNT THE THIRD.

ASHLAND, Wisconsin.

MESSRS. EDITORS: After a pleasant week on Lake Winnebago, which I reached by the Chicago and Northwestern Railroad *via* Janesville, I ran up here on the Wisconsin Central to the shores of Lake Superior, 251 miles farther north, where the heat of the torrid term has been tempered by gentle breezes. The place is thronged with visitors; the Chequamegon Hotel with its supplementary cottages being filled, while the smaller hotels and boarding-houses are enjoying a fair patronage. For a region that was made accessible by rail and steamboat only one year ago, Ashland may well congratulate herself upon the reputation which she has already secured as a summer resort, and the promise held out to her of its permanent establishment. With increased facilities of communication by water between it and the Canadian shore and northern Michigan, no known region on the face of the globe will offer such numerous and varied attractions; and I predict that in the course of a brief period all the anticipations of the most hopeful will be realized. The Pictured Rocks, the Apostle Islands, Thunder Cape, Isle Royal, the Nepigon, and the great mines of copper and iron, will be thronged as the St. Lawrence and the Adirondacks never were. Yachts will whiten the indenting bays; anglers thread the rapids of the ice-cold water-courses which empty the wilderness lakes; hunters track out the paths which lead to the haunts of the deer and bears. Where do summer ramblers find their rest and quest now? Only in the North Woods of New York; on the St. Lawrence; at the White Sulphur Springs of Virginia; on the waters of the upper Mississippi; and at the seaside places. And are not all these circumscribed in comparison with that grand territorial expanse of woods and water which embraces Lakes Superior, Huron and Michigan, with all their marvelous physical belongings? Their bosoms are as broad and trackless as briny oceans, and one may start from Collingwood in Canada or Buffalo in the Empire State, and travel continuously on a mediterranean tour as fast as steam can move him, until the waxing moon has fulled and waned, and repeat no portion of the cruise. At Thunder Cape, on the threshold of Manitoba, is the Dawson water route which penetrates to Hudson's Bay; at Duluth is the portal of the great Northwest; there is the Georgian Bay with its multitude of islands; the Sault Ste Marie which chafes the boundaries of two dominions; the weird tracery of the elements upon the south shore rocks; the interior lake system of northern Michigan; the ancient island of Mackinaw and the old French mission; the Wisconsin wilderness, and the Apostle Islands, each of which is a little domain by itself, the smaller ones like coronas of foliage on pedestals of red sandstone upreared from the floor of the deep lake. The Grand Rapids and Indiana Railroad leads directly to one of the most favored points on the lake coast, and the Wisconsin Central to another. The round trip to be made by steamers from Petoskey on the Michigan peninsula, through the Mackinaw strait into Huron, thence into Superior *via* the Sault Ste Marie; thence along its entire southern shore to Duluth, touching at Marquette, Houghton, Ashland and other intermediate points, and returning to the north shore, would have no parallel on either continent. At present the route is imperfectly served, but if visitors multiply as they have done within a twelve-month, inducements will be ample to prepare a schedule with special reference to summer passenger travel and the time-tables of the Northern Pacific, Wisconsin Central, Chicago & Northwestern (at Marquette) and the Grand Rapids & Indiana roads. All these outlying railroad lines, which reach out from the central system like the tentacles of a cuttlefish, in search of sustenance, have been built at great expense to overcome natural obstacles; and we believe that those same natural attractions which prompted their construction will prove to be the best means of reimbursement. The prices of boarding and the transportation tariff are so low as to more than compensate for the long distances to be traveled; so that it is vastly cheaper for the citizen of distant New England to spend two months on the lakes than at Narragansett Pier, Long Branch, Saratoga, Lake George, or the Thousand Islands. With the bottom fact that the average rates at the Western resorts are but $2 per day and $12 per week (!) the anxious inquirer can readily compute the saving to be made. Housekeepers can close their domiciles and make money. What the scenic and climatic attractions are to the tourist I propose to define in my present series of letters; but the story will be long. To make my narrative consecutive I must pick up my trail where I left it near Staunton, Virginia, last month, in my transit of the Blue Ridge on the line of the Chesapeake & Ohio Railway, as described in my second letter. I will delay only to suggest that any Eastern sportsmen purposing to visit the coming Dog Show at St. Paul, Minnesota, early in September, will do well to take the lake steamers from Collingwood, Buffalo, Detroit, Chicago, etc., to Duluth. Although the time of the journey will be a trifle longer, the cost will be less and they can bring in their dogs in better condition than after a long, cramped journey in a baggage car. They will have an opportunity to examine and select the

best shooting localities along the route, at which they should stop on their return. For deer, bears, ducks, geese, pigeons, ruffed grouse, rabbits, squirrels, woodcocks, snipe, and all small game except quail and prairie fowl, the whole lake shore stands supreme and unfrequented. By leaving the steamer at Ashland, Wisconsin, or at Marquette or Petoskey, in Michigan, the sportsman can enjoy forest shooting, and thence move south by rail into the celebrated duck and chicken regions of Indiana and Illinois. I take occasion to give these hints now, for it will be long before I reach this part of Wisconsin in the course of my narrative. My letters lag, but I move on.

The Blue Ridge.—The mountain range of Virginia where the Chesapeake and Ohio Railroad crosses it, is of the most romantic character. From Staunton, among the hills, to White Sulphur, the road crosses valleys, ridges, and streams transversely; beyond, it follows the deep cut channels of rivers, and the sinuous bottoms of ravines. High mountains and precipitous crags hedge it in, their jagged outlines sharply marked upon the narrow ribbon of blue sky above the rushing rapids. It is a continuous Delaware Water Gap for miles. If one could stand on the summit of the great dividing ridge, and looking to the right and left, watch the progress of the train, he would see it toiling up steep grades, dipping into sombre valleys, crossing rivers and viaducts, and boring through rocks like a teredo. Crags bristle all around; great boulders choke the river beds; gnarled trees hang by their roots to ledges; dark-colored torrents foam and struggle among the rocks; ramparts of stone cross the route and project into the air. The whole enterprise was noted for its stupendous engineering difficulties; but still the road persists. Nothing impedes or intercepts. It bores, it goes around, it spans, it spurns, it clings to precipices, it balances on dizzy apices, it climbs, it slides down. At the Great Bend Tunnel, near Talcott, it leaves the daylight, and does not emerge from darkness until it has traversed a subterranean passage of 6,400 feet in length! Superficial dwellers who are curious to know what exists in the bowels of the earth far beneath them can be gratified by taking a look into the hole. All the country around is full of iron and salt and coal, mineral springs of sulphur and alum gush out in every direction. Deposits of ice from great caves run under the earth. Fossil forms of organisms which once lived and breathed the air above lie hecatombed, inanimate, "froze to stone." It is a weird country. Wedged into some of the ravines are great blast furnaces, which belch and glare like vents of Tophet, and redden the night. Coal-pits smoke and smudge, and the atmosphere is heavy with lamp-black. The breath of Vulcan is hoarse as he toils and sweats. There is very little agriculture among the crags, and few homes save those of hunters and toilers in the furnaces and mines. But here and there, scattered about in the nestling valleys are the healing springs which make this region famous as a summer resort; pretty cottages and merry music enliven the sombre aspect, just as the sun lights up the gloom of the gorges when clouds are drifting across the sky. Narrow winding roads lead out from the railroad track, down which old-fashioned creaking coaches rumble for a moment, and then disappear, lost to sight in the woods. The distances to the springs are various, some extending to thirty miles. No less than thirty springs and hotels are mentioned in the guide books, but perhaps for that reason the most popular are the famous White Sulphur Springs, which I hardly need describe for Southern readers. They are 227 miles from Richmond and 194 from Huntington, on the Ohio River. The situation is elevated, being 2,000 feet above tide-water. The buildings occupy a natural basin, which is laid out in lawn and shaded walks and drives, the main building occupying the centre, and ranges of white cottages the rim of the basin at a convenient distance from the hotel. The main building is one of the largest in the country, being 400 feet square. The dining-room is 300 feet long, and seats 1,200 persons, and the parlor is nearly as large. Last season 2,100 persons were lodged and fed in a single day. It is so wholly unlike summer hotel structures in the north as to be a novelty to northern people. It is as remarkable for the primitive character of its appointments as for the *neglige* of its guests. No carpets interfere with the circulation of air in the chambers, and the walls are superfluously white. To make a full toilette the ladies must depend upon the large mirrors in the parlor. Nevertheless the table is good and the beds clean and comfortable. One can be as comfortable here at $3 a day as at Brother Beckley's little inn by the wayside near Kanawha Falls at $1 50 per day.

The Kanawha Falls wash the stone doorstep by which we cross the threshold of the mountain region on the west. At the portal the clear, pure water of the higher region tumbles over a ledge which extends a thousand feet across the river, and mingles with the roily and clay-stained tide below. Above the falls are rapids, crags, boulders, gorges, and a wilderness. Wild beasts roam in the forests and mountain trout disport in the streams. Below, the river glides with a smooth, unbroken flow to the muddy Ohio, its shores lined with cultivated fields and pretty towns. Between White Sulphur Springs and the Falls lies the choicest and wildest scenery of the route. Far up in the mountain heights of the intermediate range are the little tributary streams which help to form the Greenbriar, the Gauley and the New rivers, and these two last, uniting, form the Kanawha, a short distance above the falls. The whole tract looks as though there had been rough horse-play among the giants. The whole New River channel is filled with the boulders which they have hurled at each other across the chasm, so that the choked river can hardly run in some places; long, straight trunks of pines, split and shattered in their tilts, have been flung into the r Walls of precipice flank the passes; they jut into the channel-way, and tower above to dizzy heights. Overlooking all are the Hawks Nest cliffs. The whole region is full of interest to the tourist, the geologist, and the sportsman. Kanawha Falls is a favorite resort for anglers. At the foot the black bass, the wall-eyed pike, and white perch gather in great schools, barred from further passage upward. I have seen the head of a bass which weighed nine pounds, and the head of a wall-eyed pike which weighed thirteen pounds. Beckley, the proprietor of the hotel, will show these specimens to the curious. Within easy distance by foot or rail, one can fill his basket with speckled trout. Altogether, I know of no place where better facilities of access are afforded to such a variety of sport. I caught both bass and white perch with the fly. Being high up in the mountains, the air is cool and bracing, and any one who wants snug quarters and plenty of elbow room might as well stop here as go farther, for he will find nothing like it until he reaches the foot-hills of the "Rockies."

I was most romantically lodged in a front room of the inn. Directly in front is a mountain, with just room enough at the foot for three tracks. Up among the trees, half way to the top, is a boulder, which looks as if it would slip and fall down into my room. The sun rises behind that mountain, and it is 9 o'clock before he looks over the top to see what is going on in the valley. When his rays rest on the cool stratum of air on the bottom, a mist rises, and the orisons of the day begin. Farther out, away from the shadow, men have been at work for hours in the saw-mill which stands by the placid lake, at the foot of the falls. By mid-day it is hot, and grain ripens in the sun which was needed to mature it.

It rained the whole afternoon of the day I arrived. A tree-frog, squat in the foliage opposite, had told me it would, and so I did not go out to fish. When the up and down trains halted in front for dinner, we sat under the porch and watched a "razor-back" pig dodge among the car wheels in quest of bits of food which the passengers dropped from the windows. Presently the cars began to move, and it was amusing to note the agility with which he escaped being crushed. The trains backed and pulled ahead so frequently that bets began to be made that he would be run over. Odds of 100 to 1 were offered that he would not. I put up until I lost a quarter, and then quit. After that there were no takers. The pig was alive when the train left, and when I was bantered by Judge P—— that a man who had traveled so much should bet on a depot pig, I allowed that I had been induced to bet because I observed that the pig's tail was short off at the rump, and assumed that he once before had a close squeak of it. I have learned wisdom from experience.

But my letter grows long, and I have given only an inkling of what is to be seen on this road, which took nearly forty years to construct, it having been begun in 1836. The points of interest are almost as numerous as the stations marked on the time schedule. When my vacation is finished I shall return by the same route, and perhaps find new subjects along the line for comment. Passing Charlestown, the capital of West Virginia, and reaching the Ohio River, we boarded one of the steamers of the Chesapeake and Ohio Railroad Company, and began our 350 mile sail down the river to Louisville, where I dated my first letter. The current of cool air, caused by the motion of the boat, was most grateful to us as we sat in the bow, and the constantly shifting scenery and the novelty of the river made the trip most charming. The boats are large and well appointed and well patronized. I was surprised to hear that passenger travel by river was increasing instead of waning, as I had supposed, and that there had recently been constructed, at some town in Indiana, two steamers, which were larger and more magnificent than any previously launched. I am pleased to hear this, for I think the time is approaching when Americans will not take their vacations at railroad speed nor make a business of pleasure. A day at Cincinnati broke the monotony of the trip, and when I reached the chief city of Kentucky I was convinced that my choice of routes had been wisely made.

From Louisville I made post haste, via Indianapolis to Chicago, fleeing from the heat of the first days of July, and thence in twenty-four hours more was landed at the snug hostelry of friend Roberts on Doty Island, at Neenah, Wisconsin, whence I dated my second letter. Lake Winnebago, where Roberts is located, deserves an extended notice, and to it I shall devote a portion of my fourth letter. It is a charming and much patronized resort, and is reached by the Chicago and North-western Railroad.

HALLOCK.

THE HUNGRY VISITOR FROM FLORIDA.—The name on the card was familiar, and he was from Florida: enough to insure his speedy admittance into our innermost sanctum. In he came, shuffling rather than walking, a most scaly looking being; and there was that in his general bearing which was far from prepossessing. Floridians are not apt to be stunted in growth. Our visitor was six feet if he was an inch. But in some way he had not filled out, had not expanded laterally. Just at that particular part of his body where a man's stomach is supposed to be, we say it without exaggeration, our visitor was no bigger around than a very medium fence rail. Surmounting this ridiculous body was a little oblong head in which two very small fiery eyes gleamed with a strangely repellant light. But the most forbidding feature of his countenance was the mouth. If we had doubted that our visitor was starved a glance at his mouth would have reassured us. It gaped wide open, the tongue darted forth and the jaws were fixed asunder, chronically stretching for a mouthful.

"No," he explained in a sibilant lisping voice, "not a regular subscriber of the paper. In the swamp where he lived the mail communications were so interrupted that it was hardly worth while to subscribe for a weekly paper. He took his chances, and usually good ones they were too, of picking up a stray copy of the THE FOREST AND STREAM from some of the sportsmen who every winter penetrated to his secluded home. Being upon a northern trip and happening in the city he had come to call upon us, as he had been told every one did when they came to New York. Not having eaten anything for several weeks, thought perhaps we might direct him to some reliable place where he could get a good square, solid meal once more. His last refection away down in that Florida swamp had been a young alligator and a discarded green glass bottle. The strengthening juices of the alligator had long since been assimilated to his system, but the bottle, though possessing rare staying qualities, was not decidedly nutritious. We perhaps knew just the place where a hungry Florida-swampian might find something to his taste."

Could we resist that appeal? Throwing down our pen and doffing our hat we conducted this hungry individual from Florida around to Wallace's, and, having safely deposited him in the taxidermist's shop, were rewarded by a beautiful coiling of his whole body, a fiery glance of the bright little eyes, a hissing of thanks and a grateful sounding of the rattles—there were just thirteen of them. He hungers no more. He's stuffed.

GAME PROTECTION.

MEETINGS OF STATE ASSOCIATIONS FOR 1878.

Tennessee State Sportsmen's Association, Nashville, Dec. 2. Sect'y., Clark Pritchett, Nashville, Tenn.

Wisconsin State Sportsmen's Association.

Massachusetts State Sportsmen's Association, at call of President

Missouri State Sportsmen's Association.

SUPERVISORS AND GAME LAWS.—Relative to our opinion, recently published, concerning the authority of supervisors to alter the game laws, Chas. E. Whitehead, Esq., council of the New York Game Protective Society, writes us as follows:

You are correct in your interpretation of the law. I drew that section so as to appease county members who wished to protect black squirrels, bull pouts and muskrats, and you will find that some of these outside families have been covered by the shield of the law in the hands of supervisors who were interested in them. But supervisors cannot shorten or lengthen the close season of game which is protected by the general statute. Yours, etc., CHAS. E. WHITEHEAD.

NATIONAL SPORTSMEN'S ASSOCIATION—*Wilkes Barre, Pa., July 27.—Mr. Editor:* Pursuant to adjournment the next meeting of the National Sportsmen's Association will be held in the rooms of the Philadelphia Sportsmen's Club, northeast corner of Thirteenth and Chestnut streets, Philadelphia, at 12 M., of Tuesday, September 17, 1878, and we now call upon all State Associations and others who are interested in protection of game and fish to send representatives to this meeting.

B. F. DORRANCE, SEC. *pro tem.*

OFFICIAL LAW BREAKERS.—It not infrequently happens that our game and fish protective laws are not only not enforced by those whose duty it is to secure their proper observance, but are openly violated by those same delinquent officials. This is a case in point where some one with a not very unusual amount of common sense should agitate the matter and correct the abuse. A correspondent writes from Charleston, S. C., July 23:

Mr. Editor: Fishing in the Embarass River has not been very good this spring with the rod and line. The water was too high and muddy until the 15th of June, when the water was low and clear. The pot-fishermen took full possession of seines, snares, spears, traps, channel nets, trot lines and shooting. The people grumble because the river is not full of fish, and they allow this wholesale slaughter of fish to go on year after year. I believe the city and county officers are the worst violators of the game and fish laws that we have.

J. B. D.

TOO MANY FISH.—*Ashburnham, Mass., July 22.—Mr. Editor:* I notice in your issue of June 27 last, your correspondent from this place refers to some fine catches of trout taken here in this town. This occasioned some little surprise to myself and others who have fished these streams for many years and claim to know their capacity, etc. Therefore, from unquestioned authority (that of the parties themselves), I regret to say they were taken in a very unsportsmanlike manner. This affair came to the notice of the proper authorities, and efforts were and are being made to prosecute, I trust successfully. Perhaps, however, the parties are sufficiently punished now, as I understand they are heartily ashamed of their action, and have come to a realizing sense of the fact that the extermination of trout could not be more effectually accomplished than by the method practiced by them.

MANX.

The Rifle.

THE NEW JERSEY STATE RANGE.

The several towns throughout the State of New Jersey have shown no lack of interest in the matter of rifle practice. Rifle clubs, principally short-range ones, have been organized by the dozen, and some very good teams have come out of Jersey to show their skill on other ranges, while of single marksmen, at long as well as at short-range work, many noteworthy names will suggest themselves. With the opening of the new State range at Brinton these bodies will find a central stamping ground, and can now spend their effort in building up about "Brinton" a fame and a name. Since early in th

year a few gentlemen have been working along at the task of organization, and on March 11 the New Jersey State Rifle Association was incorporated, and now is provided with a roll of over 100 actual members, and the following list of officers: President, Col. Edw. H. Wright. Vice-President, Capt. Wm. H. De Hart. Secretary, Peter Bonnett. Treasurer, H. F. Anderson. Directors—Maj. Henry Fulton, Dr. J. M. Dart, George A. Squire, B. A. Vail, Hon. Dudley S. Steele, H. F. Anderson, Peter Bonnett, Col. E. H. Wright, Capt. Wm. H. De Hart, A. R. Warner, J. T. B. Collins, E. A. S. Man, Capt. George L. Winn, George Carter, Major Addison Thomas. Honorary Life Director, Gen. George B. McClellan. Ex-Officio Directors—Major-General Gershom Mott, commanding N. G. S. N. J.; Brevet Major-General Wm. S. Stryker, Adjutant-General S. N. J.; Brevet Major-General Lewis Perrine, Quartermaster General S. N. J.; Brigadier-General Joseph W. Plume, commanding First Brigade S. N. J.; Brevet Major-General Wm. J. Sewell, commanding Second Brigade S. N. J.; Col. W. H. Sterling, A. D. C., General Inspector of Rifle Practice N. S. J.

The selection of a range location was a delicate and important choice. After looking at several plots it was decided to fix the range at a point on the meadows between Elizabeth and Elizabethport, on the line of the Central Railroad of New Jersey. The grounds are about 100 acres in extent, and, having a broad stretch of salt meadow behind the targets, there is no necessity for high banks or butts.

Brinton—named such out of compliment to Geo. Brinton McClellan—has its merits and its demerits. There are a plenty of mosquitoes, but there is also a fresh salt breeze from the broad Newark Bay near by. Compared with Creedmoor—the beau ideal of all American ranges—there are advantages and disadvantages about Brinton. The broad velvety lawn of the American Wimbledon, where at any target shooting may be done at any range, is wanting at the Jersey range, and in its place is a scrubby bit of upland, sloping away after a run of 600 yards to several thousand yards of marsh or meadow land. The line of fire looks off toward the Newark Bay, northeast by east, a disadvantage for early morning practice. At some of the high ranges long, low mounds have been thrown up to bring the prone marksmen up to the level of the target. These mounds are broad enough to accommodate the scorers, spotters, and the apparatus the marksman may need in his practice. In time the Range Committee hope to have the entire upland section of the range placed under sod, and create of it a fine camping lawn. The mid-range butts are before an embankment about 150 feet long on the edge of the upper or dry meadow. This arrangement brings the entire line of mid-range and short-range fire over dry land, and firing points from 100 to 600 yards are staked out. Further to the left the place of the off-hand butts is staked out, but as yet none have been thrown up. The targets are of canvas, stretched upon wooden frames, and slide vertically, while the markers stand in an open pit before the depressed targets. Off to the right are the long-range firing points. The line of fire here runs over a long stretch of sedge and bulrush meadow before reaching the low mantlet butts of plank bulkheads filled in with broken stone. The targets stand upon a platform, and each marker is masked behind a smaller bulkhead of plank and stone. The targets slide on rolling chocks, a fresh target going out as a punctured one is drawn in. These are of canvas. The natural advantages of the place are inferior to those of Creedmoor, but it will prove a formidable rival to the former, owing to the regularity and frequency with which trains stop at the ground. Way trains to Elizabeth run every half hour in the morning, and more often still in the afternoon, and with a liberal list of regularly recurring matches the Brinton managers need few fears of lack of patronage.

The opening day was set for the 25th ult., and several hundred marksmen, with a few million mosquitoes, attended during the afternoon. Creedmoor was well represented in its marksmen, as well as by representatives of its Board of Directors. There were many distinguished local guests. Upon the arrival of Major-General Gershom Mott, commanding the 3,000 men who constitute the National Guard of the State, a salute of thirteen guns was fired. Accompanying Gen. Mott were Col. Loder, Col. Ward, Col. Welling and Maj. Duryee, of his staff; Adjutant-General Wm. S. Stryker, Brigadier-General Plume, of the First Brigade; Col. Wm. H. Sterling, the Division Rifle Inspector; Col. Morrill, of the Third; Col. Steele, of the Fourth, and Maj. Sloan, of the Seventh, and members of the State Legislature. Gov. McClellan, who is at Cape May, sent a note of regrets. Of the directors of the association there were present Col. Wright, President; Captain De Hart, Vice-President; P. Bonnett, Secretary; Maj. Henry Fulton, Dr. J. M. Dart, George A. Squire, B. A. Vail, Dudley S. Steele, J. T. B. Collins, E. A. S. Man, Capt. Geo. L. Winn, Geo. Carter, Private N. P. Stanton, of the National Rifle Association, Gen. Alex. Shaler, Capt. Story, Col. Geo. D. Scott, J. P. Waters and Secretary Geo. S. Schermerhorn, of the Board of Directors of that body, with Chas. Pond, of Bridgeport; Adjt. W. H. Murphy, C. E. Overhaugh and Capt. Waddell were also present. The range was opened by a long-range match for a commemorative medal, struck in honor of the opening. Considering that the range had never yet been fired over, the scores made were very fair. Two sighting shots were permitted at each range. The scores ran:

	900 yards.			1,000 yards.		
W Gunn	4 5 5 4 5—23			5 3 5 5 5—23—46		
L Geiger	5 5 5 5 4—24			3 5 5 4 5—22—46		
H Fisher	3 3 5 5 5—21			3 5 4 3 5—22—43		
R Rathbone	5 2 5 5 5—22			5 2 4 4 4—19—41		
O McLaughlin	5 4 5 5 4—23			0 3 5 5 5—18—41		
I L Allen	5 4 4 4 4—21			5 0 3 5 5—18—39		
C Dusenberry	18	19	37	J P Waters	13	17 30
G L Morse	19	17	36	J A Hatry	19	10 29
C A Hodgman	16	19	35	N D Ward	11	11 22
F H Holton	11	20	31			

A subscription match at 200 yards afforded sport for a large number of the visitors, though somehow the scores did not show anything extra brilliant, running as follows:

G T Carter 29	L H Greve 26	E T Davis 22
C A Watson 29	B A Vail 26	C A Stevens 22
J F Rathyen 28	Chas Garser 25	S A Miller 21
W P Wood 28	Com J G Hill 24	H C Howsell 20
A Gibbs 28	W Haddenhurst 23	Col Howard 20
J S Conlin 28	G M Townsend 22	J J Dermott 19
B Squires 27	C H Houghton 22	

The Directors' match, also at 200 yards, for the gold badge of office, was very generally contested for, and with one or two good off-hand shots the race for first place was closely fought. The President very courteously took place in the rear, but in this he was followed by the State Inspector of Rifle Practice, who came within one point of getting that position. The Directors' scores ran:

T B Collins 22	Dr J M Dart 19	Gen J H Plume 13
B A Vail 21	Gen Mott 16	Col W H Sterling 9
George Carter 21	P Bonnett 16	Col E H Wright 8
Maj Henry Fulton 20	Capt W H De Hart 15	
Geo L Winn 19	Geo A Squire 15	

It is the intention of the State military authorities to institute practice by the State troops at a very early day, and, with the close proximity of such a railway centre as Elizabeth, no trouble will be met in conveying the men to and from the grounds.

SHARPSHOOTERS' UNION OF THE UNITED STATES.

MR. EDITOR: In the meeting of the delegates of the associations of the Sharpshooters' Union of the United States of North America, to the third national shooting festival, held June 16th to 24th, a committee was appointed to revise the constitution of the Sharpshooters' Union, and to call a meeting of delegates in 1879 in this city. The committee, then appointed by the President, J. A. Bauer, of San Francisco, Cal., consists of the following gentlemen: Herm. Raschen, Jac. Heintz, Aug. Ermisch, C. Mattman, G. A. Kundahl, Ch. Zettler, H. Schalk, F. N. Matt and C. Froman. Pursuant to a call of Mr. B. Lippmann, secretary of the meeting of June 19, (this committee had its first meeting July 18th inst., in the headquarters of the Union, 197 Bowery,) an organization took place by the election of the following officers: President, Capt. A. Ermisch, of Jersey Schuetzen Corps; Vice-President, Ch. Mattman, Pres. of Helvetia Rifle Club; Secretary, Jac. Heintz, Sec. of Columbia Rifle Association. One of the members of the committee having resigned, Mr. B. Lippmann was elected to fill the vacancy. The committee will have regular meetings every fourth Thursday of a month.

The following German shooting societies will have their annual shooting festivals in August or September, as far as could be learned:

August 6—Hudson City Schuetzen Corps, Capt. Henry Blum, in Union Hill Schuetzen Park, Union Hill, N. J.

August 6, 7, 8—Brooklyn Schuetzen Corps, Capt. John H. Doscher, in Myrtle Avenue Park, Brooklyn, E. D.

August 7, 8—New York Central Schuetzen Corps, Capt. C. F. Gennerich, in Jones' Woods Colosseum and Washington Park, 67th to 69th street, Avenue A, New York city.

August 13, 14—Jersey Schuetzen Corps, Capt. Aug. Ermisch, in Union Hill Schuetzen Park, Union Hill, N. J.

August 19—Rheinischer Schuetzen Bund, Maj. F. N. Matt, in Bender's New York Schuetzen Park, cor. First avenue and 63d street, New York city.

August 26, 27—Greenville Sharpshooters, Capt. A. Zengner, in the Schuetzen Park, Greenville, N. J.

September 2—Ninth Ward Reform Schuetzen Club, President Wm. F. Schneider, in Elm Park, 92d street and Ninth avenue, New York city.

September 8, 9, 10, 11—Twenty-fifth anniversary of Helvetia Rifle Club, President Ch. Mattman, in Schuetzen Park, Union Hill, N. J.

September 9—Bohemian Schuetzen Corps, Capt. F. Wokal, in Bender's New York Schuetzen Park, 63d street and First avenue, New York city.

September 9, 10, 11—New York City Schuetzen Corps, Capt. J. F. Gerdes, in Jones' Wood Colosseum and Washington Park, 67th to 69th street, Avenue A, New York city.

S. O. V.

[FROM OUR OWN CORRESPONDENT.]

THE FIRST WEEK AT WIMBLEDON.

WILBLEDON, July 13, 1878.

EDITOR FOREST AND STREAM:

With a week of the great rifle meeting now past it is very safe to call it a complete success. Many of the eighteen previous July gatherings have been occasions of great pleasure and high scores; but in weather, interest, numbers, etc., the nineteenth annual meeting has surpassed all. There has been rain, but during the shooting hours, at least, the weather has been dry and fine, the light has been good and the wind not over troublesome. But few changes have been introduced this year. The six inch bull's eye at the 200 yards targets has been abandoned and the old eight inch bull's eye placed again upon the targets. Canvas targets are now used in all the competitions at all ranges and for the Queen's Prize. In place of using Snider rifle for the first stage at 200, 500 and 600 yards the Martini-Henry rifle is now employed throughout. With a superior weapon comes of course superior scores, as will be seen below.

Wimbledon after all is something more than a mere shooting stand. It has a strong social aspect. Men from every section of the country cannot live together in this canvas town for several weeks without forming acquaintances, and when those associations are renewed from year to year it is not strange that they should look upon each other as lifelong friends.

American riflemen particularly should know now what this great rifle encampment is, since after it the National Rifle Association of America is shaping its course. For a full fortnight each year the great inclosure at Wimbledon Common springs up as if by magic, finds for a few days its thousands of inhabitants and then away, as in a dream, go tents and tent-dwellers, flags, fence and all, leaving only the common with its stunted shrubbery, and away to the west the long, low mounds against which the targets are displayed. It was to this range that the American team found time to pay a flying visit in 1875 after the Irish victorica, and it is from this range that the great cementing power goes forth which keeps thousands of British riflemen, scattered the world over, in one great body of hard working marksmen. Life here is a busy one. Between gun-fires, from early in the forenoon until six o'clock in the evening, the business of the meeting takes precedence over all things else—the men are at the firing points straining every nerve, or scurrying across the common to get in a few shots here or there in this or that competition. One is burrying to take his place on the line at a bull's eye target, a sort of sweepstakes contest, merely to try the elevation which his judgment tells him fits the condition of light, moisture and wind. He fires most carefully, but hits low, and forewarned, he "goes up half a point" and, with his opening shot in some other competition at the same range, gets in an opening bull's-eye in place of the "magpie." So on, all day long; but when evening comes relaxation runs rampant. From a dozen camp-canteens comes the sound of musical instruments; the band of the Victorias gives an open-air concert under the great umbrella tent, 150 feet or more in diameter, while away from some Scot's tent come the shrill notes of the pipes. Along the members' lines are tents which, in their luxurious outfit bespeak the wealth of the occupants who make of the Wimbledon meeting a fortnight's vacation. There is nothing like it in all Britain, and perhaps a great American camp meeting will give the clearest idea of what the Wimbledon gathering is.

The staff at Wimbledon shows few changes. The Earl of Wharncliffe is at the head and Col. Peel, whom you will all remember in his association with the British team under Sir Henry Halford, is again the Executive officer. The old campers are here on the Association lines as well as on the more pretentious members' camp. The London Irish are missing, but the Canadians are at their old spot, and doing good work before the targets. The running deer has been made to perform as a leaping or galloping game by a cone arrangement on the platform. Capt. Midway has devised a torpedo target by which when the bull's-eye is hit a railway track torpedo is exploded. The apparatus occasionally gets out of gear. The telephone is working finely between the long range targets and firing point, and there is now talk of putting it on all the ranges ere another year to replace the present telegraphic system.

I will not burden you with many scores, not at least for this week's work, where the shooting is mainly for prizes open to Volunteers only. In my next I will tell the story of the Elcho Shield match, and of the small-bore work, which you can compare with what your own champions are doing, and, by the way, "they say" that the Irish are going to carry off the great Elcho again. Certainly they have a very strong team and their visits to America have not been thrown away. According to the competitive selection test the Irish team show more strength than either the Scotch or English. I came here on Saturday last before the date fixed for the opening of the harmless hostilities. Already there were hundreds in camp and, according to the *Morning State*, 1,560 volunteers spent that night in the camp and rose on Sunday morning for a quiet day's rest before the work of the week. There was service in camp and during the day no end of visitors, though the mid-week Sunday, that is to-morrow, will bring down the herds of Londoners to wander about the grounds and envy the men their comfortable quarters.

Monday morning came out beautifully clear, and the cracking rifles were heard all along the mile or more extent of firing points. The Council have declared that leather elbow caps are not to be allowed "in uniforms," but cap-covers may be worn on the head without cap below. The helmet headgear is not in much favor, as the men find that either in the back or front position the helmet ends are in the way and obstruct the sight.

America is not entirely unrepresented here. In the exhibition tent is an American Gatling gun, working with dummy cartridge, to the admiration of crowds of visitors, while W. M. Farrow and Johr, of Creedmoor fame, are here making excellent work with the Ballard rifle.

Farrow and Johr are on their way to the Dusseldorf meeting in Germany. Johr, you remember, holds your *Spirit of the Times* Badge, while Farrow was the "Schutzen-konig" of the Union Hill gathering last month. The conclusion of the first stage of the Queen's Cup prize should have finished with Thursday night, but when the scores were aggregated it was found that three men tied for top place on scores of 95 in the possible 105. That this means extra good shooting is shown in the following exhibit of what has been done in the past five years of the present style of scoring:

1874—*Corporal Young, 1st Herts	87	105
1875—Private Innes, 10th Aberdeen	90	105
1876—Private Burgess, 1st Newcastle	86	105
1877—Corporal Betts, 1st Norfolk R. V.	92	105

*Also Silver Medallist in 1870.

And while this fight was going on for the first place among the "sixty" who are to contest at the 800, 900 and 1,000 yards for the final gold medal and the £250 cash prize, there were twenty-five scores of 88 each for the last eight places on the "sixty." With the settlement of the Queen's prize, first stage, the work of many of the volunteers who came here closes, and Thursday evening saw a grand exodus in all directions from the camp; but there are small-bore men coming in, and the teams are gathering for the final test of next week.

The firing off of the ties for the first place and the silver medal perhaps induced many to linger to see the pretty triangular contest which took place before the Carton target yesterday morning. The three co-equal champions were: Sergeant Lamont, 1st Edinburgh; Private Lowe, 22d Middlesex; and Corporal Mollineux, 40th Lancashire.

In telling the story of this tie shooting I use the words of local chronicler, who says:

Half an hour before the marksmen appeared to test their prowess once again eager groups of volunteers and visitors were crowding in ranks four deep around the enclosure facing the Carton butts, where the last scene of a struggle closer than any previously seen at Wimbledon was to be enacted. No puzzling wind or deceptive light gave the competitors cause for anxious glances towards the fluttering flags that are sometimes such useful wind gauges, nor furnished an excuse for erratic shooting such as unsuccessful men always find when bull's-eyes are blurred by mists and mirage. If the rifle wavered it was not because of wind, but of the tremulousness which was caused by beating hearts and nerves not firmly strung, and if the targets were seen dimly it was not due to changes in the clear light which fell full on the targets and brought them into strong relief from the dark background of turf and heather, but rather to the faintness of vision that sometimes marks a moment of anxious excitement. Around the three who were to fire for the proud position of first place in the sixty interest centered and asserted itself so strongly that a space wherein the trio might be free from jostling and the disturbing sounds of audibly expressed comments was kept with difficulty. Whether the competitors had caught something of this excitement, or whether the suspense of long waiting had been too much for them, only one bore evidence of being calm, cool, and self-possessed. The two north-countrymen stood apart in grim silence, and tried to appear unconcerned, while the Middlesex champion cheerfully exchanged greetings with his friends, as if either perfectly confident of success, or prepared to bear the reverses of ill-fortune contentedly. Somebody having intimated that the competitors might utilize their shots by taking carton tickets, which would give them a chance of winning an additional prize if they scored a central bull, Lowe went off quickly to avail himself of the suggestion, evidently feeling that he was in the condition for straight shooting; but the others seemed disinclined to risk a "bawbee or twa" in the speculation.

By this time a great crowd had gathered at the firing point, the range was signalled "all clear," and Lamont lay down to fire the first shot. There was a long pause before the rifle could be steadied, but at length he pulled, and friends with binoculars and field-glasses looked in vain for any sign of a hit on target or butt. "Where did that go?" was the question when the marksman slowly came back to his friends, reluctantly convinced that he had missed. A cheery comforter suggested, "Weel, maybe its joost gaun ower the baunk," and then the Scotch contingent lapsed into silence or stood ready to claim Mullineux, who is said to be Glas-

gow horn, as a fellow-countryman if the opportunity should offer, but cautiously refrained from committing themselves to this prematurely. The Lancashire man then went down, aimed deliberately, pulled, and up came the dummy with an outer disc. A silence and stillness that seemed as breathless as the breeze that scarcely stirred the pendant flags followed while Private Lowe quietly stepped forward and took his position, indicating that he has tried all the modification of the back position by first placing his left arm to support; but shifting it to the front of his body and supporting the weight of the head by a device which seems much in vogue here, namely, grasping the left cuff in his teeth, while the hand steadied the butt of the rifle under the armpit. His first shot was an inner, scoring four, and a responsive cheer came from those who favored the metropolitan.

The contest, however, was not yet over—each man had yet two shots to fire, and even Lamont stood a chance of winning still if the others should break down. Again he missed, but this time the course of the bullet was marked, and it was evident he had miscalculated his elevation, for the glacis in front of the targets was its billet. Mullineux made another outer, and Lowe followed with a "bull," upon which the Middlesex men could restrain their cheers no longer. It was still possible, however, that an unlucky miss for him, and a bull's-eye for Mullineux, might turn their jubilations into wailing. Lamont, with no chance whatever, fired his last shot, and just managed to get on the extreme edge of the target. Mullineux struggled hard to find the right place, and nearly got there, but again the black disc was shown, and Lowe was hailed the winner with one shot to fire. Not allowing himself to be flurried, however, he settled down for the last time, and succeeded in getting another inner, as if to prove that his nerves were no more to be unsteadied by success than by suspense.

Meanwhile the 25 88's were illustrating the process of exhaustion, and the survival of the fittest at four targets on the same range. In the result Corporal Marshall, 14th Devon, who even excelled the performance of Private Lowe, making three bull's-eyes; Sergeant Simpson, of Edinburgh; Private McLaren, 1st Lanark; Color-Sergeant Ferguson, 1st Inverness; Sergeant Heywood, 5th Lancashire; Sergeant Knight, 10th Somerset; Corporal Shoppard; Private Dunlop, London Scottish, and Private Phillipe made the nine top scores, the three last named marking 11 each. There was thus another tie, and the three gentlemen in question had to fire off again to see which one of them should be excluded from the 60, and this unfortunate lot fell to Private Phillips.

To-day we have a dozen big contests, important as regards numbers of entries, and of great interest to the contestants, who have been chosen on a hundred provincial ranges to appear here as champion representatives, but the matches are hardly of sufficient importance to crowd your valuable space after so long a letter as this.

RUDOLPH.

MASSACHUSETTS—*Boston, Walnut Hill, July* 24.—American team competition; 800, 900 and 1,000 yards:

J S Sumner.																
800	3	5	3	5	5	5	5	5	5	4	5	5	5	5	5—70	
900	5	4	3	5	5	5	5	4	4	4	5	5	5	4	5—63	
1,000	5	5	4	4	5	5	4	5	4	5	5	5	5	4	4—70—203	
H L Lee.																
800	3	5	4	5	5	5	5	5	5	5	5	5	5	5	3—70	
900	5	3	5	5	5	4	5	4	4	5	5	4	5	5	5—64	
1,000	4	5	5	5	5	5	5	5	5	4	4	3	5	5	5—70—204	
William Gerrish.																
800	3	5	5	4	5	3	5	4	4	5	4	5	5	5	5—67	
900	4	5	5	5	5	5	5	5	3	5	5	5	5	4	5—71	
1,000	5	4	5	5	5	5	3	4	5	0	5	5	5	5	3—64—202	
W H Jackson.																
800	5	5	5	5	5	5	4	5	5	A	5	5	5	5	5—69	
900	5	5	A	5	3	5	5	4	5	A	5	5	5	5	4—61	
1,000	5	4	5	5	4	4	4	5	5	5	5	3	5	5	4—68—198	
J F Brown.																
800	4	5	4	5	3	4	4	4	5	5	4	5	5	5	5—67	
900	5	5	4	4	3	5	5	5	4	3	5	5	5	4	4—63	
1,000	3	0	4	4	5	5	5	5	5	4	5	5	5	5	5—65—198	
J A Lowell.																
800	5	5	5	5	4	4	4	5	5	3	5	5	5	3	0—63	
900	5	3	4	5	4	5	4	4	4	5	4	5	3	5	4—64	
1,000	5	3	5	5	3	5	5	5	5	4	3	4	5	5	5—67—194	
H Tyler.																
800	4	5	5	5	5	5	4	5	5	5	5	5	4	3	5—70	
900	4	3	4	4	5	4	5	5	4	5	5	4	4	5	5—66	
1,000	5	4	5	3	3	4	4	A	4	5	4	3	4	4	5—57—193	
G W Davison.																
800	3	4	3	4	3	4	3	5	5	5	5	4	5	5	5—63	
900	5	4	3	5	5	0	5	4	5	3	3	5	4	4	5—60	
1,000	5	3	4	3	5	5	4	5	3	4	5	5	5	5	5—66—189	
S Wilder.																
800	0	3	5	0	5	3	5	5	5	5	5	4	5	5	5—60	
900	3	4	5	5	5	3	3	5	4	5	5	5	5	5	3—65	
1,000	4	2	2	5	5	4	5	4	5	4	3	5	5	4	5—62—187	
J N Frye.																
800	2	4	4	2	4	4	3	5	2	5	5	5	5	4	4—58	
900	5	5	3	4	5	4	5	4	5	5	5	5	5	2	3—65	
1,000	4	3	3	5	3	3	2	5	3	5	4	3	0	2	0—45—168	
W M Ward.																
800	3	5	5	4	3	5	3	4	5	5	5	5	3	4	5—64	
900	5	3	3	4	4	2	5	3	5	3	4	2	4	5	0—52	
1,000	0	4	0	5	3	4	4	3	4	2	3	4	0	5	4—45—161	

The standing of the several competitors in the first American team competition is also appended, the figures following each name denoting, respectively, the result in the preceding Tuesday's and the last day's shooting and the total score for both days:

Capt W H Jackson	192	198	390	J F Brown	182	198	380
J S Sumner	181	208	389	H Tyler	177	193	372
Wm Gerrish	179	202	381	G W Davison	178	189	367

July 27.—Final match in the amateur series for July. Distance, 200 yards, off-hand, conditions previously noted:

L L Hubbard	5	5	5	5	5	5	5	4	4—48
L L Hubbard (re-entry)	5	5	4	5	4	4	4	5	4—45
L L Hubbard (re-entry)	5	4	4	5	5	4	4	5	5—45
J N Frye	5	4	4	5	5	5	4	5	4—45
H Lee	4	4	4	4	4	5	5	4	5—43
E B Souther	4	5	4	4	4	5	4	5	4—43
J Borden	4	4	5	4	4	4	4	4	5—42
L L Hastings	3	4	4	5	5	4	5	4	3—42
J N Nichols	4	4	5	4	4	3	5	3	5—41
B James	4	3	5	5	4	3	4	4	4—41
T Sias	4	4	3	4	4	5	4	4	4—40
C W Meiggs	4	4	4	3	4	5	4	4	4—40
H E Lord	5	3	4	5	3	5	4	4	3—40
W Bartlett	3	3	5	5	4	4	4	3	4—38
G D Curtis	4	4	4	3	4	4	4	4	3—38
T Demster	4	3	2	4	4	4	3	4	4—37

Owing to the large number who participated in the "amateur series" there were only a few entries in the "no cleaning match." Only the best is given:

J Borden	200 yards	3	4	4	4	5	4	4	—28 } —53
	300 "	3	4	4	4	3	4	3	—25 }

Messrs. Rockwell and Hubbard stand at the head of all competitors with the fine scores: Rockwell, 50, 61, 60, and Hubbard, 59, 59, 59, making a tie. The 1,000-yards targets were occupied by a party of gentlemen, one of whom succeeded in making a score of 201 out of a possible 225. A larger number of military were out yesterday than at any time during the season who successfully found the bull's-eye.

GARDNER RIFLE CLUB—*Hackmatack Range, Gardner, Mass., July* 24.—Distance 200 yards, 20 shots:

Mass.		Creed.		Mass.		Creed
Austin	176	82	Brown	189		83
Bodge	190	81	Burgess	168		78
Bent	191	86	Knowlton	206		89
Pratt	209	89	Coleman	179		83

A CORRECTION.—Boston and Abington scores were reversed in our last. They should have read: Boston, 769; Abington, 758.

CONNECTICUT—*Stamford, July* 25.—Stamford Rifle Club competition for Teackle Cup. Mr. E. H. Sanford having won the cup three times, it now becomes his property. Distance, 200 and 300 yards, ten shots at each:

	200 yards.	300 yards.
E H Sanford	5 4 5 4 4 4 5 5 5 4—45	4 3 5 4 4 3 3 4 4 4—38—83
W H Sanford	4 4 5 5 4 4 4 4 5 5—44	4 4 4 4 3 4 4 4 2 3—36—80
J H Teackle	4 5 4 4 4 4 3 5 4 5—42	2 4 5 4 4 4 4 2 4 4—37—79
H M Wilson	4 4 5 4 5 4 5 5 4 4—43	4 4 2 2 4 4 3 4 3 4—34—77
Norman Trovost	5 3 4 4 4 5 4 4 4 4—41	3 4 2 4 3 3 4 4 4 3—34—75
G F Hendrie	4 5 5 4 4 4 4 4 0—38	3 3 3 4 4 4 3 4 4 4—36—74
C W Minor	4 5 3 4 4 4 4 4 3 4—39	4 4 3 3 4 3 3 3 4 2—33—72
G G Smith	4 3 2 4 5 5 5 2 4 4—38	3 3 4 3 4 2 3 4 3 4—33—71
T J Warren	4 4 4 4 2 4 4 3 4 4—37	4 3 4 2 4 3 2 3 4 4—33—70
A S Swords	4 4 4 4 4 4 4 3 5 4—40	2 3 4 4 3 5 3 0 3 3—29—69
L B Gaylor	4 4 4 4 5 4 4 4 3 2—38	2 0 3 3 3 4 4 4 4 3—30—68
E Bennett	4 4 4 3 4 3 4 2 5 3—37	4 3 4 4 3 0 3 4 3 3—31—68
W Ferguson	4 4 3 4 3 3 4 3 4 3—35	2 4 3 3 4 2 3 3 3 3—30—66
W L Hurlbutt	4 4 3 4 4 3 4 3 4 2—36	3 0 0 4 2 0 0 2 0 0—11—46

The third competition for the championship badge took place on Saturday, July 20, resulting as follows:

	200 yards.	300 yards.
Sanford	4 4 5 4 4 5 5—31	4 4 4 4 4 5 3—28—59
Bennett	3 4 4 3 4 3 4—25	3 5 4 5 4 5 3—27—52
Swords	4 5 5 3 3 4 3—27	4 3 4 4 3 4 3—25—52
Taylor	3 5 4 4 4 4 3—27	4 2 3 3 2 3 4—21—48
Warren	3 4 4 4 2 0 4—21	3 2 4 3 2 4 4—22—43
Ferguson	3 2 3 4 5 3 3—23	3 3 0 3 3 4 3—19—42

Willowbrook, Saturday, July 27.—The attendance was the largest of the season. Nathan Washburn, of Hartford, was winner of the long-range match (ten shots each at 800, 900 and 1,000 yards), scoring 143 out of a possible 150. W. H. Binns, of Hartford, was winner for the third time of the "Remington" mid-range match, scoring 49 out of a possible 50, at 500 yards. He becomes the owner of the trophy, a handsome specimen of the revolvers manufactured at the Remington works in Ilion, N. Y., and presented to the Connecticut Rifle Association by the Messrs. Remingtons. The military match, for members of the First Regiment, was won by Lieutenant J. L. Osgood, of New Britain, whose score was 51 out of a possible 70 (seven shots each at 200 and 500 yards), Col. P. W. Hudson was second, with a score of 50; the match for any military rifle by Captain J. L. Woodbridge, with a new pattern "Borchardt" Sharps, with a score of 55 out of 70 (seven shots each at 200 and 500 yards), Wallace Gunn being second with the same score, but not as good average; and the "all comers" match for any rifle, 200 yards off-hand, by Henry Andrus, of Hartford, whose score was 32 out of a possible 35. O. E. Pillard, New Britain, and J. D. Marks, Collinsville, each scored 31. There were sixteen entries for this match, in which there is an increasing interest among off-hand shooters. There was considerable glass ball shooting under the direction of Captain J. L. Woodbridge, some good shooting being done by the riflemen present. After the shooting a business meeting was held, and William Parker, of New Britain, was chosen secretary, in place of F. T. Studley, of Hartford, resigned. The next match will take place Saturday, August 10, by which time a new mid-range contest will be arranged for, the regular contest having been decided. The arrangement will be for seven shots at that distance, and re-entries will be allowed. There will also be arrangements for glass ball shooting.

DR. CARVER AT HARTFORD.—On the 28th ult. the Doctor gave an exhibition at Hartford before a large concourse of people. Ball and coin shooting were the leading features.

—We call attention to the advertisement of a gentleman who offers a Sharps Creedmoor rifle at a sacrifice.

ZETTLER'S, *July* 24.—Zettler's, associated with N. Y. Turner Cadets; 200-yard reduced targets: H. Sprieser, 44; Ch. Blust, 35; J. Gemindt, 35; L. Denis, 34; G. Illwitzer, 34; G. Maag, 34; A. Litterst, 33; W. Hoffman, 32; C. Braun, 32; J. Rosenbaum, 30; H. Spamer, 29; T. Schmager, 27; W. Eisinger, 24; L. Bischoff, 22.

WITHDRAWAL OF THE REMINGTON PRIZE.—In consequence of some differences existing between the N. R. A. and the Messrs. Remington, the prize offered by them has been withdrawn.

CREEDMOOR, *July* 24.—Competition for American Team:

	800	900		800	900
R Rathbone	71	70	B G Doughty	68	59
H F Clark	73	66	S T G Dudley	60	65

A disagreeable wrangle took place here in regard to scores made by Messrs. Allen and Jewell, which is not worth commenting on.

"Dirty Match."—Conditions: Prize—A Ballard mid-range rifle; open to all comers; distance, 200 yds.; fifteen shots, without cleaning and without sighting shots. Position standing; any rifle; entrance fee, fifty cents. To be won three times before becoming the personal property of the winner. The scores were as follows:

A H Wickham	66	H Fisher	60	M M Maltby	54
J F Rathjen	65	J Lathe	59	M B Engel	54
E E Lewis	63	A G Weber	57	F Alder	53
J L Paulding	62	N D Ward	56	J A Hatry	51
E G Zettler	61	J E Irwin	56	J W Todd	51
F H Holton	61	J Finlayson	56	A Schoverling	50
B Zettler	61	A McInness	56	J G Story	45
G L Morse	60	R D Bagley	55	C V Peckham	44
J W Mangam	60	H D Blydenburgh	54	F E Kaylster	42
C E Blydenburgh	60	W H Duulap	54	C E Imslow	36

Seven competitors retired without completing their scores.

Amateur Club match—The members of the Amateur Club shot a match of fifteen shots at 200 yards for their short range badge. The best scores were the following:

J T B Collins	64	M M Maltby	63	H Fisher	63
G L Morse	64	C E Blydenburgh	63	I L Allee	62
N D Ward	63	F H Holton	63	B F Clark	60

Schoverling-Daly Match—The members of the New York Rifle Club shot a match for the "Schoverling and Daly Medal" at 200 and 300 yards. The following were the best scores made: Fred Alder, 79; C. E. Blydenburgh, 78; F. H. Holton, 78; J. S. Conlin, 71; A. J. Howlett, 57.

The members of the Washington Gray Rifle Club shot for a life membership, N. R. A. The distances were 200 and 300 yards, five shots at each. The best scores were as follows: J. F. McHugh, 39; G. E. Parcoe, 37; W. T. Miller, 36; D. Wilson, 34; L. T. Baker, 33; J. Buckbee, 32.

A match also took place among the members of the Irish-American Rifle Club for the club "trophy."

July 27.—The Remington long-range match was postponed, perhaps indefinitely. Champion Marksman Badge, offered by General Wingate, was on. Condition: Open to all members of the National Rifle Association and all members of the National Guard State of New York in uniform. Distances, 200 and 500 yards. Five shots at each distance. Weapon, Remington rifle, New York State model. Position, standing at 200 yards; any, with head toward the target, at 500. The badge to become the property of that competitor who, at the close of the season of 1878, shall have won it the greatest number of times. Members of the National Guard may, with the consent of their Inspector of Rifle Practice, count their scores made in this match as a qualification for the Marksman's Badge issued by the State. There were eighty entries made by about forty individuals. Highest scores:

E Barker	43	C F Robbins	39
E W Price	43	A G Weber	33
C H Eagle	43	J L Price	36
J R B Bagley	42	J A Tackaberry	35
J W Gardner	40	J Ross	35
T M Linton	40	J W Hitchcock	34
A B Van Huesen	39	H W Clements	33
E W Ketcham	39	A M Hall	33
A C McLewee	39	D M Earl, Jr	33
A F Ferris	39	G F Merchant	33
A J Dam, Jr	32		
W Underwood, Jr	32		
G W Basbrouck	31		
H C Titus	30		
A W Conover	30		
L C Mott	29		
S H Deuton	27		
C M Englis	27		
W H Heirser	26		
C C Power	26		

In the Seventh Regiment Rifle Club matches, Mr. C. H. Eagle won "The Trophy" on a score of 32 out of a possible 35 at 500 yards, also the regimental gold medal with 62 out of 70 points at 200 and 500 yards.

SAVANNAH TOURNAMENT.—The rifle contest, which took place at Savannah, Georgia, July 24, under the supervision of Company C, Savannah Volunteer Guards, was participated in by eight teams. Creedmore rules. The scores made were:

Company C, S V G. H C Cunningham, Captain.		**Savannah Cadets.** W M Mills, Captain.	
Johnstone	5 4 4 4—21	Lovell	3 4 4 5 4—20
W Hunter	5 3 4 5 4—21	Garsed	5 5 4 3 4—21
DeLettre	3 4 3 3 3—16	Nichols	4 5 4 4 4—21
J Hunter	3 4 3 3 2—15	Silva	4 5 4 3 4—20
T Hunter	3 3 4 3 5—18—92	Hershbacb	5 4 4 4 4—21—103
Company B, S V G.		**Republican Blues.**	
Allen, Capt	4 4 4 4 3—19	Merrell, Capt	5 3 4 5 3—20
Maclean	4 4 3 4 4—19	Hamlet	4 5 3 4 4—20
Appleton	4 4 4 5 5—22	Lafburrow	4 4 3 3 4—18
Kieffer	3 3 3 4 4—17	Butler	3 4 4 4 4—19
Cronk	0 3 3 2 3—11—88	White	4 3 4 4 4—19—96
Georgia Hussars.		**Irish Jasper Greens.** E J Kennedy, Captain.	
J McAlpin, Capt	4 4 3 3 4—19	Daley	3 3 4 4 3—17
Pritchard	5 5 4 4 4—22	McCabe	2 2 5 3 2—14
Ryals	4 4 4 4 5—21	Bonhan	3 5 3 4 5—20
Cunningham	3 4 3 4 4—18	Goette	0 0 0 0 0—0
D McAlpin	4 4 5 5 4—22—102	Brodrick	2 3 0 3 3—11—62
German Volunteers.		**Chatham Artillery.**	
Von Glahn, Capt	3 4 4 3 4—18	Walker, Capt	4 4 4 4 5—21
Jaugstetter	4 3 2 4 3—16	Tuffts	4 4 4 4 2—18
Seyden	3 4 4 4 5—20	C Saussy	3 3 3 4 3—16
Racker	4 4 4 2 3—17	J Silva	4 4 3 4 4—19
Warnecko	2 2 3 4 4—15—60	J Saussy	2 5 4 4 4—19—93

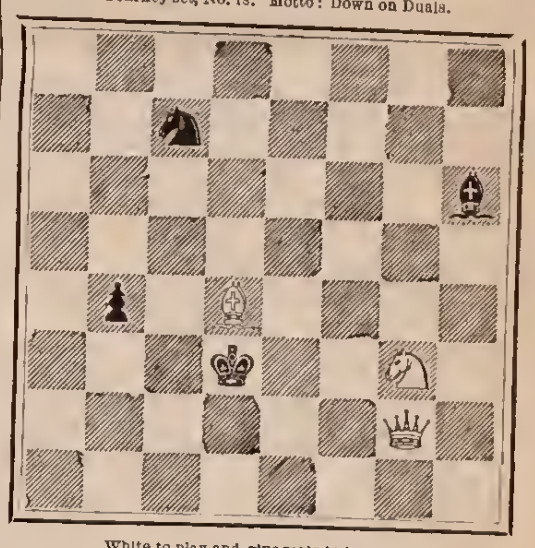
The individual ties of 23, which were shot off, were finally won by Pritchard.

The Game of Chess.

NOTICE.—Chess exchanges, communications and solutions should be addressed "Chess Editor FOREST AND STREAM, P. O. box 84, Wolcottville, Conn."

Problem No. 22.

Tourney set, No. 18. Motto: Down on Duals.



White to play and give mate in two moves.

CURSORY JOTTINGS.

—The International Tournament at Paris, according to our dispatch, resulted in Zukertort, of Berlin and London, winning the first prize; Winawere, of Russia, the second; Blackburne, of England, the third; Bird, of England, the fourth, and Mackenzie, of America, the fifth. The later telegrams state that Zukertort and Wieawere tie for the first and Bird and Mackenzie for the fourth prize. We shall give a table of scores next week.

—The *American Chess Journal* for June is at hand, and is a very valuable number. Although it alludes to the Centennial critics in no flattering manner, we nevertheless cordially recommend it to our readers. While we and others, without fear or favor, expressed opinions on that subject, we do not pretend to or assert the infallibility of our judgment. We had hoped that this issue was, if not settled, at least buried; but if it must again come to the surface, we can vindicate ourselves. We much prefer, however, to look upon the question as an honest difference in opinions, and logically consider it. But if it must be otherwise, we can also let fly a charge or two in an off-hand and reckless manner. For the sake of harmony we are willing to have it now cease, but further remarks of that kind will force us to the support of those whose opinions on a certain subject do not materially differ from those which we entertain. The *Journal* might profit, as well as please its readers, by following the example of the *Nuova Rivista*, and occasionally publish an article on the art of problem composition or end games.

NOTICE TO EXCHANGES.—The following have not yet come to hand: *Schach Zeitung, Saloonblat* and *Nordisk Skatiende*: the Jan., Feb., June and July numbers of the *Chess Players' Chronicle*; June numbers of *La Strategie* and *Nuova Rivista degli Sacchia*, and the *Huddersfield College Magazine* for June. Will these exchanges give this attention?

☞ FOREST AND STREAM will be sent for fractions of a year as follows: Six months, $2; three months, $1. To clubs of or more, $3 per annum

JOHN BONE, THE IMMORTAL.—He deserves the title; he has earned it. John Bone lives in Texas, of course; that's where they all live. He has been repeatedly shot dead in his tracks by infuriated mobs; wild Injun tribes have alternately tortured him to death, clubbed the life out of him and transfixed him with poisoned arrows; he has been hung as a horse thief; fatally injured by the explosion of a kerosene lamp; stung to death by rattlesnakes; crushed to a jelly by bears; immature drug-clerks have by mistake administered all sorts of deadly poisons to him, which have repeatedly proved fatal in their effects; he has been mortally wounded in six railroad collisions; and twelve lightning-rod and book agents have as many times talked him to death. And now the sheriff is after John to kill him again for a fresh crime. He doesn't mind it much himself, and thinks that when he is a little more used to it he may come to enjoy it.

"OLD ABE."—And now it has come to light that the eagle, which we all saw at the Centennial, and expended a deal of sentiment upon as the veteran war eagle that went with the Eighth Wisconsin Infantry through the smoke and grime of the four year's war, is a sham and a fraud after all. The genuine "Old Abe" died years ago. The present unlawful occupant of his perch is a *de facto* "Old Abe," who was fraudulently counted into his place by a returning hoard of impecunious rascals. Those blue-uniformed attendants who talked so eloquently of their war exploits and took in the money of the interested and gullible listeners—we wonder if they were frauds too, veterans who had never been within hearing of the echoes of a battle.

—What is the difference between South Side, L. I., and New York on a night? Spreads and sheets.

—While Mr. Escher was making one of his celebrated runs at billiards a few nights since, two street gamins were intently watching him through an open window. After he had scored about 150 one of them turned to the other with a perplexed expression on his face, and quick speech, "Say, Jim, where is the other man?" He evidently thought it took two to play billiards.

DOGS WITH ANTIPATHIES.—Crib, a wonderful dog, described by his proprietor as "an enemy of poachers, a friend of cats, and a connoisseur of gooseberries," while regaling himself upon his favorite fruit, fresh from the bush, got stung by a wasp, bent upon gooseberry taking too, and experienced a new and never-to-be-forgotten sensation. Crib became convinced his vocation in life was to wage war upon wasps, and from that time devoted all his energies to their destruction; and, taking up an advantageous position under the bushes he and his enemies most effected, snapped them as fast as they appeared without getting hurt himself. He, at any rate, had reasonable and just cause for the antipathy he indulged, which is more than can be said in extenuation of the irreligious collie, whose habit it was to sneak out of his master's company as that gentleman took down his *Family Prayers* and rang for the servants. Purposely prevented one evening from making his usual exit, Noble took such pains to behave indecorously that it was judged wisest to let him have his way for the future; and he was never known to make one of the nightly gathering again—*All the Year Round.*

ADVICE TO DRINKING MEN.—A drinking man can supply himself easily with the remedies used at nearly all the inebriate asylums and be his own physician at his own home, without the necessary expense and publicity of visiting the Washingtonian home or any other reformatory institution. His laboratory need contain only a small quantity of cayenne pepper, a pot of concentrated extract of beef, and a few grains of bromide of potassium. When the desire for drink recurs, make a tea from the cayenne pepper, as strong as can taken with any degree of comfort, sweeten it with milk and sugar, and drink. This tea will supply the same place that a glass of liquor would fill, and will leave no injurious effect behind. Repeated daily or so often as the appetite returns, it will be but a few days before the sufferer will have become disgusted with the taste of the pepper, and with the appearance of the disgust disappears the love of liquor. The fact is proven every day. The extract of beef is to made into beef tea, according to the directions on the pot, in quantities as may be needed for the time being, and furnishes a cheap, easily digestible and healthy nutriment, it being made "to stay on the stomach" when heavier articles of food would be rejected. The bromide of potassium is to be used carefully and only in cases of extreme nervousness, the dose being from fifteen to twenty grains, dissolved in water. This is a public exhibit of the method of treatment adopted at the inebriate asylums. In addition thereto the drinking man should surround himself with influences which tend to make him forget the degrading associations of the bar-room and lift him upward. He should endeavor, so far as his business avocations will permit, to sleep, bathe and eat regularly and obey the laws of health. By the adoption of this course energetically and sincerely no man who has the will to reform can fail to do so. Hundreds and thousands can attest the truth of these statements.—*Boston Traveller.*

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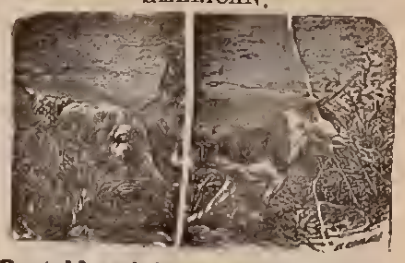

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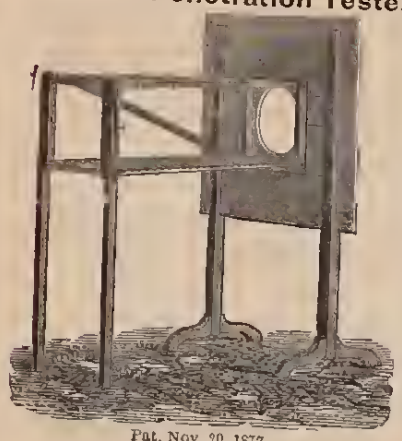

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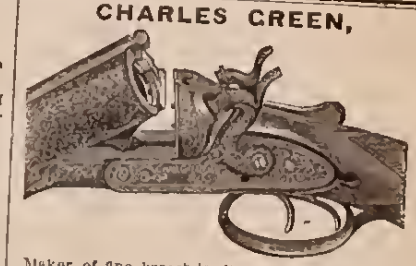

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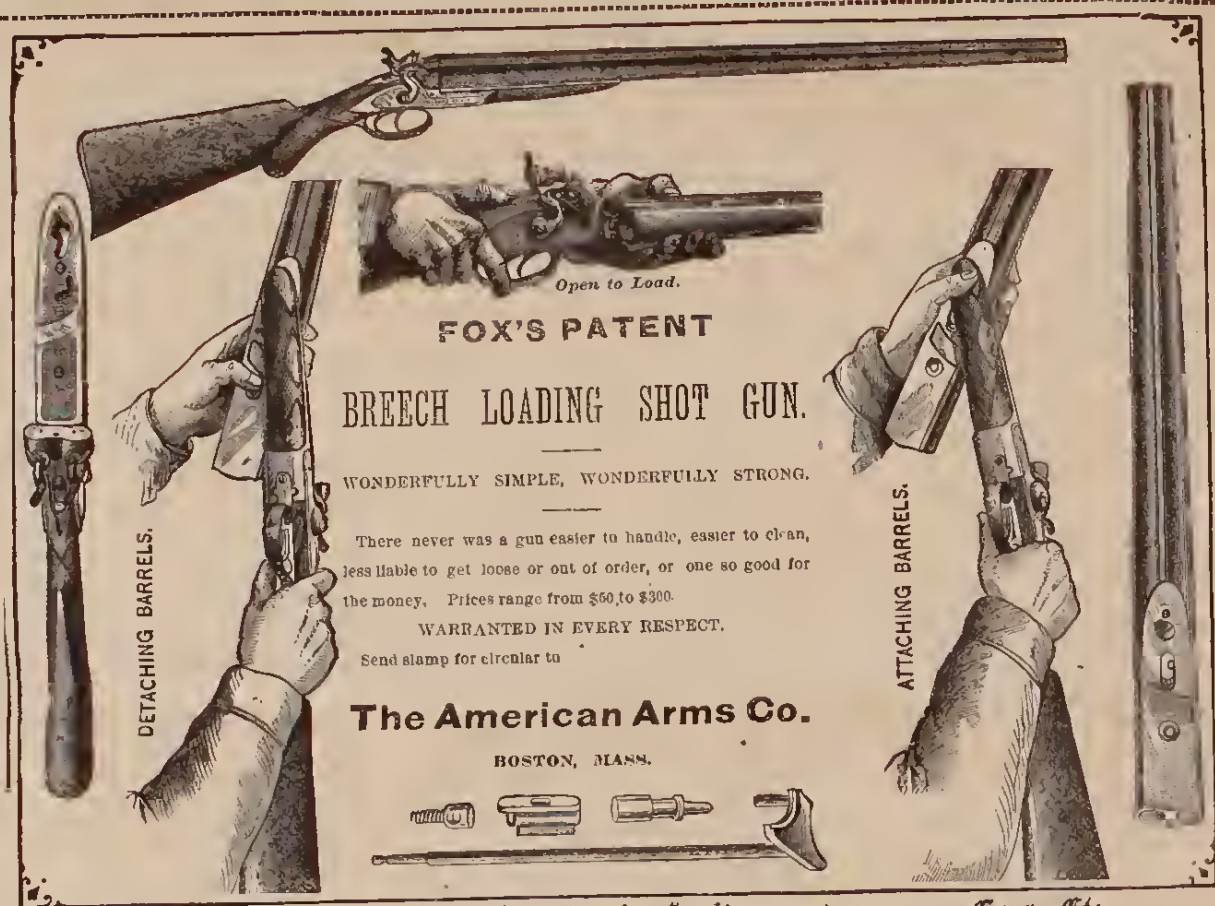

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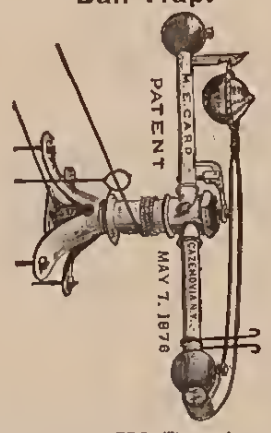

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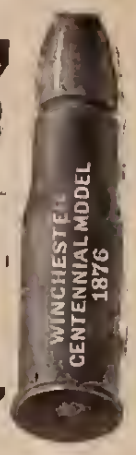

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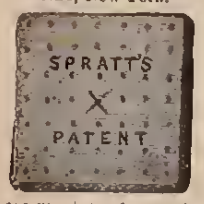

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Hart's Sportsman's Favorite Metallic Shells.

FOR BREECH-LOADING SHOT GUNS.

These Shells are easily loaded, and the caps easily extracted from inside. Head solid and much thicker than any Shell now made, giving a solid seat for cone or anvil, which prevents it from driving through or springing away, thereby causing miss-fires. The Cone is made of nickel, and fastened solid in its place. Neither rusts nor corrodes fast like movable anvil made from steel. The Nickel Cone also prevents miss-fire when a cap has been left on shell for a few days, which is liable to occur either in steel or iron. These Shells are finely finished, and made any length ordered, from 2½ to 3½ inches.

Shells and Loaders and Descriptive Price-Lists can be obtained from all the leading Sportsmen's Houses throughout the country. *HART & SLOAN, Newark, N. J.*

FROM CAPTAIN BOGARDUS, CHAMPION WING-SHOT OF AMERICA.

MESSRS. GEORGE E. HART & CO.—Gentlemen: The fifty Shells I received from you to-day suit me better than any I have ever used. They are stronger and better in every respect, and I shall use them in all my shooting hereafter. Yours truly, A. H. BOGARDUS.

TATHAM & BROTHERS,

NEW YORK.

MANUFACTURERS OF

AMERICAN STANDARD. Tatham's PATENT FINISH DROP SHOT. New York. BLUE LABEL.

AND

Tatham's IMPROVED "CHILLED" SHOT New York. RED LABEL.

Compressed Buck Shot.

FIRST PREMIUM, CENTENNIAL EXHIBITION—REPORT,—"Exact uniformity of size, truly spherical form, high degree of finish and general excellence."

Medicinal.

BRANDRETH'S PILLS.

We believe these celebrated pills are pre-ordained by their inherent merits to be the medicine of the world. They impart a power by which every organ of the body becomes healthy. Nature has formed the bowels so that they are capable of drawing to them the impurity of any organ of the body, however distant. So we have little more to do when we are sick than to purge freely with a medicine time has proved will not hurt. This treatment always quickly restores the health when adopted in time.

BRANDRETH'S PILLS

cure both costiveness and diarrhœa. Ask the man who was dying from constipated bowels what cured him; he tells you Brandreth's Pills. Ask him who had dysentery for months what cured him; he says Brandreth's Pills. They are the best medicine for Small Pox, and they prevent any marks. A case occurred recently where Brandreth's Pills cured a deep ulcer of the foot, which the doctors said could only be removed by amputation; yet twenty-five boxes cured it and restored the patient's health. Reference W. M. Skinner, of White Plains.

Brandreth's Pills are not a quack medicine, but a scientific preparation, which have been prepared by the present proprietor for over fifty years. They are wholly composed of innocent herbs and vegetable essences, are incapable of hurting the most delicate, yet sure to cleanse the bowels and blood and exert a curative effect upon every form of disease. Where for twenty years the patient had no movement of the bowels without medicine or mechanical means, a month's use of Brandreth's Pills cured, restoring the bowels to regularity.

The secret of recruiting the vital principle is discovered in this medicine; it generates and increases healthy animal warmth. Provided the great organs are not irreparably injured, there is no disease Brandreth's Pills will not cure. Remember, they concentrate the vitality of the system to eject the disease wherever located in the body.

BRANDRETH'S PILLS

are sold by all dealers—25 cents a box, either sugar-coated or plain—and at Dr. Brandreth's

PRINCIPAL OFFICE,

294 CANAL STREET, NEW YORK.

STOP AND READ.

All forms of Kidney diseases, Pains in the Back, Sides and Loins, are positively cured by

GRANT'S REMEDY.

Its effects are truly marvelous in Dropsy, Gravel and Bright's disease. No matter of how long standing the case may be, positive relief is had in from one to three days. Do not despair, hesitate or doubt, for it is really a specific and never fails. It is purely a vegetable preparation. By its timely use thousands of cases that have been considered incurable by the most eminent physicians have been permanently cured. It is also indorsed by the regular physicians and medical societies throughout the country. Sold in bottles at two dollars each, or three bottles, which is enough to cure the most aggravated case, sent to any address on receipt of five dollars. Small trial bottles, one dollar each. All orders to be addressed to

Grant's Remedy Manufacturing Co.,

551 MAIN ST., - - WORCESTER, MASS.

Sportsmen's Routes.

Chesapeake & Ohio RR

The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia.

Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc., etc.

Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist

through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts,

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southeast; at Gordonsville, with the North and Northwest; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD,
Gen. Passenger and Ticket Agent,
Richmond, Va.
ap

Old Dominion Line.

The steamers of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connections direct for Chincoteague, Cobb's Island, and points on the Peninsula. City Point, James' River, Currituck, Florida, and the mountainous country of Virginia, Tennessee, etc. Norfolk steamers sail Tuesday, Thursday and Saturday; Delaware, Monday, Wednesday and Friday at 3 P. M. Full information given at office, 197 Greenwich St., New York. apo 28 1y

FOR NEW HAVEN, HARTFORD, SPRINGFIELD White Mountains, Montreal and intermediate points. The new and elegant steamer Continental leaves Pier No. 25, East River, daily (Sundays excepted) at 3. A passenger train will be in waiting on the wharf at New Haven and leave for Springfield and way stations on arrival of boat.

NIGHT LINE.—The Elm City leaves New York at 11 P. M., connecting with passenger train in waiting on wharf at New Haven, leaving 5:15 A. M. Tickets sold and baggage checked at 944 Broadway, New York, and 4 Court street, Brooklyn. Excursion to New Haven and return, $1.50. Apply at General Office, on the pier, or to RICHARD PECK, General Agent.

Sportsmen's Routes.

NEW YORK AND PHILADELPHIA NEW LINE
ROUND BROOK ROUTE,
FOR TRENTON AND PHILADELPHIA.
COMMENCING JULY 17, 1878

STATION IN NEW YORK—Foot of Liberty st. N. R.

Leave New York for Trenton and Philadelphia at 6:30, 8, 9:30, †6:15, †11:30 A. M., †:30, 4:00, 5:30, 12 P. M., and at 4:30 P. M. for Trenton.

Leave Philadelphia from station North Pennsylvania Railroad, Third and Berks streets, at 6:25 (way), 7:45, 9:30, 11:30 A. M., 1:30, 2:30, 4:15, 5:15 12:00 P. M.

Leave Trenton for New York at 1:20 (except Monday), 6:50, 8:18, 10:20 A. M., †2:15, 2:15, 3:00, 4:55, 6:30 P. M.

Pullman Drawing Room Cars are attached to the 9:30 A. M., 4:00, P. M. trains from New York and to the 7:45, A. M., 1:30 P. M. trains from Philadelphia.

SUNDAY TRAINS—Leave New York and Philadelphia at 9:00 A. M., 5:30, 12 P. M. Leave New York for Trenton at 9:30 A. M. and 6:30 P. M. Leave Trenton for New York at 1:20, 9:50 A. M., 6:10 P. M.

Boats of the "Brooklyn and Erie Annex" make connection at Jersey City station to and from Brooklyn and Erie Depot, Jersey City.

Tickets for sale at foot of Liberty street, Nos. 529 and 944 Broadway, at the principal hotels, at offices of the Erie Railway in New York and Brooklyn, and at No. 4 Court street, Brooklyn. Baggage checked from residence to destination.

Sep13 ty H. P. BALDWIN, Gen. Pass. Agent

TO SPORTSMEN:

THE PENNSYLVANIA R.R. CO.

Respectfully invite attention to the

Superior Facilities

afforded by their lines for reaching most of the TROTTING PARKS and RACE COURSES in the Middle States. These lines being CONTINUOUS FROM ALL IMPORTANT POINTS, avoid the difficulties and dangers of reshipment, while the excellent cars which run over the smooth steel tracks enable STOCK TO BE TRANSPORTED without failure or injury.

The lines of

Pennsylvani Railroad Company

also reach the best localities for

GUNNING AND FISHING

in Pennsylvania and New Jersey. EXCURSION TICKETS are sold at the offices of the Company in all the principle cities to KANE, RENOVA, BEDFORD, CRESSON, RALSTON, MINNEQUA, and other well-known centers for

Trout Fishing, Wing Shooting, and Still Hunting.

Also, to

TUCKERTON, BEACH HAVEN, CAPE MAY, SQUAN, and points on the NEW JERSEY COAST renowned for SALT WATER SPORT AFTER FIN AND FEATHER.

L. P. FARMER, Gen'l Pass. Agent.
FRANK THOMSON, Gen'l Manager. feb17-tf

CHICAGO & ALTON RAILROAD,

THE ONLY DIRECT RAILROAD from Chicago to St. Louis, via Chicago to Kansas City

WITHOUT CHANGE OF CARS.

FIRST-CLASS ACCOMMODATIONS IN EVERYTHING.

SPORTSMEN will find splendid shooting on the line of this road; prairie chicken, geese, ducks, brant, quail, etc. Connects direct at Kansas City with the Kansas Pacific Railroad for the great Buffalo and Antelope range of Kansas and Colorado.

Liberal arrangements for transport of Dogs for Sportsmen.

JAMES CHARLTON,
General Passenger Agent,
Chicago, Ills

FOR FLORIDA

FOR THROUGH TICKETS TO FERNANDINA JACKSONVILLE, ST. AUGUSTINE, SANFORD, ENTERPRISE, and intermediate landings on ST. JOHN'S RIVER and interior points in FLORIDA, by steamship to SAVANNAH, and thence by railroad or steamboat, apply to WM. L. JAMES, General Agent.

Philadelphia and Southern Mail S. S. Co.,
Pier 22 South Delaware Avenue, Phila.

Dec14-ly

TROUT FISHING!

The Wisconsin Central Railroad

THROUGH TO

LAKE SUPERIOR.

EXCURSION TICKETS from Chicago to Ashland and return for $20 are sold at 63 Clark street, or the C. M. and St. Paul, Madison Street Depot, Chicago; also at low rates from Milwaukee. Dogs, guns and camp equipage taken free.

The points of attraction to sportsmen on this "Forest and Stream" route are Menasha and Green Bay for bass fishing; Dutternut Creek and Lake for muscalonge; the many branches and lakes of the Flambeau and Chippewa which teem with bass, pike and pickerel, never till last season dished by sportsmen. Between Silver Creek and Ashland all are trout streams, and many others can be easily reached along the shore from Ashland or Bayfield, while rock fishing for speckled trout and trolling in the Bay affords excellent sport.

The Chequasmegon hotel at Ashland, built last year, has been enlarged, and is supplied with a steam-yacht, sail and rowboats and excellent guides.

The atmosphere at Ashland is a sure preventive of hay fever.

Steamers from Ashland to all Lake Ports.
Send for Guide Book.

HENRY PRATT, G. T. A.
my9 6m Milwaukee, Wis.

Sportsmen's Routes.

"THE FISHING LINE."

Brook Trout, Grayling and BlackBass Fisheries of Northern Michigan,

VIA THE

Grand Rapids & Indiana RR

(Mackinaw, Grand Rapids & Cincinnati Short Line.)

Sportsmen who have cast a fly, or trolled a spoon in the

Grand Traverse Region

will come again without solicitation. All other lovers of the Rod are invited to try these waters, wherein the fish named above, as also Muscalonge, Pike and Pickerel abound

In no other streams east of the Rocky Mountains is the famous AMERICAN GRAYLING found in such numbers.

BROOK TROUT Season opens May 1.
GRAYLING Season opens June 1.

The Sportsman can readily send trophies of his skill to his friends or "Club" at home, as ice for packing fish can be had at many points.

TAKE YOUR FAMILY WITH YOU. The scenery of the North Woods and Lakes is very beautiful. The air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma.

The Hotel accommodations are good, far surpassing the average in countries new enough to afford the finest of fishing.

On and after June 1 Round Trip Excursion Tickets sold to Points in Grand Traverse Region, and attractive train facilities offered to tourists and sportsmen; also Mackinaw and Lake Superior Excursion Tickets.

Dogs, Guns and Fishing Tackle Carried Free, at owner's risk.

Camp Cars for fishing parties and families at low rates.

It is our aim to make sportsmen feel "at home" on this route. For Tourist's Guide, containing full information as to Hotels, Boats, Guides, etc., and accurate maps of the fishing grounds, send to

A. B. LEET, G. P. A.,
A. HOPPE, Grand Rapids, Mich.
Eastern Agent, 116 Market St., Phila., Pa.
mar28 4mos

CONEY ISLAND—BRIGHTON BEACH.

Opening of the
BROOKLYN, FLATBUSH & CONEY ISLAND R. R.

SUMMER ARRANGEMENT,
Commencing July 2, 1878.

Trains for Coney Island—Leave depot on Flatbush avenue, Willink Entrance, Prospect Park, at 6:20, 7:30, 8:30, 9:30, 10, 10:30, 11, 11:20, 11:40 A. M., 12 M., †2:30, 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Beach—7, 8, 9, 10, 10:30, 11, 11:20, 11:40 A. M., †2 M., 12:40, 1, 1:20, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, †1 P. M.

Sunday Trains to Island—8:30, 9, 9:30, 10, 10:20, 10:40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:30, 1:40, 2, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:05, 7:30, 8, 8:20, 8:40, 9, 9:30, 10, 10:30 P. M.

Returning from Island—9, 9:30, 10, 10:20, 10:40, 11, 11:20, 11:40 A. M., 12 M., 1, 1:20, 1:40, 2:20, 2:40, 3, 3:20, 3:40, 4, 4:20, 4:40, 5, 5:20, 5:40, 6, 6:20, 6:40, 7, 7:20, 7:35, 7:50, 8:05, 8:20, 8:40, 9, 9:30, 10, 10:30, †1 P. M.

Time to Coney Island, ten minutes. Excursion tickets, 40 cents; single fare, 20 cents. Grand concerts every afternoon and evening by Conterno's Twenty-third Regiment Band.

MR. LEVY, the celebrated cornet soloist, has been engaged for the season.

The following horse-car lines run directly to depot: Flatbush avenue from Fulton Ferry; Bergen street, S. B.; Franklin avenue, from South Seventh street Ferry, E. D., and Nostrand avenue, from foot of Broadway. W. E. DORWIN, Sup't.

St. Louis, Minneapolis
AND
ST. PAUL SHORT LINE.

Through Pullman Palace Sleeping Cars between St. Louis, Minneapolis and St. Paul.

Burlington, C. Rapids & N'rth'rn

Railway.

QUICKEST, CHEAPEST AND BEST!

TWO PASSENGER TRAINS EACH WAY DAILY, between Burlington, Albert Lea and Minneapolis, crossing and connecting with all East and West Lines in Iowa, running through some of the finest hunting grounds in the Northwest for Geese, Ducks, Pinnated and Ruffed Grouse and Quail. Sportsmen and their dogs taken good care of. Reduced rates on parties of ten or more upon application to General Ticket Office, Cedar Rapids. C. J. IVES,
E. F. WINSLOW, Gen. Passenger Agent.
General Manager. tf

LONG ISLAND RAILROAD, MAY, 27, 1878.—Ferryboats leave New York from James Slip (daily except Sundays) 30 minutes, and from Thirty-fourth street, East River (daily) 15 minutes previous to departure of trains, and from South Wall street, Fulton and Catharine ferries (daily) 30 minutes previous to departure of trains from Depot, corner Flatbush and Atlantic avenues, Brooklyn. Trains leave Brooklyn and Long Island City (Hunter's Point) as follows: For Greenport, Sag Harbor, etc., 8:30 A. M., 4 P. M., and on Saturdays at 3:30 P. M. For Patchogue, etc., 9:30 A. M., 4:30 and 6 P. M. For Babylon, etc., at 9:30 A. M., 4, 4:30, 5 and 6 P. M. For Port Jefferson, etc., at 10 A. M. and 4:30 P. M. For Northport, etc., at 10 A. M., 3:30, 4.30 and 6:30 P. M. For Locust Valley, at 8:30 and 10:00 A. M., 3:30, 4:30, 5:30 and 6:30 P. M. For Far Rockaway, etc., at 9:30 A. M., 4, 4:30, 5, 6 and 7 P. M. For Garden City and Hempstead, 8:30 and 10 A. M., 3:30, 4:30, 5:30, 6:30 P. M., and 12:15 night, and from Long Island City only 9:30 A. M., 1:30 and 6:30 P. M. SUNDAYS—For Port Jefferson, Patchogue, etc., 9 A. M. Babylon, etc., 6 and 7 P. M. Northport and Locust Valley, 9 A. M. and 6:30 P. M., Garden City and Hempstead, 9 A. M., 2:30 and 6:30 P. M., and from Long Island City only 9:30 A. M. and 5:30 P. M. Trains for Rockaway Beach, Flushing, College Point, Jamaica, etc., as per time tables. Ticket offices in New York at 261 Broadway, corner Warren street, at James Slip and Thirty-fourth street ferries, at the offices of "The Long Island Express," 3 Park place, 785 and 942 Broadway and Grand Central Depot; in Brooklyn, No. 333 Washington street and 79 Fourth street. By purchasing tickets at any of the above offices, baggage can be checked from residence to destination.

S. SPENCER, Gen'l Sup't.
J. CHITTENDEN, Gen'l Pass. Agent. je6 tf

Sportsmen's Routes.

Cromwell Steamship Line.

NEW YORK, HALIFAX, N. S. AND ST. JOHNS, N. F.

THE FIRST-CLASS STEAMSHIPS

CORTES, Capt. Bennett, and
ALHAMDRA, Capt. McIlhinney,

form a regular line between above ports, leaving Pier 10, North River, New York, three times a month. Persons visiting Nova Scotia, Newfoundland or the Lower St. Lawrence will find this the cheapest and most direct route, avoiding changes and detention. Time between New York and Halifax about sixty hours, one half of trip through Long Island and Vineyard Sounds, in smooth water.

Cabin passage, including stateroom and meals, New York and Halifax, $15 gold; New York and St. Johns, $20, gold. Excursion tickets at reduced rates. For schedule of sailings and further particulars apply to

CLARK & SEAMAN,
56 West street, N. Y.

AGENTS—WOOD & CO., Halifax, N. S., HARVEY & CO., St. John's, N. F. je26 6m

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THE SPORTSMAN'S ROUTE.

Chicago & Northwestern RR.

Embraces under one management the Great Trunk Railway Lines of the West and Northwest, and, with its numerous branches and connections, forms the shortest and quickest route between Chicago and all points in Illinois, Wisconsin, Northern Michigan, Minnesota, Iowa, Nebraska, California, and the Western Territories. Its OMAHA AND CALIFORNIA LINE is the shortest and best route for all points in Northern Illinois, Iowa, Dakota, Nebraska, Wyoming, Colorado, Utah, Nevada, California, Oregon, China, Japan and Australia. Its CHICAGO, ST. PAUL AND MINNEAPOLIS LINE is the short line for Northern Wisconsin and Minnesota, and for Madison, St. Paul, Minneapolis, Duluth and all points in the Great Northwest. Its WINONA AND ST. PETER LINE is the only route for Winona, Rochester, Owatonna, Mankato, St. Peter, New Ulm and all points in Southern and Central Minnesota. Its GREEN BAY AND MARQUETTE LINE is the only line for Janesville, Watertown, Fond du Lac, Oshkosh, Appleton, Green Bay, Escanaba, Negaunee, Marquette, Houghton, Hancock and the Lake Superior country. Its FREEPORT AND DUBUQUE LINE is the only route for Elgin, Rockford, Freeport and all points via Freeport. Its CHICAGO AND MILWAUKEE LINE is the old Lake Shore route, and is the only one passing through Evanston, Lake Forest, Highland Park, Waukegan Racine, Kenosha to Milwaukee. PULLMAN HOTEL CARS are now running regularly between Chicago and Council Bluffs, on the California Express Train of the CHICAGO & NORTHWESTERN RAILWAY. Westbound, they leave Chicago daily, except Sunday (and on every third Sunday), from the Wells Street Depot, at 10:30 A. M., and arrive at Council Bluffs next morning.

Eastbound they leave Council Bluffs at 5:30 P. M., daily, except Saturday (and on every third Saturday), and reach Chicago next afternoon.

☞ No other roads west of Chicago runs Pullman or any other form of Hotel cars.

TO SPORTSMEN.

This line presents peculiar advantages. For Prairie Chickens, Ducks, Geese and Brant shooting, our Iowa line to-day offers more favorable points than any other road in the country, while for Deer and Bear hunting, and for Brook Trout, Lake Salmon, Pike, Pickerel and Bass fishing, a hundred points on the Northern and Northwestern lines of this company will be found unsurpassed by anything in the West.

New York office, No. 415 Broadway; Boston office, No. 5 State street.

For rates or information not attainable from your home ticket agents, apply to

MARVIN HUGHITT,
W. H. STENNETT, Gen. Manager, Chicago.
Gen. Pass. Agent, Chicago. je20 tf

Saratoga Races.

TAKE THE

PEOPLES LINE STEAMERS

DREW AND ST. JOHN.

THE FINEST STEAMERS IN THE WORLD.

Leave Pier 41, North River, foot of Canal street, daily at 6 P. M., arriving in Saratoga each day in time to see the races.

Hotels and Resorts for Sportsmen.

Grand Fishing.

ROBERTS' SUMMER RESORT,

DOTY ISLAND,

NEENAH, WIS.

FISHING AND ANGLING.—To the sportsman and angler no place in Wisconsin offers greater inducements, the catch of fish during the season being at all times good, and the varieties such as to make it first-class sport. Black and silver bass, muscalonge, pike, pickerel, catfish, sturgeon, rock bass and perch, are the common varieties caught, and as the best fishing grounds are within a few rods of the house, no time is lost in going or coming. je20 3m

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Wild Fowl Shooting.

SPRINGVILLE DOUSE OR SPORTSMEN'S RETREAT, SHINNECOCK BAY, L. I.,

By a practical gunner and an old bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. Special attention given by himself to his guests, and satisfaction guaranteed. Address WM. N. LANE, Good Ground, L. I. Nov8 tf

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Hotels and Resorts for Sportsmen.

Sherman House,

(CLARK AND RANDOLPH),

CHICAGO.

Rates reduced to $3 per day for all rooms above the parlor floor, without baths.

Rooms with baths, $3.50, $4, and $4.50 per day.

ALVIN HULBERT, Prop'r.

We challenge any Hotel in the World to show as large and as elegantly furnished rooms as those of the SHERMAN. je20 tf

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Mount Julien Summer Hotel.

COUNTY PETERBOROUGH, CANADA.

This hotel, situated on the shore of Stony Lake, amidst scenery of the most picturesque character, is easy of access and comfortable in all its appointments. The facilities for boating, fishing and shooting cannot be surpassed. Terms, $1.25 per day, $7 per week. Boats and canoes, dogs and guides always on hire. Boats either via Suspension Bridge and Grand Trunk R. R. to Port Hope, or via Rochester, N. Y., by boat to Port Hope; thence via the Midland R. R. to Lakefield, and by boat to the hotel. Full particulars furnished on application. Address Lakefield P. O., Ontario, Canada. je6 tf

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CAMPING OUT—CAMP PISCATORIAL.

In connection with the Ashley House, I offer 50 Wall Tents to those fond of camping out; situated within 100 yards of the celebrated fishing grounds of Barnegat Inlet. *Rations.*—Fish for the catching; oysters, clams and groceries at first cost, affording cheap summer recreation. See posters, with illustration, in all sporting houses. Address J. W. KINSEY, Ashley House, Barnegat P. O., Ocean County, N. J. my30 tf

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THE BARNEGAT HOUSE,

Forked River, Ocean County, N. J.

The nearest house to the finest fishing and gunning of Barnegat Bay. Superior accommodations for families or transient guests at reasonable rates. Access via N. J. S. R. R. Address S. L. ATKINSON, Manager. Refer to C. Smith, 44 West Broadway. Je20 4t

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Greenwood Lake.

MONTCLAIR & GREENWOOD LAKE RAILWAY.

THE ONLY THROUGH ROUTE TO GREENWOOD LAKE.

Splendid Bass and Pickerel Fishing—Beautiful Lake and Mountain Scenery.

Trains leave New York, foot of Courtlandt and Desbrosses streets, daily (Sundays excepted) at 8:20 A. M. and 4:30 P. M.

Leave Brooklyn, via Annex boats foot of Fulton street, at 8 A. M. and 4 P. M.

Pullman Parlor Car on 4:30 P. M. train.

Through coach daily between Hackensack, Paterson and Greenwood Lake.

Excursion fare from Brooklyn, New York or Jersey City, $2.00 Parties of fifteen or more persons, $1.50 each.

J. F. MACKIE, Gen. Pass. Agent.

Notice to Anglers.

THE ST. GEORGE HOTEL,

GREENWOOD LAKE,

Furnish Guides at $2 per day. Boats 50 cents per day. No extra charge for use of Tackle.

Hazen House, Greenwood Lake,

JOHN HAZEN, PROPRIETOR.

P. O. address, Greenwood Lake, Orange Co., N. Y.

For fishing and shooting, the proprietor offers all facilities for the enjoyment of his guests on reasonable terms. may2 3m

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THE SUBSCRIBER desires a capitalist or association of gentlemen to join him in the erection of a select family hotel or club house on the most beautiful and eligible situation at Greenwood Lake, N. Y., with from twenty to fifty acres of land, as may be desired, and will take one-third of the purchase price of the property in stock or shares in the enterprise. Choice building sites, with water fronts, also for sale, in plots to suit, on favorable terms. Circulars can be had at office of FOREST AND STREAM. Apply to or address S. CALDWELL, Greenwood Lake, Orange County, N. Y. may16 tf

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BRANDON HOUSE, GREENWOOD LAKE, Orange County, N. Y. Splendid bass fishing good boating and bathing. Telegraph office in house. Take Montclair and Greenwood Lake Railway.

TRAPHAGEN HOUSE, GREENWOOD LAKE, Orange County, N. Y., L. Y. JENNESS. An excellent family hotel. Also good accommodations for the sportsman. Good boats and every facility for fishing. je13 3m

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BRADNER HOUSE, GREENWOOD LAKE, ORANGE COUNTY, N. Y., May 15, 1878. Terms—$2 per day, $8 to $10 per week. Free stages for guests to and from the steamboat dock at ARLINGTON to the house. G. S. BRADNER, Proprietor. jy4 3m

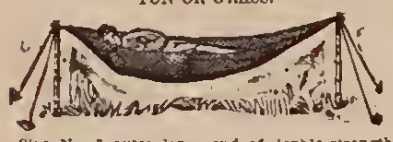
Sportsmen's Goods.

LOST
BECAUSE HE HAD NO
COMPASS.

THIS IS AN EXACT FAC-SIMILE.
Brass case and cover; white metal face; jewel mounted; patent catch. The very best compass made. As a guarantee of excellence, a sample has been left at the FOREST AND STREAM AND ROD AND GUN office. Sent on receipt of $1.50, by post office order, to any part of the United States or Canada. WILLIAMS & CO., 99 Water Street, New York, Agents for the London and New York Compass Co.

ASHANTEE
Pocket Hammock.

THE GENUINE IS NOT MADE OF HEMP, COTTON OR GRASS.



Size No. 3, extra large and of double strength, weight 3 lbs, sent by mail on receipt of $5.40. Include ropes, screw hooks and rubber packing case. Substitutes for trees shown above, $1 per set. Descriptive circular free.

McCOY & SANDERS, SOLE AGENTS,
134 Duane St., New York.

GOOD'S OIL TANNED MOCCASINS.
The best thing in the market for hunting, fishing, canoeing, snow-shoeing, etc. They are easy to the feet, and very durable. Made to order in a variety of styles, and warranted the *genuine article*. Send for illustrated circular. MARTIN S HUTCHINGS, P. O. Box 368, Dover, N. H. (Successor to Frank Good.)
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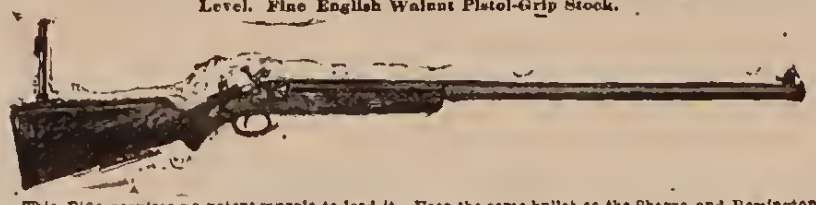

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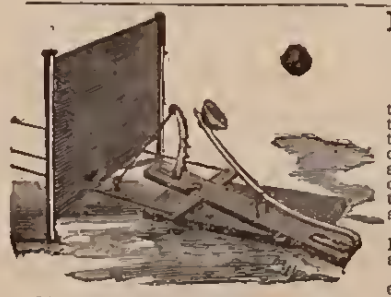

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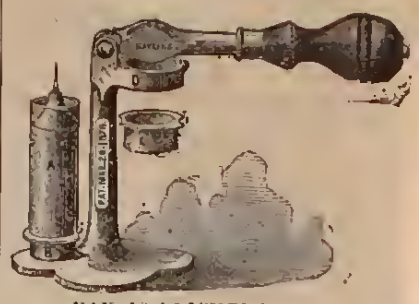

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